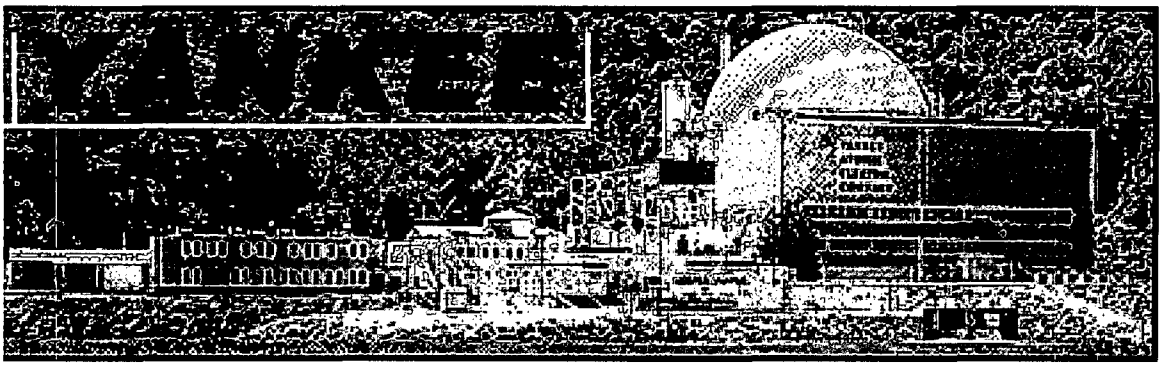
Yankee Nuclear Plant Station
YNPS-FSS-TBN01-00
Volume 1
(Main Report)



Yankee Atomic Electric Company

YANKEE NUCLEAR POWER STATION
FINAL STATUS SURVEY REPORT

REPORT NO.: YNPS-FSS-TBN01-00

Prepared by: _____ Date: 02/20/05
Martin Erickson, FSS Radiological Engineer

Reviewed by: _____ Date: 02/20/05
Chris Messier, FSS Radiological Engineer

Approved by: _____ Date: 02/21/05
Dann Smith, FSS Manager

Table of Contents

Section	Page
1.0 Executive Summary	1
1.1 Identification of Survey Area and Units	1
1.2 Date(s) of Survey	1
1.3 Number and Types of Measurements Collected	2
1.4 Summary of Survey Results	2
1.5 Conclusions	2
2.0 FSS Program Overview	2
2.1 Survey Planning	2
2.2 Survey Design	3
2.3 Survey Implementation	3
2.4 Survey Data Assessment	3
2.5 Quality Assurance and Quality Control Measures	4
3.0 Survey Area Information	4
3.1 Survey Area Description and HSA Information	4
3.2 History of Survey Area	4
3.3 Division of TBN-01 into Survey Units	5
3.4 Survey Unit Description	5
4.0 Individual Survey Unit Information	6
4.1 Survey Unit TBN-01-01 and TBN-01-09 through TBN-01-17	6
4.1.1 Summary of Radiological Data Since HSA	6
4.1.1.1 Chronology and Description of Surveys Since HSA	6
4.1.1.2 Radionuclide Selection and Basis	6
4.1.1.3 Summary of Scoping/Characterization Survey Data	7
4.1.2 Basis for Classification	7
4.1.3 Remedial Actions and Further Investigations	7
4.1.4 Unique features of Survey Unit	8
4.1.5 ALARA Practices and Evaluations	8
4.2 Survey Units TBN-01-02 through TBN-01-08	8

Table of Contents (Continued)

Section Page

4.2.1 Summary of Radiological Data Since HSA 8
4.2.1.1 Chronology and Description of Surveys Since HSA 8
4.2.1.2 Radionuclide Selection and Basis 9
4.2.1.3 Summary of Scoping/Characterization Survey Data 9
4.2.2 Basis for Classification 9
4.2.3 Remedial Actions and Further Investigations 10
4.2.4 Unique features of Survey Unit 10
4.2.5 ALARA Practices and Evaluations 10
5.0 Final Status Survey 11
5.1 Survey Unit TBN-01-01 and TBN-01-09 through TBN-01-17 11
5.1.1 Survey Planning 11
5.1.1.1 Final Status Survey Plan and Associated DQOs 11
5.1.1.2 Deviations from the FSS Plan as Written in the LTP 13
5.1.1.3 DCGL Selection and Use 14
5.1.1.4 Measurements 14
5.1.2 Survey Implementation Activities 17
5.1.3 Surveillance Surveys 18
5.1.3.1 Periodic Surveillance Surveys 18
5.1.3.2 Resurveys 19
5.1.3.3 Investigations 19
5.1.4 Survey Results 19
5.1.5 Data Quality Assessment 25
5.2 Survey Unit TBN-01-02 through TBN-01-08 31
5.2.1 Survey Planning 31
5.2.1.1 Final Status Survey Plan and Associated DQOs 31
5.2.1.2 Deviations from the FSS Plan as Written in the LTP 33
5.2.1.3 DCGL Selection and Use 33
5.2.1.4 Measurements 34
5.2.2 Survey Implementation Activities 35

5.2.3 Surveillance Surveys 36
5.2.3.1 Periodic Surveillance Surveys 36
5.2.3.2 Resurveys 36
5.2.3.3 Investigations 36
5.2.4 Survey Results 36
5.2.5 Data Quality Assessment 38
6.0 Quality Assurance and Quality Control 42
6.1 Instrument QC Checks 42
6.2 Split Samples and Recounts 43
6.3 Self-Assessments 43
7.0 Conclusion 43

Table of Contents (Continued)

List of Tables

Table — Page

Table 1 – Survey Area TBN-01 Events/Conditions 5

Table 2 – Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 Surveys 7

Table 3 – Survey Units TBN-01-02 through TBN-01-08 Surveys 9

Table 4 – Survey Unit TBN-01-01 and TBN-01-09 through TBN-01-17 Design Parameters .. 12

Table 5 – $DCGL_W$, $DCGL_{EMC}$ and Investigation Level for ISOCS Measurements 13

Table 6 – Sample Measurement Locations with GPS Coordinates 15

Table 7 – FSS Activity Summary for Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 18

Table 8 – Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 Fixed-point Measurements 20

Table 9 – Summary of ISOCS Scan Results for Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 25

Table 10 - Survey Unit TBN-01-02 through TBN-01-08 Design Parameters 32

Table 11 - DCGLW, DCGLemc and Investigation Levels 33

Table 12 - FSS Activity Summary for Survey Units TBN-01-02 through TBN-01-08 35

Table 13 - Survey Units TBN-01-02 through TBN-01-08 Fixed-point Measurements 37

List of Figures

Figure — Page

Figure 1 – Map of Survey Units Relative to Structures 44

Figure 2 –Site Map 45

Figure 3 – Map of Survey Units Relative to Survey Area 46

List of Attachments

Attachment A – ISOCS Results

Attachment B – Data Quality Assessment Plots and Curves

Attachment C – Instrument QC Records

List of Appendices

Appendix A – YNPS-FSSP-TBN01, *"Final Status Survey Planning Worksheet, Survey Area TBN-01, Units 1 through 17"*

Appendix B – YA-REPT-00-015-04, *"Instrument Efficiency Determination for Use in Minimum Detectable Concentration Calculations in Support of the Final StatusSurvey at Yankee Rowe"*

Appendix C –YA-REPT-00-018-05, *"Use of In-situ Gamma Spectrum Analysis to Perform Elevated Measurement Comparison in Support of Final Status Surveys"*

Appendix D – ALARA Evaluation TBN-01Units 2 through 8 and TBN-01-01 and TBN-01-09 to TBN-01-17

List of Abbreviations and Acronyms

AL ..... Action Level
ALARA ..... As Low As Reasonably Achievable
c/d ..... Counts per Disintegration
DCGL ..... Derived Concentration Guideline Level
$DCGL_{EMC}$ ..... DCGL for small areas of elevated activity
$DCGL_W$ ..... DCGL for average concentration over a wide area, used with statistical tests
DQO ..... Data Quality Objectives
EMC ..... Elevated Measurement Comparison
ETD ..... Easy-to-Detect
FSS ..... Final Status Survey
FSSP ..... Final Status Survey Plan
GPS ..... Global Positioning System
H_o ..... Null Hypothesis
HSA ..... Historical Site Assessment
HTD ..... Hard-to-Detect
ISOCS ..... *In-situ* Object Counting System®
LBGR ..... Lower Bound of the Grey Region
LTP ..... License Termination Plan
MARSSIM ..... Multi-Agency Radiation Survey and Site Investigation Manual
MDA ..... Minimum Detectable Activity
MDC ..... Minimum Detectable Concentration
PAB ..... Primary Auxiliary Building
QAPP ..... Quality Assurance Project Plan
QC ..... Quality Control
RCA ..... Radiological Controlled Area
RP ..... Radiation Protection
RSS ..... Reactor Support Structure
SFP ..... Spent Fuel Pool
VC ..... Vapor Container
VCC ..... Vertical Concrete Cask
VSP ..... Visual Sample Plan
YNPS ..... Yankee Nuclear Power Station

1.0 EXECUTIVE SUMMARY

1.1 Identification of Survey Area and Units

A Final Status Survey (FSS) was performed of Survey Area TBN-01 in accordance with Yankee Nuclear Power Station's (YNPS) License Termination Plan (LTP). This FSS was conducted as a structure surface FSS with building occupancy Derived Concentration Guideline Levels (DCGLs) even though the TBN-01 structure will be subsurface at license termination. This practice conservatively implements LTP criteria that subsurface structure surfaces be evaluated for the presence of contamination.

TBN-01 is described in the LTP as the Turbine Building and Offices. Decommissioning of the area resulted in the complete demolition of the above grade structures and partial demolition of the floors and foundation of the structures. As a result, the boundaries of TBN-01 have been adjusted to include the areas discussed below. TBN-01 is subdivided into seventeen distinct Survey Units comprising a total surface area of approximately 1554 square meters.

TBN-01 currently consists of the remaining concrete floors and exposed foundations of the former Turbine Building and the Circulating Water discharge piping. All above grade structures have been demolished and removed, as well as portions of the floors and foundations of the Turbine Building. The Administration Building, turbine pedestal and the control room shield wall have been completely removed and the footprints of these former structures are incorporated into adjacent open land survey areas. The Circulating Water Discharge line, as a large accessible area easily traversed by surveying personnel, is considered the basement of the turbine hall and is considered to be a part of Survey Area TBN-01as Survey Units TBN-01-02 through -08. Figure 1 illustrates the relationship of the former structures to Survey Area TBN-01.

TBN-01 is located outside of the Radiological Controlled Area (RCA), as delineated in years 2004-2005, and was originally classified, in the HSA, as a MARSSIM Class 3 area. Subsequent demolition activities performed in and adjacent to TBN-01 have prompted a reclassification of TBN-01 to a MARSSIM Class 1 area.

1.2 Dates(s) of Survey

The FSS of the TBN-01 survey units was performed during the following time periods:

TBN-01-01 and TBN-01-09 through TBN-01-17 – October 19, 2005 to November 7, 2005

TBN-01-03 through TBN-01-08 – May 26, 2005 to June 02, 2005

TBN-01-02 – July 22, 2005 to July 27, 2005

1.3 Number and Types of Measurements Collected

Final Status Survey Plans (FSSPs) were developed for each survey unit in accordance with YNPS LTP and FSS procedures using the MARSSIM protocol. The planning and design of the survey plans employed the Data Quality Objective (DQO) process, ensuring that the type, quantity and quality of data gathered was appropriate for the decision-making process and that the resultant decisions were technically sound and defensible. A total of 305 fixed-point measurements were taken, providing data for the non-parametric testing of the survey area. In addition to the fixed-point samples, a total of 269 *In-Situ* Object Counting System (ISOCS) scans, supplemented by hand-held survey instrument scans, were performed to provide 100 percent coverage of the survey area.

1.4 Summary of Survey Results

Following the survey, the data were reviewed against the survey design to confirm completeness and consistency, to verify that the results were valid, to ensure that the survey plan objectives were met and to verify survey unit classification. The boundaries of areas of elevated activity were identified based upon the results of a 100 percent surface scan, and one area identified as exceeding $DCGL_{EMC}$ was remediated. Resurveys of the remediated area indicated no result greater than $DCGL_W$. No significant anomalies were observed in the graphical representation of the data collected as depicted in Attachment B. Retrospective power curves were generated and demonstrated that adequate power was achieved. An evaluation of the fixed-point sample data shows that none of the values exceeded the $DCGL_W$. Therefore, the null hypothesis (H_o) (that is, that the survey unit exceeds the release criteria) is rejected.

1.5 Conclusions

Based upon the evaluation of the data acquired for the FSS, TBN-01 meets the release requirements set forth in the YNPS LTP. The Total Effective Dose Equivalent (TEDE) to the average member of the critical group does not exceed 25 mrem/yr, and 10CFR20 Subpart E ALARA requirements have been met. This survey unit was evaluated against the site release criteria administrative level DCGLs that ensure that the Massachusetts Department of Public Health's 10 mrem/yr limit will be met.

2.0 FSS PROGRAM OVERVIEW

2.1 Survey Planning

The YNPS FSS Program employs a strategic planning approach for conducting final status surveys with the ultimate objective to demonstrate compliance with the DCGLs, in accordance with the YNPS LTP. The DQO process is used as a planning technique to ensure that the type, quantity, and quality of data gathered is appropriate

for the decision-making process and that the resultant decisions are technically sound and defensible. Other key planning measures are the review of historical data for the survey unit and the use of a team for plan development.

2.2 Survey Design

In designing the FSS, the questions to be answered are: "Does the residual radioactivity, if present in the survey unit, exceed the LTP release criteria?" and "Is the potential dose from this radioactivity ALARA?" In order to answer these questions, the radionuclides present in the survey units must be identified, and the survey units classified. Survey units are classified with respect to the potential for contamination: the greater the potential for contamination, the more stringent the classification and the more rigorous the survey.

The survey design additionally includes the number, type and locations of fixed measurements/samples (as well as any judgmental assessments required), scanning requirements, and instrumentation selection with the required sensitivities or detection levels. DCGLs are developed relative to the surface/material of the survey unit and are used to determine the minimum sensitivity required for the survey. Determining the acceptable decision error rates, the lower bound of the gray region (LBGR), statistical test selection and the calculation of the standard deviation and relative shift allows for the development of a prospective power curve plotting the probability of the survey unit passing FSS.

2.3 Survey Implementation

Once the planning and development has been completed, the implementation phase of the FSS program begins. Upon completion of remediation and final characterization activities, a final walk down of the survey unit is performed. If the unit is determined to be acceptable (i.e. physical condition of the unit is suitable for FSS), it is turned over to the FSS team, and FSS isolation and control measures are established. After the survey unit isolation and controls are in place, grid points are identified for the fixed measurements/samples, using Global Positioning System (GPS) coordinates whenever possible, consistent with the Massachusetts State Plane System, and the area scan grid is identified. Data is collected and any required investigations are performed.

2.4 Survey Data Assessment

The final stage of the FSS program involves assessment of the data collected to ensure the validity of the results, to demonstrate achievement of the survey plan objectives, and to validate survey unit classification. During this phase, the DQOs and survey design are reviewed for consistency between DQO output, sampling design and other data collection documents. A preliminary data review is conducted to include: checking for problems or anomalies, calculation of statistical quantities and preparation of graphical representations for data comparison. Statistical tests are

performed, if required, and the assumptions for the tests are verified. Conclusions are then drawn from the data, and any deficiencies or recommendations for improvement are documented.

2.5 Quality Assurance and Quality Control Measures

YNPS FSS activities are implemented and performed under approved procedures, and the YNPS Quality Assurance Project Plan (QAPP) assures plans, procedures and instructions have been followed during the course of FSS, as well as providing guidance for implementing quality control measures specified in the YNPS LTP.

3.0 SURVEY AREA INFORMATION

3.1 Survey Area Descriptions and HSA Information

Survey Area TBN-01 consists of concrete surfaces of the Turbine Building along with the Circulating water Discharge Line encompassing approximately 1554 square meters of surface area. Figure 2 depicts the boundaries of TBN-01 in relation to the site map.

The LTP assumes that the reinforced concrete floors and foundations of the Turbine and Administration Buildings, turbine pedestal, and control room shield wall (reduced to grade level) located within and adjacent to TBN-01, were to undergo FSS and remain onsite. However, subsequent management decisions resulted in the complete demolition and removal of the Administration Building floors and foundation, the turbine pedestal and the control room shield wall. The area of these former structures will be incorporated into other open land Survey Areas. The Circulating Water Discharge line, identified as Survey Units TBN-01-02 through 08, is considered the basement of the turbine hall, even though it extends far beyond the footprint of the building.

3.2 History of Survey Area

During plant operation, TBN-01 was maintained as a "clean" area with only minor contamination events, due to the migration of radioactive contamination out of the RCA and through the Service Building. The systems present and the processes performed in TBN-01 were not intended to involve radioactive materials. Table 1 identifies the conditions and events in which radioactive material was present in TBN-01.

Table 1

Survey Area TBN-01 Events/Conditions

Date	Event/Condition
1967	Contamination Due to Main Coolant Pump Refurbishment on Turbine Deck
Unknown	Primary to Secondary leak
1998	Turbine Support Pedestal #4 Contamination
Post-HSA	Storage of contaminated soils from various excavations and contaminated VC steel

3.3 Division of TBN-01 into Survey Units

TBN-01 is subdivided into seventeen distinct survey units. TBN-01-01 and TBN-01-09 through TBN-01-17 encompass the former Turbine Building floor and foundation. TBN-02 through TBN-01-08 represent the Circulating Water Discharge Piping. Figure 3 illustrates the survey units relative to the survey area.

3.4 Survey Unit Description

TBN-01-01 and TBN-01-09 through TBN-01-17

TBN-01-01 and TBN-01-09 through TBN-01-17 consist of steel-reinforced concrete pad and foundation portions, which are the remnants of the Turbine Building. The combination of these TBN survey units are bounded on the north by OOL-02, on the west by OOL-10, on the east by SVC-01, and on the south by NOL-06. Soil areas, exposed within these survey units by demolition and component removal, have been incorporated in the open land survey area OOL-02. The resultant total area of these units is approximately 909 m^2.

TBN-01-02 through TBN-01-08

The Circulating Water Discharge line, consisting of Survey Units TBN-01-02 through -08, constitutes the basement of the turbine hall, even though it extends far beyond the footprint of the building. Originally, due to the initial Class 3 designation, these units were treated as one survey unit. However, because of its reclassification to Class 1 and the size restrictions on Class 1 survey units, the unit was subdivided into seven smaller units. The survey was designed and implemented for these units as structures, as they are large concrete and steel construction and were easily accessible to personnel performing the survey.

For most of its length, the discharge line has an 84-inch inside diameter, the majority of which consist of steel lined concrete. There is also a short section of bare concrete, and some solid steel pipe. Survey units TBN-01-02 through TBN-01-08 travel in a north-to-northeasterly direction through survey areas: OOL-02, OOL-04, OOL-03, terminating at survey area OMB-06. The three survey units closest to the

Seal Pit (Survey Area OMB-06) each include a 48-inch steel pipe that goes off at an angle, turns vertical and dead-ends at a horizontal blank flange. Survey units TBN-01-02 through TBN-01-08 have a total internal surface area of approximately 645 square meters.

4.0 INDIVIDUAL SURVEY UNIT INFORMATION

4.1. Survey Unit TBN-01-01 and TBN-01-09 through TBN-01-17

4.1.1 Summary of Radiological Data Since Historical Site Assessment (HSA)

4.1.1.1 Chronology and Description of Surveys Since HSA

After demolition and removal of the above grade portion of the structure, the Turbine Building slab was used as a materials lay-down area during the demolition of adjacent structures. From September 28, 2005, to October 18, 2005, a characterization survey of the slab was performed. The characterization survey was comprised of 531 ISOCS assays and 91 fixed-point measurements.

Upon completion of the characterization effort, isolation and control measures were implemented for the FSS of the Turbine Building slab including storm water controls. The Turbine Building slab boundaries were bounded on the north by OOL-02, on the west by OOL-10 with SVC-01 forming the east boundary and NOL-06 forming the south boundary. The condition of TBN-01-01 and TBN-01-09 through TBN-01-17 at the time of FSS was smooth to heavily remediated steel reinforced concrete.

4.1.1.2 Radionuclide Selection and Basis

During the initial DQO process, Co^{60} was identified as the radiological nuclide of concern due to its more restrictive DCGL value when compared to Cs^{137} (sampling of soil adjacent to the concrete indicated an approximate 50% Co^{60} to 50% Cs^{137} relationship). Turbine Building and adjacent soil characterization and survey data indicate no other LTP-specified radionuclides warrant consideration in these survey units.

4.1.1.3 Summary of Scoping/Characterization Survey Data

Table 2 summarizes the characterization surveys for Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17.

Table 2

Survey Units TBN-01-01 and

TBN-01-09 through TBN-01-17 Surveys

Parameter	Characterization 09/28/05-10/18/05
Number of measurements	91
Mean	288 cpm
Standard Deviation	54 cpm
Minimum	184 cpm
Maximum	539 cpm

4.1.2 Basis for Classification

Based upon the historical use and radiological conditions, Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 were originally designated as MARSSIM Class 3. Based upon reviews of data obtained during the course of demolition and interviews with personnel, in addition to the fact that the slab was used as a storage area for slightly contaminated materials, it was determined that TBN-01-01 and TBN-01-09 through TBN-01-17 would be reclassified as a Class 1 unit.

4.1.3 Remedial Actions and Further Investigations

During the FSS of TBN-01-14, a small crevice approximately 4cm long by 1cm wide was discovered to contain 2802cpm/100cm^2 as measured with an HP100C or 4.6E4dpm/100cm^2. This discrete area of contamination was not identified by ISOCS scans during the characterization/remediation surveys. A successful remediation was performed using a vacuum at that point.

ISOCS investigation levels from the survey unit were set at 2.9E3dpm/100cm^2 for Co-60 based on an even distribution of activity over an area of 1m^2. The 4cm^2 area correlates to discrete area, activity concentrated in an area small enough to appear to ISOCS as a discreet particle. As expected the ISOCS investigation levels were not triggered since the 4 cm^2 area of activity is equivalent to 4.6dpm/m^2 when uniformly distributed over the 1m^2 area.

Sample data point TBN-01-14-005-F-FM was not used in the statistical assessment of TBN-01-14 given that the remedial process compromised it.

4.1.4 Unique Features of Survey Unit

Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 exhibited surface characteristics ranging from smooth surfaces to heavily remediated irregular surfaces. The irregular surfaces increased the source-to-detector distance to as much as 1 inch. Table 4.2 of the YA-REPT-00-015-04 (Appendix A) provides instrument efficiency factors (ε_i) for various source-to-detector distances. Detector efficiencies (HP-100C) were applied as follows: smooth surface 0.0603 c/d, irregular surface 0.0373 c/d.

4.1.5 ALARA Practices and Evaluations

A unit specific ALARA Evaluation was developed for each of the survey units with each Evaluation concluding that additional remediation was not warranted (Appendix D).

4.2. Survey Units TBN-01-02 through TBN-01-08

4.2.1 Summary of Radiological Data since Historical Site Assessment (HSA)

4.2.1.1 Chronology and Description of Surveys Since HSA

From April 28, 2005, to May 13, 2005, a comprehensive scoping/characterization survey plan was performed. The survey plan was a three stage iterative process, with the data from each iteration providing guidance for the next. Smears, gamma and beta scans, sediment sampling and concrete core boring were performed as part of this survey. The results indicated that a small amount of activity existed in the lower ten feet of the annulus of the pipe. The last ten feet of the liner was cut off, the annulus was scraped and the pipe was pressure washed. On May 26, 2005, a turnover survey was performed and that data was used to determine the statistical values for the DQOs.

Upon completion of the characterization effort, isolation and control measures were implemented for the FSS. The boundaries for TBN-01-02 through TBN-01-08 were the interior surfaces of the Circulating Water Discharge Pipe, starting at the Turbine Building and terminating at the Discharge Seal Pit (OMB-06). The condition of TBN-01-02 through TBN-01-08 at the time of FSS was steel lined buried concrete pipe proceeding in a north to

northeasterly direction from the Turbine Building to the Discharge Seal Pit.

4.2.1.2 Radionuclide Selection and Basis

The original characterization data consisted of a set of four sediment samples from the Survey Area that were taken in 1998 and found to contain Co-60. The Co-60 is assumed to be a component of the activity released through the licensed discharge pathway, which flowed into the circ water discharge line from the service water line. Cs-137 and traces of other radionuclides were found, but too inconsistently in sediment samples to be able to establish a less conservative nuclide mix. Because of its low beta energy, using Co-60 as the sole nuclide of concern was more conservative than mixes including any other nuclides identified.

4.2.1.3 Summary of Scoping/Characterization Survey Data

Table 3 summarizes scoping, characterization, and remedial action surveys for Survey Units TBN-01-02 through TBN-01-08.

Table 3

Survey Units TBN-01-02 through TBN-01-08 Surveys

Parameter	Remedial	Scoping/ Characterization	
	09/09/98	05/09/05-05/10/05	05/09/05-05/10/05
Number of samples/fixed-point measurements collected	4 (sediment)	9 (sediment)	11 (fixed-point)
Co^{60}: Mean Concentration Standard Deviation	2.95 pCi/g 1.04 pCi/g	Non-detect Non-detect	105 cpm 52 cpm

4.2.2 Basis for Classification

Based upon the historical use and radiological conditions associated with Survey Units TBN-01-02 through TBN-01-08, these units were designated as MARSSIM Class 1.

4.2.3 Remedial Actions and Further Investigations

The first FSS survey of TBN-01-02 consisted of 15 survey points laid out in a triangular grid pattern with a random start point. There were no points with measurements greater than $DCGL_W$.

After an intense rainstorm, a question was raised as to whether material from the surface may have been carried into the pipe. Berms were constructed around both of the openings. Area surveillance (YNPS-ASP-TBN01-02-01) was performed, in accordance with DP-8860, "*Area Surveillance Following Final Status Survey,*" in an effort to determine if the radiological conditions had changed since FSS. Two survey points from that surveillance exceeded the mean plus two standard deviations of the original FSS data (however, measurements remained less than $DCGL_W$). This necessitated the performance of investigative area surveillance (YNPS-ASP-TBN01-02-02). Two of the new survey points had results greater than the mean plus two standard deviations of the original FSS data, (though still less than $DCGL_W$), necessitating a new FSS of the survey unit in accordance with DP-8860.

The subsequent FSS of TBN-01-02 consisted of 15 survey points laid out in a new triangular grid pattern with a random start point. There were no points with measurements greater than $DCGL_W$.

The failure of both the resurvey and the investigation were most likely the result of:

1. The data set for the FSS of the survey unit was clustered closely about the arithmetic mean with little dispersion resulting in a relatively small standard deviation.

2. Slight variances in the ambient background could account for results greater than two standard deviations from the mean (i.e. increased/varying radon concentrations for that day).

3. An acceptance criterion was too restrictive for passing the resurvey when results are not significantly distinguishable from background. The acceptance criterion has since been changed to three standard deviations, for data that is less than $DCGL_W$, from the mean of the FSS.

4.2.4 Unique Features of Survey Unit

A unique feature associated with TBN-01-02 through TBN-01-08 is that the survey units consist of a section of buried piping.

4.2.5 ALARA Practices and Evaluations

A unit specific ALARA Evaluation was developed for each of the survey units with each Evaluation concluding that additional remediation was not warranted (Appendix D).

5.0 FINAL STATUS SURVEY

5.1 Survey Unit TBN-01-01 and TBN-01-09 through TBN-01-17

5.1.1 Survey Planning

5.1.1.1 Final Status Survey Plan and Associated DQOs

The FSS for TBN-01-01 and TBN-01-09 through TBN-01-17 (YNPS-FSSP-TBN01-01-00 and YNPS-FSSP-TBN01-09-00 through YNPS-FSSP-TBN01-17-00) was planned and developed in accordance with the LTP using the DQO process. Form DPF-8856.1, found in YNPS Procedure 8856, "*Preparation of Survey Plans*," was used to provide guidance and consistency during development of the FSS Plan. Each FSS Plan can be found in Appendix A. The DQO process allows for systematic planning and is specifically designed to address problems that require a decision to be made in a complex survey design and, in turn, provides alternative actions. The DQO process was used to develop an integrated survey plan providing the survey unit identification, sample size, selected analytical techniques, survey instrumentation, and scan coverage. The Sign Test was specified for non-parametric statistical testing for this survey unit, if required. The design parameters developed are presented in Table 4.

Table 4
Survey Unit TBN-01-01 and TBN-01-09 through TBN-01-17
Design Parameters

Survey Unit	Design Parameter	Value	Basis
TBN-01-01	Area	76 m^2	Class 1, =100 m^2
	Number of Direct Measurements	15 plus 5 added (Same for all units)	Based on a LBGR of 0.5 (unity rule), sigma of 0.12 and an adjusted relative shift of 2 $\alpha=\beta=0.05$ (Same for all units)
	Sample Area	3.8 m^2	76 m^2 / 20 = 3.8 m^2
	Sample Grid Spacing, triangular pitch	2.1 m	$(76/(0.866*20))^{1/2}$
	Scan Grid Area (Same for all units)	ISOCS scans at 2 meters	2.6 m on center
	Scan area	76 m^2	Class 1 Area – 100% (Same for all units)
	Scan Investigation Level (Same for all units)	Co^{60}: 2.9E3 dpm/100cm^2 Cs^{137}: 1.1E4 dpm/100cm^2	See Appendix C
TBN-01-09	Area	93m^2	Class 1, =100 m^2
	Sample Area	4.6 m^2	93 m^2 / 20 = 4.6 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(93/(0.866*20))^{1/2}$
TBN-01-10	Area	91 m^2	Class 1, =100 m^2
	Sample Area	4.5 m^2	91 m^2 / 20 = 4.5 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(93/(0.866*20))^{1/2}$
TBN-01-11	Area	100 m^2	Class 1, =100 m^2
	Sample Area	5 m^2	100 m^2 / 20 = 5 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(100/(0.866*20))^{1/2}$
TBN-01-12	Area	100 m^2	Class 1, =100 m^2
	Sample Area	5 m^2	100 m^2 / 20 = 5 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(100/(0.866*20))^{1/2}$
TBN-01-13	Area	100 m^2	Class 1, =100 m^2
	Sample Area	5 m^2	100 m^2 / 20 = 5 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(100/(0.866*20))^{1/2}$
TBN-01-14	Area	89 m^2	Class 1, =100 m^2
	Sample Area	4.5 m^2	89 m^2 / 20 = 4.5 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(89/(0.866*20))^{1/2}$
TBN-01-15	Area	100 m^2	Class 1, =100 m^2
	Sample Area	5 m^2	100 m^2 / 20 = 5 m^2
	Sample Grid Spacing, triangular pitch	2.4 m^2	$(100/(0.866*20))^{1/2}$
TBN-01-16	Area	72 m^2	Class 1, =100 m^2
	Sample Area	5 m^2	100 m^2 / 20 = 5 m^2
	Sample Grid Spacing, triangular pitch	2.0 m^2	$(72/(0.866*20))^{1/2}$

Survey Unit	Design Parameter	Value	Basis
TBN-01-17	Area	88 m^2	Class 1, =100 m^2
	Sample Area	4.4 m^2	88 m^2 / 20 = 4.4 m^2
	Sample Grid Spacing, triangular pitch	2.2 m^2	$(88/0.866*20)^{1/2}$

5.1.1.2 Deviations from the FSS Plan as Written in the LTP

The null hypothesis (H_o) is stated and tested in the negative form: "Residual licensed radioactive materials in Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 exceeds the release criterion." This null hypothesis is designed to protect the health of the public as well as to demonstrate compliance with the requirements set forth in the Yankee Rowe LTP. The tolerable limits established for this survey plan set the probability of Type I errors (a) at 0.05 and the probability of Type II errors (β) at 0.05. Investigation levels for the fixed measurements were set at a statistical outlier >$DCGL_W$ and at >$DCGL_{EMC}$. The scan MDCs for the ISOCS measurements were set at the $DCGL_{EMC}$. All MDCs for the surveys of TBN-01-01 and TBN-01-09 through TBN-01-17 were met in accordance with YNPS LTP. DCGL values and the associated MDC values can be found in Table 5.

Table 5

$DCGL_W$, $DCGL_{EMC}$ and

Investigation Level for ISOCS measurements

	DCGLw	$DCGL_{EMC}$ (ISOCS based on source area = 1m^2)	Investigation Level ISOCS (Based on source area = 1m^2, 2m 90d collimated)
Nuclide	Bldg Surface (dpm/100 cm^2) at 8.73 mrem/y	Bldg Surface (dpm/100 cm^2)	Bldg Surface (dpm/100 cm^2)
Co-60	6.3E+03 (Smooth=379 cpm) (Irregular=232 cpm)	4.6E+04	2.9E+03
Cs-137	2.2E+04	1.7E+05	1.1E+04

The FSSP design was performed to the criteria of the LTP; therefore, no subsequent LTP deviations with potential impact to this survey unit need to be evaluated.

5.1.1.3 DCGL Selection and Use

It must be noted that for the final evaluation of the TBN survey units and throughout this report, the acceptance criteria of Building Surface LTP-listed DCGL values has been applied. However, given that all of the remaining slab and foundation structure will be at least a few feet subsurface before site grading is complete and will be in such a state at license termination, the LTP, section 5.6.3.1.2, "Exterior Surfaces of Building Foundations," establishes the applicable guidance, as it addresses methods that may be applied to determine if subsurface structure surfaces will be acceptable by meeting LTP-required concrete volumetric DCGLs.

With the established LTP guidance, given that Co-60 and Cs-137 have been found to be the only radionuclides of significance in the area of concern, and given the ISOCS ability to readily detect either constituent to acceptable levels and conventional hand-held instrument survey criteria techniques being conservatively based on C0-60 beta emissions, performing a Class 1 survey applying Building Surface DCGLs has led to a very conservative approach in determining the final status of the survey units. However, in applying this approach, in addition to evaluating subsurface conditions, there is no unanswered concern should the question of future subsurface structure occupancy arise.

5.1.1.4 Measurements

Error tolerances and characterization sample population statistics drove the selection of fifteen samples. Professional judgment was exercised adding five additional fixed-point measurements despite the use of ISOCS scanning to achieve a tighter sampling grid building conservatism into the sampling design.

The fixed-point sampling grid was developed as a systematic grid with spacing consisting of a triangular pitch pattern with a random starting point. With the aid of a GPS and AutoCAD-generated survey unit map, the systematic random start grid was developed using Visual Sample Plan (VSP version 4.0a) software. Sample measurement locations are provided with the GPS coordinates in Table 6.

Table 6

Sample Measurement Locations with GPS Coordinates

	EAST	NORTH		EAST	NORTH
TBN-01-01-001	272385.2323	3093645.8470	TBN-01-09-001	272370.907	3093680.872
TBN-01-01-002	272379.7090	3093641.6970	TBN-01-09-002	272364.791	3093676.277
TBN-01-01-003	272374.1850	3093637.5460	TBN-01-09-003	272358.675	3093671.681
TBN-01-01-004	272368.6610	3093633.3960	TBN-01-09-004	272352.559	3093667.086
TBN-01-01-005	272384.4000	3093652.7060	TBN-01-09-005	272346.443	3093662.49
TBN-01-01-006	272378.8760	3093648.5550	TBN-01-09-006	272363.869	3093683.871
TBN-01-01-007	272373.3530	3093644.4050	TBN-01-09-007	272357.753	3093679.276
TBN-01-01-008	272367.8290	3093640.2550	TBN-01-09-008	272351.637	3093674.68
TBN-01-01-009	272378.0440	3093655.4140	TBN-01-09-009	272345.521	3093670.085
TBN-01-01-010	272372.5200	3093651.2640	TBN-01-09-010	272362.947	3093691.465
TBN-01-01-011	272366.9960	3093647.1141	TBN-01-09-011	272356.831	3093686.87
TBN-01-01-012	272361.4730	3093642.9630	TBN-01-09-012	272355.91	3093694.464
TBN-01-01-013	272377.2110	3093662.2730	TBN-01-09-013	272349.794	3093689.869
TBN-01-01-014	272371.6880	3093658.1230	TBN-01-09-014	272343.667	3093685.273
TBN-01-01-015	272366.1640	3093653.9730	TBN-01-09-015	272337.561	3093680.678
TBN-01-01-016	272360.6400	3093649.8220	TBN-01-09-016	272354.988	3093702.059
TBN-01-01-017	272370.8550	3093664.9820	TBN-01-09-017	272348.872	3093697.463
TBN-01-01-018	272365.3310	3093660.8310	TBN-01-09-018	272342.756	3093692.868
TBN-01-01-019	272359.8080	3093656.6810	TBN-01-09-019	272336.64	3093688.272
TBN-01-01-020	272354.2840	3093652.5310	TBN-01-09-020	272330.524	3093683.677
	EAST	NORTH		EAST	NORTH
TBN-01-10-001	272353.5140	3093705.1430	TBN-01-11-001	on vertical surface	on vertical surface
TBN-01-10-002	272329.6090	3093687.1800	TBN-01-11-002	on vertical surface	on vertical surface
TBN-01-10-003	272346.6360	3093708.0732	TBN-01-11-003	272361.4460	3093628.2444
TBN-01-10-004	272340.6595	3093703.5826	TBN-01-11-004	272355.0240	3093623.4180
TBN-01-10-005	272334.6829	3093699.0919	TBN-01-11-005	272348.6030	3093618.5940
TBN-01-10-006	272328.7063	3093694.6013	TBN-01-11-006	272342.1800	3093613.7680
TBN-01-10-007	272345.7354	3093715.4946	TBN-01-11-007	272354.0560	3093631.3930
TBN-01-10-008	272339.7588	3093711.0039	TBN-01-11-008	272347.6330	3093626.5670
TBN-01-10-009	272333.7822	3093706.5132	TBN-01-11-009	272341.2130	3093621.7430
TBN-01-10-010	272327.8055	3093702.0226	TBN-01-11-010	272334.7920	3093616.9190
TBN-01-10-011	272321.8288	3093697.5319	TBN-01-11-011	272353.0900	3093639.3650
TBN-01-10-012	272338.8582	3093718.4251	TBN-01-11-012	272346.6670	3093634.5400
TBN-01-10-013	272332.8815	3093713.9345	TBN-01-11-013	272340.2470	3093629.7150
TBN-01-10-014	272326.9050	3093709.4440	TBN-01-11-014	272333.8240	3093624.8900
TBN-01-10-015	272320.9280	3093704.9530	TBN-01-11-015	272352.1200	3093647.3390
TBN-01-10-016	272337.9570	3093725.8460	TBN-01-11-016	272345.6990	3093642.5140
TBN-01-10-017	272331.9810	3093721.3560	TBN-01-11-017	272339.2770	3093637.6890
TBN-01-10-018	272326.0040	3093716.8650	TBN-01-11-018	272326.4360	3093628.0400
TBN-01-10-019	272320.0280	3093712.3750	TBN-01-11-019	272338.3120	3093645.6590
TBN-01-10-020	272314.0510	3093707.8840	TBN-01-11-020	272331.8920	3093640.8350
TBN-01-12-001	on vertical surface	on vertical surface	TBN-01-13-001	on vertical surface	on vertical surface

	EAST	NORTH		EAST	NORTH
TBN-01-12-002	on vertical surface	on vertical surface	TBN-01-13-002	on vertical surface	on vertical surface
TBN-01-12-003	on vertical surface	on vertical surface	TBN-01-13-003	272320.026	3093681.558
TBN-01-12-004	272341.8740	3093655.2980	TBN-01-13-004	272314.261	3093667.226
TBN-01-12-005	272335.3240	3093650.3770	TBN-01-13-005	272308.496	3093672.894
TBN-01-12-006	272328.7770	3093645.4580	TBN-01-13-006	272302.731	3093668.563
TBN-01-12-007	272322.2300	3093640.5390	TBN-01-13-007	272319.156	3093688.715
TBN-01-12-008	272334.3400	3093658.5090	TBN-01-13-008	272301.864	3093675.721
TBN-01-12-009	272327.7900	3093653.5880	TBN-01-13-009	272296.099	3093671.39
TBN-01-12-010	272321.2430	3093648.6680	TBN-01-13-010	272295.229	3093678.547
TBN-01-12-011	272326.8040	3093661.7170	TBN-01-13-011	272300.127	3093690.037
TBN-01-12-012	272320.2570	3093656.7980	TBN-01-13-012	272294.362	3093685.705
TBN-01-12-013	272313.7090	3093651.8790	TBN-01-13-013	272288.597	3093681.374
TBN-01-12-014	272325.8190	3093669.8490	TBN-01-13-014	272310.709	3093703.806
TBN-01-12-015	272319.2700	3093664.9280	TBN-01-13-015	272304.943	3093699.474
TBN-01-12-016	272312.7230	3093660.0080	TBN-01-13-016	272293.493	3093692.862
TBN-01-12-017	272324.8310	3093677.9810	TBN-01-13-017	272287.728	3093688.531
TBN-01-12-018	272318.2810	3093673.0600	TBN-01-13-018	272304.074	3093706.632
TBN-01-12-019	272311.7340	3093668.1400	TBN-01-13-019	272298.308	3093702.3
TBN-01-12-020	272305.1870	3093663.2210	TBN-01-13-020	272281.095	3093691.358
	EAST	NORTH		EAST	NORTH
TBN-01-14-001	272334.0120	3093605.2280	TBN-01-15-001	272294.0930	3093664.1290
TBN-01-14-002	272328.0430	3093600.7430	TBN-01-15-002	272287.7630	3093659.5730
TBN-01-14-003	272322.0740	3093596.2580	TBN-01-15-003	272281.4330	3093654.8160
TBN-01-14-004	272316.1050	3093591.7730	TBN-01-15-004	272275.1030	3093650.0600
TBN-01-14-005	272333.1120	3093612.6400	TBN-01-15-005	272268.7720	3093645.3030
TBN-01-14-006	272315.2050	3093599.1850	TBN-01-15-006	272286.8090	3093667.4330
TBN-01-14-007	272326.2440	3093615.5670	TBN-01-15-007	272280.4790	3093662.6770
TBN-01-14-008	272314.3060	3093606.5970	TBN-01-15-008	272274.1490	3093657.9200
TBN-01-14-009	272308.3370	3093602.1120	TBN-01-15-009	272267.8180	3093653.1640
TBN-01-14-010	272325.3440	3093622.9780	TBN-01-15-010	272285.8550	3093675.2930
TBN-01-14-011	272313.4060	3093614.0090	TBN-01-15-011	272279.5250	3093670.5370
TBN-01-14-012	272307.4370	3093609.5240	TBN-01-15-012	272273.1950	3093665.7810
TBN-01-14-013	272301.4690	3093605.0390	TBN-01-15-013	272266.8640	3093661.0240
TBN-01-14-014	272306.5380	3093616.9350	TBN-01-15-014	272278.5710	3093678.3970
TBN-01-14-015	272300.5690	3093612.4510	TBN-01-15-015	272272.2410	3093673.6410
TBN-01-14-016	272317.6060	3093634.8860	TBN-01-15-016	272265.9100	3093668.8840
TBN-01-14-017	272311.6380	3093630.4010	TBN-01-15-017	272257.5800	3093664.1280
TBN-01-14-018	272305.6380	3093624.3470	TBN-01-15-018	272258.6260	3093686.2580
TBN-01-14-019	272299.6690	3093619.8620	TBN-01-15-019	272264.9560	3093676.7450
TBN-01-14-020	272293.7000	3093615.3770	TBN-01-15-020	272277.6170	3093671.9890
TBN-01-16-001	272308.9590	3093586.0270	TBN-01-17-001	272299.4970	3093653.7050
TBN-01-16-002	272303.5750	3093582.0110	TBN-01-17-002	272287.6620	3093644.8120
TBN-01-16-003	272298.1900	3093577.9650	TBN-01-17-003	272298.6050	3093661.0530
TBN-01-16-004	272292.8060	3093573.9190	TBN-01-17-004	272292.6880	3093656.6060
TBN-01-16-005	272287.4210	3093569.8740	TBN-01-17-005	272286.7700	3093652.1600
TBN-01-16-006	272282.0370	3093565.8280	TBN-01-17-006	272280.8530	3093647.7140

	EAST	NORTH		EAST	NORTH
TBN-01-16-007	272276.6520	3093561.7820	TBN-01-17-007	272274.9350	3093643.2670
TBN-01-16-008	272271.2680	3093557.7370	TBN-01-17-008	272269.0170	3093638.8210
TBN-01-16-009	272302.7630	3093588.6970	TBN-01-17-009	272263.1000	3093634.3750
TBN-01-16-010	272301.9520	3093595.3830	TBN-01-17-010	272262.2080	3093641.7230
TBN-01-16-011	272295.7560	3093598.0230	TBN-01-17-011	272261.3160	3093649.0710
TBN-01-16-012	272290.3710	3093593.9770	TBN-01-17-012	272319.6630	3093734.9520
TBN-01-16-013	272284.9870	3093589.9310	TBN-01-17-013	272313.7450	3093730.5060
TBN-01-16-014	272289.5600	3093600.6630	TBN-01-17-014	272307.8270	3093726.0590
TBN-01-16-015	272284.1760	3093596.6170	TBN-01-17-015	272301.9100	3093721.6130
TBN-01-16-016	272288.7490	3093607.3490	TBN-01-17-016	272295.9920	3093717.1670
TBN-01-16-017	272283.3640	3093603.3030	TBN-01-17-017	272290.0750	3093712.7200
TBN-01-16-018	272277.9800	3093599.2580	TBN-01-17-018	272284.1570	3093708.2740
TBN-01-16-019	272282.5530	3093609.9890	TBN-01-17-019	272278.2390	3093703.8280
TBN-01-16-020	272277.1680	3093605.9430	TBN-01-17-020	272272.3220	3093699.3820

A total of 267 ISOCS scans were performed in Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 providing 100 percent coverage of the survey unit. The ISOCS scan grid used a 2.6-m point-to-point grid with no perimeter points farther than 1.3 m from the survey unit boundary. The ISOCS scan grid did not require a random start. ISOCS scans were performed at a height of 2 m from the surface positioned perpendicular to the scan point using a 90-degree collimator. The adjusted investigation levels, referenced in Table 4, for the ISOCS were derived by multiplying the $DCGL_{EMC}$ ($DCGL_W$ * AF for a 1-m^2 elevated area) by the ratio of MDCs obtained from the 12.6-m^2 field of view relative to the MDC obtained for a 1-m^2 area at the edge of the 12.6-m^2 field of view, as this leads to a conservative model. The values developed for the 1-m^2 elevated area at the edge of the field of view used for the ISOCS scan investigative levels are sensitive enough to detect the elevated comparison values for the 12.6-m^2 area. MDC values for the Portable ISOCS scans were set at the $DCGL_{EMC}$ for the individual radionuclides. The technical basis for the use of the ISOCS is documented in Technical Report YA-REPT-00-018-05, "*Use of In-situ Gamma Spectrum Analysis to Perform Elevated Measurement Comparison in Support of Final Status Surveys*" (Appendix C).

5.1.2 Survey Implementation Activities

Table 7 provides a summary of daily activities performed during the Final Status Survey of Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17.

Table 7
FSS Activity Summary for Survey Units
TBN-01-01 and TBN-01-09 through TBN-01-17

Date	Activity
October 19, 2005	Performed walk-down of Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 Established Isolation and Controls
October 21, 2005	Started gridding of Survey Units. Commenced ISOCS scans
October 24, 2005	Continued ISOCS scans. Layout of fixed-point grid (GPS). Commenced fixed-point measurements
October 27, 2005	Completed fixed-point measurements
November 4, 2005	ISOCS Scans complete
November 7, 2005	Performed investigation of fixed-point area TBN-01-14-005-F-FM. Found elevated area confined to a crevice in the concrete ~4 cm long, 1 cm wide and 1 cm deep. Vacuumed out the crevice and performed gamma (SPA-3), beta (HP100) scans and a fixed-point measurement of the remediated area. Post remedial survey shows the area successfully remediated. FSS Complete

Remedial actions implemented during the FSS include vacuuming of a small crevice in the concrete.

5.1.3 Surveillance Surveys

5.1.3.1 Periodic Surveillance Surveys

Upon completion of the FSS of Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17, the survey units were set up for periodic surveillance surveys on a quarterly basis in accordance with YNPS procedure DP-8860, "*Area Surveillance Following Final Status Survey*." These surveys provide assurance that areas with successful FSS remain unchanged until license termination. Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 are unique in the fact that after the successful FSS, the survey units were backfilled with clean fill, thus protecting the survey units so surveillance surveying is not required.

5.1.3.2 Resurveys

After vacuuming a crevice in the concrete at fixed-point measurement TBN-01-14-005-F-FM, gamma scans were performed in the area with a SPA-3, beta scans were performed with a HP100 and a fixed-point measurement was taken on the crevice. Gamma and beta scan results were consistent with background readings in the survey area. The fixed-point result was within 1s of the mean of the survey unit.

5.1.3.3 Investigations

Fixed-point measurement TBN-01-14-005-F-FM yielded a reading of 2802 cpm prompting an investigation of the measurement area. Gamma and beta scans indicated that the activity was limited to an area inside of a crevice in the concrete, which was successfully remediated.

5.1.4 Survey Results

A total of 200 fixed-point readings were taken in Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 all of which were corrected for ambient background. One fixed-point measurement, TBN-01-14-005-F-FM was compromised by the remediation effort performed at that point and was not used in the statistical analysis of the Survey Unit. All of the fixed-point measurements used in the statistical analysis of the Survey Units were below the $DCGL_W$, therefore no statistical testing was necessary. Table 8 includes the fixed-point readings that were gathered for Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17.

Table 8
Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17
Fixed-point Measurements

TBN-01-01-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2	TBN-01-09-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2
001	256	Smooth	60	001	226	Smooth	-550
002	266	Smooth	226	002	228	Smooth	-517
003	240	Smooth	-205	003	227	Smooth	-534
004	241	Smooth	-189	004	254	Smooth	-86
005	230	Smooth	-371	005	260	Smooth	13
006	267	Smooth	242	006	250	Smooth	-152
007	270	Smooth	292	007	182	Smooth	-1280
008	251	Smooth	-23	008	252	Smooth	-119
009	225	Smooth	-454	009	263	Smooth	63
010	272	Smooth	325	010	236	Smooth	-384
011	229	Rough	-628	011	230	Smooth	-784
012	267	Smooth	242	012	257	Smooth	-36
013	267	Smooth	242	013	233	Smooth	-434
014	234	Smooth	-305	014	249	Smooth	-169
015	243	Rough	-252	015	269	Rough	263
016	269	Rough	446	016	255	Smooth	-112
017	263	Smooth	176	017	247	Smooth	-202
018	222	Smooth	-504	018	232	Smooth	-451
019	237	Rough	-413	019	243	Rough	-435
020	256	Rough	97	020	223	Smooth	-972
Mean	250			Mean	241		
Std. Dev.	17			Std. Dev.	20		

TBN-01-10-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2	TBN-01-11-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2
001	237	Smooth	-273	001	264	Smooth	32
002	282	Smooth	473	002	287	Smooth	414
003	292	Smooth	639	003	197	Smooth	-1078
004	273	Smooth	324	004	237	Rough	-415
005	255	Smooth	25	005	223	Rough	-647
006	265	Smooth	191	006	181	Smooth	-1344
007	248	Smooth	-91	007	261	Smooth	-17
008	281	Smooth	456	008	217	Smooth	-747
009	244	Smooth	-157	009	239	Smooth	-382
010	237	Smooth	-273	010	236	Smooth	-432
011	294	Rough	1088	011	233	Smooth	-780
012	250	Rough	-58	012	191	Smooth	-1178
013	240	Smooth	-223	013	232	Smooth	-498
014	238	Smooth	-257	014	235	Smooth	-448
015	287	Rough	900	015	214	Smooth	-1290
016	255	Rough	41	016	252	Smooth	-270
017	237	Smooth	-273	017	239	Rough	-382
018	256	Smooth	42	018	229	Smooth	-548
019	255	Rough	41	019	179	Smooth	-2229
020	241	Smooth	-335	020	262	Smooth	-1
Mean	258			Mean	230		
Std. Dev.	20			Std. Dev.	28		

TBN-01-12-xxx-F-FM	Cpm	Rough or Smooth	dpm/100cm^2	TBN-01-13-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2
001	317	Smooth	1088	001	291	Smooth	705
002	299	Smooth	789	002	254	Smooth	92
003	289	Smooth	624	003	279	Rough	506
004	223	Rough	-470	004	333	Smooth	1401
005	238	Smooth	-222	005	294	Smooth	755
006	249	Rough	-39	006	224	Rough	-406
007	252	Rough	10	007	271	Rough	373
008	242	Rough	-156	008	243	Smooth	-91
009	234	Smooth	-288	009	231	Smooth	-290
010	222	Smooth	-487	010	219	Rough	-489
011	295	Smooth	1171	011	243	Rough	-147
012	298	Smooth	773	012	231	Smooth	-290
013	295	Smooth	723	013	234	Smooth	-240
014	291	Rough	657	014	292	Smooth	721
015	297	Rough	1225	015	259	Rough	283
016	275	Rough	634	016	263	Smooth	390
017	278	Smooth	441	017	238	Smooth	-174
018	280	Smooth	474	018	245	Smooth	-58
019	273	Smooth	580	019	266	Smooth	470
020	291	Smooth	1064	020	218	Smooth	-818
Mean	279			Mean	250		
Std. Dev.	29			Std. Dev.	30		

TBN-01-14-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2	TBN-01-15-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2
001	281	Rough	1100	001	275	Smooth	796
002	325	Rough	1830	002	284	Smooth	945
003	294	Rough	1316	003	283	Smooth	928
004	299	Rough	1399	004	317	Rough	1492
005	Survey Point	remediated		005	329	Smooth	1691
006	298	Smooth	1382	006	292	Smooth	1077
007	307	Smooth	1531	007	284	Smooth	945
008	299	Smooth	1399	008	328	Smooth	1674
009	327	Smooth	1863	009	288	Smooth	1011
010	285	Smooth	1167	010	283	Smooth	928
011	256	Rough	1111	011	299	Smooth	1933
012	289	Smooth	1233	012	296	Rough	1144
013	300	Smooth	1415	013	325	Smooth	1625
014	305	Smooth	1498	014	317	Smooth	1492
015	271	Smooth	1514	015	348	Smooth	3248
016	319	Rough	2802	016	330	Smooth	2765
017	299	Rough	1399	017	300	Rough	1210
018	316	Smooth	1681	018	331	Rough	1724
019	305	Smooth	2426	019	319	Smooth	2470
020	297	Rough	2212	020	321	Rough	2523
Mean	299			Mean	309		
Std. Dev.	18			Std. Dev.	21		

TBN-01-16-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2	TBN-01-17-xxx-F-FM	cpm	Rough or Smooth	dpm/100cm^2
001	352	Smooth	2375	001	288	Smooth	1339
002	342	Rough	2209	002	247	Smooth	659
003	333	Smooth	2060	003	275	Smooth	1123
004	333	Rough	2060	004	243	Smooth	593
005	327	Smooth	1961	005	295	Smooth	1455
006	329	Smooth	1994	006	301	Rough	1554
007	317	Rough	1795	007	264	Rough	941
008	336	Smooth	2110	008	277	Rough	1156
009	270	Rough	1016	009	274	Rough	1107
010	303	Rough	1563	010	279	Smooth	1190
011	253	Smooth	1189	011	329	Smooth	3269
012	269	Smooth	999	012	291	Smooth	1389
013	311	Smooth	1696	013	265	Smooth	958
014	244	Smooth	585	014	281	Smooth	1223
015	250	Smooth	1108	015	269	Smooth	1658
016	260	Smooth	1377	016	283	Smooth	2034
017	267	Rough	966	017	272	Smooth	1074
018	272	Rough	1049	018	281	Rough	1223
019	296	Rough	2343	019	253	Smooth	1229
020	324	Smooth	3095	020	300	Smooth	2490
Mean	307			Mean	278		
Std. Dev.	35			Std. Dev.	20		

Two hundred and sixty-seven ISOCS scans were performed and the results compared to the respective Investigation Levels (Table 5) and where multiple nuclides were positively identified a fractional $DCGL_{EMC}$ sum-of-fractions (Unity) was performed. A summary of the ISOCS scans is provided in Table 9.

Table 9

Summary of ISOCS Scan Results for Survey Units

TBN-01-01 and TBN-01-09 through TBN-01-17

Unit Number	Number of Scans	Action Levels Exceeded	Sum of Fractions = 1
TBN-01-01	26	No	No
TBN-01-09	20	No	No
TBN-01-10	23	No	No
TBN-01-11	25	No	No
TBN-01-12	26	No	No
TBN-01-13	23	No	No
TBN-01-14	30	No	No
TBN-01-15	24	No	No
TBN-01-16	51	No	No
TBN-01-17	19	No	No

5.1.5 Data Quality Assessment

The Data Quality Assessment phase is the part of the FSS where survey design and data are reviewed for completeness and consistency, ensuring the validity of the results, verifying that the survey plan objectives were met, and validating the classification of the survey unit.

The sample design and the data acquired were reviewed and found to be in accordance with applicable YNPS procedures DP-8861, "*Data Quality Assessment*"; DP-8856, "*Preparation of Survey Plans*"; DP-8853, "*Determination of the Number and Locations of FSS Samples and Measurements*"; DP-8857, "*Statistical Tests*"; DP-8865, "*Computer Determination of the Number of FSS Samples and Measurements*" and DP-8852, "*Final Status Survey Quality Assurance Project Plan*".

TBN-01-01

A data review was performed and statistical quantities were calculated. The average concentrations from Table 8 are smaller than the respective characterization data from Table 2 and the standard deviation is higher. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was less than two standard deviations. The frequency plot demonstrates a slight skew high. The scatter plot graphically illustrates that the data varies about the arithmetic mean with no outliers. The data posting plot does not clearly

reveal any systematic spatial trends. Review of the quantile plots for TBN-01-01 indicates some asymmetry in the upper 75th quantile. Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was lower than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-09

A data review was performed and statistical quantities were calculated. The average concentrations and standard deviation from Table 8 are smaller than the respective characterization data from Table 2. The retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a slight skew high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-09 indicates some asymmetry about the arithmetic mean.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was lower than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-10

A data review was performed and statistical quantities were calculated. The average concentrations from Table 8 are smaller than the respective characterization data from Table 2 and the standard deviation is higher. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard

deviations. The frequency plot demonstrates a normal Poisson distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-10 indicates some asymmetry about the arithmetic mean and the lower quartile.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was lower than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-11

A data review was performed and statistical quantities were calculated. The average concentrations from Table 8 are less than the respective characterization data from Table 2 and the standard deviation is higher. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within two standard deviations. The frequency plot demonstrates a normal Poisson distribution slightly skewed high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-11 indicates some asymmetry about the arithmetic mean.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was lower than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-12

A data review was performed and statistical quantities were calculated. The average measurement and standard deviation from Table 8 are higher than the respective characterization data from Table 2. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within two standard deviations. The frequency plot demonstrates a normal Poisson distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-12 indicates some asymmetry in the lower quartile.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-13

A data review was performed and statistical quantities were calculated. The average measurement from Table 8 is lower than the respective characterization data from Table 2 and the standard deviation is higher. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal Poisson distribution slightly skewed high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-13 indicates a slightly larger variability in the upper quartile.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was lower than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-14

A data review was performed and statistical quantities were calculated. The average measurement from Table 8 is lower than the respective characterization data from Table 2 and the standard deviation is higher. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal Poisson distribution slightly skewed high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-14 indicates a slightly larger variability in the upper quartile.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was lower than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-15

A data review was performed and statistical quantities were calculated. The average measurement and the standard deviation from Table 8 is higher than the respective characterization data from Table 2. The retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-15 indicates a slightly larger variability in the upper quartile.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-16

A data review was performed and statistical quantities were calculated. The average measurement and the standard deviation from Table 8 are higher than the respective characterization data from Table 2. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within two standard deviations. The frequency plot demonstrates a normal Poisson distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-16 indicates a slight amount of variability in the inner quartile.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-17

A data review was performed and statistical quantities were calculated. The average measurement and the standard deviation from Table 8 are higher than the respective characterization data from Table 2. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal Poisson

distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the quantile plots for TBN-01-17 indicates no significant variability in the data set.

Review of the data in Table 8 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, quantile plots, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

5.2 Survey Units TBN-01-02 through TBN-01-08

5.2.1 Survey Planning

5.2.1.1 Final Status Survey Plan and Associated DQOs

The FSS for TBN-01-02 through TBN-01-08 (YNPS-FSSP-TBN01-02-01 through YNPS-FSSP-TBN01-08-00) was planned and developed in accordance with the LTP using the DQO process. Form DPF-8856.1, found in YNPS Procedure 8856, "*Preparation of Survey Plans*," was used to provide guidance and consistency during development of the FSS Plan. Each FSS Plan can be found in Appendix A. The DQO process allows for systematic planning and is specifically designed to address problems that require a decision to be made in a complex survey design and in turn provides alternative actions. The DQO process was used to develop an integrated survey plan providing the survey unit identification, sample size, selected analytical techniques, survey instrumentation, and scan coverage. The Sign Test was specified for non-parametric statistical testing for this survey unit, if required. The design parameters developed are presented in the Table 10.

Table 10
Survey Unit TBN-01-02 through TBN-01-08 Design Parameters

Survey Unit	Design Parameter	Value	Basis
TBN-01-02	Area	96 m^2	Class 1, =100 m^2
	Number of Direct Measurements	15 (Same for all units)	Based on a LBGR of 3600 dpm/100cm^2), sigma(Std. Dev.) of 21.5 cpm and an adjusted relative shift of 2 $\alpha=\beta=0.05$ (Same for all units)
	Sample Area	4.8 m^2	96 m^2 / 20 = 4.8 m^2
	Sample Grid Spacing, triangular pitch	2.7 m	$(96/(0.866*15))^{1/2}$
	Scan MDC $fDCGL_{EMC}$ Scan MDCR	0.193 94.9 cpm	MDC_{fixed} of 60.9 cpm and Co^{60} as the sole nuclide Average Bkgd. Of 155.1 cpm
	Scan area	96 m^2	Class 1 Area – 100% (Same for all units)
	Scan Investigation Level	694 cpm above established background (Same for all units)	$DCGL_W$ of 434 cpm and an AF=1.6 ($DCGL_W$ x AF) (Same for all units)
TBN-01-03	Scan MDC $fDCGL_{EMC}$ Scan MDCR (Same for units 03-08)	0.149 73.2 cpm	MDC_{fixed} of 47.6 cpm and Co^{60} as the sole nuclide Average Bkgd. Of 92.2 cpm
	Area	94m^2	Class 1, =100 m^2
	Sample Area	6.3 m^2	94 m^2 / 15 = 6.3 m^2
	Sample Grid Spacing, triangular pitch	2.7 m^2	$(94/(0.866*15))^{1/2}$
TBN-01-04	Area	100 m^2	Class 1, =100 m^2
	Sample Area	6.7 m^2	100 m^2 / 15 = 6.7 m^2
	Sample Grid Spacing, triangular pitch	2.8 m^2	$(100/(0.866*15))^{1/2}$
TBN-01-05	Area	93 m^2	Class 1, =100 m^2
	Sample Area	6.2 m^2	93 m^2 / 15 = 6.2 m^2
	Sample Grid Spacing with a triangular pitch	2.7 m^2	$(93/(0.866*15))^{1/2}$
TBN-01-06	Area	98 m^2	Class 1, =100 m^2
	Sample Area	6.5 m^2	98 m^2 / 15 = 6.5 m^2
	Sample Grid Spacing, triangular pitch	2.7 m^2	$(98/(0.866*15))^{1/2}$
TBN-01-07	Area	64 m^2	Class 1, =100 m^2
	Sample Area	4.3 m^2	64 m^2 / 15 = 4.3 m^2
	Sample Grid Spacing, triangular pitch	2.2 m^2	$(64/(0.866*15))^{1/2}$
TBN-01-08	Area	100 m^2	Class 1, =100 m^2
	Sample Area	6.7 m^2	100 m^2 / 15 = 6.7 m^2
	Sample Grid Spacing, triangular pitch	2.8 m^2	$(100/(0.866*15))^{1/2}$

5.2.1.2 Deviations from the FSS Plan as Written in the LTP

The null hypothesis (H_o) is stated and tested in the negative form: "Residual licensed radioactive materials in TBN-01-02 through TBN-01-08 exceeds the release criterion." This null hypothesis is designed to protect the health of the public as well as to demonstrate compliance with the requirements set forth in the Yankee Rowe LTP. The tolerable limits established for this survey plan set the probability of Type I errors (a) at 0.05 and the probability of Type II errors (β) at 0.05. Investigation levels for the fixed measurements were set at a statistical outlier >$DCGL_W$ and at >$DCGL_{EMC}$. All MDCs for the surveys of TBN-01-02 through TBN-01-08 were met in accordance with YNPS LTP. DCGL values and the associated MDC values can be found in Table 11.

Table 11

***$DCGL_W$, $DCGL_{EMC}$* and**

Investigation Levels

	DCGLw	$DCGL_{EMC}$	Investigation Level HP100	Investigation Level SPA-3
Nuclide	Bldg Surface (dpm/100 cm^2) at 10 mrem/y	Bldg Surface (dpm/100 cm^2)	Bldg Surface (dpm/100 cm^2)	Bldg. Surface
Co-60	7.2E+03	1.2E+04	Greater than 1.2E+04 or 7.2E3 and a statistical outlier	>1.3 times the background

The FSSP design was performed to the criteria of the LTP; therefore, no subsequent LTP deviations with potential impact to this survey unit need to be evaluated.

5.2.1.3 DCGL Selection and Use

As with the TBN slab and foundation survey units, it must be noted that for the final evaluation of the TBN survey units and throughout this report, the acceptance criteria of Building Surface LTP-listed DCGL values has been applied. However, given that the all of the remaining slab and foundation structure will be at least a few feet subsurface before site grading is complete and will be in such a state at license termination, the LTP, section 5.6.3.1.2, "Exterior Surfaces of Building Foundations," establishes the applicable guidance, as it

addresses methods that may be applied to determine if subsurface structure surfaces will be acceptable by meeting LTP-required concrete volumetric DCGLs.

With the established LTP guidance, given that Co-60 and Cs-137 have been found to be the only radionuclides of significance in the area of concern, and given the ISOCS ability to readily detect either constituent to acceptable levels and conventional hand-held instrument survey criteria being conservatively based on C0-60 beta emissions, performing a Class 1 survey applying Building Surface DCGLs has led to a very conservative approach in determining the final status of the survey units. However, in applying this approach, in addition to evaluating subsurface conditions, there is no unanswered concern should the question of future subsurface structure occupancy arise.

5.2.1.4 Measurements

The sample design required that 15 fixed-point measurements per survey unit be used for the Sign Test based on the probability of error tolerance (α and β), LBGR and adjusted relative shift value found in Table 10.

The fixed-point sampling grid was developed as a systematic grid with spacing consisting of a triangular pitch pattern with a random starting point. The systematic grid was laid out by hand from an identified random starting point.

100 percent beta scans of the surface were performed with the HP-100 detector ½ inch from the surface at a rate no greater than 2 inches/second, listening for an increased count rate using earphones pausing at any upscale reading and allowing the detector to stabilize. If the reading was more than 694 cpm above the established background, the location was marked for investigation and the finding logged.

SPA-3 gamma scans were a biased 100 percent of the unlined section of the piping to locate activity in cracks and crevices in the concrete. Gamma scans were performed by walking the length of the pipe with a SPA-3 probe within 3 inches of the bottom centerline, at no greater than 0.5 meter/second noting elevated readings. The middle cooling tower nozzle was scanned in the same way with the SPA-3. The bottom part of the 84-inch pipe in the unlined, concrete section was scanned using a serpentine motion, in two bands, one on either side of the centerline. At least three passes were made on each linear meter, again at 0.5

meter/second. Locations were marked that were reproducibly above background on the pipe and the approximate location and reading were shown on the survey map.

5.2.2 Survey Implementation Activities

Table 12 provides a summary of daily activities performed during the Final Status Survey of Survey Units TBN-01-02 through TBN-01-08.

Table 12

FSS Activity Summary for Survey Units

TBN-01-02 through TBN-01-08

Date	Activity
May 26, 2005	Performed walk-down of Survey Units TBN-01-02 through TBN-01-08. Established Isolation and Controls. Started gridding of Survey Units.
May 27, 2005	Commenced SPA-3 scans and fixed-point measurements
May 31, 2005	Commenced beta scans
June 02, 2005	FSS complete
June 03, 2005	Equipment demobilization
July 15, 2005	Initiated Area Surveillance Plan (YNPS-ASP-TBN01-02-00) resurvey of TBN-01-02 in response to a significant rain event. Performing beta scans and fixed-point measurements.
July 19 and 20, 2005	Initiated Area Surveillance Plan (YNPS-ASP-TBN01-02-02) investigation of TBN-01-02 in response to failure of resurvey. Performing beta scans and fixed-point measurements.
July 22, 2005	Performing new FSS of TBN-01-02 in response to failure of investigation survey (YNPS-FSSP-TBN01-02-01). Performing beta scans and fixed-point measurements on a new systematic grid with a random starting point.
July 27, 2005	FSS of TBN-01-02 complete.

5.2.3 Surveillance Surveys

5.2.3.1 Periodic Surveillance Surveys

Upon completion of the FSS of Survey Units TBN-01-02 through TBN-01-08, the survey units were set up for periodic surveillance surveys on a quarterly basis in accordance with YNPS procedure DP-8860, "*Area Surveillance Following Final Status Survey*." These surveys provide assurance that areas with successful FSS remain unchanged until license termination. Survey Units TBN-01-02 through TBN-01-08 are unique in the fact that after the successful FSS, the survey units were flow-filled with concrete, thus protecting the survey units so surveillance surveying is not required.

5.2.3.2 Resurveys

After a significant rain event a resurvey (YNPS-ASP-TBN01-02-00) was initiated to assess if the FSS of TBN-01-02 was compromised by the intrusion of material from the ground surrounding the openings at the south end of the Circulating Water Discharge Line. Beta scans and fixed-point measurements were taken in the Survey Unit. The acceptance criterion, at the time, was that no single fixed-point measurement could be greater than two standard deviations from the Mean of the FSS of the unit (Survey Unit Mean = 189 cpm and Std. Dev. = 33 cpm). Two data points, # 011 and # 012, were greater than the two standard deviations: 294 cpm and 268 cpm respectively. This prompted an investigation survey of the Survey Unit.

5.2.3.3 Investigations

There were no investigations other than the one mentioned in 5.2.3.2.

5.2.4 Survey Results

A total of 105 fixed-point readings were taken in Survey Units TBN-01-02 through TBN-01-08 none, which were corrected for ambient background. All of the fixed-point measurements used in the statistical analysis of the Survey Unit were below the $DCGL_W$, therefore no statistical test was necessary. Table 13 includes the fixed-point readings that were gathered for Survey Units TBN-01-02 through TBN-01-08.

Table 13
Survey Units TBN-01-02 through TBN-01-08
Fixed-point Measurements

Measurement	cpm	Measurement	cpm	Measurement	cpm
TBN-01-02-001-F-FM	232	TBN-01-03-001-FM	298	TBN-01-04-001-FM	180
TBN-01-02-002-F-FM	264	TBN-01-03-002-FM	274	TBN-01-04-002-FM	143
TBN-01-02-003-F-FM	158	TBN-01-03-003-FM	279	TBN-01-04-003-FM	176
TBN-01-02-004-F-FM	193	TBN-01-03-004-FM	240	TBN-01-04-004-FM	149
TBN-01-02-005-F-FM	210	TBN-01-03-005-FM	223	TBN-01-04-005-FM	169
TBN-01-02-006-F-FM	389	TBN-01-03-006-FM	288	TBN-01-04-006-FM	183
TBN-01-02-007-F-FM	182	TBN-01-03-007-FM	256	TBN-01-04-007-FM	177
TBN-01-02-008-F-FM	249	TBN-01-03-008-FM	237	TBN-01-04-008-FM	185
TBN-01-02-009-F-FM	163	TBN-01-03-009-FM	219	TBN-01-04-009-FM	162
TBN-01-02-010-F-FM	219	TBN-01-03-010-FM	199	TBN-01-04-010-FM	217
TBN-01-02-011-F-FM	283	TBN-01-03-011-FM	206	TBN-01-04-011-FM	183
TBN-01-02-012-F-FM	233	TBN-01-03-012-FM	196	TBN-01-04-012-FM	149
TBN-01-02-013-F-FM	158	TBN-01-03-013-FM	216	TBN-01-04-013-FM	151
TBN-01-02-014-F-FM	145	TBN-01-03-014-FM	235	TBN-01-04-014-FM	148
TBN-01-02-015-F-FM	208	TBN-01-03-015-FM	218	TBN-01-04-015-FM	146
Mean	189	Mean	239	Mean	168
Std. Dev.	33	Std. Dev.	33	Std. Dev.	21
TBN-01-05-001-FM	174	TBN-01-06-001-FM	166	TBN-01-07-001-FM	216
TBN-01-05-002-FM	174	TBN-01-06-002-FM	182	TBN-01-07-002-FM	183
TBN-01-05-003-FM	169	TBN-01-06-003-FM	173	TBN-01-07-003-FM	188
TBN-01-05-004-FM	190	TBN-01-06-004-FM	411	TBN-01-07-004-FM	196
TBN-01-05-005-FM	213	TBN-01-06-005-FM	370	TBN-01-07-005-FM	164
TBN-01-05-006-FM	182	TBN-01-06-006-FM	222	TBN-01-07-006-FM	218
TBN-01-05-007-FM	187	TBN-01-06-007-FM	223	TBN-01-07-007-FM	219
TBN-01-05-008-FM	162	TBN-01-06-008-FM	168	TBN-01-07-008-FM	207
TBN-01-05-009-FM	152	TBN-01-06-009-FM	187	TBN-01-07-009-FM	221
TBN-01-05-010-FM	162	TBN-01-06-010-FM	169	TBN-01-07-010-FM	210
TBN-01-05-011-FM	172	TBN-01-06-011-FM	231	TBN-01-07-011-FM	212
TBN-01-05-012-FM	153	TBN-01-06-012-FM	195	TBN-01-07-012-FM	217
TBN-01-05-013-FM	162	TBN-01-06-013-FM	209	TBN-01-07-013-FM	171
TBN-01-05-014-FM	198	TBN-01-06-014-FM	146	TBN-01-07-014-FM	191
TBN-01-05-015-FM	159	TBN-01-06-015-FM	183	TBN-01-07-015-FM	226
Measurement	cpm	Measurement	cpm	Measurement	cpm
Mean	141	Mean	216	Mean	203
Std. Dev.	17	Std. Dev.	75	Std. Dev.	19

Measurement	cpm
TBN-01-08-001-FM	248
TBN-01-08-002-FM	181
TBN-01-08-003-FM	170
TBN-01-08-004-FM	175
TBN-01-08-005-FM	191
TBN-01-08-006-FM	189
TBN-01-08-007-FM	205
TBN-01-08-008-FM	205
TBN-01-08-009-FM	175
TBN-01-08-010-FM	213
TBN-01-08-011-FM	215
TBN-01-08-012-FM	209
TBN-01-08-013-FM	208
TBN-01-08-014-FM	219
TBN-01-08-015-FM	194
Mean	200
Std. Dev.	21

5.2.5 Data Quality Assessment

The Data Quality Assessment phase is the part of the FSS where survey design and data are reviewed for completeness and consistency, ensuring the validity of the results, verifying that the survey plan objectives were met, and validating the classification of the survey unit.

The sample design and the data acquired were reviewed and found to be in accordance with applicable YNPS procedures DP-8861, "*Data Quality Assessment*"; DP-8856, "*Preparation of Survey Plans*"; DP-8853, "*Determination of the Number and Locations of FSS Samples and Measurements*"; DP-8857, "*Statistical Tests*"; DP-8865, "*Computer Determination of the Number of FSS Samples and Measurements*"; and DP-8852, "*Final Status Survey Quality Assurance Project Plan*".

TBN-01-02

A data review was performed and statistical quantities were calculated. The average concentrations and the standard deviation from Table 13 are larger than the respective characterization data from Table 10. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was less than three standard deviations with one measurement high, but less than $DCGL_W$. The frequency plot demonstrates a normal Poisson distribution with a slight skew high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends. Review of the data in

Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-03

A data review was performed and statistical quantities were calculated. The average concentrations from Table 13 are larger than the respective characterization data from Table 10 and the standard deviation is smaller. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within two standard deviations. The frequency plot demonstrates a slight skew high. The scatter plot graphically illustrates that the data varies about the arithmetic mean with little dispersion and no outliers. The data posting plot does not clearly reveal any systematic spatial trends.

Review of the data in Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-04

A data review was performed and statistical quantities were calculated. The average concentrations from Table 13 are larger than the respective characterization data from Table 10 and the standard deviation is lower. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations with one measurement elevated but less than the $DCGL_W$. The data set without this one measurement would have been slightly over one standard deviation in range. The frequency plot demonstrates a normal distribution slightly skewed high by the one high measurement. The

scatter plot graphically illustrates that the data varies about the arithmetic mean, with no statistical outliers. The data posting plot does not clearly reveal any systematic spatial trends.

Review of the data in Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was greater than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-05

A data review was performed and statistical quantities were calculated. The average concentrations from Table 13 are higher than the respective characterization data from Table 10 and the standard deviation is lower. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal Poisson distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends.

Review of the data in Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-06

A data review was performed and statistical quantities were calculated. The average measurement and standard deviation from Table 13 are higher than the respective characterization data from Table 10. However, the retrospective power curve maintained sufficient power to pass the

survey unit. The data range for the unit was within three standard deviations with two values elevated, but less than the $DCGL_W$. The frequency plot demonstrates a normal distribution slightly skewed high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no statistical outliers. The data posting plot does not clearly reveal any systematic spatial trends.

Review of the data in Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-07

A data review was performed and statistical quantities were calculated. The average measurement from Table 13 is higher than the respective characterization data from Table 10 and the standard deviation is lower. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal distribution slightly skewed high. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends.

Review of the data in Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

TBN-01-08

A data review was performed and statistical quantities were calculated. The average measurement from Table 13 is higher than the respective characterization data from Table 10 and the standard deviation is lower. However, the retrospective power curve maintained sufficient power to pass the survey unit. The data range for the unit was within three standard deviations. The frequency plot demonstrates a normal distribution. The scatter plot graphically illustrates that the data varies about the arithmetic mean, with no outliers. The data posting plot does not clearly reveal any systematic spatial trends.

Review of the data in Table 13 indicates that all of the fixed-point measurements are below the $DCGL_W$; therefore, no statistical test is required.

Copies of the power curves, scatter plots and posting plots are found in Attachment B.

The actual level of residual activity was higher than the estimated level (i.e., values derived from characterization data) used for the survey design; however, the survey demonstrated sufficient power to indicate that the survey unit null hypothesis should be rejected.

6.0 QUALITY ASSURANCE AND QUALITY CONTROL

6.1 Instrument QC Checks

Operation of the portable ISOCS was in accordance with DP-8871,"*Operation of the Canberra Portable ISOCS System,*" with QC checks performed in accordance with DP-8869,"*In-situ (ISOCS) Gamma Spectrum Assay System Calibration Procedure*" and DP-8871, "*Operation of the Canberra Portable ISOCS System.*" Operation of the E-600 w/SPA-3 was in accordance with DP-8535,"*Setup and Operation of the Eberline E-600 Digital Survey Instrument,*" with QC checks preformed in accordance with DP-8540, "*Operation and Source Checks of Portable Friskers.*" Instrument response checks were performed prior to and after use for the E-600 w/SPA-3 and once per shift for the Portable ISOCS. Any flags (i.e. anomalies in the QC results) encountered during the ISOCS QC Source Count were corrected/ resolved prior to surveying. All instrumentation involved with the FSS of TBN-01 satisfied the above criteria for the survey. QC records are found in Attachment C.

6.2 Split Samples and Recounts

One fixed-point measurement location from each of the Survey Units TBN-01-01 and TBN-01-09 through TBN-01-17 were counted twice on site and the results were to be compared in accordance with DP-8864,"*Split Sample Assessment for Final Status Survey.*" DP-8864, however, deals strictly with samples and provides no criteria for fixed-point measurements therefore no measurement comparison were made.

6.3 Self-Assessments

No self-assessments were performed during the FSS of TBN-01.

7.0 CONCLUSION

The FSS of TBN-01 has been performed in accordance with YNPS LTP and applicable FSS procedures. Evaluation of the fixed-point data has shown that none of the measurements exceeded the structure surface $DCGL_W$. Therefore, the null hypothesis (H_o) is rejected. No significant anomalies were observed in the graphical representation of the data collected. The retrospective power curves generated shows adequate power was achieved.

TBN-01 meets the objectives of the Final Status Survey.

Based upon the evaluation of the data acquired for the FSS, TBN-01 meets the release requirements set forth in YNPS LTP. The TEDE to members of the critical group does not exceed 25 mrem/yr, including that from groundwater, and the requirement of 10CFR20 Subpart E for ALARA has been met.

Figure 1

Map of Survey Units Relative to Structures

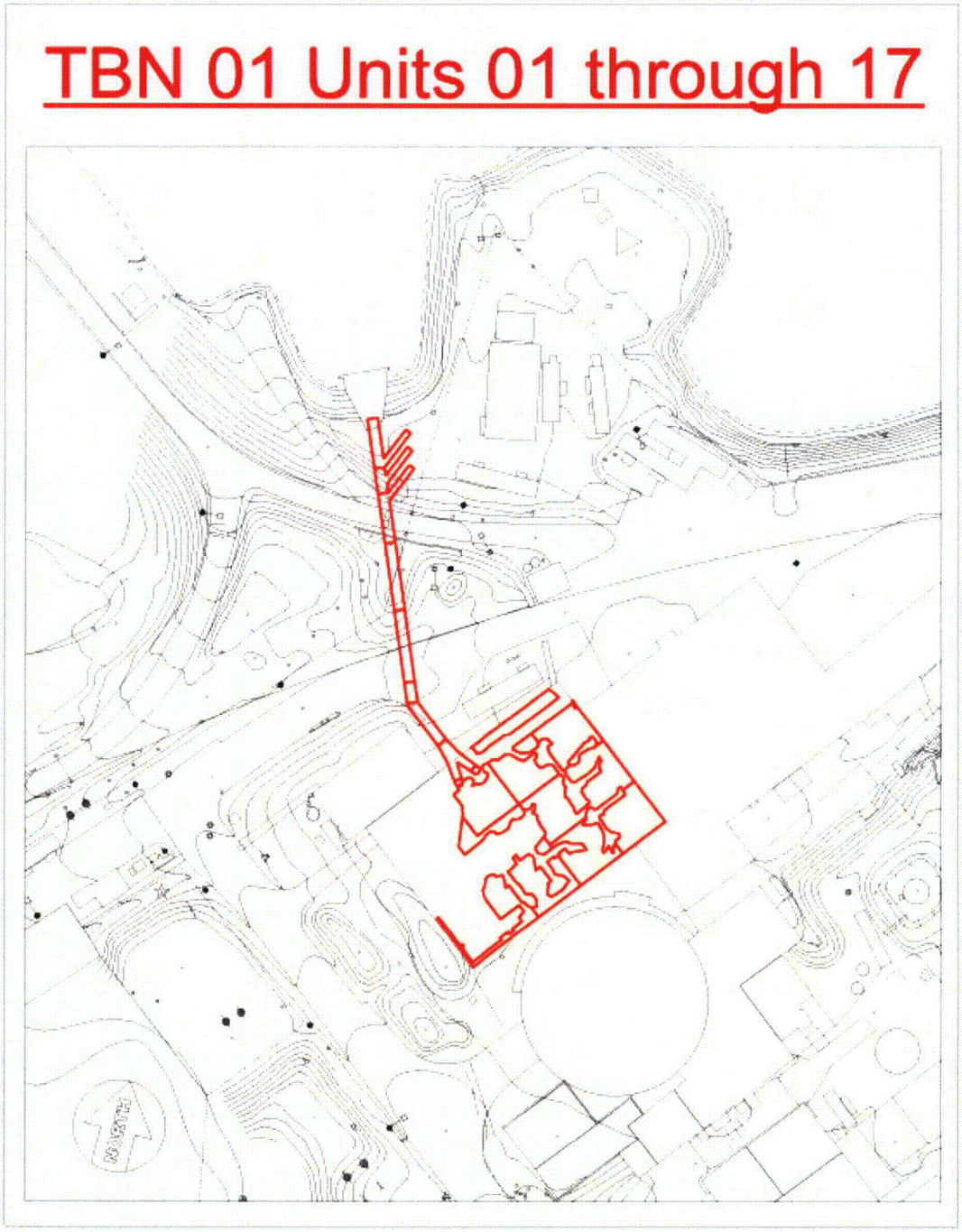
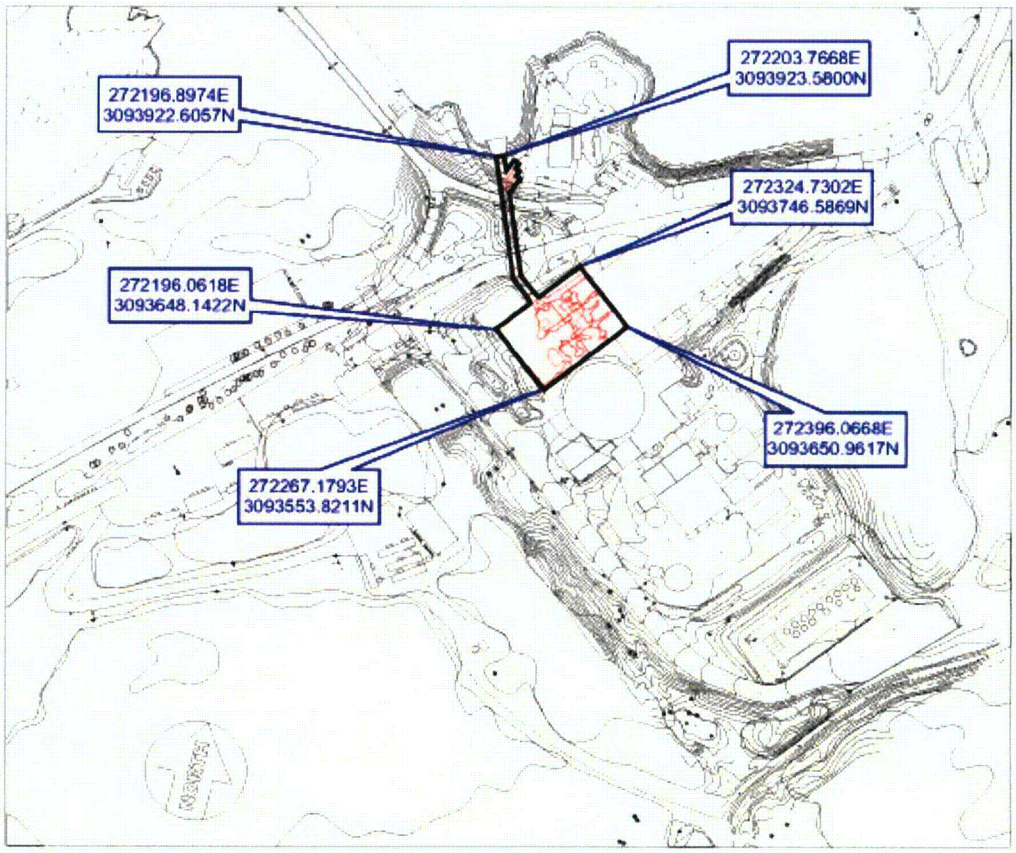


Figure 2

Site Map

TBN 01 Footprint

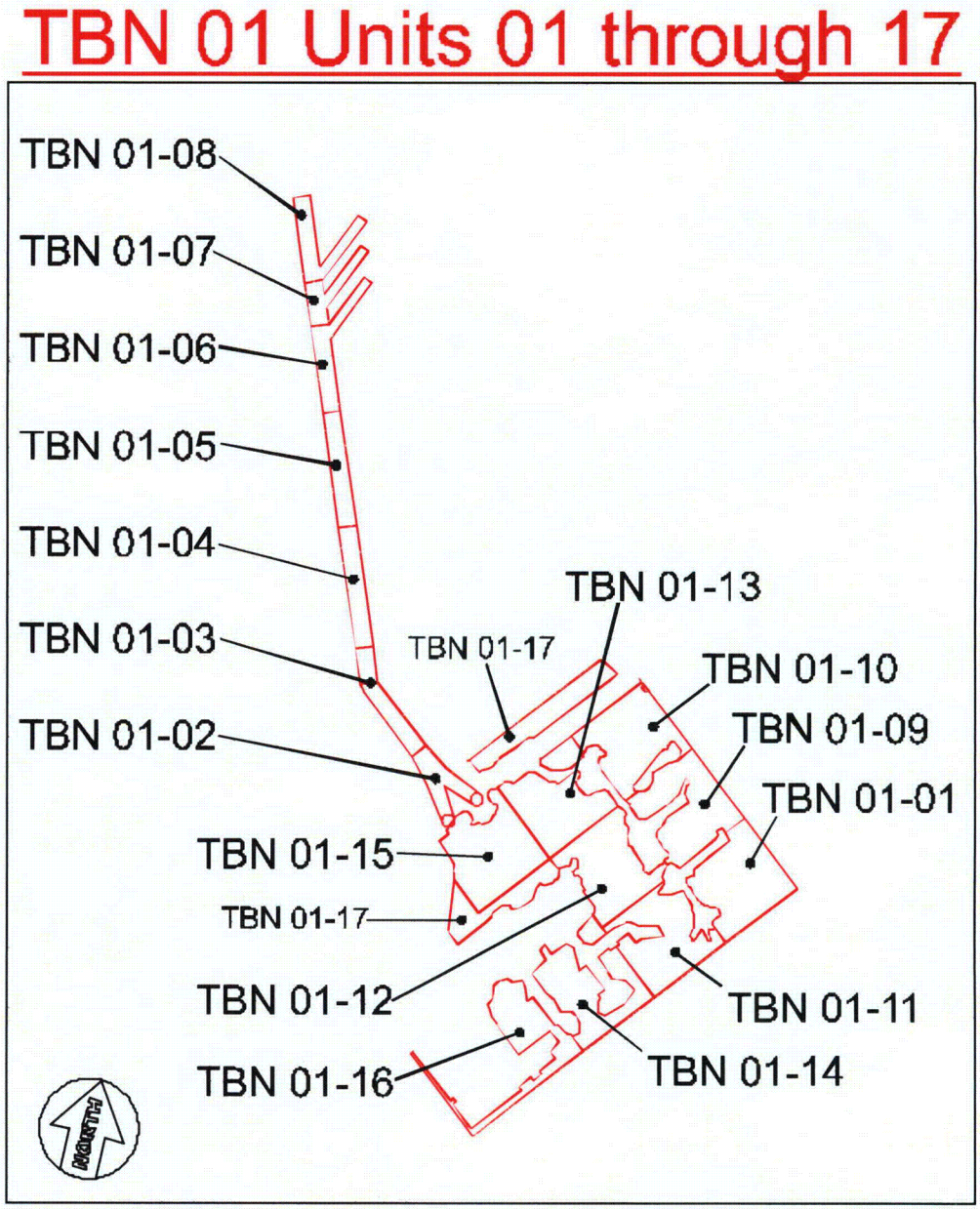
Survey Units 01 through 17



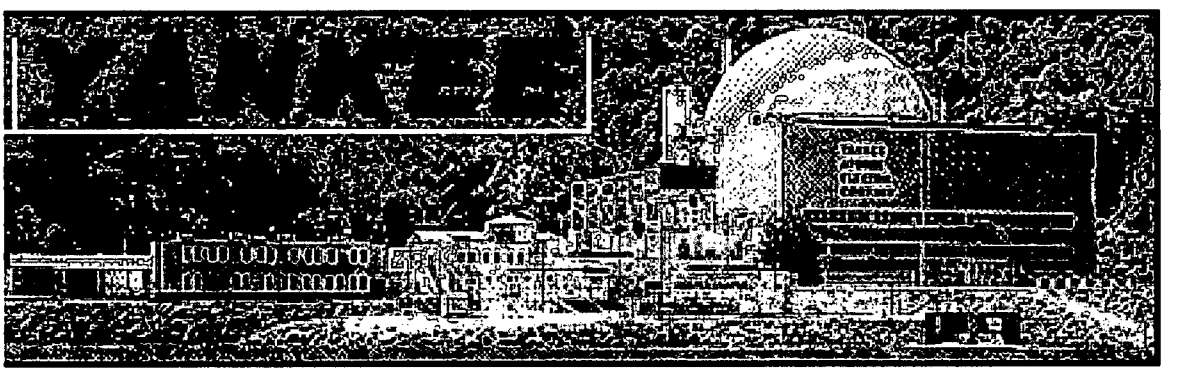
GPS Coordinates (MA State Plane)

Figure 3

Map of Survey Units Relative to Survey Area



Yankee Nuclear Plant Station
YNPS-FSS-TBN01-00
Volume 2
(Attachment A)



Yankee Atomic Electric Company

Attachment A
ISOCS Results

(CTRL + Click on the link)

TBN-01-01	TBN-01-09	TBN-01-10	TBN-01-11	TBN-01-12
TBN-01-13	TBN-01-14	TBN-01-15	TBN-01-16	TBN-01-17

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 Uncertainty	Cs-0137 MDA	Cs-0137 Activity	Cs-0137 Uncertait	Ag-108m MDA	Ag-108m Activity	Ag-108m Uncer	K-40 Activity
TBN-01-01-101-F-G.RPT	TBN-01-01-101-F-G	0.40	24-Oct-05	9:46:12	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	36300	68813.09	15895.22	50100	66039.02	24716.9	63000			5940031
TBN-01-01-102-F-G.RPT	TBN-01-01-102-F-G	0.00	24-Oct-05	10:05:01	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	66900			81000			70200			6880438
TBN-01-01-103-F-G.RPT	TBN-01-01-103-F-G	0.18	24-Oct-05	10:23:56	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	37100	53603.93	15463.15	82300			71100			7950997
TBN-01-01-104-F-G.RPT	TBN-01-01-104-F-G	0.00	24-Oct-05	10:44:56	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	63700			82300			69200			8566654
TBN-01-01-105-F-G.RPT	TBN-01-01-105-F-G	0.00	24-Oct-05	11:06:02	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	61100			75700			68800			6872747
TBN-01-01-106-F-G.RPT	TBN-01-01-106-F-G	0.00	24-Oct-05	11:24:14	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	47900			66100			65300			6305826
TBN-01-01-107-F-G.RPT	TBN-01-01-107-F-G	0.00	24-Oct-05	11:43:35	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	54200			72800			68000			6233660
TBN-01-01-108-F-G.RPT	TBN-01-01-108-F-G	0.00	24-Oct-05	12:48:33	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	56600			72800			66600			5831632
TBN-01-01-109-F-G.RPT	TBN-01-01-109-F-G	0.00	24-Oct-05	13:08:55	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	52200			67100			65800			5965203
TBN-01-01-110-F-G.RPT	TBN-01-01-110-F-G	0.00	24-Oct-05	13:26:49	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	48500			69200			67400			5815109
TBN-01-01-111-F-G.RPT	TBN-01-01-111-F-G	0.00	24-Oct-05	13:47:17	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	51200			68000			67000			5974567
TBN-01-01-112-F-G.RPT	TBN-01-01-112-F-G	0.00	24-Oct-05	14:06:38	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	60700			75700			66800			6400315
TBN-01-01-113-F-G.RPT	TBN-01-01-113-F-G	0.00	24-Oct-05	14:24:27	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	57100			77000			71100			7862321
TBN-01-01-114-F-G.RPT	TBN-01-01-114-F-G	0.00	24-Oct-05	14:43:00	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	51700			69800			69300			7625435
TBN-01-01-115-F-G.RPT	TBN-01-01-115-F-G	0.00	24-Oct-05	15:13:10	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	50700			74000			67600			7604421
TBN-01-01-116-F-G.RPT	TBN-01-01-116-F-G	0.00	24-Oct-05	15:30:56	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	54200			69200			70900			6777848
TBN-01-01-117-F-G.RPT	TBN-01-01-117-F-G	0.00	24-Oct-05	15:51:01	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	63700			70400			64900			6947440
TBN-01-01-118-F-G.RPT	TBN-01-01-118-F-G	0.00	25-Oct-05	7:41:06	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	56600			73100			67200			7006234
TBN-01-01-119-F-G.RPT	TBN-01-01-119-F-G	0.00	25-Oct-05	7:59:57	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	50700			75700			64900			7555367
TBN-01-01-120-F-G.RPT	TBN-01-01-120-F-G	0.00	25-Oct-05	8:17:53	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	53700			76800			67800			7326388
TBN-01-01-121-F-G.RPT	TBN-01-01-121-F-G	0.00	25-Oct-05	8:44:26	901	BLUE6279	BLUE_CONC_1M90D	dpm/m2	53000			78000			70600			7784159
TBN-01-01-122-F-G.RPT	TBN-01-01-122-F-G	0.00	25-Oct-05	10:11:13	901.2	BLUE6279	BLUE_CONC_1M90D	dpm/m2	56000			68400			64000			6346436
TBN-01-01-123-F-G.RPT	TBN-01-01-123-F-G	0.00	25-Oct-05	10:37:00	901.1	BLUE6279	BLUE_CONC_1M90D	dpm/m2	48800			66100			69100			5803826
TBN-01-01-124-F-G.RPT	TBN-01-01-124-F-G	0.00	25-Oct-05	10:59:48	901.1	BLUE6279	BLUE_CONC_1M90D	dpm/m2	53000			74400			66500			5759452
TBN-01-01-125-F-G.RPT	TBN-01-01-125-F-G	0.00	25-Oct-05	11:26:55	900.8	BLUE6279	BLUE_CONC_1M90D	dpm/m2	56900			82500			74400			7775638
TBN-01-01-126-F-G.RPT	TBN-01-01-126-F-G	0.00	25-Oct-05	13:15:58	902.9	BLUE6279	BLUE_CONC_1M90D	dpm/m2	57400			134000			126000			5705356
	max	0.40						average		6.12E+04			7.51E+04			7.01E+04	average	6.79E+06
								median		6.12E+04			7.36E+04			6.77E+04	median	6.83E+06
								stdev		1.08E+04			1.38E+04			1.17E+04	stdev	8.48E+05
								min	3.63E+04	5.36E+04		1.55E+04	5.01E+04		2.47E+04	6.30E+04	min	5.71E+06
								max	6.69E+04	6.88E+04		1.69E+04	1.34E+05		2.47E+04	1.26E+05	max	8.57E+06
								Invest Level		2.90E+03			1.10E+04					
								MDC < DCGLemc	4.60E+06			1.70E+07						

Report Generated On 10/24/2005 10:01:14 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 9:46:12 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	249-	261	253.37	63.16	0.96	7.81E+001	37.68	4.32E+002
M	2	282-	306	291.60	72.75	0.84	1.35E+002	40.40	4.98E+002
m	3	282-	306	300.41	74.96	0.84	2.62E+002	51.11	5.59E+002
F	4	331-	344	339.23	84.70	0.88	1.45E+002	41.93	5.08E+002
F	5	949-	963	953.48	238.69	1.01	1.58E+002	32.16	1.81E+002
M	6	1175-	1204	1179.84	295.39	0.91	3.66E+001	19.26	7.78E+001
m	7	1175-	1204	1199.94	300.43	0.92	2.61E+001	17.21	7.29E+001
F	8	1347-	1359	1353.24	338.81	0.97	3.74E+001	18.58	6.94E+001
F	9	1400-	1412	1406.53	352.15	1.28	7.57E+001	22.41	6.65E+001
F	10	2322-	2338	2329.42	583.04	1.31	6.18E+001	20.83	7.19E+001
F	11	2425-	2443	2435.03	609.44	1.35	1.08E+002	22.89	4.51E+001
F	12	2638-	2652	2644.74	661.86	1.29	4.85E+001	17.22	3.51E+001
F	13	3631-	3651	3641.97	910.95	1.93	8.93E+001	20.40	3.41E+001
F	14	3866-	3882	3873.53	968.76	1.75	5.53E+001	16.23	1.70E+001
F	15	4683-	4699	4691.33	1172.84	1.85	5.36E+001	16.71	1.87E+001
F	16	5319-	5334	5326.72	1331.35	1.56	4.07E+001	14.92	1.40E+001
F	17	5828-	5853	5840.72	1459.56	2.09	4.07E+002	39.11	1.64E+001
F	18	7050-	7063	7056.31	1762.79	2.22	3.50E+001	12.63	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.953	1460.81*		10.67	5.94003E+006	7.45976E+005
Co-60	0.978	1173.22*		100.00	7.74325E+004	2.48799E+004
		1332.49*		100.00	6.14369E+004	2.30158E+004
Cs-137	0.999	661.65*		85.12	6.60390E+004	2.47169E+004
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	8.10746E+004	2.93550E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.28872E+006	6.33132E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.84511E+005	7.31770E+004
Bi-214	0.686	609.31*		46.30	2.62777E+005	6.44674E+004
		1120.29		15.10		
		1764.49*		15.80	3.66621E+005	1.37395E+005
PB-214	0.565	74.82*	@	6.21	3.94353E+006	1.12784E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.64713E+005	9.09911E+004
		351.92*		37.20	1.86601E+005	6.34330E+004
Ac-228	0.997	338.32*		11.40	2.96662E+005	1.54607E+005
		911.07*		27.70	4.15323E+005	1.06236E+005
		969.11*		16.60	4.41182E+005	1.37524E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.953	5.940031E+006	7.459755E+005
Co-60		0.978	6.881309E+004	1.689522E+004
Cs-137		0.999	6.603902E+004	2.471690E+004
TL-208		0.471	8.107464E+004	2.935499E+004
Pb-212	@	0.497	2.845114E+005	7.317697E+004
Bi-214		0.686	2.815140E+005	5.836220E+004
PB-214	@	0.565	1.794427E+005	5.203629E+004
Ac-228		0.997	3.957014E+005	7.385866E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 1	63.16	8.6739E-002	48.27
M 2	72.75	1.5019E-001	29.89
F 4	84.70	1.6078E-001	28.98
m 7	300.43	2.8950E-002	66.05

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.0253E+004	3.63E+004	7.7432E+004
		1332.49*	100.00	3.6273E+004		6.1437E+004
	Nb-94	702.63	100.00	5.7366E+004	5.68E+004	-1.1787E+004
		871.10	100.00	5.6818E+004		3.0795E+004
	Ag-108m	79.20	7.10	2.1538E+006	6.30E+004	-5.8627E+005
		433.93	89.90	6.2979E+004		-1.1420E+004
		614.37	90.40	8.8820E+004		-1.6554E+004
		722.95	90.50	7.2960E+004		7.2504E+003
	Sb-125	176.33	6.89	1.1429E+006	1.99E+005	-1.4918E+005
		427.89	29.33	1.9919E+005		7.5934E+004
		463.38	10.35	6.3003E+005		1.3631E+005
		600.56	17.80	3.2605E+005		1.8673E+005
		606.64	5.02	1.5669E+006		1.6761E+006
		635.90	11.32	5.6037E+005		3.6455E+005
	Cs-134	563.23	8.38	7.2803E+005	7.61E+004	5.2621E+005
		569.32	15.43	3.7473E+005		-3.1235E+005
		604.70	97.60	8.0676E+004		-1.9798E+004
		795.84	85.40	7.6114E+004		5.6922E+004
		801.93	8.73	6.6202E+005		-1.7202E+005
+	Cs-137	661.65*	85.12	5.0111E+004	5.01E+004	6.6039E+004
	Eu-152	121.78	28.40	3.3749E+005	2.33E+005	-4.0469E+005
		244.69	7.49	1.0268E+006		-8.9158E+005
		344.27	26.50	2.5100E+005		3.4384E+004
		778.89	12.74	4.5173E+005		-1.3401E+005
		867.32	4.16	1.3323E+006		-1.1323E+006
		964.01	14.40	5.0217E+005		2.9922E+005
		1085.78	10.00	6.1435E+005		3.0454E+005
		1112.02	13.30	5.4815E+005		-4.2838E+005
		1407.95	20.70	2.3309E+005		1.7637E+005
	Eu-154	123.07	40.50	2.3293E+005	1.45E+005	-9.9150E+004
		247.94	6.60	1.0704E+006		-7.9074E+005
		591.81	4.83	1.3104E+006		-4.6986E+005
		723.30	19.70	3.3771E+005		1.7178E+005
		756.87	4.33	1.3371E+006		-8.8057E+004
		873.19	11.50	4.9445E+005		-1.5684E+005
		996.32	10.30	6.1318E+005		1.4592E+005
		1004.76	17.90	3.3917E+005		6.8779E+004
		1274.45	35.50	1.4485E+005		5.5532E+004
	Eu-155	86.54	30.90	4.4687E+005	4.47E+005	-1.3704E+005
		105.31	20.70	5.3393E+005		-8.2050E+004
	Am-241	59.54	35.90	4.9887E+005	4.99E+005	-1.6997E+005
	Cm-243	228.19	10.56	7.1493E+005	4.97E+005	1.9506E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9693E+005	4.97E+005	2.3420E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 10:20:03 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 10:05:01 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.38	72.69	1.23	1.89E+002	43.05	5.15E+002
m	2	285-	309	300.51	74.99	1.23	3.50E+002	52.24	6.83E+002
F	3	943-	959	953.79	238.77	0.83	1.09E+002	29.07	2.07E+002
F	4	1398-	1411	1406.44	352.13	1.16	7.59E+001	23.64	8.99E+001
F	5	2323-	2338	2331.23	583.50	1.61	1.17E+002	22.76	3.20E+001
F	6	2426-	2444	2435.27	609.50	1.49	9.93E+001	22.93	6.20E+001
F	7	3633-	3651	3641.36	910.80	1.63	8.16E+001	20.40	3.73E+001
F	8	3869-	3881	3875.05	969.13	1.09	3.23E+001	13.64	1.70E+001
F	9	4472-	4484	4478.10	1119.64	1.13	2.45E+001	13.36	2.30E+001
F	10	5319-	5337	5328.73	1331.85	1.87	3.94E+001	13.50	7.28E+000
F	11	5827-	5853	5840.74	1459.56	2.11	4.72E+002	41.87	1.02E+001
F	12	7051-	7064	7057.26	1763.02	1.57	3.02E+001	13.06	1.00E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.954	1460.81*	10.67	6.88044E+006	8.26488E+005
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.53226E+005	3.60928E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	3.05429E+006	7.52840E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.96877E+005	6.08446E+004
Bi-214	0.984	609.31*	46.30	2.40927E+005	6.32119E+004
		1120.29*	15.10	2.29236E+005	1.27414E+005
		1764.49*	15.80	3.16496E+005	1.40615E+005
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	3.79407E+005	1.04415E+005
		969.11*	16.60	2.58077E+005	1.12129E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.954	6.880438E+006	8.264884E+005
TL-208		0.468	1.532255E+005	3.609278E+004
Pb-212	@	0.497	1.968767E+005	6.084463E+004
Bi-214		0.984	2.494849E+005	5.252695E+004
Ac-228		0.621	3.230584E+005	7.641403E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	2.1013E-001	22.76
F 4	352.13	8.4374E-002	31.13
F 10	1331.85	4.3804E-002	34.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.9918E+004	6.69E+004	7.4624E+004
	1332.49	100.00	6.6890E+004		7.7724E+004
Nb-94	702.63	100.00	6.5907E+004	6.03E+004	7.7971E+003
	871.10	100.00	6.0286E+004		3.3791E+003
Ag-108m	79.20	7.10	2.2285E+006	7.02E+004	-1.6174E+006
	433.93	89.90	7.0159E+004		-3.4837E+004
	614.37	90.40	9.0574E+004		-8.7678E+002
	722.95	90.50	7.2960E+004		5.5696E+004
Sb-125	176.33	6.89	1.1429E+006	2.25E+005	-4.1211E+005
	427.89	29.33	2.2545E+005		8.0686E+004
	463.38	10.35	6.8575E+005		6.6728E+005
	600.56	17.80	3.6865E+005		3.0668E+005
	606.64	5.02	1.6975E+006		1.7133E+006
	635.90	11.32	5.4357E+005		1.2540E+005
Cs-134	563.23	8.38	7.3067E+005	7.49E+004	3.1801E+005
	569.32	15.43	3.9702E+005		1.7056E+005
	604.70	97.60	8.7202E+004		9.7375E+003
	795.84	85.40	7.4858E+004		6.1052E+004
	801.93	8.73	6.8248E+005		-5.4849E+005
Cs-137	661.65	85.12	8.1038E+004	8.10E+004	5.1058E+004
Eu-152	121.78	28.40	3.6195E+005	1.86E+005	-8.0870E+004
	244.69	7.49	1.0495E+006		-4.2323E+005
	344.27	26.50	2.5674E+005		-2.5304E+005
	778.89	12.74	4.8113E+005		-6.5029E+004
	867.32	4.16	1.4618E+006		-9.8859E+005
	964.01	14.40	4.8664E+005		2.8528E+005
	1085.78	10.00	6.3935E+005		1.3927E+005
	1112.02	13.30	5.3392E+005		-1.6153E+005
	1407.95	20.70	1.8580E+005		5.6019E+004
Eu-154	123.07	40.50	2.5523E+005	1.61E+005	1.3903E+005
	247.94	6.60	1.1456E+006		-2.0379E+005
	591.81	4.83	1.1589E+006		-3.5134E+005
	723.30	19.70	3.3647E+005		4.9163E+005
	756.87	4.33	1.3768E+006		-4.5218E+005
	873.19	11.50	4.9728E+005		-5.4642E+005
	996.32	10.30	5.8050E+005		1.9206E+005
	1004.76	17.90	3.1314E+005		2.0522E+004
	1274.45	35.50	1.6093E+005		-1.4790E+005
Eu-155	86.54	30.90	4.5850E+005	4.58E+005	4.4562E+005
	105.31	20.70	5.5490E+005		1.7751E+005
Am-241	59.54	35.90	4.9284E+005	4.93E+005	-3.1152E+005
Cm-243	228.19	10.56	7.1756E+005	5.16E+005	7.3733E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1629E+005	5.16E+005	-2.7628E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 10:38:58 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 10:23:56 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.68	72.77	0.96	1.57E+002	41.93	5.58E+002
m	2	282-	306	299.86	74.82	0.96	3.04E+002	52.91	6.35E+002
F	3	331-	344	339.03	84.65	1.23	1.14E+002	43.66	5.65E+002
F	4	947-	960	953.48	238.69	1.14	1.88E+002	34.02	1.62E+002
F	5	1172-	1186	1179.22	295.24	1.27	8.17E+001	24.17	1.02E+002
F	6	1397-	1412	1406.21	352.07	1.34	9.18E+001	25.09	1.01E+002
F	7	2034-	2052	2041.95	511.16	2.19	1.06E+002	23.10	6.96E+001
F	8	2321-	2338	2330.47	583.30	1.28	8.89E+001	21.89	5.63E+001
F	9	2428-	2446	2435.64	609.60	1.56	9.98E+001	21.62	3.59E+001
F	10	3635-	3651	3641.99	910.95	1.35	7.35E+001	19.08	2.79E+001
F	11	3865-	3879	3873.02	968.63	1.59	4.64E+001	17.52	3.55E+001
F	12	4473-	4484	4477.55	1119.50	2.13	3.26E+001	13.84	1.58E+001
F	13	4683-	4698	4691.45	1172.87	1.86	4.53E+001	15.94	2.34E+001
F	14	5320-	5334	5327.14	1331.45	1.59	2.96E+001	13.37	1.51E+001
F	15	5502-	5515	5507.98	1376.56	0.56	1.08E+001	7.27	6.21E+000
F	16	5828-	5856	5841.08	1459.65	2.08	5.45E+002	45.01	1.77E+001
F	17	7049-	7062	7055.42	1762.56	1.28	2.76E+001	12.02	8.77E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.10858E+005	2.88259E+004
K-40	0.960	1460.81*		10.67	7.95100E+006	9.19361E+005
Co-60	0.982	1173.22*		100.00	6.53784E+004	2.35851E+004
		1332.49*		100.00	4.47267E+004	2.04788E+004
TL-208	0.752	277.35		6.80		
		510.84*		21.60	5.13232E+005	1.39880E+005
		583.14*		84.20	1.16612E+005	3.26020E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.66410E+006	6.98087E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.38748E+005	8.11474E+004
Bi-214	0.972	609.31*		46.30	2.42169E+005	6.05062E+004
		1120.29*		15.10	3.05239E+005	1.33545E+005
		1764.49*		15.80	2.89675E+005	1.29339E+005
PB-214	0.565	74.82*	@	6.21	4.59031E+006	1.24813E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.67441E+005	1.25125E+005
		351.92*		37.20	2.26309E+005	7.24817E+004
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	3.41546E+005	9.70223E+004
		969.11*		16.60	3.69805E+005	1.45038E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.567000E+004	2.966225E+004
K-40		0.960	7.950997E+006	9.193613E+005
Co-60		0.982	5.360393E+004	1.546315E+004
TL-208		0.752	1.166116E+005	3.237976E+004
Pb-212	@	0.498	3.387485E+005	8.114743E+004
Bi-214		0.972	2.585603E+005	5.070205E+004
PB-214	@	0.565	2.617688E+005	6.271862E+004
Ac-228		0.620	3.502821E+005	8.064263E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	1.7405E-001	26.77
F 3	84.65	1.2720E-001	38.13
F 15	1376.56	1.1953E-002	67.60

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.4604E+004	3.71E+004	6.5378E+004
		1332.49*	100.00	3.7088E+004		4.4727E+004
	Nb-94	702.63	100.00	5.9287E+004	5.93E+004	3.9622E+004
		871.10	100.00	6.4416E+004		-6.0457E+003
	Ag-108m	79.20	7.10	2.2077E+006	7.11E+004	-1.8056E+006
		433.93	89.90	7.1123E+004		9.5479E+003
		614.37	90.40	8.5199E+004		-1.7422E+004
		722.95	90.50	7.2416E+004		4.6139E+003
	Sb-125	176.33	6.89	1.2029E+006	2.05E+005	5.0294E+005
		427.89	29.33	2.0484E+005		9.0895E+003
		463.38	10.35	6.9356E+005		3.8641E+005
		600.56	17.80	3.3823E+005		-1.9057E+005
		606.64	5.02	1.5740E+006		2.1574E+006
		635.90	11.32	5.7060E+005		4.0504E+005
	Cs-134	563.23	8.38	7.7657E+005	7.42E+004	-6.8658E+005
		569.32	15.43	4.2884E+005		-6.3664E+005
		604.70	97.60	7.9751E+004		-3.4313E+004
		795.84	85.40	7.4222E+004		2.6807E+004
		801.93	8.73	6.3001E+005		-5.9354E+005
	Cs-137	661.65	85.12	8.2325E+004	8.23E+004	3.5235E+004
	Eu-152	121.78	28.40	3.6664E+005	2.39E+005	-7.2473E+004
		244.69	7.49	1.0569E+006		-5.5771E+004
		344.27	26.50	2.7465E+005		-1.3541E+005
		778.89	12.74	4.9831E+005		-2.8218E+005
		867.32	4.16	1.5801E+006		2.7308E+005
		964.01	14.40	5.8801E+005		4.2487E+005
		1085.78	10.00	6.8971E+005		1.8564E+005
		1112.02	13.30	5.7773E+005		-4.3953E+005
		1407.95	20.70	2.3862E+005		-2.0422E+004
	Eu-154	123.07	40.50	2.5707E+005	1.86E+005	1.3246E+005
		247.94	6.60	1.1366E+006		-1.8300E+006
		591.81	4.83	1.2872E+006		-3.5079E+005
		723.30	19.70	3.3398E+005		2.4253E+005
		756.87	4.33	1.4830E+006		-1.5380E+005
		873.19	11.50	5.4803E+005		-7.1651E+004
		996.32	10.30	6.1318E+005		3.2861E+005
		1004.76	17.90	3.5234E+005		1.2987E+005
		1274.45	35.50	1.8553E+005		5.9128E+003
	Eu-155	86.54	30.90	4.6420E+005	4.64E+005	1.0556E+005
		105.31	20.70	5.5721E+005		3.3166E+004
	Am-241	59.54	35.90	4.9526E+005	4.95E+005	-1.8000E+005
	Cm-243	228.19	10.56	7.3482E+005	5.33E+005	-8.3125E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3340E+005	5.33E+005	-1.9956E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 10:59:57 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 10:44:56 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	318	291.98	72.84	1.03	1.64E+002	42.32	6.21E+002
m	2	283-	318	300.54	74.99	1.04	3.46E+002	51.37	5.69E+002
m	3	283-	318	309.32	77.20	1.04	9.84E+001	38.88	5.58E+002
F	4	330-	366	338.82	84.59	1.74	2.55E+002	47.81	1.37E+003
F	5	948-	960	954.23	238.88	1.15	1.69E+002	33.81	1.61E+002
F	6	1173-	1190	1179.82	295.39	1.14	7.63E+001	21.80	8.89E+001
F	7	1400-	1413	1407.18	352.32	1.28	5.99E+001	23.16	1.03E+002
F	8	2323-	2340	2331.25	583.50	1.20	8.88E+001	22.34	6.24E+001
F	9	2428-	2444	2435.54	609.57	1.40	1.08E+002	22.85	4.06E+001
F	10	3634-	3652	3642.51	911.08	1.47	9.80E+001	20.97	2.38E+001
F	11	3866-	3881	3872.74	968.56	1.48	4.84E+001	16.70	2.63E+001
F	12	4473-	4486	4479.24	1119.92	1.24	2.63E+001	13.21	1.94E+001
F	13	5826-	5854	5840.81	1459.58	1.96	5.88E+002	47.18	2.55E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.955	1460.81*	10.67	8.56665E+006	9.76914E+005
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.16483E+005	3.31211E+004
		860.37	12.46		
Pb-212	0.837	74.81* @	10.70	3.02364E+006	7.43437E+005
		77.11* @	18.00	4.96317E+005	2.18864E+005
		87.30 @	8.00		
		238.63*	44.60	3.04641E+005	7.74753E+004
Bi-214	0.712	609.31*	46.30	2.61404E+005	6.42897E+004
		1120.29*	15.10	2.46264E+005	1.26414E+005
		1764.49	15.80		
PB-214	0.758	74.82* @	6.21	5.20981E+006	1.33563E+006
		77.11* @	10.50	8.50829E+005	3.80536E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.43363E+005	1.13865E+005
		351.92*	37.20	1.47749E+005	6.22015E+004
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	4.55808E+005	1.10711E+005
		969.11*	16.60	3.86385E+005	1.39246E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.955	8.566654E+006	9.769142E+005
TL-208		0.468	1.164835E+005	3.312106E+004
Pb-212	@	0.837	3.046409E+005	7.747534E+004
Bi-214		0.712	2.582932E+005	5.730473E+004
PB-214	@	0.758	1.927071E+005	5.458755E+004
Ac-228		0.620	4.289201E+005	8.665870E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.8227E-001	25.80
F 4	84.59	2.8361E-001	18.73

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0755E+004	6.37E+004	-4.9335E+003
	1332.49	100.00	6.3667E+004		6.2129E+004
Nb-94	702.63	100.00	6.3195E+004	5.97E+004	-1.2116E+004
	871.10	100.00	5.9672E+004		-6.2523E+003
Ag-108m	79.20	7.10	2.1821E+006	6.92E+004	-5.8890E+005
	433.93	89.90	6.9181E+004		-5.7566E+004
	614.37	90.40	9.1150E+004		2.3875E+004
	722.95	90.50	7.6399E+004		3.1986E+004
Sb-125	176.33	6.89	1.1375E+006	2.14E+005	-1.5424E+006
	427.89	29.33	2.1393E+005		1.2471E+004
	463.38	10.35	6.3003E+005		-2.8871E+005
	600.56	17.80	3.3016E+005		1.2028E+005
	606.64	5.02	1.6128E+006		1.8320E+006
	635.90	11.32	5.1730E+005		2.7072E+005
Cs-134	563.23	8.38	7.0654E+005	7.45E+004	-3.0515E+005
	569.32	15.43	4.1256E+005		3.3277E+005
	604.70	97.60	8.3386E+004		-3.5290E+004
	795.84	85.40	7.4541E+004		-2.9808E+004
	801.93	8.73	6.6891E+005		-1.1261E+006
Cs-137	661.65	85.12	8.2325E+004	8.23E+004	4.2020E+004
Eu-152	121.78	28.40	3.5604E+005	2.33E+005	-1.4212E+005
	244.69	7.49	1.0507E+006		-9.6130E+005
	344.27	26.50	2.5570E+005		-4.3126E+005
	778.89	12.74	4.8331E+005		-4.5950E+005
	867.32	4.16	1.3871E+006		-8.6495E+005
	964.01	14.40	5.4247E+005		8.4996E+005
	1085.78	10.00	6.4630E+005		5.4481E+005
	1112.02	13.30	5.2665E+005		-1.2611E+005
	1407.95	20.70	2.3309E+005		2.3730E+005
Eu-154	123.07	40.50	2.4707E+005	1.61E+005	-4.2298E+005
	247.94	6.60	1.1017E+006		-1.1451E+006
	591.81	4.83	1.2395E+006		-5.2397E+005
	723.30	19.70	3.4624E+005		1.2086E+005
	756.87	4.33	1.5304E+006		-9.4043E+005
	873.19	11.50	5.0009E+005		-3.3909E+005
	996.32	10.30	5.8719E+005		-2.9333E+005
	1004.76	17.90	3.2942E+005		-6.5088E+004
	1274.45	35.50	1.6093E+005		1.0041E+005
Eu-155	86.54	30.90	4.7667E+005	4.77E+005	6.0456E+005
	105.31	20.70	5.4609E+005		2.2888E+003
Am-241	59.54	35.90	4.8797E+005	4.88E+005	-1.6697E+005
Cm-243	228.19	10.56	7.2538E+005	5.19E+005	8.0595E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1944E+005	5.19E+005	1.9620E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 11:21:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 11:06:02 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	945-	964	955.30	239.14	1.99	1.20E+002	29.70	2.23E+002
F	2	1403-	1412	1407.04	352.28	0.61	3.92E+001	18.32	7.28E+001
F	3	2033-	2049	2040.29	510.74	1.32	6.02E+001	20.77	7.66E+001
F	4	2423-	2444	2434.63	609.34	2.41	9.74E+001	20.38	4.31E+001
F	5	3634-	3653	3642.25	911.02	1.58	8.05E+001	19.78	3.11E+001
F	6	5826-	5856	5841.13	1459.66	2.66	4.71E+002	40.93	2.63E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	6.32512E+004	2.35515E+004
K-40	0.961	1460.81*	10.67	6.87275E+006	8.15945E+005
Bi-214	0.418	609.31*	46.30	2.36245E+005	5.75376E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty.
ANN	0.998	6.325117E+004	2.355154E+004
K-40	0.961	6.872747E+006	8.159447E+005
Bi-214	0.418	2.362453E+005	5.753758E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	239.14	1.3345E-001	24.73
F	2	352.28	4.3584E-002	46.70
F	5	911.02	8.9452E-002	24.57

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.8348E+004	6.11E+004	1.2360E+004
	1332.49	100.00	6.1131E+004		5.4663E+004
Nb-94	702.63	100.00	6.1144E+004	5.75E+004	3.3984E+004
	871.10	100.00	5.7465E+004		8.7721E+003
Ag-108m	79.20	7.10	2.1727E+006	6.88E+004	-5.3030E+006
	433.93	89.90	6.8786E+004		2.8411E+004
	614.37	90.40	8.4580E+004		-2.9045E+004
	722.95	90.50	7.2142E+004		1.9882E+004
Sb-125	176.33	6.89	1.0669E+006	2.09E+005	-1.1666E+005
	427.89	29.33	2.0913E+005		-9.9953E+004
	463.38	10.35	6.2313E+005		2.0247E+005
	600.56	17.80	3.3016E+005		-1.8407E+005
	606.64	5.02	1.5488E+006		1.5402E+006
	635.90	11.32	5.3061E+005		-8.3287E+004
Cs-134	563.23	8.38	7.2272E+005	7.16E+004	1.3557E+005
	569.32	15.43	3.9702E+005		-1.0740E+005
	604.70	97.60	7.7868E+004		-2.2955E+003
	795.84	85.40	7.1616E+004		2.6480E+004
	801.93	8.73	6.6202E+005		-9.7156E+004
Cs-137	661.65	85.12	7.5659E+004	7.57E+004	-2.8309E+004
Eu-152	121.78	28.40	3.3749E+005	2.36E+005	-1.4652E+005
	244.69	7.49	1.0205E+006		-7.0374E+005
	344.27	26.50	2.4620E+005		-6.1793E+005
	778.89	12.74	4.6099E+005		-3.1775E+005
	867.32	4.16	1.3402E+006		-1.2639E+006
	964.01	14.40	5.4071E+005		7.5810E+005
	1085.78	10.00	5.7270E+005		-1.0268E+005
	1112.02	13.30	5.4109E+005		-7.9627E+004
	1407.95	20.70	2.3588E+005		1.8380E+005
Eu-154	123.07	40.50	2.3665E+005	1.56E+005	-2.2050E+004
	247.94	6.60	1.0397E+006		-6.2230E+005
	591.81	4.83	1.2199E+006		-1.1028E+006
	723.30	19.70	3.2894E+005		7.3791E+004
	756.87	4.33	1.3833E+006		-3.4609E+004
	873.19	11.50	4.8007E+005		7.8409E+003
	996.32	10.30	5.9708E+005		4.2970E+005
	1004.76	17.90	3.1935E+005		7.0911E+004
	1274.45	35.50	1.5577E+005		-1.8305E+004
Eu-155	86.54	30.90	4.5521E+005	4.55E+005	4.9970E+005
	105.31	20.70	5.3951E+005		4.6895E+004
Am-241	59.54	35.90	4.7857E+005	4.79E+005	-1.0260E+005
Cm-243	228.19	10.56	6.9446E+005	5.00E+005	1.9573E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0021E+005	5.00E+005	-9.1995E+003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 11:39:15 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 11:24:14 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.80	72.80	0.74	9.53E+001	36.23	4.40E+002
m	2	285-	306	300.31	74.94	0.75	2.31E+002	47.89	4.80E+002
F	3	947-	960	954.15	238.86	1.07	1.32E+002	29.60	1.38E+002
F	4	1397-	1414	1406.39	352.12	1.67	1.19E+002	23.93	6.75E+001
F	5	2033-	2054	2042.87	511.39	2.43	1.22E+002	23.23	6.90E+001
F	6	2321-	2339	2330.78	583.38	1.32	8.67E+001	20.42	3.54E+001
F	7	2424-	2442	2434.34	609.27	1.79	9.70E+001	21.56	4.43E+001
F	8	3633-	3652	3641.89	910.93	1.87	9.47E+001	20.53	2.73E+001
F	9	3869-	3881	3874.36	968.96	0.98	2.27E+001	14.42	3.71E+001
F	10	5828-	5854	5841.37	1459.72	1.92	4.32E+002	40.56	1.68E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.28026E+005	3.02977E+004
K-40	0.964	1460.81*		10.67	6.30583E+006	7.81352E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	5.92715E+005	1.48385E+005
		583.14*		84.20	1.13804E+005	3.07376E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.02109E+006	5.76414E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.37658E+005	6.51162E+004
Bi-214	0.418	609.31*		46.30	2.35462E+005	5.99682E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	4.40114E+005	1.08061E+005
		969.11*		16.60	1.81407E+005	1.16574E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	1.034446E+005	3.100632E+004
K-40		0.964	6.305826E+006	7.813523E+005
TL-208		0.750	1.138045E+005	3.051303E+004
Pb-212	@	0.497	2.376576E+005	6.511623E+004
Bi-214		0.418	2.354622E+005	5.996822E+004
Ac-228		0.622	3.205507E+005	7.924924E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	1.0587E-001	38.03
F 4	352.12	1.3168E-001	20.19

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6932E+004	4.79E+004	-2.7362E+003
	1332.49	100.00	4.7936E+004		3.3174E+004
Nb-94	702.63	100.00	5.7645E+004	5.68E+004	4.5546E+004
	871.10	100.00	5.6818E+004		4.6835E+004
Ag-108m	79.20	7.10	2.0573E+006	6.53E+004	-1.6763E+006
	433.93	89.90	6.5325E+004		2.2715E+004
	614.37	90.40	8.2055E+004		-7.1684E+004
	722.95	90.50	7.4036E+004		6.0969E+004
Sb-125	176.33	6.89	1.0505E+006	1.91E+005	-6.4862E+005
	427.89	29.33	1.9070E+005		-1.2805E+005
	463.38	10.35	6.3174E+005		3.0068E+005
	600.56	17.80	3.2743E+005		-7.5404E+004
	606.64	5.02	1.5847E+006		2.4880E+006
	635.90	11.32	5.5204E+005		7.6018E+004
Cs-134	563.23	8.38	7.1737E+005	7.06E+004	2.8637E+005
	569.32	15.43	3.7010E+005		-1.5117E+005
	604.70	97.60	7.9937E+004		-1.2912E+004
	795.84	85.40	7.0613E+004		1.6245E+004
	801.93	8.73	6.4087E+005		1.9822E+005
Cs-137	661.65	85.12	6.6097E+004	6.61E+004	5.2096E+004
Eu-152	121.78	28.40	3.4630E+005	2.30E+005	5.8372E+004
	244.69	7.49	1.0050E+006		-5.8378E+005
	344.27	26.50	2.5205E+005		-1.4810E+005
	778.89	12.74	4.4939E+005		-2.4925E+005
	867.32	4.16	1.3639E+006		-2.0353E+006
	964.01	14.40	5.3180E+005		8.0726E+005
	1085.78	10.00	5.8437E+005		5.8915E+003
	1112.02	13.30	4.8593E+005		-3.4275E+005
	1407.95	20.70	2.3027E+005		1.6895E+005
Eu-154	123.07	40.50	2.4060E+005	1.71E+005	-4.4212E+004
	247.94	6.60	1.0248E+006		-1.5418E+006
	591.81	4.83	1.1693E+006		5.1132E+005
	723.30	19.70	3.3522E+005		-1.1508E+005
	756.87	4.33	1.3031E+006		-3.9786E+005
	873.19	11.50	4.8588E+005		2.7569E+004
	996.32	10.30	5.2743E+005		1.7618E+005
	1004.76	17.90	3.1104E+005		-1.9449E+005
	1274.45	35.50	1.7075E+005		1.9368E+005
Eu-155	86.54	30.90	4.3475E+005	4.35E+005	2.8578E+005
	105.31	20.70	5.2448E+005		4.3977E+005
Am-241	59.54	35.90	4.7607E+005	4.76E+005	-2.0193E+004
Cm-243	228.19	10.56	6.1678E+005	4.92E+005	-6.2786E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9196E+005	4.92E+005	1.3954E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 11:58:37 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 11:43:35 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	317	291.74	72.78	1.32	2.21E+002	43.66	5.77E+002
m	2	282-	317	300.18	74.90	1.32	4.28E+002	52.05	6.25E+002
m	3	282-	317	308.20	76.91	1.32	1.67E+002	41.37	6.10E+002
F	4	335-	345	339.56	84.78	1.19	1.28E+002	42.26	3.89E+002
F	5	948-	959	953.86	238.78	1.19	1.47E+002	30.11	1.06E+002
F	6	1174-	1187	1179.97	295.43	0.78	4.56E+001	18.86	7.98E+001
F	7	1399-	1415	1406.66	352.19	1.51	9.24E+001	23.29	8.15E+001
F	8	2323-	2343	2331.31	583.51	1.25	9.98E+001	21.77	4.23E+001
F	9	2426-	2444	2435.18	609.48	1.48	9.66E+001	20.93	3.33E+001
F	10	3634-	3650	3641.86	910.92	1.41	6.37E+001	18.13	2.81E+001
F	11	5828-	5855	5841.15	1459.66	2.08	4.28E+002	39.60	3.27E+000
F	12	7050-	7063	7055.65	1762.62	1.62	1.94E+001	10.77	9.20E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.961	1460.81*	10.67	6.23366E+006	7.66861E+005
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.30949E+005	3.34039E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.74035E+006	8.62998E+005
		77.11* @	18.00	8.46029E+005	2.67096E+005
		87.30 @	8.00		
		238.63*	44.60	2.65880E+005	6.84641E+004
Bi-214	0.682	609.31*	46.30	2.34463E+005	5.85716E+004
		1120.29	15.10		
		1764.49*	15.80	2.03976E+005	1.14798E+005
PB-214	0.759	74.82* @	6.21	6.44473E+006	1.55883E+006
		77.11* @	10.50	1.45034E+006	4.70511E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.05117E+005	9.16535E+004
		351.92*	37.20	2.27621E+005	6.88578E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.961	6.233660E+006	7.668606E+005
TL-208		0.468	1.309486E+005	3.340391E+004
Pb-212	@	0.838	2.658797E+005	6.846407E+004
Bi-214		0.682	2.281655E+005	5.217314E+004
PB-214	@	0.759	2.195019E+005	5.505231E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	2.4610E-001	19.71
F 4	84.78	1.4171E-001	33.13
F 10	910.92	7.0822E-002	28.45

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0118E+004	5.42E+004	2.0731E+003
	1332.49	100.00	5.4231E+004		3.9217E+004
Nb-94	702.63	100.00	6.1144E+004	5.75E+004	5.7240E+002
	871.10	100.00	5.7465E+004		5.1400E+004
Ag-108m	79.20	7.10	2.1065E+006	6.80E+004	-5.3201E+005
	433.93	89.90	6.7988E+004		1.9948E+004
	614.37	90.40	8.3956E+004		-2.6111E+004
	722.95	90.50	7.2960E+004		8.6423E+004
Sb-125	176.33	6.89	1.0470E+006	2.00E+005	-1.0275E+006
	427.89	29.33	2.0046E+005		-4.1735E+004
	463.38	10.35	6.3174E+005		3.1829E+005
	600.56	17.80	3.1624E+005		1.6476E+005
	606.64	5.02	1.5488E+006		2.3914E+006
	635.90	11.32	4.6758E+005		-2.4393E+005
Cs-134	563.23	8.38	6.8434E+005	6.75E+004	-1.9843E+005
	569.32	15.43	3.6384E+005		-1.8355E+004
	604.70	97.60	7.9003E+004		-2.0231E+004
	795.84	85.40	6.7508E+004		-1.7149E+004
	801.93	8.73	6.8248E+005		-5.8735E+004
Cs-137	661.65	85.12	7.2814E+004	7.28E+004	8.2059E+004
Eu-152	121.78	28.40	3.4372E+005	2.03E+005	-8.8984E+004
	244.69	7.49	1.0037E+006		-7.9125E+005
	344.27	26.50	2.3119E+005		-3.1590E+005
	778.89	12.74	4.6781E+005		-2.8925E+005
	867.32	4.16	1.3794E+006		-5.2978E+005
	964.01	14.40	5.1905E+005		5.6781E+005
	1085.78	10.00	5.3604E+005		-5.1938E+005
	1112.02	13.30	5.0926E+005		-6.7237E+004
	1407.95	20.70	2.0293E+005		-6.6305E+003
Eu-154	123.07	40.50	2.3919E+005	1.52E+005	1.2243E+005
	247.94	6.60	1.0672E+006		-1.6120E+006
	591.81	4.83	1.1109E+006		5.9280E+004
	723.30	19.70	3.3522E+005		3.7583E+005
	756.87	4.33	1.2962E+006		2.5239E+005
	873.19	11.50	4.8298E+005		1.7107E+005
	996.32	10.30	5.7712E+005		5.4526E+003
	1004.76	17.90	3.3531E+005		3.5473E+005
	1274.45	35.50	1.5178E+005		7.9233E+004
Eu-155	86.54	30.90	4.3039E+005	4.30E+005	3.4388E+005
	105.31	20.70	4.9504E+005		-1.3687E+005
Am-241	59.54	35.90	4.7178E+005	4.72E+005	-1.8765E+005
Cm-243	228.19	10.56	6.7706E+005	4.91E+005	-2.3363E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9113E+005	4.91E+005	-1.5535E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 1:03:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 12:48:33 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	290-	304	299.26	74.67	1.59	3.27E+002	53.24	6.87E+002
F	2	333-	345	339.97	84.88	0.90	9.15E+001	39.34	4.65E+002
F	3	947-	959	953.64	238.73	1.12	1.27E+002	30.84	1.53E+002
F	4	1402-	1415	1407.13	352.31	1.35	5.52E+001	21.93	8.18E+001
F	5	2033-	2052	2041.95	511.16	1.67	8.23E+001	21.84	7.85E+001
F	6	2322-	2339	2331.13	583.47	1.60	1.01E+002	21.19	3.16E+001
F	7	2426-	2445	2435.38	609.53	1.85	9.92E+001	20.86	3.54E+001
F	8	3633-	3653	3642.56	911.10	2.13	9.32E+001	19.46	1.82E+001
F	9	5828-	5855	5841.18	1459.67	2.25	4.00E+002	38.30	1.29E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	8.64901E+004	2.59526E+004
K-40	0.961	1460.81*	10.67	5.83163E+006	7.31322E+005
TL-208	0.750	277.35	6.80		
		510.84*	21.60	4.00417E+005	1.24521E+005
		583.14*	84.20	1.31906E+005	3.28298E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.87075E+006	7.31359E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.29760E+005	6.62727E+004
Bi-214	0.417	609.31*	46.30	2.40798E+005	5.88215E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	5.799835E+004	2.688791E+004
K-40		0.961	5.831632E+006	7.313217E+005
TL-208		0.750	1.319062E+005	3.254712E+004
Pb-212	@	0.497	2.297595E+005	6.627267E+004
Bi-214		0.417	2.407983E+005	5.882152E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.88	1.0166E-001	42.99
F	4	352.31	6.1311E-002	39.74
F	8	911.10	1.0350E-001	20.89

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.1427E+004	5.66E+004	4.1160E+004
	1332.49	100.00	5.6632E+004		5.4392E+004
Nb-94	702.63	100.00	5.6238E+004	5.62E+004	8.3444E+003
	871.10	100.00	5.8105E+004		1.9026E+004
Ag-108m	79.20	7.10	2.1299E+006	6.66E+004	-3.2212E+006
	433.93	89.90	6.6568E+004		-2.1274E+004
	614.37	90.40	8.3537E+004		6.3399E+003
	722.95	90.50	7.2142E+004		2.4849E+004
Sb-125	176.33	6.89	1.0989E+006	2.09E+005	2.2767E+005
	427.89	29.33	2.0913E+005		5.5652E+004
	463.38	10.35	5.9104E+005		-4.7424E+005
	600.56	17.80	3.3152E+005		1.1103E+005
	606.64	5.02	1.5121E+006		2.8306E+006
	635.90	11.32	5.1955E+005		-3.7864E+005
Cs-134	563.23	8.38	6.7582E+005	7.03E+004	2.8332E+005
	569.32	15.43	3.7930E+005		-2.7231E+004
	604.70	97.60	7.6131E+004		-5.9512E+004
	795.84	85.40	7.0275E+004		-5.7643E+003
	801.93	8.73	6.8248E+005		-8.9421E+005
Cs-137	661.65	85.12	7.2814E+004	7.28E+004	6.4494E+004
Eu-152	121.78	28.40	3.4788E+005	2.12E+005	7.8745E+004
	244.69	7.49	1.0140E+006		-1.3766E+006
	344.27	26.50	2.4350E+005		-4.2764E+005
	778.89	12.74	4.5407E+005		-5.5159E+004
	867.32	4.16	1.4398E+006		2.6641E+005
	964.01	14.40	5.1162E+005		6.7545E+005
	1085.78	10.00	5.7270E+005		2.1140E+005
	1112.02	13.30	4.9903E+005		-1.7136E+005
	1407.95	20.70	2.1248E+005		-7.5759E+004
Eu-154	123.07	40.50	2.4018E+005	1.48E+005	-1.6772E+005
	247.94	6.60	1.0672E+006		-9.1405E+004
	591.81	4.83	1.1537E+006		-6.0824E+004
	723.30	19.70	3.3522E+005		2.5590E+005
	756.87	4.33	1.3703E+006		-2.9016E+005
	873.19	11.50	4.9161E+005		2.1735E+005
	996.32	10.30	5.1992E+005		-2.0183E+005
	1004.76	17.90	2.9590E+005		1.1415E+005
	1274.45	35.50	1.4767E+005		-3.3489E+004
Eu-155	86.54	30.90	4.2494E+005	4.25E+005	3.9423E+005
	105.31	20.70	5.2801E+005		-9.9571E+004
Am-241	59.54	35.90	4.9430E+005	4.94E+005	-7.0431E+004
Cm-243	228.19	10.56	6.7799E+005	4.82E+005	-8.1701E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8188E+005	4.82E+005	-1.7076E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 1:23:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 1:08:55 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	306	300.88	75.08	1.07	2.28E+002	53.84	6.80E+002
F	2	334-	344	338.48	84.51	0.99	9.61E+001	41.98	4.46E+002
F	3	737-	754	743.79	186.14	0.89	4.82E+001	23.44	1.95E+002
F	4	947-	960	953.99	238.82	0.91	1.26E+002	30.31	1.70E+002
F	5	1344-	1358	1352.98	338.75	0.90	3.58E+001	19.22	9.93E+001
F	6	1400-	1413	1406.44	352.13	1.44	9.85E+001	24.27	7.51E+001
F	7	2322-	2340	2331.03	583.44	1.46	8.11E+001	20.48	4.75E+001
F	8	2425-	2445	2435.63	609.59	1.58	1.10E+002	22.79	4.99E+001
F	9	3633-	3651	3642.22	911.01	1.94	7.51E+001	19.20	3.08E+001
F	10	3866-	3879	3873.12	968.65	0.87	3.74E+001	14.88	2.61E+001
F	11	4472-	4484	4479.09	1119.88	1.38	2.77E+001	13.50	1.77E+001
F	12	5829-	5855	5841.13	1459.66	2.03	4.09E+002	39.62	2.26E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.961	1460.81*	10.67	5.96520E+006	7.52962E+005
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.06413E+005	3.03345E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.98679E+006	6.10254E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.26867E+005	6.52195E+004
Bi-214	0.712	609.31*	46.30	2.67579E+005	6.45681E+004
		1120.29*	15.10	2.59151E+005	1.29421E+005
		1764.49	15.80		
Ac-228	0.997	338.32*	11.40	2.84308E+005	1.58892E+005
		911.07*	27.70	3.49330E+005	9.79184E+004
		969.11*	16.60	2.97968E+005	1.22732E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.961	5.965203E+006	7.529619E+005
TL-208		0.469	1.064132E+005	3.033450E+004
Pb-212	@	0.497	2.268674E+005	6.521952E+004
Bi-214		0.712	2.658990E+005	5.777685E+004
Ac-228		0.997	3.208687E+005	6.895831E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.51	1.0683E-001	43.66
F	3	186.14	5.3549E-002	48.64
F	6	352.13	1.0944E-001	24.64

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7289E+004	5.22E+004	5.2413E+004
	1332.49	100.00	5.2224E+004		-3.3010E+004
Nb-94	702.63	100.00	5.9823E+004	5.24E+004	1.4185E+004
	871.10	100.00	5.2404E+004		-2.4659E+004
Ag-108m	79.20	7.10	2.1625E+006	6.58E+004	-3.6083E+006
	433.93	89.90	6.6977E+004		-7.0272E+004
	614.37	90.40	8.9016E+004		-1.8470E+004
	722.95	90.50	6.5816E+004		-7.4232E+003
Sb-125	176.33	6.89	1.0784E+006	2.17E+005	-3.5007E+005
	427.89	29.33	2.1745E+005		1.0075E+005
	463.38	10.35	5.7618E+005		-5.0153E+005
	600.56	17.80	3.3823E+005		8.0391E+004
	606.64	5.02	1.6404E+006		3.2691E+006
	635.90	11.32	5.3061E+005		-2.0278E+005
Cs-134	563.23	8.38	6.9276E+005	7.33E+004	-6.8523E+004
	569.32	15.43	3.8381E+005		9.7843E+003
	604.70	97.60	8.2493E+004		6.1956E+003
	795.84	85.40	7.3256E+004		-2.2855E+004
	801.93	8.73	6.8582E+005		-2.6763E+005
Cs-137	661.65	85.12	6.7055E+004	6.71E+004	1.6429E+004
Eu-152	121.78	28.40	3.5738E+005	2.22E+005	2.4658E+005
	244.69	7.49	9.7592E+005		-4.1448E+005
	344.27	26.50	2.5100E+005		-1.5413E+005
	778.89	12.74	4.7452E+005		-2.4049E+005
	867.32	4.16	1.3323E+006		-6.9981E+005
	964.01	14.40	5.0597E+005		1.5923E+005
	1085.78	10.00	5.9202E+005		-3.5445E+005
	1112.02	13.30	5.1178E+005		-3.4971E+005
	1407.95	20.70	2.2157E+005		1.4044E+005
Eu-154	123.07	40.50	2.4707E+005	1.46E+005	8.7709E+004
	247.94	6.60	1.0114E+006		-1.1779E+006
	591.81	4.83	1.2778E+006		1.1529E+006
	723.30	19.70	3.0790E+005		-9.3882E+004
	756.87	4.33	1.2248E+006		-3.7940E+005
	873.19	11.50	4.6217E+005		7.9949E+004
	996.32	10.30	5.1228E+005		-5.5340E+004
	1004.76	17.90	3.5418E+005		2.2994E+005
	1274.45	35.50	1.4627E+005		-9.3096E+003
Eu-155	86.54	30.90	4.4501E+005	4.45E+005	7.1512E+005
	105.31	20.70	5.3071E+005		2.3868E+005
Am-241	59.54	35.90	5.0126E+005	5.01E+005	1.5264E+005
Cm-243	228.19	10.56	7.0165E+005	4.82E+005	2.2765E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8188E+005	4.82E+005	-2.6236E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 1:41:51 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 1:26:49 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	292.06	72.86	1.00	1.69E+002	40.59	5.11E+002
m	2	282-	305	299.98	74.85	1.00	2.98E+002	50.17	5.40E+002
F	3	948-	961	954.01	238.82	0.87	1.04E+002	28.77	1.73E+002
F	4	1346-	1358	1352.23	338.56	1.03	3.92E+001	19.47	7.55E+001
F	5	1398-	1416	1406.76	352.21	1.45	1.12E+002	24.17	8.11E+001
F	6	2035-	2048	2040.34	510.75	1.07	5.90E+001	19.89	5.52E+001
F	7	2324-	2340	2330.92	583.42	1.58	8.44E+001	20.29	3.36E+001
F	8	2427-	2443	2435.19	609.49	1.35	8.46E+001	21.78	5.53E+001
F	9	3634-	3652	3643.53	911.34	1.80	6.10E+001	17.97	3.06E+001
F	10	3868-	3880	3874.38	968.97	1.03	2.78E+001	12.96	1.78E+001
F	11	4472-	4484	4477.56	1119.50	0.81	1.72E+001	10.81	1.84E+001
F	12	5828-	5854	5841.12	1459.66	2.10	3.99E+002	38.85	2.04E+001
F	13	7052-	7065	7058.31	1763.28	1.81	3.04E+001	12.02	5.01E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	6.19417E+004	2.26268E+004
K-40	0.960	1460.81*		10.67	5.81511E+006	7.36603E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	2.86767E+005	1.07339E+005
		583.14*		84.20	1.10737E+005	3.03894E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.60939E+006	6.74148E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.88261E+005	5.97011E+004
Bi-214	0.987	609.31*		46.30	2.05278E+005	5.87062E+004
		1120.29*		15.10	1.60674E+005	1.02628E+005
		1764.49*		15.80	3.18542E+005	1.30074E+005
Ac-228	0.998	338.32*		11.40	3.10821E+005	1.62037E+005
		911.07*		27.70	2.83462E+005	8.96980E+004
		969.11*		16.60	2.21433E+005	1.05976E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.998	3.802242E+004	2.354677E+004
K-40	0.960	5.815109E+006	7.366031E+005
TL-208	0.751	1.107373E+005	3.017441E+004
Pb-212 @	0.497	1.882612E+005	5.970105E+004
Bi-214	0.987	2.108147E+005	4.744698E+004
Ac-228	0.998	2.656387E+005	6.306718E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	1.8795E-001	23.99
F 5	352.21	1.2393E-001	21.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3243E+004	4.85E+004	4.2629E+004
	1332.49	100.00	4.8495E+004		-1.3753E+004
Nb-94	702.63	100.00	5.4498E+004	5.31E+004	-6.3825E+004
	871.10	100.00	5.3108E+004		5.7656E+004
Ag-108m	79.20	7.10	2.0314E+006	6.74E+004	-3.7983E+006
	433.93	89.90	6.7383E+004		-1.6743E+004
	614.37	90.40	8.5814E+004		-4.1197E+004
	722.95	90.50	6.9342E+004		7.0856E+004
Sb-125	176.33	6.89	1.0588E+006	2.07E+005	-3.0124E+003
	427.89	29.33	2.0669E+005		-9.8610E+003
	463.38	10.35	5.7618E+005		-3.5272E+005
	600.56	17.80	3.1766E+005		-5.0214E+004
	606.64	5.02	1.5811E+006		2.1894E+006
	635.90	11.32	5.0823E+005		5.8435E+004
Cs-134	563.23	8.38	7.1468E+005	6.79E+004	1.1384E+005
	569.32	15.43	3.8974E+005		3.3849E+005
	604.70	97.60	7.8627E+004		-1.7790E+004
	795.84	85.40	6.7861E+004		-3.7278E+004
	801.93	8.73	6.7573E+005		-2.7572E+005
Cs-137	661.65	85.12	6.9235E+004	6.92E+004	9.8680E+003
Eu-152	121.78	28.40	3.4112E+005	2.36E+005	-1.1264E+005
	244.69	7.49	9.6378E+005		5.1274E+005
	344.27	26.50	2.4020E+005		9.0772E+004
	778.89	12.74	4.2517E+005		6.0555E+004
	867.32	4.16	1.2408E+006		-1.5904E+006
	964.01	14.40	4.9447E+005		7.4543E+005
	1085.78	10.00	5.6875E+005		3.6934E+005
	1112.02	13.30	4.8326E+005		1.4971E+005
	1407.95	20.70	2.3588E+005		7.7975E+004
Eu-154	123.07	40.50	2.3807E+005	1.48E+005	-7.5250E+004
	247.94	6.60	1.0215E+006		-9.4158E+005
	591.81	4.83	1.1431E+006		-2.4153E+005
	723.30	19.70	3.1596E+005		1.0047E+005
	756.87	4.33	1.3100E+006		-1.1395E+006
	873.19	11.50	4.4981E+005		-4.1715E+005
	996.32	10.30	5.6687E+005		1.3672E+005
	1004.76	17.90	3.0893E+005		-4.0986E+005
	1274.45	35.50	1.4767E+005		-3.8572E+004
Eu-155	86.54	30.90	4.4179E+005	4.42E+005	6.5905E+005
	105.31	20.70	5.3098E+005		-1.0473E+005
Am-241	59.54	35.90	4.7932E+005	4.79E+005	-1.6569E+005
Cm-243	228.19	10.56	6.7521E+005	4.77E+005	8.3293E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7675E+005	4.77E+005	3.2338E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:02:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 1:47:17 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	292.18	72.89	1.29	1.28E+002	41.65	5.31E+002
m	2	286-	309	300.38	74.95	1.29	3.17E+002	50.44	7.31E+002
F	3	943-	960	954.46	238.93	1.23	1.61E+002	31.17	1.62E+002
F	4	1400-	1417	1406.31	352.10	1.46	8.37E+001	23.19	8.87E+001
F	5	2324-	2340	2331.78	583.63	1.17	5.43E+001	18.65	5.26E+001
F	6	2427-	2443	2435.64	609.60	1.04	7.29E+001	20.30	5.12E+001
F	7	2803-	2814	2808.04	702.67	0.96	1.91E+001	11.67	1.74E+001
F	8	3634-	3650	3641.83	910.91	1.87	6.12E+001	18.22	3.09E+001
F	9	5826-	5854	5841.20	1459.68	2.35	4.10E+002	38.81	1.80E+001
F	10	7049-	7063	7056.42	1762.81	1.73	3.39E+001	13.02	7.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.962	1460.81*	10.67	5.97459E+006	7.44427E+005
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	7.12636E+004	2.62285E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.77048E+006	6.99525E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.90551E+005	7.23699E+004
Bi-214	0.685	609.31*	46.30	1.76925E+005	5.39633E+004
		1120.29	15.10		
		1764.49*	15.80	3.55195E+005	1.41096E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.962	5.974587E+006	7.444274E+005
TL-208	0.466	7.126355E+004	2.622853E+004
Pb-212 @	0.496	2.905506E+005	7.236995E+004
Bi-214	0.685	1.996733E+005	5.040275E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	1.4210E-001	32.57
F 4	352.10	9.3045E-002	27.69
F 7	702.67	2.1238E-002	61.08
F 8	910.91	6.7956E-002	29.79

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.6380E+004	5.12E+004	7.5216E+003
	1332.49	100.00	5.1189E+004		-2.0081E+004
Nb-94	702.63	100.00	6.0355E+004	5.13E+004	3.2770E+004
	871.10	100.00	5.1327E+004		-2.3318E+004
Ag-108m	79.20	7.10	2.1283E+006	6.70E+004	-1.1991E+006
	433.93	89.90	6.9378E+004		3.3567E+004
	614.37	90.40	8.0978E+004		-5.1155E+004
	722.95	90.50	6.7013E+004		2.7822E+004
Sb-125	176.33	6.89	1.1000E+006	2.05E+005	9.2041E+005
	427.89	29.33	2.0546E+005		8.6555E+004
	463.38	10.35	5.9287E+005		-1.3445E+005
	600.56	17.80	3.0756E+005		-1.5535E+005
	606.64	5.02	1.5452E+006		2.9389E+006
	635.90	11.32	5.0131E+005		2.6776E+004
Cs-134	563.23	8.38	6.6136E+005	6.64E+004	-4.9359E+005
	569.32	15.43	3.5906E+005		3.3700E+004
	604.70	97.60	7.6131E+004		-7.9489E+004
	795.84	85.40	6.6439E+004		-1.9355E+004
	801.93	8.73	6.2635E+005		-4.0395E+005
Cs-137	661.65	85.12	6.7999E+004	6.80E+004	-4.0149E+004
Eu-152	121.78	28.40	3.3688E+005	2.22E+005	4.2653E+004
	244.69	7.49	1.0140E+006		-1.1963E+006
	344.27	26.50	2.5047E+005		-4.7738E+005
	778.89	12.74	4.5869E+005		2.9034E+004
	867.32	4.16	1.2408E+006		-1.7470E+006
	964.01	14.40	4.9641E+005		4.4166E+005
	1085.78	10.00	5.1002E+005		-3.1931E+005
	1112.02	13.30	4.9644E+005		-5.6219E+005
	1407.95	20.70	2.2157E+005		1.3924E+005
Eu-154	123.07	40.50	2.3365E+005	1.38E+005	-8.0254E+003
	247.94	6.60	1.0608E+006		-7.0836E+005
	591.81	4.83	1.2298E+006		-3.6804E+005
	723.30	19.70	3.0653E+005		8.5654E+004
	756.87	4.33	1.3637E+006		1.8954E+005
	873.19	11.50	4.2059E+005		-5.2722E+005
	996.32	10.30	5.6340E+005		3.8691E+005
	1004.76	17.90	3.1314E+005		2.8565E+005
	1274.45	35.50	1.3755E+005		-6.4884E+004
Eu-155	86.54	30.90	4.3004E+005	4.30E+005	4.0749E+005
	105.31	20.70	5.2774E+005		-1.5816E+005
Am-241	59.54	35.90	4.6126E+005	4.61E+005	-2.9559E+005
Cm-243	228.19	10.56	6.5345E+005	4.72E+005	-6.1898E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7157E+005	4.72E+005	-9.1855E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:21:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 2:06:38 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	290-	308	299.22	74.66	1.91	3.20E+002	54.87	9.26E+002
F	2	333-	345	338.53	84.52	0.81	7.83E+001	40.06	5.51E+002
F	3	943-	960	953.45	238.68	1.50	1.25E+002	30.44	1.96E+002
F	4	1398-	1411	1404.91	351.75	1.00	5.13E+001	21.17	9.10E+001
F	5	2030-	2051	2040.02	510.67	1.90	8.14E+001	22.50	1.02E+002
F	6	2322-	2343	2331.23	583.49	1.69	9.86E+001	21.54	4.64E+001
F	7	2423-	2442	2434.86	609.40	1.39	7.73E+001	21.80	6.81E+001
F	8	3635-	3653	3642.98	911.20	1.87	6.83E+001	18.58	3.16E+001
F	9	5828-	5856	5841.70	1459.80	2.29	4.39E+002	40.40	2.18E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	8.55431E+004	2.65060E+004
K-40	0.970	1460.81*		10.67	6.40032E+006	7.84581E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	3.96033E+005	1.26903E+005
		583.14*		84.20	1.29342E+005	3.30396E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.81136E+006	7.31830E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.25538E+005	6.53062E+004
Bi-214	0.418	609.31*		46.30	1.87672E+005	5.78227E+004
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	5.760534E+004	2.743479E+004
K-40		0.970	6.400315E+006	7.845807E+005
TL-208		0.750	1.293416E+005	3.276960E+004
Pb-212	@	0.497	2.255378E+005	6.530620E+004
Bi-214		0.418	1.876716E+005	5.782266E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.52	8.7018E-002	51.15
F	4	351.75	5.6968E-002	41.29
F	8	911.20	7.5881E-002	27.20

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0076E+004	6.07E+004	2.0368E+004
	1332.49	100.00	6.0697E+004		2.9697E+004
Nb-94	702.63	100.00	6.0090E+004	5.48E+004	-2.6243E+004
	871.10	100.00	5.4828E+004		1.6665E+004
Ag-108m	79.20	7.10	2.1363E+006	6.68E+004	-1.8663E+006
	433.93	89.90	6.6773E+004		2.5779E+004
	614.37	90.40	8.7230E+004		-7.9151E+003
	722.95	90.50	6.8478E+004		-2.5182E+004
Sb-125	176.33	6.89	1.1233E+006	2.00E+005	-4.4692E+005
	427.89	29.33	2.0046E+005		-2.6620E+004
	463.38	10.35	6.0909E+005		2.2825E+005
	600.56	17.80	3.3422E+005		7.1557E+004
	606.64	5.02	1.6335E+006		2.7407E+006
	635.90	11.32	4.9898E+005		-5.6507E+005
Cs-134	563.23	8.38	6.9554E+005	6.96E+004	3.0032E+005
	569.32	15.43	3.9120E+005		1.4417E+005
	604.70	97.60	8.2313E+004		1.3950E+004
	795.84	85.40	6.9594E+004		-2.7020E+004
	801.93	8.73	6.6548E+005		-8.7617E+005
Cs-137	661.65	85.12	7.5659E+004	7.57E+004	7.9676E+004
Eu-152	121.78	28.40	3.4232E+005	2.57E+005	-7.6060E+004
	244.69	7.49	9.9976E+005		-8.4672E+005
	344.27	26.50	2.5981E+005		-1.5445E+005
	778.89	12.74	4.7452E+005		1.1260E+005
	867.32	4.16	1.3242E+006		-1.8840E+006
	964.01	14.40	5.2273E+005		6.2138E+005
	1085.78	10.00	6.2519E+005		-2.9689E+005
	1112.02	13.30	5.2908E+005		-5.1886E+005
	1407.95	20.70	2.5697E+005		2.4321E+005
Eu-154	123.07	40.50	2.3807E+005	1.67E+005	-1.7572E+005
	247.94	6.60	1.0413E+006		-1.1765E+006
	591.81	4.83	1.1898E+006		3.8927E+005
	723.30	19.70	3.1463E+005		-2.5438E+005
	756.87	4.33	1.2610E+006		-5.8093E+005
	873.19	11.50	4.7121E+005		-9.9917E+004
	996.32	10.30	5.8050E+005		-2.5150E+005
	1004.76	17.90	3.1104E+005		-1.4192E+005
	1274.45	35.50	1.6714E+005		1.1718E+005
Eu-155	86.54	30.90	4.5570E+005	4.56E+005	7.1176E+005
	105.31	20.70	5.4242E+005		2.0928E+004
Am-241	59.54	35.90	4.7607E+005	4.76E+005	-7.4947E+003
Cm-243	228.19	10.56	7.1843E+005	4.79E+005	2.6446E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7932E+005	4.79E+005	5.7768E+003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:39:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 2:24:27 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	309	300.63	75.02	1.28	2.50E+002	53.59	7.79E+002
F	2	946-	960	953.20	238.62	1.39	1.34E+002	32.89	2.17E+002
F	3	1174-	1186	1181.52	295.81	1.14	5.11E+001	21.73	9.85E+001
F	4	1400-	1415	1407.53	352.41	1.26	7.72E+001	22.35	8.20E+001
F	5	2033-	2050	2042.91	511.40	1.66	8.90E+001	22.96	8.10E+001
F	6	2323-	2342	2330.85	583.40	1.97	1.09E+002	22.91	5.55E+001
F	7	2427-	2444	2435.17	609.48	1.64	7.43E+001	21.07	6.17E+001
F	8	3633-	3652	3642.14	910.99	1.77	7.85E+001	20.01	4.00E+001
F	9	4165-	4176	4170.96	1042.99	0.84	1.15E+001	8.85	8.95E+000
F	10	5827-	5855	5841.13	1459.66	2.27	5.39E+002	44.73	2.90E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*		100.00	9.34755E+004	2.74581E+004
K-40	0.961	1460.81*		10.67	7.86232E+006	9.11424E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	4.32757E+005	1.31942E+005
		583.14*		84.20	1.43028E+005	3.55178E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.17968E+006	6.33756E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.42265E+005	7.04314E+004
Bi-214	0.418	609.31*		46.30	1.80418E+005	5.58480E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.560	74.82*	@	6.21	3.75565E+006	1.12550E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.30041E+005	1.05218E+005
		351.92*		37.20	1.90256E+005	6.36178E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	6.258150E+004	2.849192E+004
K-40		0.961	7.862321E+006	9.114242E+005
TL-208		0.750	1.430277E+005	3.521062E+004
Pb-212	@	0.497	2.422650E+005	7.043137E+004
Bi-214		0.418	1.804180E+005	5.584795E+004
PB-214	@	0.560	2.009067E+005	5.444034E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	8	910.99	8.7248E-002	25.48
F	9	1042.99	1.2724E-002	77.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6932E+004	5.71E+004	-4.1149E+004
	1332.49	100.00	5.7099E+004		6.1163E+003
Nb-94	702.63	100.00	6.2434E+004	5.55E+004	-3.8858E+004
	871.10	100.00	5.5500E+004		8.7727E+003
Ag-108m	79.20	7.10	2.2323E+006	7.11E+004	-1.2336E+006
	433.93	89.90	7.1123E+004		1.9577E+004
	614.37	90.40	8.7829E+004		-3.5662E+004
	722.95	90.50	7.5096E+004		4.8514E+004
Sb-125	176.33	6.89	1.2039E+006	2.17E+005	5.3809E+005
	427.89	29.33	2.1687E+005		4.6867E+004
	463.38	10.35	6.7467E+005		8.9208E+004
	600.56	17.80	3.4087E+005		-7.4593E+004
	606.64	5.02	1.6197E+006		2.2469E+006
	635.90	11.32	5.1955E+005		-3.7025E+004
Cs-134	563.23	8.38	7.3330E+005	7.23E+004	-5.5469E+005
	569.32	15.43	4.1532E+005		6.3853E+004
	604.70	97.60	8.2672E+004		-3.1911E+004
	795.84	85.40	7.2277E+004		-9.7757E+004
	801.93	8.73	7.4335E+005		-2.2258E+005
Cs-137	661.65	85.12	7.7041E+004	7.70E+004	7.0635E+004
Eu-152	121.78	28.40	3.6383E+005	2.09E+005	2.6225E+004
	244.69	7.49	1.1457E+006		2.7078E+005
	344.27	26.50	2.6435E+005		-2.4606E+005
	778.89	12.74	5.0460E+005		-2.3219E+005
	867.32	4.16	1.3871E+006		-1.6943E+006
	964.01	14.40	5.4598E+005		1.0163E+006
	1085.78	10.00	6.0700E+005		-4.0969E+005
	1112.02	13.30	5.2665E+005		-8.1334E+005
	1407.95	20.70	2.0935E+005		-1.1412E+005
Eu-154	123.07	40.50	2.5272E+005	1.71E+005	-6.4039E+004
	247.94	6.60	1.1734E+006		-7.2925E+004
	591.81	4.83	1.2100E+006		-7.1883E+005
	723.30	19.70	3.3020E+005		-3.1280E+005
	756.87	4.33	1.4465E+006		1.2217E+006
	873.19	11.50	4.7418E+005		5.0542E+004
	996.32	10.30	5.2369E+005		-5.1334E+005
	1004.76	17.90	3.1935E+005		-1.5748E+005
	1274.45	35.50	1.7075E+005		4.1861E+004
Eu-155	86.54	30.90	4.6291E+005	4.63E+005	6.4015E+005
	105.31	20.70	5.5977E+005		2.3722E+005
Am-241	59.54	35.90	4.8032E+005	4.80E+005	1.5809E+005
Cm-243	228.19	10.56	7.4834E+005	5.36E+005	2.3201E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3645E+005	5.36E+005	-2.2238E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:58:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 2:43:00 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.39	72.70	0.82	1.08E+002	38.70	4.98E+002
m	2	285-	307	300.21	74.91	0.82	2.26E+002	48.61	5.41E+002
F	3	334-	345	339.40	84.74	0.87	7.96E+001	41.18	5.14E+002
F	4	947-	961	953.74	238.75	0.90	1.25E+002	30.66	1.94E+002
F	5	1175-	1185	1180.43	295.54	0.77	3.30E+001	19.05	8.38E+001
F	6	1345-	1358	1352.39	338.60	0.95	3.95E+001	18.96	7.54E+001
F	7	1401-	1413	1406.31	352.10	1.20	8.32E+001	24.18	8.14E+001
F	8	2031-	2052	2041.69	511.09	1.98	1.10E+002	23.63	8.54E+001
F	9	2323-	2339	2331.38	583.53	1.21	7.99E+001	21.19	5.28E+001
F	10	2428-	2442	2434.97	609.43	1.57	1.01E+002	22.16	3.42E+001
F	11	3634-	3653	3642.47	911.07	1.75	9.24E+001	19.74	1.65E+001
F	12	3865-	3882	3873.28	968.69	1.37	4.86E+001	16.04	2.23E+001
F	13	4473-	4484	4478.37	1119.70	0.74	1.68E+001	11.64	2.84E+001
F	14	5828-	5854	5840.88	1459.60	2.03	5.23E+002	44.17	1.31E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.15043E+005	2.96040E+004
K-40	0.956	1460.81*		10.67	7.62543E+006	8.92132E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	5.32609E+005	1.43792E+005
		583.14*		84.20	1.04868E+005	3.10768E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.98045E+006	5.75698E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.26168E+005	6.56853E+004
Bi-214	0.712	609.31*		46.30	2.46015E+005	6.18790E+004
		1120.29*		15.10	1.57390E+005	1.10255E+005
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	3.41238E+006	1.02241E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.48763E+005	8.93175E+004
		351.92*		37.20	2.05042E+005	6.87428E+004
Ac-228	0.998	338.32*		11.40	3.13133E+005	1.58255E+005
		911.07*		27.70	4.29439E+005	1.04232E+005
		969.11*		16.60	3.87664E+005	1.34249E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	9.239196E+004	3.034653E+004
K-40		0.956	7.625435E+006	8.921320E+005
TL-208		0.749	1.048683E+005	3.088830E+004
Pb-212	@	0.497	2.261683E+005	6.568533E+004
Bi-214		0.712	2.247859E+005	5.396129E+004
PB-214	@	0.565	1.841059E+005	5.447629E+004
Ac-228		0.998	3.923009E+005	7.303778E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	1.1987E-001	35.87
F 3	84.74	8.8393E-002	51.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9391E+004	5.17E+004	3.8854E+004
	1332.49	100.00	5.1709E+004		4.9049E+003
Nb-94	702.63	100.00	6.2943E+004	6.15E+004	2.1603E+004
	871.10	100.00	6.1496E+004		1.3619E+003
Ag-108m	79.20	7.10	2.1750E+006	6.93E+004	-4.2160E+005
	433.93	89.90	6.9965E+004		1.4597E+004
	614.37	90.40	8.5609E+004		-6.5622E+004
	722.95	90.50	6.9342E+004		2.2410E+004
Sb-125	176.33	6.89	1.1277E+006	2.11E+005	-9.8266E+004
	427.89	29.33	2.1094E+005		-5.6551E+004
	463.38	10.35	6.1263E+005		8.0316E+004
	600.56	17.80	3.2880E+005		-2.1211E+004
	606.64	5.02	1.5988E+006		2.7866E+006
	635.90	11.32	5.7665E+005		3.1460E+005
Cs-134	563.23	8.38	7.2538E+005	7.67E+004	-4.3929E+005
	569.32	15.43	3.8231E+005		-5.9924E+004
	604.70	97.60	8.1225E+004		-3.9549E+004
	795.84	85.40	7.6734E+004		1.4698E+004
	801.93	8.73	6.5855E+005		-9.0662E+005
Cs-137	661.65	85.12	6.9845E+004	6.98E+004	-1.1024E+004
Eu-152	121.78	28.40	3.5179E+005	2.00E+005	3.1624E+005
	244.69	7.49	9.8659E+005		-4.5581E+005
	344.27	26.50	2.4076E+005		-1.3812E+005
	778.89	12.74	4.7005E+005		-2.0901E+005
	867.32	4.16	1.4762E+006		-1.3857E+006
	964.01	14.40	5.2273E+005		5.9252E+005
	1085.78	10.00	6.2519E+005		-1.0347E+005
	1112.02	13.30	5.2665E+005		1.0254E+005
	1407.95	20.70	1.9964E+005		-6.6836E+004
Eu-154	123.07	40.50	2.4115E+005	1.56E+005	-2.0017E+005
	247.94	6.60	1.0298E+006		-1.0262E+006
	591.81	4.83	1.2492E+006		5.0030E+005
	723.30	19.70	3.1728E+005		-3.2649E+004
	756.87	4.33	1.3768E+006		-1.0024E+006
	873.19	11.50	5.4803E+005		4.2180E+005
	996.32	10.30	5.4573E+005		6.1851E+004
	1004.76	17.90	3.3336E+005		1.4923E+005
	1274.45	35.50	1.5577E+005		-8.3721E+003
Eu-155	86.54	30.90	4.5189E+005	4.52E+005	3.7494E+005
	105.31	20.70	5.3659E+005		-1.4845E+005
Am-241	59.54	35.90	4.8968E+005	4.90E+005	2.5644E+005
Cm-243	228.19	10.56	7.0522E+005	5.07E+005	-1.1832E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0670E+005	5.07E+005	1.2844E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 3:28:11 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 3:13:10 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.57	72.74	0.99	1.66E+002	40.97	5.29E+002
m	2	282-	306	300.09	74.88	1.00	3.70E+002	53.71	6.03E+002
F	3	333-	344	339.21	84.69	0.97	1.03E+002	42.28	4.92E+002
F	4	563-	570	566.04	141.58	0.67	2.94E+001	24.62	1.54E+002
F	5	946-	964	954.37	238.91	1.08	1.62E+002	31.89	2.04E+002
F	6	1176-	1190	1180.53	295.56	0.96	5.64E+001	21.81	1.01E+002
F	7	1343-	1358	1351.93	338.49	0.88	4.81E+001	19.07	8.01E+001
F	8	1401-	1413	1406.47	352.14	1.10	9.70E+001	23.33	5.57E+001
F	9	2321-	2338	2330.51	583.31	1.33	1.35E+002	25.68	5.63E+001
F	10	2427-	2444	2435.54	609.57	1.57	1.10E+002	22.62	3.99E+001
F	11	2901-	2912	2906.06	727.16	0.84	1.63E+001	12.32	3.00E+001
F	12	3634-	3650	3642.23	911.01	1.38	7.12E+001	19.73	3.44E+001
F	13	3866-	3880	3872.80	968.57	1.40	5.46E+001	18.37	3.39E+001
F	14	4472-	4486	4478.79	1119.81	1.36	2.65E+001	13.21	1.87E+001
F	15	5828-	5855	5841.54	1459.76	2.00	5.21E+002	44.21	1.33E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.967	1460.81*	10.67	7.60442E+006	8.91461E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.77658E+005	4.10746E+004
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	1.65510E+005	1.26265E+005
Pb-212	0.496	74.81* @	10.70	3.23823E+006	7.89794E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.92176E+005	7.35441E+004
Bi-214	0.711	609.31*	46.30	2.67472E+005	6.42025E+004
		1120.29*	15.10	2.48155E+005	1.26513E+005
		1764.49	15.80		
PB-214	0.564	74.82* @	6.21	5.57956E+006	1.41983E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.53893E+005	1.07088E+005
		351.92*	37.20	2.38906E+005	7.00053E+004
Ac-228	0.997	338.32*	11.40	3.81668E+005	1.62744E+005
		911.07*	27.70	3.31092E+005	9.93285E+004
		969.11*	16.60	4.35397E+005	1.53469E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.967	7.604421E+006	8.914614E+005
TL-208		0.470	1.776577E+005	4.107458E+004
Bi-212		1.000	1.655102E+005	1.262647E+005
Pb-212	@	0.496	2.921762E+005	7.354406E+004
Bi-214		0.711	2.635164E+005	5.725228E+004
PB-214	@	0.564	2.433931E+005	5.859582E+004
Ac-228		0.997	3.659991E+005	7.421253E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.74	1.8433E-001	24.69
F	3	84.69	1.1487E-001	40.89
F	4	141.58	3.2650E-002	83.79

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8488E+004	5.07E+004	-3.1176E+003
	1332.49	100.00	5.0662E+004		1.2108E+004
Nb-94	702.63	100.00	5.7366E+004	5.41E+004	-3.6458E+004
	871.10	100.00	5.4147E+004		-5.1637E+004
Ag-108m	79.20	7.10	2.1876E+006	6.76E+004	-1.4605E+006
	433.93	89.90	6.7585E+004		-3.2093E+004
	614.37	90.40	8.7230E+004		-9.9572E+003
	722.95	90.50	6.8768E+004		-2.1830E+004
Sb-125	176.33	6.89	1.1222E+006	2.14E+005	4.1129E+005
	427.89	29.33	2.1393E+005		-2.0521E+004
	463.38	10.35	6.1615E+005		4.2634E+005
	600.56	17.80	3.2880E+005		8.2587E+002
	606.64	5.02	1.5847E+006		2.6896E+006
	635.90	11.32	5.0363E+005		-5.6421E+005
Cs-134	563.23	8.38	6.9831E+005	7.49E+004	-3.9897E+004
	569.32	15.43	3.9412E+005		1.3351E+005
	604.70	97.60	8.0859E+004		-2.2874E+004
	795.84	85.40	7.4858E+004		1.1490E+004
	801.93	8.73	7.1200E+005		-2.2756E+005
Cs-137	661.65	85.12	7.3966E+004	7.40E+004	-3.2391E+004
Eu-152	121.78	28.40	3.5738E+005	2.03E+005	-6.0455E+004
	244.69	7.49	1.0011E+006		-3.3805E+005
	344.27	26.50	2.6083E+005		-9.0115E+003
	778.89	12.74	4.5407E+005		-1.1759E+005
	867.32	4.16	1.2915E+006		-2.1014E+006
	964.01	14.40	5.8963E+005		5.7857E+005
	1085.78	10.00	5.2320E+005		-1.8985E+005
	1112.02	13.30	5.5281E+005		2.8437E+005
	1407.95	20.70	2.0293E+005		-6.1929E+004
Eu-154	123.07	40.50	2.4991E+005	1.58E+005	-1.3949E+005
	247.94	6.60	1.0543E+006		-5.7312E+005
	591.81	4.83	1.1641E+006		-5.3996E+005
	723.30	19.70	3.1596E+005		-1.4220E+005
	756.87	4.33	1.5304E+006		1.0810E+006
	873.19	11.50	4.7121E+005		-2.7569E+004
	996.32	10.30	5.7031E+005		-4.6564E+005
	1004.76	17.90	3.2942E+005		2.3169E+005
	1274.45	35.50	1.5837E+005		2.9137E+004
Eu-155	86.54	30.90	4.5421E+005	4.54E+005	5.4858E+005
	105.31	20.70	5.5361E+005		-1.4532E+003
Am-241	59.54	35.90	4.8919E+005	4.89E+005	-3.2291E+004
Cm-243	228.19	10.56	6.7241E+005	5.19E+005	-1.0710E+006

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1944E+005	5.19E+005	2.8270E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 3:45:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 3:30:56 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.42	72.70	1.08	1.85E+002	43.12	4.31E+002
m	2	287-	306	299.96	74.85	1.09	2.99E+002	51.91	6.88E+002
F	3	333-	345	339.10	84.67	0.71	1.27E+002	40.78	5.42E+002
F	4	948-	960	954.04	238.83	1.13	1.54E+002	32.28	1.52E+002
F	5	1346-	1357	1352.28	338.57	0.99	4.23E+001	19.26	6.72E+001
F	6	1401-	1413	1406.86	352.24	0.98	7.81E+001	22.58	6.85E+001
F	7	2321-	2341	2330.99	583.43	1.55	9.99E+001	22.55	6.33E+001
F	8	2427-	2444	2435.34	609.52	1.26	8.63E+001	21.59	5.11E+001
F	9	3635-	3652	3642.21	911.01	1.20	6.31E+001	17.88	2.84E+001
F	10	3868-	3880	3874.57	969.02	1.13	3.20E+001	15.16	2.66E+001
F	11	5830-	5855	5841.49	1459.75	1.91	4.65E+002	42.40	2.52E+001
F	12	7049-	7064	7057.00	1762.96	1.65	4.28E+001	14.21	8.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.966	1460.81*	10.67	6.77785E+006	8.26646E+005
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.31164E+005	3.42949E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.61728E+006	6.85314E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.78031E+005	7.27424E+004
Bi-214	0.689	609.31*	46.30	2.09323E+005	5.85252E+004
		1120.29	15.10		
		1764.49*	15.80	4.49269E+005	1.55670E+005
Ac-228	0.999	338.32*	11.40	3.35530E+005	1.61629E+005
		911.07*	27.70	2.93405E+005	8.97254E+004
		969.11*	16.60	2.54951E+005	1.23834E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.966	6.777848E+006	8.266458E+005
TL-208		0.469	1.311636E+005	3.429492E+004
Pb-212	@	0.497	2.780309E+005	7.274238E+004
Bi-214		0.689	2.390383E+005	5.478160E+004
Ac-228		0.999	2.894740E+005	6.626970E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.70	2.0546E-001	23.32
F	3	84.67	1.4103E-001	32.12
F	6	352.24	8.6766E-002	28.91

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2861E+004	5.42E+004	1.1913E+004
	1332.49	100.00	5.4231E+004		-3.0110E+004
Nb-94	702.63	100.00	5.7922E+004	5.79E+004	6.1077E+004
	871.10	100.00	5.9980E+004		1.1129E+004
Ag-108m	79.20	7.10	2.1442E+006	7.09E+004	-1.8439E+006
	433.93	89.90	7.0931E+004		1.6594E+004
	614.37	90.40	8.1841E+004		-1.5435E+003
	722.95	90.50	7.2416E+004		2.8243E+004
Sb-125	176.33	6.89	1.1462E+006	2.16E+005	1.2912E+006
	427.89	29.33	2.1570E+005		7.6739E+004
	463.38	10.35	6.0194E+005		2.6401E+004
	600.56	17.80	3.2467E+005		-1.1968E+005
	606.64	5.02	1.5597E+006		2.8685E+006
	635.90	11.32	5.2178E+005		-9.4285E+003
Cs-134	563.23	8.38	7.2272E+005	7.16E+004	-6.6891E+004
	569.32	15.43	4.2618E+005		3.6006E+005
	604.70	97.60	8.0676E+004		2.7836E+004
	795.84	85.40	7.1616E+004		6.1987E+003
	801.93	8.73	7.0555E+005		-2.6514E+005
Cs-137	661.65	85.12	6.9235E+004	6.92E+004	-2.9518E+004
Eu-152	121.78	28.40	3.5738E+005	2.36E+005	-6.8275E+004
	244.69	7.49	9.9845E+005		1.0861E+004
	344.27	26.50	2.4620E+005		-1.7212E+005
	778.89	12.74	4.5869E+005		-5.0929E+005
	867.32	4.16	1.4690E+006		-1.4981E+006
	964.01	14.40	5.3359E+005		5.5204E+005
	1085.78	10.00	5.9956E+005		1.8461E+005
	1112.02	13.30	5.1679E+005		-3.6750E+005
	1407.95	20.70	2.3588E+005		1.1682E+005
Eu-154	123.07	40.50	2.5005E+005	1.49E+005	7.1330E+003
	247.94	6.60	1.0248E+006		-1.6724E+006
	591.81	4.83	1.1641E+006		6.3148E+005
	723.30	19.70	3.3272E+005		7.9533E+004
	756.87	4.33	1.2752E+006		1.0182E+005
	873.19	11.50	5.2197E+005		1.5690E+005
	996.32	10.30	5.4932E+005		-2.7019E+005
	1004.76	17.90	3.2342E+005		3.1594E+005
	1274.45	35.50	1.4905E+005		1.1987E+005
Eu-155	86.54	30.90	4.5718E+005	4.57E+005	3.8753E+005
	105.31	20.70	5.3819E+005		2.8505E+005
Am-241	59.54	35.90	4.9284E+005	4.93E+005	-8.2008E+005
Cm-243	228.19	10.56	7.0076E+005	5.04E+005	3.6169E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0428E+005	5.04E+005	4.3587E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 4:06:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 3:51:01 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.66	72.76	0.84	1.37E+002	40.19	4.65E+002
m	2	286-	305	300.31	74.93	0.85	2.22E+002	48.62	5.88E+002
F	3	739-	749	743.24	186.00	0.84	3.98E+001	25.19	1.63E+002
F	4	945-	959	954.29	238.89	1.17	1.44E+002	31.39	1.61E+002
F	5	1347-	1359	1351.69	338.43	1.12	4.04E+001	19.48	6.78E+001
F	6	1399-	1414	1406.80	352.22	1.25	8.68E+001	22.85	7.39E+001
F	7	2033-	2051	2041.48	511.04	1.85	9.04E+001	22.61	7.40E+001
F	8	2323-	2339	2330.84	583.40	1.10	6.45E+001	19.86	5.77E+001
F	9	2427-	2444	2435.09	609.46	1.22	8.81E+001	20.97	3.60E+001
F	10	2903-	2914	2908.34	727.73	0.74	1.62E+001	10.70	1.96E+001
F	11	3632-	3650	3641.12	910.74	1.45	7.32E+001	18.86	2.85E+001
F	12	3866-	3880	3873.73	968.81	1.60	4.05E+001	15.32	2.06E+001
F	13	4473-	4486	4479.55	1120.00	1.49	2.73E+001	14.18	2.11E+001
F	14	5321-	5334	5327.67	1331.58	0.94	1.90E+001	10.07	1.93E+001
F	15	5828-	5853	5840.82	1459.58	2.00	4.76E+002	42.57	2.28E+001
F	16	7051-	7064	7057.51	1763.08	1.36	2.39E+001	11.40	8.49E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	9.50198E+004	2.72346E+004
K-40	0.955	1460.81*		10.67	6.94744E+006	8.37640E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	4.39906E+005	1.31104E+005
		583.14*		84.20	8.46588E+004	2.83604E+004
		860.37		12.46		
Bi-212	0.991	727.17*		11.80	1.64248E+005	1.10090E+005
Pb-212	0.496	74.81*	@	10.70	1.94156E+006	5.70610E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.60501E+005	6.98166E+004
Bi-214	0.987	609.31*		46.30	2.13847E+005	5.74200E+004
		1120.29*		15.10	2.55550E+005	1.35513E+005
		1764.49*		15.80	2.50436E+005	1.22124E+005
Ac-228	0.997	338.32*		11.40	3.20293E+005	1.62500E+005
		911.07*		27.70	3.40257E+005	9.60257E+004
		969.11*		16.60	3.22727E+005	1.26797E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	7.673351E+004	2.790865E+004
K-40		0.955	6.947440E+006	8.376396E+005
TL-208		0.751	8.465878E+004	2.822593E+004
Bi-212		0.991	1.642481E+005	1.100903E+005
Pb-212	@	0.496	2.605008E+005	6.981656E+004
Bi-214		0.987	2.249678E+005	4.851821E+004
Ac-228		0.997	3.314023E+005	6.925147E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.76	1.5172E-001	29.44
F	3	186.00	4.4169E-002	63.36
F	6	352.22	9.6397E-002	26.34
F	14	1331.58	2.1117E-002	52.99

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.4690E+004	6.37E+004	1.0439E+004
	1332.49	100.00	6.3667E+004		2.2638E+004
Nb-94	702.63	100.00	5.9556E+004	5.45E+004	-2.1981E+004
	871.10	100.00	5.4488E+004		6.1922E+003
Ag-108m	79.20	7.10	2.1218E+006	6.49E+004	-3.7061E+006
	433.93	89.90	6.7383E+004		-2.9645E+004
	614.37	90.40	8.6017E+004		-1.1316E+004
	722.95	90.50	6.4903E+004		-7.6187E+003
Sb-125	176.33	6.89	1.0841E+006	1.97E+005	-5.9921E+004
	427.89	29.33	1.9662E+005		-1.4858E+005
	463.38	10.35	5.9470E+005		-3.5277E+005
	600.56	17.80	3.4350E+005		2.1969E+005
	606.64	5.02	1.5415E+006		9.4342E+005
	635.90	11.32	4.9664E+005		-1.2022E+005
Cs-134	563.23	8.38	7.6662E+005	7.06E+004	3.2035E+005
	569.32	15.43	4.1532E+005		9.3562E+004
	604.70	97.60	8.1589E+004		1.7942E+004
	795.84	85.40	7.0613E+004		4.1183E+004
	801.93	8.73	6.9247E+005		2.2932E+005
Cs-137	661.65	85.12	7.0449E+004	7.04E+004	1.4933E+004
Eu-152	121.78	28.40	3.4827E+005	2.36E+005	-1.3960E+005
	244.69	7.49	1.0407E+006		-1.3761E+006
	344.27	26.50	2.6335E+005		1.4008E+005
	778.89	12.74	4.7229E+005		-3.8959E+005
	867.32	4.16	1.2915E+006		-1.7322E+006
	964.01	14.40	5.3180E+005		5.0996E+005
	1085.78	10.00	5.1446E+005		-5.7877E+005
	1112.02	13.30	4.8326E+005		-3.1580E+005
	1407.95	20.70	2.3588E+005		-1.3734E+005
Eu-154	123.07	40.50	2.4115E+005	1.72E+005	7.5593E+003
	247.94	6.60	1.1321E+006		-3.6110E+005
	591.81	4.83	1.1484E+006		-9.2485E+005
	723.30	19.70	3.0240E+005		2.7181E+005
	756.87	4.33	1.2248E+006		-8.2189E+004
	873.19	11.50	4.8588E+005		-4.8228E+004
	996.32	10.30	5.2743E+005		-7.0621E+005
	1004.76	17.90	3.5049E+005		2.6821E+005
	1274.45	35.50	1.7194E+005		7.6227E+004
Eu-155	86.54	30.90	4.5850E+005	4.58E+005	6.2159E+005
	105.31	20.70	5.4110E+005		-4.5085E+005
Am-241	59.54	35.90	4.9017E+005	4.90E+005	-8.4753E+003
Cm-243	228.19	10.56	7.0433E+005	5.13E+005	-1.7445E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1311E+005	5.13E+005	-2.9467E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 7:56:08 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 7:41:06 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
	1	295-	307	300.46	74.97	1.17	8.14E+001	92.33	8.10E+002
F	2	333-	345	339.04	84.65	1.10	1.31E+002	43.25	4.97E+002
F	3	948-	961	953.96	238.81	1.08	1.23E+002	31.54	1.95E+002
F	4	1345-	1357	1352.09	338.53	1.32	5.64E+001	19.76	5.69E+001
F	5	1396-	1415	1406.67	352.19	1.44	1.45E+002	26.84	9.26E+001
F	6	2322-	2341	2331.32	583.52	1.61	8.76E+001	21.32	5.54E+001
F	7	2425-	2443	2434.68	609.36	1.53	1.15E+002	23.85	5.69E+001
F	8	3633-	3652	3642.39	911.05	1.76	7.29E+001	18.81	2.70E+001
F	9	3865-	3881	3873.25	968.69	1.89	5.80E+001	16.41	1.71E+001
F	10	4472-	4483	4477.45	1119.47	1.11	2.60E+001	14.63	2.99E+001
F	11	4945-	4958	4951.48	1237.74	0.91	2.25E+001	12.10	2.10E+001
F	12	5828-	5856	5841.43	1459.74	2.13	4.80E+002	42.47	1.99E+001
F	13	7050-	7067	7057.17	1763.00	1.90	4.37E+001	15.38	1.62E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.966	1460.81*	10.67	7.00623E+006	8.39812E+005
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.15003E+005	3.18426E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	7.11076E+005	8.18882E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.21460E+005	6.66556E+004
Bi-214	0.982	609.31*	46.30	2.79376E+005	6.75227E+004
		1120.29*	15.10	2.43556E+005	1.39407E+005
		1764.49*	15.80	4.58786E+005	1.67656E+005
Ac-228	0.998	338.32*	11.40	4.47367E+005	1.71764E+005
		911.07*	27.70	3.38868E+005	9.57635E+004
		969.11*	16.60	4.62379E+005	1.39631E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.966	7.006234E+006	8.398121E+005
TL-208		0.468	1.150026E+005	3.184257E+004
Pb-212	@	0.497	2.214601E+005	6.665565E+004
Bi-214		0.982	2.941942E+005	5.713235E+004
Ac-228		0.998	3.904178E+005	7.175351E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.65	1.4599E-001	32.92
F	5	352.19	1.6115E-001	18.51
F	11	1237.74	2.5046E-002	53.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4745E+004	5.66E+004	-7.2198E+002
	1332.49	100.00	5.6632E+004		-1.0989E+004
Nb-94	702.63	100.00	5.8472E+004	5.81E+004	1.3213E+004
	871.10	100.00	5.8105E+004		2.4017E+003
Ag-108m	79.20	7.10	2.2216E+006	6.72E+004	-8.4936E+005
	433.93	89.90	6.7180E+004		-3.3493E+003
	614.37	90.40	9.2293E+004		-1.2841E+004
	722.95	90.50	6.9342E+004		2.0528E+004
Sb-125	176.33	6.89	1.1706E+006	2.17E+005	5.5449E+005
	427.89	29.33	2.1745E+005		1.4948E+005
	463.38	10.35	6.3345E+005		2.6151E+005
	600.56	17.80	3.3288E+005		9.0650E+004
	606.64	5.02	1.7106E+006		2.1146E+006
	635.90	11.32	5.2178E+005		-2.2719E+004
Cs-134	563.23	8.38	7.2803E+005	7.09E+004	-1.1784E+005
	569.32	15.43	3.9412E+005		7.8510E+004
	604.70	97.60	8.6350E+004		-3.1957E+004
	795.84	85.40	7.0949E+004		6.7456E+004
	801.93	8.73	6.6202E+005		-1.9398E+006
Cs-137	661.65	85.12	7.3103E+004	7.31E+004	-2.6303E+004
Eu-152	121.78	28.40	3.4827E+005	2.33E+005	-1.2276E+005
	244.69	7.49	1.0582E+006		-5.4651E+005
	344.27	26.50	2.5153E+005		-1.0008E+005
	778.89	12.74	4.8113E+005		-3.9939E+004
	867.32	4.16	1.4398E+006		-4.8619E+005
	964.01	14.40	5.1721E+005		5.4310E+005
	1085.78	10.00	6.2876E+005		1.8437E+005
	1112.02	13.30	5.3632E+005		-4.2213E+005
	1407.95	20.70	2.3309E+005		-8.0027E+004
Eu-154	123.07	40.50	2.4365E+005	1.81E+005	-1.2027E+005
	247.94	6.60	1.0908E+006		1.7778E+004
	591.81	4.83	1.1054E+006		-6.6453E+005
	723.30	19.70	3.2252E+005		1.7764E+005
	756.87	4.33	1.3438E+006		1.6190E+005
	873.19	11.50	5.1388E+005		2.6636E+005
	996.32	10.30	5.5992E+005		-2.3048E+005
	1004.76	17.90	3.1935E+005		1.5043E+005
	1274.45	35.50	1.8112E+005		2.3054E+005
Eu-155	86.54	30.90	4.4771E+005	4.48E+005	5.5175E+005
	105.31	20.70	5.4294E+005		-1.7113E+004
Am-241	59.54	35.90	4.9526E+005	4.95E+005	-1.1285E+005
Cm-243	228.19	10.56	7.0611E+005	5.18E+005	6.5428E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1787E+005	5.18E+005	-6.0433E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 8:14:58 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 7:59:57 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	315	292.24	72.91	1.12	1.91E+002	43.60	5.95E+002
m	2	284-	315	300.18	74.90	1.13	3.33E+002	50.17	5.84E+002
m	3	284-	315	308.53	77.00	1.13	1.03E+002	39.27	6.11E+002
F	4	948-	961	953.80	238.77	1.17	1.71E+002	32.94	1.58E+002
F	5	1172-	1185	1179.63	295.34	1.31	7.30E+001	23.97	1.03E+002
F	6	1342-	1358	1351.92	338.48	1.30	5.57E+001	20.66	8.93E+001
F	7	1399-	1414	1406.72	352.20	1.32	1.24E+002	26.43	8.93E+001
F	8	2033-	2052	2041.73	511.10	1.88	9.98E+001	22.21	6.15E+001
F	9	2322-	2339	2330.27	583.25	1.46	1.02E+002	22.36	4.50E+001
F	10	2426-	2444	2435.19	609.48	1.39	1.39E+002	25.88	5.95E+001
F	11	2902-	2913	2907.93	727.63	0.63	1.74E+001	11.09	2.42E+001
F	12	3634-	3649	3641.28	910.78	1.50	7.12E+001	19.52	3.23E+001
F	13	5827-	5855	5840.79	1459.57	2.09	5.18E+002	43.95	1.45E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf.	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.04840E+005	2.75765E+004
K-40	0.955	1460.81*		10.67	7.55537E+006	8.85910E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	4.85372E+005	1.33681E+005
		583.14*		84.20	1.34238E+005	3.42934E+004
		860.37		12.46		
Bi-212	0.994	727.17*		11.80	1.76790E+005	1.14300E+005
Pb-212	0.838	74.81*	@	10.70	2.91068E+006	7.19756E+005
		77.11*	@	18.00	5.19455E+005	2.23143E+005
		87.30	@	8.00		
		238.63*		44.60	3.07873E+005	7.65527E+004
Bi-214	0.418	609.31*		46.30	3.36383E+005	7.54835E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.759	74.82*	@	6.21	5.01518E+006	1.29249E+006
		77.11*	@	10.50	8.90495E+005	3.88267E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.28662E+005	1.21227E+005
		351.92*		37.20	3.05127E+005	8.27316E+004
Ac-228	0.544	338.32*		11.40	4.41907E+005	1.77970E+005
		911.07*		27.70	3.30826E+005	9.84178E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	7.584499E+004	2.853838E+004
K-40		0.955	7.555367E+006	8.859097E+005
TL-208		0.752	1.342382E+005	3.401317E+004
Bi-212		0.994	1.767898E+005	1.142997E+005
Pb-212	@	0.838	3.078734E+005	7.655269E+004
Bi-214		0.418	3.363828E+005	7.548347E+004
PB-214	@	0.759	3.126050E+005	6.833497E+004
Ac-228		0.544	3.568405E+005	8.612582E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M. 1	72.91	2.1191E-001	22.86

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3243E+004	5.07E+004	-1.6337E+004
	1332.49	100.00	5.0662E+004		-7.2459E+003
Nb-94	702.63	100.00	5.8745E+004	5.75E+004	-1.0960E+004
	871.10	100.00	5.7465E+004		5.9964E+003
Ag-108m	79.20	7.10	2.1585E+006	6.49E+004	-2.1149E+005
	433.93	89.90	6.4905E+004		-1.9654E+004
	614.37	90.40	9.3607E+004		3.0661E+004
	722.95	90.50	6.9342E+004		-6.9122E+003
Sb-125	176.33	6.89	1.1418E+006	2.09E+005	-9.4595E+005
	427.89	29.33	2.0853E+005		-2.6904E+004
	463.38	10.35	6.1790E+005		1.1871E+005
	600.56	17.80	3.1766E+005		-2.4701E+005
	606.64	5.02	1.7463E+006		3.6801E+006
	635.90	11.32	4.8234E+005		0.0000E+000
Cs-134	563.23	8.38	7.2005E+005	7.16E+004	-1.5729E+004
	569.32	15.43	3.9989E+005		2.3459E+005
	604.70	97.60	8.6863E+004		-5.6637E+004
	795.84	85.40	7.1616E+004		8.2039E+004
	801.93	8.73	6.7233E+005		-1.2833E+005
Cs-137	661.65	85.12	7.5659E+004	7.57E+004	8.7116E+004
Eu-152	121.78	28.40	3.6214E+005	2.40E+005	4.3094E+004
	244.69	7.49	1.0470E+006		2.4596E+005
	344.27	26.50	2.4020E+005		-1.5349E+005
	778.89	12.74	4.3013E+005		-2.1262E+005
	867.32	4.16	1.4024E+006		-2.7953E+005
	964.01	14.40	5.0026E+005		5.7214E+005
	1085.78	10.00	5.6875E+005		6.3056E+004
	1112.02	13.30	5.5281E+005		-2.4824E+005
	1407.95	20.70	2.4929E+005		6.2068E+004
Eu-154	123.07	40.50	2.5444E+005	1.68E+005	3.8917E+004
	247.94	6.60	1.1124E+006		-1.8802E+006
	591.81	4.83	1.2636E+006		4.4978E+005
	723.30	19.70	3.2252E+005		1.9533E+005
	756.87	4.33	1.3304E+006		-3.7887E+004
	873.19	11.50	4.9728E+005		-3.4318E+005
	996.32	10.30	6.4411E+005		5.3955E+005
	1004.76	17.90	3.4488E+005		7.2764E+004
	1274.45	35.50	1.6835E+005		-2.6163E+004
Eu-155	86.54	30.90	4.5139E+005	4.51E+005	2.9587E+005
	105.31	20.70	5.2584E+005		-1.6765E+005
Am-241	59.54	35.90	4.9309E+005	4.93E+005	-1.9086E+005
Cm-243	228.19	10.56	7.3226E+005	4.94E+005	8.1723E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9362E+005	4.94E+005	-1.1745E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 8:32:54 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 8:17:53 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.78	72.80	0.98	1.28E+002	40.90	5.67E+002
m	2	284-	306	300.16	74.90	0.99	2.72E+002	51.60	6.76E+002
F	3	335-	344	339.13	84.67	0.48	5.98E+001	32.19	4.27E+002
F	4	943-	958	953.77	238.76	0.98	1.39E+002	31.80	1.93E+002
M	5	1174-	1203	1180.39	295.53	1.41	7.55E+001	22.31	8.13E+001
m	6	1174-	1203	1198.53	300.07	1.41	4.24E+001	18.86	9.03E+001
F	7	1398-	1414	1406.31	352.10	1.26	1.24E+002	26.17	8.75E+001
F	8	2032-	2046	2040.25	510.73	1.25	5.87E+001	21.06	7.11E+001
F	9	2324-	2342	2330.80	583.39	1.37	7.92E+001	21.76	6.46E+001
F	10	2427-	2445	2436.28	609.76	1.34	1.55E+002	26.16	4.37E+001
F	11	3634-	3651	3642.48	911.08	1.57	7.37E+001	20.56	4.52E+001
F	12	3866-	3882	3873.63	968.78	1.47	4.33E+001	15.47	2.16E+001
F	13	4943-	4957	4949.65	1237.29	1.22	2.56E+001	13.38	2.25E+001
F	14	5828-	5854	5841.01	1459.63	2.05	5.02E+002	43.26	1.32E+001
F	15	7050-	7063	7057.04	1762.97	2.04	3.53E+001	13.26	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	6.16900E+004	2.37507E+004
K-40	0.959	1460.81*		10.67	7.32639E+006	8.65831E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	2.85602E+005	1.12403E+005
		583.14*		84.20	1.03913E+005	3.16857E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.38100E+006	6.49317E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.50839E+005	6.95490E+004
Bi-214	0.686	609.31*		46.30	3.75331E+005	7.88270E+004
		1120.29		15.10		
		1764.49*		15.80	3.70154E+005	1.43914E+005
PB-214	0.565	74.82*	@	6.21	4.10253E+006	1.15775E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.39672E+005	1.15560E+005
		351.92*		37.20	3.05697E+005	8.22749E+004
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	3.42666E+005	1.03434E+005
		969.11*		16.60	3.45605E+005	1.28598E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	3.924480E+004	2.470631E+004
K-40		0.959	7.326388E+006	8.658308E+005
TL-208		0.752	1.039131E+005	3.150418E+004
Pb-212	@	0.497	2.508395E+005	6.954904E+004
Bi-214		0.686	3.741365E+005	6.913545E+004
PB-214	@	0.565	3.171260E+005	6.702322E+004
Ac-228		0.622	3.438207E+005	8.059833E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.4210E-001	31.98
F	3	84.67	6.6457E-002	53.81
m	6	300.07	4.7144E-002	44.45
F	13	1237.29	2.8482E-002	52.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.5483E+004	5.37E+004	7.1528E+004
	1332.49	100.00	5.3737E+004		3.3308E+004
Nb-94	702.63	100.00	6.0355E+004	5.35E+004	-1.8631E+004
	871.10	100.00	5.3457E+004		-2.9061E+004
Ag-108m	79.20	7.10	2.1891E+006	6.78E+004	-8.0666E+005
	433.93	89.90	6.7787E+004		3.0322E+004
	614.37	90.40	9.5453E+004		-4.7517E+004
	722.95	90.50	7.4036E+004		5.1527E+004
Sb-125	176.33	6.89	1.1884E+006	2.02E+005	-1.0930E+006
	427.89	29.33	2.0235E+005		-6.1856E+004
	463.38	10.35	6.5357E+005		2.0779E+005
	600.56	17.80	3.1766E+005		-3.6131E+005
	606.64	5.02	1.8092E+006		3.5564E+006
	635.90	11.32	4.9898E+005		-2.2627E+005
Cs-134	563.23	8.38	7.6411E+005	7.36E+004	-3.8099E+005
	569.32	15.43	4.2884E+005		-2.9116E+004
	604.70	97.60	9.1983E+004		1.4082E+004
	795.84	85.40	7.3579E+004		9.6205E+003
	801.93	8.73	6.5505E+005		-7.1157E+005
Cs-137	661.65	85.12	7.6767E+004	7.68E+004	2.0560E+004
Eu-152	121.78	28.40	3.6081E+005	2.30E+005	-2.1524E+005
	244.69	7.49	1.0557E+006		-2.5644E+006
	344.27	26.50	2.4404E+005		-2.9144E+005
	778.89	12.74	4.8113E+005		-1.8125E+005
	867.32	4.16	1.3717E+006		9.4277E+004
	964.01	14.40	5.0217E+005		1.8736E+005
	1085.78	10.00	6.4975E+005		1.9078E+005
	1112.02	13.30	4.8326E+005		-2.7014E+005
	1407.95	20.70	2.3027E+005		-5.5797E+004
Eu-154	123.07	40.50	2.5112E+005	1.66E+005	1.1867E+004
	247.94	6.60	1.0861E+006		-1.3628E+006
	591.81	4.83	1.2588E+006		8.0509E+005
	723.30	19.70	3.3647E+005		1.3241E+004
	756.87	4.33	1.4649E+006		9.6041E+005
	873.19	11.50	4.6217E+005		-1.3054E+005
	996.32	10.30	5.7712E+005		-2.3719E+005
	1004.76	17.90	3.2139E+005		1.5236E+005
	1274.45	35.50	1.6592E+005		2.6628E+004
Eu-155	86.54	30.90	4.5915E+005	4.59E+005	8.1419E+005
	105.31	20.70	5.5542E+005		3.9793E+004
Am-241	59.54	35.90	4.9309E+005	4.93E+005	-3.6220E+005
Cm-243	228.19	10.56	7.2191E+005	5.14E+005	-1.2186E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1391E+005	5.14E+005	2.7145E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 8:59:28 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 8:44:26 AM
Live Time: 900.0 seconds
Real Time: 901.0 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.38	72.69	1.14	2.28E+002	46.10	5.77E+002
m	2	285-	309	300.50	74.98	1.14	3.86E+002	53.36	6.58E+002
F	3	332-	345	339.34	84.73	0.71	9.91E+001	40.28	6.15E+002
F	4	948-	960	954.11	238.85	1.13	1.47E+002	30.11	1.17E+002
F	5	1173-	1186	1181.10	295.71	1.12	5.05E+001	22.93	1.21E+002
F	6	1346-	1356	1351.25	338.32	0.86	3.82E+001	19.01	6.88E+001
F	7	1400-	1414	1406.29	352.10	1.04	1.02E+002	24.48	7.66E+001
F	8	1613-	1622	1617.97	405.08	0.85	2.00E+001	14.44	3.75E+001
F	9	2035-	2052	2042.43	511.28	1.83	1.15E+002	24.79	7.34E+001
F	10	2323-	2340	2331.30	583.51	1.47	8.03E+001	20.03	3.95E+001
F	11	2407-	2443	2434.95	609.42	1.28	1.20E+002	24.10	1.02E+002
F	12	3634-	3650	3642.58	911.10	1.81	5.54E+001	16.59	2.14E+001
M	13	3852-	3879	3857.38	964.72	0.97	1.28E+001	9.74	1.70E+001
m	14	3852-	3879	3872.43	968.48	0.97	3.20E+001	14.05	2.46E+001
F	15	4472-	4487	4479.15	1119.90	1.69	3.22E+001	14.27	1.95E+001
F	16	5826-	5854	5840.74	1459.56	2.13	5.30E+002	44.41	1.44E+001
F	17	7049-	7065	7057.26	1763.02	1.33	3.35E+001	11.90	2.01E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.20599E+005	3.10842E+004
K-40	0.954	1460.81*		10.67	7.78416E+006	9.06595E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	5.58330E+005	1.50959E+005
		583.14*		84.20	1.05800E+005	2.98560E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	3.31690E+006	7.95305E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.63786E+005	6.80132E+004
Bi-214	0.986	609.31*		46.30	2.92828E+005	6.91148E+004
		1120.29*		15.10	3.03346E+005	1.38123E+005
		1764.49*		15.80	3.54261E+005	1.30720E+005
PB-214	0.562	74.82*	@	6.21	5.71512E+006	1.43176E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.26382E+005	1.09625E+005
		351.92*		37.20	2.51583E+005	7.33987E+004
Ac-228	0.996	338.32*		11.40	3.02063E+005	1.57664E+005
		911.07*		27.70	2.58891E+005	8.30850E+004
		969.11*		16.60	2.56575E+005	1.15812E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	9.774663E+004	3.173733E+004
K-40		0.954	7.784159E+006	9.065948E+005
TL-208		0.749	1.057997E+005	2.965629E+004
Pb-212	@	0.495	2.637858E+005	6.801321E+004
Bi-214		0.986	3.057747E+005	5.587722E+004
PB-214	@	0.562	2.437829E+005	6.099035E+004
Ac-228		0.996	2.649145E+005	6.205934E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	2.5291E-001	20.25
F 3	84.73	1.1009E-001	40.65
F 8	405.08	2.2191E-002	72.32
M 13	964.72	1.4167E-002	76.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4709E+004	5.30E+004	2.3909E+004
	1332.49	100.00	5.3019E+004		-1.3656E+004
Nb-94	702.63	100.00	5.9608E+004	5.65E+004	-3.7940E+003
	871.10	100.00	5.6457E+004		-3.7804E+004
Ag-108m	79.20	7.10	2.1834E+006	7.06E+004	-2.2351E+006
	433.93	89.90	7.2914E+004		-8.2757E+003
	614.37	90.40	9.2687E+004		3.0329E+003
	722.95	90.50	7.0574E+004		3.4858E+004
Sb-125	176.33	6.89	1.1681E+006	2.18E+005	-1.8910E+005
	427.89	29.33	2.1830E+005		-5.6229E+004
	463.38	10.35	6.2122E+005		2.5811E+005
	600.56	17.80	3.4484E+005		1.1862E+005
	606.64	5.02	1.6944E+006		2.1847E+006
	635.90	11.32	5.5259E+005		2.3781E+005
Cs-134	563.23	8.38	7.0031E+005	7.06E+004	2.4790E+005
	569.32	15.43	3.8045E+005		1.2766E+005
	604.70	97.60	8.6697E+004		1.5479E+004
	795.84	85.40	7.0649E+004		-3.4526E+004
	801.93	8.73	6.7590E+005		-5.3085E+005
Cs-137	661.65	85.12	7.8011E+004	7.80E+004	5.7431E+004
Eu-152	121.78	28.40	3.6082E+005	2.04E+005	2.9810E+005
	244.69	7.49	1.0260E+006		2.1403E+005
	344.27	26.50	2.4331E+005		-1.8131E+005
	778.89	12.74	5.2172E+005		1.0237E+005
	867.32	4.16	1.4174E+006		-1.3556E+006
	964.01	14.40	5.1617E+005		6.5872E+005
	1085.78	10.00	6.1387E+005		1.3549E+005
	1112.02	13.30	5.1191E+005		-2.9638E+004
	1407.95	20.70	2.0415E+005		-5.7634E+004
Eu-154	123.07	40.50	2.5014E+005	1.74E+005	4.1217E+004
	247.94	6.60	1.0877E+006		-8.9783E+005
	591.81	4.83	1.2778E+006		-2.5657E+004
	723.30	19.70	3.2164E+005		3.6301E+004
	756.87	4.33	1.4036E+006		4.8497E+005
	873.19	11.50	4.9419E+005		-3.0823E+005
	996.32	10.30	5.5931E+005		-5.6602E+004
	1004.76	17.90	3.0188E+005		-6.6184E+004
	1274.45	35.50	1.7404E+005		1.8755E+004
Eu-155	86.54	30.90	4.6223E+005	4.62E+005	3.9963E+005
	105.31	20.70	5.3973E+005		-3.9943E+005
Am-241	59.54	35.90	5.0925E+005	5.09E+005	-2.9238E+005
Cm-243	228.19	10.56	7.3858E+005	5.23E+005	2.7239E+003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2320E+005	5.23E+005	2.4899E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 10:26:15 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 10:11:13 AM
Live Time: 900.0 seconds
Real Time: 901.2 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	304	291.23	72.66	1.02	1.62E+002	42.70	5.88E+002
m	2	284-	304	299.96	74.85	1.02	2.52E+002	50.76	5.63E+002
F	3	944-	960	953.55	238.71	1.24	1.32E+002	30.87	1.95E+002
F	4	1172-	1188	1179.77	295.37	1.58	8.05E+001	23.49	1.04E+002
F	5	1398-	1413	1406.05	352.04	1.28	1.30E+002	27.66	1.02E+002
F	6	2321-	2339	2330.56	583.33	1.40	9.08E+001	21.94	5.49E+001
F	7	2424-	2443	2434.71	609.36	1.33	1.59E+002	26.97	5.41E+001
F	8	2899-	2911	2905.01	726.90	1.10	2.24E+001	13.58	2.77E+001
F	9	3636-	3651	3643.07	911.22	1.73	5.22E+001	17.16	2.65E+001
F	10	3865-	3882	3873.32	968.70	1.58	4.54E+001	15.72	2.25E+001
F	11	4469-	4485	4476.99	1119.36	1.26	4.38E+001	16.18	2.98E+001
F	12	5828-	5854	5840.63	1459.53	1.83	4.32E+002	40.86	1.67E+001
F	13	7047-	7062	7055.93	1762.69	2.03	2.95E+001	12.16	5.93E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.952	1460.81*		10.67	6.34644E+006	7.89638E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.19510E+005	3.29310E+004
		860.37		12.46		
Bi-212	0.998	727.17*		11.80	2.28133E+005	1.40888E+005
Pb-212	0.496	74.81*	@	10.70	2.17093E+006	6.09635E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.35848E+005	6.65555E+004
Bi-214	0.975	609.31*		46.30	3.86694E+005	8.14636E+004
		1120.29*		15.10	4.12172E+005	1.58457E+005
		1764.49*		15.80	3.11529E+005	1.32350E+005
PB-214	0.564	74.82*	@	6.21	3.74058E+006	1.08495E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.60940E+005	1.21558E+005
		351.92*		37.20	3.18930E+005	8.63826E+004
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	2.44201E+005	8.50099E+004
		969.11*		16.60	3.64401E+005	1.31712E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.952	6.346436E+006	7.896383E+005
TL-208		0.470	1.195098E+005	3.293103E+004
Bi-212		0.998	2.281328E+005	1.408882E+005
Pb-212	@	0.496	2.358477E+005	6.655547E+004
Bi-214		0.975	3.734614E+005	6.355107E+004
PB-214	@	0.564	3.330266E+005	7.041392E+004
Ac-228		0.620	2.795482E+005	7.142493E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	1.7947E-001	26.43

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2414E+004	5.60E+004	-1.3001E+004
	1332.49	100.00	5.5986E+004		2.9336E+004
Nb-94	702.63	100.00	5.8236E+004	5.61E+004	2.3235E+004
	871.10	100.00	5.6125E+004		-2.9298E+004
Ag-108m	79.20	7.10	2.0883E+006	6.40E+004	-5.2976E+006
	433.93	89.90	6.3971E+004		-1.7117E+004
	614.37	90.40	9.8216E+004		-3.1163E+004
	722.95	90.50	7.0574E+004		-4.5096E+003
Sb-125	176.33	6.89	1.1471E+006	2.04E+005	7.9977E+005
	427.89	29.33	2.0393E+005		6.6677E+004
	463.38	10.35	6.2813E+005		-2.1699E+005
	600.56	17.80	3.2871E+005		8.4370E+004
	606.64	5.02	1.7916E+006		3.5481E+006
	635.90	11.32	4.8951E+005		-2.8130E+005
Cs-134	563.23	8.38	7.5870E+005	7.10E+004	9.1331E+004
	569.32	15.43	3.8945E+005		-1.0588E+005
	604.70	97.60	9.1544E+004		1.5545E+004
	795.84	85.40	7.0989E+004		-2.4083E+004
	801.93	8.73	7.0604E+005		-3.6228E+005
Cs-137	661.65	85.12	6.8371E+004	6.84E+004	-3.6396E+003
Eu-152	121.78	28.40	3.4973E+005	2.46E+005	1.9598E+005
	244.69	7.49	1.0787E+006		1.8622E+005
	344.27	26.50	2.4601E+005		-3.0695E+005
	778.89	12.74	4.6345E+005		-3.8335E+005
	867.32	4.16	1.3552E+006		-9.5784E+005
	964.01	14.40	5.2729E+005		4.4863E+005
	1085.78	10.00	5.9510E+005		1.2461E+005
	1112.02	13.30	5.5336E+005		8.6940E+004
	1407.95	20.70	2.5079E+005		2.4527E+005
Eu-154	123.07	40.50	2.4228E+005	1.57E+005	-6.1100E+004
	247.94	6.60	1.1581E+006		-6.2851E+005
	591.81	4.83	1.2872E+006		1.3879E+005
	723.30	19.70	3.2943E+005		5.6766E+004
	756.87	4.33	1.3375E+006		-6.5584E+005
	873.19	11.50	4.8258E+005		2.1839E+005
	996.32	10.30	5.8013E+005		-9.2565E+004
	1004.76	17.90	3.1477E+005		-1.3528E+004
	1274.45	35.50	1.5660E+005		-9.9778E+004
Eu-155	86.54	30.90	4.4550E+005	4.46E+005	5.4326E+005
	105.31	20.70	5.4205E+005		-1.0248E+004
Am-241	59.54	35.90	4.8653E+005	4.87E+005	3.2332E+005
Cm-243	228.19	10.56	6.9631E+005	5.09E+005	-2.8049E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0909E+005	5.09E+005	3.4653E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 10:52:02 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 10:37:00 AM
Live Time: 900.0 seconds
Real Time: 901.1 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	306	291.23	72.66	1.03	1.83E+002	46.24	7.23E+002
m	2	281-	306	300.49	74.98	1.03	3.92E+002	58.35	7.85E+002
F	3	331-	344	339.30	84.71	0.80	1.01E+002	43.90	6.87E+002
F	4	948-	960	953.94	238.80	1.27	1.49E+002	31.19	1.37E+002
F	5	1168-	1185	1179.44	295.29	1.25	8.58E+001	24.27	1.04E+002
F	6	1345-	1357	1352.47	338.62	0.81	2.40E+001	16.93	7.46E+001
F	7	1400-	1414	1407.02	352.28	1.09	8.56E+001	23.37	8.33E+001
F	8	2322-	2338	2330.38	583.28	1.53	6.98E+001	20.23	5.16E+001
F	9	2427-	2444	2434.78	609.38	1.40	1.16E+002	24.49	5.92E+001
F	10	3634-	3652	3642.47	911.07	1.70	7.63E+001	18.91	2.44E+001
F	11	3865-	3878	3872.41	968.48	1.66	4.11E+001	14.72	1.53E+001
F	12	4471-	4486	4478.38	1119.71	1.72	4.99E+001	16.73	2.35E+001
F	13	5829-	5853	5840.68	1459.55	1.91	3.95E+002	39.15	2.21E+001
F	14	7046-	7061	7054.46	1762.32	1.76	3.96E+001	13.57	5.44E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.953	1460.81*		10.67	5.80383E+006	7.42220E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	9.19073E+004	2.92757E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	3.36899E+006	8.28866E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.66556E+005	6.98089E+004
Bi-214	0.969	609.31*		46.30	2.83323E+005	6.93245E+004
		1120.29*		15.10	4.69765E+005	1.65200E+005
		1764.49*		15.80	4.18522E+005	1.49519E+005
PB-214	0.563	74.82*	@	6.21	5.80486E+006	1.48903E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.84618E+005	1.26571E+005
		351.92*		37.20	2.10493E+005	6.73527E+004
Ac-228	0.996	338.32*		11.40	1.90131E+005	1.37245E+005
		911.07*		27.70	3.56621E+005	9.74562E+004
		969.11*		16.60	3.29650E+005	1.22994E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.953	5.803826E+006	7.422198E+005
TL-208		0.470	9.190732E+004	2.927566E+004
Pb-212	@	0.496	2.665560E+005	6.980890E+004
Bi-214		0.969	3.278182E+005	5.877767E+004
PB-214	@	0.563	2.489189E+005	5.945845E+004
Ac-228		0.996	3.093041E+005	6.674352E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	2.0334E-001	25.26
F 3	84.71	1.1234E-001	43.42

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2023E+004	4.88E+004	7.6203E+003
	1332.49	100.00	4.8757E+004		2.8223E+004
Nb-94	702.63	100.00	5.8513E+004	5.84E+004	1.3266E+004
	871.10	100.00	5.8409E+004		2.9194E+004
Ag-108m	79.20	7.10	2.3323E+006	6.91E+004	-1.4277E+006
	433.93	89.90	6.9089E+004		3.8049E+003
	614.37	90.40	9.0572E+004		-3.1133E+003
	722.95	90.50	7.1978E+004		1.6899E+004
Sb-125	176.33	6.89	1.2473E+006	1.98E+005	7.0437E+005
	427.89	29.33	1.9827E+005		-7.0664E+004
	463.38	10.35	6.3667E+005		2.8301E+005
	600.56	17.80	3.2454E+005		-1.8726E+005
	606.64	5.02	1.7044E+006		2.3522E+006
	635.90	11.32	5.1068E+005		2.2401E+005
Cs-134	563.23	8.38	7.3277E+005	6.82E+004	4.6046E+005
	569.32	15.43	3.9239E+005		-6.2548E+004
	604.70	97.60	8.8736E+004		-3.7007E+004
	795.84	85.40	6.8222E+004		7.6990E+004
	801.93	8.73	6.8272E+005		-1.0177E+005
Cs-137	661.65	85.12	6.6135E+004	6.61E+004	-2.1579E+004
Eu-152	121.78	28.40	3.7939E+005	2.29E+005	4.0313E+004
	244.69	7.49	1.0209E+006		-3.4204E+005
	344.27	26.50	2.5700E+005		-9.9930E+004
	778.89	12.74	4.2239E+005		1.2815E+005
	867.32	4.16	1.3789E+006		-4.1630E+005
	964.01	14.40	4.8918E+005		4.4573E+005
	1085.78	10.00	6.3204E+005		3.0337E+005
	1112.02	13.30	5.8518E+005		-3.2479E+005
	1407.95	20.70	2.2878E+005		-2.7601E+005
Eu-154	123.07	40.50	2.6503E+005	1.68E+005	4.3289E+004
	247.94	6.60	1.1435E+006		-8.0858E+005
	591.81	4.83	1.2244E+006		-1.0877E+006
	723.30	19.70	3.3452E+005		2.8585E+005
	756.87	4.33	1.3577E+006		-7.0578E+004
	873.19	11.50	5.1930E+005		4.9908E+005
	996.32	10.30	5.5931E+005		1.7113E+004
	1004.76	17.90	3.2101E+005		-8.2104E+004
	1274.45	35.50	1.6803E+005		8.9429E+004
Eu-155	86.54	30.90	4.9144E+005	4.91E+005	1.2925E+005
	105.31	20.70	5.8233E+005		-2.1634E+005
Am-241	59.54	35.90	5.5493E+005	5.55E+005	-1.7558E+005
Cm-243	228.19	10.56	7.1734E+005	5.08E+005	1.0216E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0750E+005	5.08E+005	-3.7297E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 11:14:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 10:59:48 AM
Live Time: 900.0 seconds
Real Time: 901.1 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.69	72.77	1.02	2.09E+002	46.41	6.15E+002
m	2	285-	305	300.14	74.89	1.03	3.31E+002	54.98	6.67E+002
F	3	332-	345	339.60	84.79	1.05	2.01E+002	48.13	6.10E+002
M	4	947-	973	953.63	238.73	1.06	1.35E+002	29.61	1.26E+002
m	5	947-	973	966.09	241.85	1.07	3.11E+001	20.92	1.43E+002
F	6	1397-	1411	1406.27	352.09	1.35	7.77E+001	22.68	7.49E+001
F	7	2323-	2336	2330.50	583.31	1.22	4.95E+001	18.65	4.72E+001
F	8	2426-	2445	2434.89	609.41	1.80	1.18E+002	22.60	3.90E+001
F	9	3635-	3652	3643.27	911.27	1.72	5.69E+001	18.27	3.60E+001
F	10	3864-	3880	3872.85	968.59	2.08	4.23E+001	13.74	1.06E+001
F	11	5827-	5853	5840.56	1459.52	1.89	3.92E+002	38.85	1.69E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.951	1460.81*		10.67	5.75945E+006	7.36538E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	6.51722E+004	2.60267E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.84463E+006	7.30903E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.42634E+005	6.53115E+004
Bi-214	0.418	609.31*		46.30	2.86594E+005	6.56174E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.346	74.82*	@	6.21	4.90137E+006	1.30866E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	3.33093E+005	2.31000E+005
		295.21		19.20		
		351.92*		37.20	1.90899E+005	6.42088E+004
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	2.65995E+005	9.07348E+004
		969.11*		16.60	3.39421E+005	1.15771E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.951	5.759452E+006	7.365375E+005
TL-208		0.470	6.517221E+004	2.602666E+004
Pb-212	@	0.496	2.426340E+005	6.531149E+004
Bi-214		0.418	2.865940E+005	6.561738E+004
PB-214	@	0.346	2.010974E+005	6.186344E+004
Ac-228		0.618	2.939351E+005	7.141467E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	2.3271E-001	22.16
F 3	84.79	2.2292E-001	23.99

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3573E+004	5.30E+004	1.1919E+004
	1332.49	100.00	5.3019E+004		1.9441E+004
Nb-94	702.63	100.00	6.2257E+004	5.37E+004	5.8806E+004
	871.10	100.00	5.3737E+004		-2.2734E+004
Ag-108m	79.20	7.10	2.2164E+006	6.65E+004	-2.7977E+006
	433.93	89.90	6.6479E+004		2.3943E+004
	614.37	90.40	8.7804E+004		-4.0810E+003
	722.95	90.50	7.1978E+004		-1.7130E+004
Sb-125	176.33	6.89	1.2088E+006	1.90E+005	-2.6529E+005
	427.89	29.33	1.9043E+005		2.9005E+003
	463.38	10.35	6.1422E+005		1.0646E+005
	600.56	17.80	3.1890E+005		-1.8274E+005
	606.64	5.02	1.6402E+006		4.1359E+006
	635.90	11.32	4.9904E+005		-3.8213E+004
Cs-134	563.23	8.38	6.4841E+005	7.13E+004	-2.8378E+005
	569.32	15.43	3.6335E+005		8.6500E+004
	604.70	97.60	8.2100E+004		-5.9824E+004
	795.84	85.40	7.1326E+004		-3.9695E+004
	801.93	8.73	7.0276E+005		2.6631E+005
Cs-137	661.65	85.12	7.4371E+004	7.44E+004	2.0731E+004
Eu-152	121.78	28.40	3.7816E+005	2.37E+005	1.7217E+005
	244.69	7.49	1.0679E+006		3.8705E+005
	344.27	26.50	2.4059E+005		-2.8885E+005
	778.89	12.74	4.8149E+005		4.3703E+004
	867.32	4.16	1.2731E+006		-3.7512E+005
	964.01	14.40	4.9313E+005		6.8190E+005
	1085.78	10.00	5.3457E+005		4.4222E+004
	1112.02	13.30	5.1697E+005		-3.0277E+005
	1407.95	20.70	2.3730E+005		-3.4740E+005
Eu-154	123.07	40.50	2.6442E+005	1.66E+005	2.5090E+005
	247.94	6.60	1.1493E+006		6.6808E+005
	591.81	4.83	1.2489E+006		-8.2072E+005
	723.30	19.70	3.2686E+005		-2.0952E+005
	756.87	4.33	1.2821E+006		8.1036E+003
	873.19	11.50	4.7368E+005		4.7824E+004
	996.32	10.30	5.8353E+005		1.0988E+004
	1004.76	17.90	3.1266E+005		2.7941E+004
	1274.45	35.50	1.6557E+005		9.1228E+004
Eu-155	86.54	30.90	4.8457E+005	4.85E+005	1.0150E+006
	105.31	20.70	5.6144E+005		-1.1277E+005
Am-241	59.54	35.90	5.4288E+005	5.43E+005	1.0408E+005
Cm-243	228.19	10.56	7.2078E+005	5.07E+005	-1.2503E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0670E+005	5.07E+005	-1.3905E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 11:41:57 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 11:26:55 AM
Live Time: 900.0 seconds
Real Time: 900.8 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.52	72.73	0.92	1.55E+002	44.85	6.13E+002
m	2	282-	305	300.31	74.93	0.92	3.17E+002	56.55	7.19E+002
F	3	333-	344	339.14	84.67	1.13	1.20E+002	46.81	5.88E+002
F	4	948-	960	954.05	238.83	0.83	1.43E+002	31.19	1.63E+002
F	5	1175-	1185	1179.44	295.29	0.77	6.04E+001	22.34	9.23E+001
F	6	1345-	1358	1352.93	338.74	0.86	3.16E+001	18.32	8.39E+001
F	7	1395-	1417	1406.23	352.08	1.28	1.32E+002	26.55	1.21E+002
F	8	2323-	2339	2330.88	583.41	1.18	6.82E+001	20.49	5.92E+001
F	9	2427-	2446	2434.94	609.42	1.47	1.76E+002	28.38	6.04E+001
F	10	3632-	3651	3641.66	910.87	1.71	7.40E+001	19.15	3.26E+001
F	11	3863-	3879	3872.15	968.41	1.55	3.11E+001	14.74	2.98E+001
F	12	4472-	4488	4479.43	1119.97	1.63	4.08E+001	15.83	2.59E+001
F	13	5828-	5855	5840.66	1459.54	2.18	5.30E+002	44.09	9.40E+000
F	14	7050-	7063	7056.33	1762.79	1.20	2.50E+001	12.16	1.32E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.952	1460.81*		10.67	7.77564E+006	9.02725E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	8.97471E+004	2.94762E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.72197E+006	7.21561E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.56940E+005	6.89293E+004
Bi-214	0.981	609.31*		46.30	4.29350E+005	8.74061E+004
		1120.29*		15.10	3.84303E+005	1.54508E+005
		1764.49*		15.80	2.64564E+005	1.31325E+005
PB-214	0.564	74.82*	@	6.21	4.69003E+006	1.28904E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.70773E+005	1.10005E+005
		351.92*		37.20	3.24277E+005	8.48277E+004
Ac-228	0.994	338.32*		11.40	2.49721E+005	1.50120E+005
		911.07*		27.70	3.45743E+005	9.79629E+004
		969.11*		16.60	2.49273E+005	1.21073E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.952	7.775638E+006	9.027246E+005
TL-208		0.469	8.974709E+004	2.947622E+004
Pb-212	@	0.495	2.569399E+005	6.892931E+004
Bi-214		0.981	3.797679E+005	6.582860E+004
PB-214	@	0.564	3.043254E+005	6.717491E+004
Ac-228		0.994	2.957332E+005	6.791652E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	1.7198E-001	28.98
F 3	84.67	1.3300E-001	39.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0783E+004	5.69E+004	2.5401E+003
	1332.49	100.00	5.6938E+004		4.4627E+004
Nb-94	702.63	100.00	6.2257E+004	6.15E+004	-2.2738E+004
	871.10	100.00	6.1517E+004		4.9626E+004
Ag-108m	79.20	7.10	2.3245E+006	7.44E+004	-3.8424E+006
	433.93	89.90	7.4387E+004		1.6806E+004
	614.37	90.40	1.0529E+005		4.8991E+003
	722.95	90.50	7.6551E+004		-4.1749E+004
Sb-125	176.33	6.89	1.2336E+006	2.26E+005	-3.7127E+005
	427.89	29.33	2.2624E+005		3.7012E+004
	463.38	10.35	6.5339E+005		-1.2327E+005
	600.56	17.80	3.7252E+005		3.1142E+004
	606.64	5.02	1.9452E+006		3.8616E+006
	635.90	11.32	5.3973E+005		2.4584E+005
Cs-134	563.23	8.38	7.5615E+005	7.59E+004	-5.1225E+005
	569.32	15.43	4.2613E+005		-1.6153E+004
	604.70	97.60	9.9179E+004		9.1559E+003
	795.84	85.40	7.5890E+004		8.2635E+003
	801.93	8.73	7.1900E+005		-4.8659E+005
Cs-137	661.65	85.12	8.2519E+004	8.25E+004	-1.4598E+004
Eu-152	121.78	28.40	3.7727E+005	2.43E+005	-1.3539E+005
	244.69	7.49	1.1082E+006		-5.7258E+004
	344.27	26.50	2.6506E+005		-2.3975E+004
	778.89	12.74	4.8808E+005		-1.4180E+005
	867.32	4.16	1.4621E+006		-1.2679E+006
	964.01	14.40	5.0479E+005		5.3645E+005
	1085.78	10.00	5.8742E+005		-9.4518E+005
	1112.02	13.30	5.7403E+005		-2.9768E+005
	1407.95	20.70	2.4279E+005		-1.3279E+005
Eu-154	123.07	40.50	2.5992E+005	1.64E+005	-1.9812E+005
	247.94	6.60	1.1994E+006		-1.5002E+005
	591.81	4.83	1.2872E+006		2.8712E+005
	723.30	19.70	3.4568E+005		-3.5986E+005
	756.87	4.33	1.5502E+006		9.8593E+005
	873.19	11.50	5.3005E+005		2.7250E+005
	996.32	10.30	5.8353E+005		-2.4433E+005
	1004.76	17.90	3.4286E+005		-1.6633E+005
	1274.45	35.50	1.6432E+005		1.6747E+004
Eu-155	86.54	30.90	4.8682E+005	4.87E+005	8.6693E+005
	105.31	20.70	5.9014E+005		5.5068E+004
Am-241	59.54	35.90	5.4372E+005	5.44E+005	3.8669E+005
Cm-243	228.19	10.56	7.5677E+005	5.63E+005	-1.1640E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.6334E+005	5.63E+005	3.1373E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 1:31:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-01-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 1:15:58 PM
Live Time: 900.0 seconds
Real Time: 902.9 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-01-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	309	300.12	74.89	0.71	2.30E+002	86.34	3.55E+003
F	2	335-	348	339.30	84.71	1.01	2.03E+002	87.82	2.75E+003
F	3	2425-	2442	2434.83	609.39	2.11	1.55E+002	32.64	1.98E+002
F	4	3635-	3652	3642.31	911.03	1.23	5.59E+001	18.67	4.38E+001
F	5	3868-	3879	3873.69	968.80	0.88	2.26E+001	13.99	3.58E+001
F	6	5829-	5854	5840.92	1459.61	2.12	3.89E+002	37.78	2.95E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.957	1460.81*	10.67	5.70536E+006	7.21682E+005
Bi-214	0.418	609.31*	46.30	3.76849E+005	9.23289E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	2.61359E+005	9.22860E+004
		969.11*	16.60	1.81536E+005	1.13775E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.957	5.705356E+006	7.216821E+005
Bi-214	0.418	3.768486E+005	9.232886E+004
Ac-228	0.620	2.296824E+005	7.167264E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	74.89	2.5521E-001	37.59
F	2	84.71	2.2534E-001	43.30

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1629E+004	5.74E+004	-3.9737E+004
	1332.49	100.00	5.7407E+004		8.5585E+003
Nb-94	702.63	100.00	1.0488E+005	8.36E+004	-4.9262E+004
	871.10	100.00	8.3623E+004		6.5692E+003
Ag-108m	79.20	7.10	4.7377E+006	1.26E+005	7.8718E+005
	433.93	89.90	1.4816E+005		-9.4458E+004
	614.37	90.40	1.5030E+005		-4.4678E+004
	722.95	90.50	1.2568E+005		1.4736E+005
Sb-125	176.33	6.89	1.5268E+006	4.52E+005	-4.1558E+005
	427.89	29.33	4.5199E+005		-4.3073E+005
	463.38	10.35	1.3478E+006		-4.7365E+005
	600.56	17.80	6.8689E+005		-7.5235E+003
	606.64	5.02	2.8458E+006		4.5502E+006
	635.90	11.32	1.0345E+006		-7.3591E+005
Cs-134	563.23	8.38	1.5235E+006	1.10E+005	1.9283E+005
	569.32	15.43	8.2078E+005		-4.3363E+005
	604.70	97.60	1.4416E+005		4.1719E+004
	795.84	85.40	1.1029E+005		-4.8912E+004
	801.93	8.73	1.0710E+006		-6.0978E+005
Cs-137	661.65	85.12	1.3413E+005	1.34E+005	-4.6498E+004
Eu-152	121.78	28.40	6.0010E+005	2.53E+005	1.2302E+005
	244.69	7.49	1.4801E+006		-2.3035E+006
	344.27	26.50	4.9907E+005		-5.5021E+005
	778.89	12.74	7.5655E+005		2.1608E+004
	867.32	4.16	2.0490E+006		-3.8170E+005
	964.01	14.40	5.7457E+005		3.1977E+005
	1085.78	10.00	6.7688E+005		-9.3037E+004
	1112.02	13.30	5.6264E+005		-5.0590E+005
	1407.95	20.70	2.5340E+005		1.7603E+005
Eu-154	123.07	40.50	4.1395E+005	1.61E+005	2.3604E+005
	247.94	6.60	1.6434E+006		-1.9233E+006
	591.81	4.83	2.5284E+006		2.1151E+005
	723.30	19.70	5.6515E+005		-2.4934E+005
	756.87	4.33	2.2571E+006		-2.5162E+006
	873.19	11.50	7.1618E+005		-1.5623E+005
	996.32	10.30	6.4747E+005		-2.3295E+005
	1004.76	17.90	3.9274E+005		-3.3246E+003
	1274.45	35.50	1.6051E+005		3.5209E+004
Eu-155	86.54	30.90	9.5416E+005	9.54E+005	1.1722E+006
	105.31	20.70	1.0648E+006		-5.4308E+005
Am-241	59.54	35.90	1.2737E+006	1.27E+006	2.0013E+005
Cm-243	228.19	10.56	9.6180E+005	8.34E+005	-5.5424E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	8.3376E+005	8.34E+005	1.6924E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

This page intentionally left blank.

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisitior	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	8:37:48	900.7	RED6264	RED_CONC_2M90D	dpm/m2	57500			79000			78800			8106380
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	9:44:40	900.7	RED6264	RED_CONC_2M90D	dpm/m2	47500			74800			66800			7496946
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	10:03:27	900.6	RED6264	RED_CONC_2M90D	dpm/m2	56500			76900			69800			6801638
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	10:22:04	900.7	RED6264	RED_CONC_2M90D	dpm/m2	58500			75100			73500			6827640
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	10:40:50	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52200			72600			66400			6751462
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	11:07:03	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52800			78700			69600			6460115
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	11:25:11	900.6	RED6264	RED_CONC_2M90D	dpm/m2	69300			85200			74800			6970711
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	11:45:21	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52800			71600			72100			7246090
TBN-01-09	TBN-01-09-1	0.04	24-Oct-05	13:33:52	900.6	RED6264	RED_CONC_2M90D	dpm/m2	48700			28000	17077.23	12424.66	71700			5409657
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	14:44:18	900.7	RED6264	RED_CONC_2M90D	dpm/m2	53900			83000			73900			7777160
TBN-01-09	TBN-01-09-1	0.07	24-Oct-05	15:32:27	900.7	RED6264	RED_CONC_2M90D	dpm/m2	64600			37700	26779.99	14984.32	78500			7859451
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	15:13:40	900.6	RED6264	RED_CONC_2M90D	dpm/m2	54900			75400			69600			6654327
TBN-01-09	TBN-01-09-1	0.12	24-Oct-05	13:53:24	900.6	RED6264	RED_CONC_2M90D	dpm/m2	61400			43500	46680.74	21275.7	72100			6749288
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	12:49:24	900.6	RED6264	RED_CONC_1M90D	dpm/m2	51200			79100			70300			6939618
TBN-01-09	TBN-01-09-1	0.00	24-Oct-05	14:22:22	900.6	RED6264	RED_CONC_2M90D	dpm/m2	47500			71900			70000			6176426
TBN-01-09	TBN-01-09-1	0.00	25-Oct-05	14:03:26	900.7	BLUE6279	BLUE_CONC_2M90D	dpm/m2	49000			67100			62800			5917739
TBN-01-09	TBN-01-09-1	0.00	25-Oct-05	13:44:24	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	58900			78400			63800			6016756
TBN-01-09	TBN-01-09-1	0.00	25-Oct-05	14:44:32	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	47900			78100			62300			6296627
TBN-01-09	TBN-01-09-1	0.00	25-Oct-05	14:25:57	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	50700			78400			63400			6139067
TBN-01-09	TBN-01-09-1	0.00	25-Oct-05	15:02:51	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	59800			77600			65900			6828573

Report Generated On 10/24/2005 8:52:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 8:37:48 AM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.65	72.87	0.93	1.79E+002	43.26	5.87E+002
m	2	285-	305	300.65	75.12	0.93	2.70E+002	50.13	5.87E+002
F	3	948-	959	953.31	238.30	1.06	1.91E+002	33.92	1.43E+002
F	4	1174-	1187	1180.25	295.04	1.51	7.25E+001	23.58	1.03E+002
F	5	1399-	1415	1406.93	351.71	1.09	6.98E+001	22.40	1.04E+002
F	6	1866-	1877	1872.11	468.02	0.89	1.66E+001	12.76	3.30E+001
F	7	2032-	2051	2041.44	510.36	1.99	1.38E+002	24.26	5.50E+001
F	8	2321-	2339	2330.24	582.56	1.39	9.45E+001	22.61	6.45E+001
F	9	2426-	2443	2434.61	608.66	1.66	9.59E+001	22.65	6.23E+001
F	10	3634-	3650	3641.46	910.39	1.70	8.50E+001	19.81	2.16E+001
F	11	3866-	3879	3872.61	968.18	1.70	4.08E+001	14.81	1.37E+001
F	12	5827-	5854	5840.30	1460.15	2.08	5.34E+002	44.87	1.68E+001
F	13	7050-	7063	7056.21	1764.15	1.89	3.14E+001	12.20	5.05E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.988	511.00*		100.00	1.50513E+005	3.38238E+004
K-40	0.987	1460.81*		10.67	8.10638E+006	9.45825E+005
TL-208	0.745	277.35		6.80		
		510.84*		21.60	6.96820E+005	1.66611E+005
		583.14*		84.20	1.29172E+005	3.53359E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.43144E+006	6.56034E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.54622E+005	8.39749E+004
Bi-214	0.696	609.31*		46.30	2.43023E+005	6.48828E+004
		1120.29		15.10		
		1764.49*		15.80	3.42894E+005	1.37362E+005
PB-214	0.565	74.82*	@	6.21	4.18945E+006	1.17056E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.36022E+005	1.23002E+005
		351.92*		37.20	1.76939E+005	6.40711E+004
Ac-228	0.605	338.32		11.40		
		911.07*		27.70	4.15149E+005	1.07962E+005
		969.11*		16.60	3.41495E+005	1.28981E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.988	1.226120E+005	3.466232E+004
K-40		0.987	8.106380E+006	9.458250E+005
TL-208		0.745	1.291721E+005	3.508421E+004
Pb-212	@	0.496	3.546218E+005	8.397487E+004
Bi-214		0.696	2.612406E+005	5.866728E+004
PB-214	@	0.565	2.108912E+005	5.682412E+004
Ac-228		0.605	3.848051E+005	8.278783E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	1.9905E-001	24.15
F 6	468.02	1.8421E-002	76.94

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.2791E+004	5.75E+004	-4.9771E+003
	1332.49	100.00	5.7495E+004		3.8109E+003
Nb-94	702.63	100.00	6.6810E+004	6.04E+004	-9.0169E+003
	871.10	100.00	6.0402E+004		-3.3631E+004
Ag-108m	79.20	7.10	2.3206E+006	7.88E+004	-4.6166E+006
	433.93	89.90	8.2329E+004		8.5785E+004
	614.37	90.40	8.6857E+004		-1.0678E+004
	722.95	90.50	7.8788E+004		7.6981E+004
Sb-125	176.33	6.89	1.2312E+006	2.42E+005	7.3596E+005
	427.89	29.33	2.4181E+005		6.9206E+004
	463.38	10.35	7.0498E+005		9.1401E+005
	600.56	17.80	3.8233E+005		-1.6385E+005
	606.64	5.02	1.7451E+006		2.2362E+006
	635.90	11.32	5.9073E+005		3.5763E+005
Cs-134	563.23	8.38	8.0859E+005	7.89E+004	3.4954E+005
	569.32	15.43	4.2831E+005		-1.6385E+005
	604.70	97.60	8.9458E+004		-2.6383E+004
	795.84	85.40	7.8945E+004		3.9019E+004
	801.93	8.73	6.8056E+005		-8.0336E+005
Cs-137	661.65	85.12	7.9016E+004	7.90E+004	3.9392E+004
Eu-152	121.78	28.40	3.7663E+005	2.60E+005	7.5939E+004
	244.69	7.49	1.0700E+006		-1.0926E+006
	344.27	26.50	2.6333E+005		-9.0894E+004
	778.89	12.74	4.8641E+005		-5.7326E+005
	867.32	4.16	1.4335E+006		2.3355E+005
	964.01	14.40	5.1686E+005		2.6240E+005
	1085.78	10.00	6.0723E+005		-3.0628E+005
	1112.02	13.30	5.0796E+005		-8.5300E+005
	1407.95	20.70	2.5953E+005		-5.2712E+002
Eu-154	123.07	40.50	2.6300E+005	1.68E+005	2.9335E+004
	247.94	6.60	1.1356E+006		-2.0975E+005
	591.81	4.83	1.3815E+006		-3.5914E+005
	723.30	19.70	3.6327E+005		3.2568E+005
	756.87	4.33	1.5440E+006		1.1457E+006
	873.19	11.50	5.2859E+005		-3.6727E+005
	996.32	10.30	6.5281E+005		1.1546E+005
	1004.76	17.90	3.7887E+005		-2.1972E+005
	1274.45	35.50	1.6774E+005		9.0092E+004
Eu-155	86.54	30.90	4.7262E+005	4.73E+005	7.6986E+005
	105.31	20.70	5.6362E+005		-4.4299E+005
Am-241	59.54	35.90	5.1362E+005	5.14E+005	1.5158E+005
Cm-243	228.19	10.56	7.5189E+005	5.16E+005	1.1559E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1581E+005	5.16E+005	2.4458E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 9:59:42 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 9:44:40 AM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.84	72.92	0.92	1.37E+002	39.31	5.33E+002
m	2	282-	306	299.87	74.93	0.92	3.17E+002	51.86	6.21E+002
F	3	329-	343	339.09	84.73	0.72	9.64E+001	40.20	6.36E+002
F	4	947-	960	953.75	238.41	1.12	1.49E+002	31.43	1.65E+002
F	5	1171-	1184	1179.73	294.91	0.77	3.66E+001	18.93	9.80E+001
F	6	1307-	1316	1311.75	327.92	0.75	2.35E+001	15.99	5.46E+001
F	7	1401-	1415	1406.61	351.63	1.18	9.53E+001	23.47	7.06E+001
F	8	2324-	2338	2331.10	582.78	1.31	8.81E+001	20.91	3.36E+001
F	9	2426-	2442	2434.52	608.63	1.47	6.40E+001	19.81	5.29E+001
F	10	3332-	3344	3337.89	834.49	0.83	1.37E+001	9.67	1.39E+001
F	11	3632-	3649	3641.46	910.39	1.86	6.90E+001	17.87	2.20E+001
M	12	3850-	3881	3855.63	963.94	1.48	2.23E+001	12.60	1.96E+001
m	13	3850-	3881	3872.90	968.26	1.48	6.12E+001	16.99	1.58E+001
F	14	5827-	5853	5840.51	1460.20	2.04	4.94E+002	43.13	1.01E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.989	1460.81*		10.67	7.49695E+006	8.92745E+005
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.20464E+005	3.27457E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.85935E+006	7.29937E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.77387E+005	7.27514E+004
Bi-214	0.409	609.31*		46.30	1.62140E+005	5.40945E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	4.92674E+006	1.30756E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.69517E+005	9.22020E+004
		351.92*		37.20	2.41842E+005	7.19535E+004
Ac-228	0.606	338.32		11.40		
		911.07*		27.70	3.37149E+005	9.55462E+004
		969.11*		16.60	5.11823E+005	1.51968E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.989	7.496946E+006	8.927449E+005
TL-208		0.468	1.204645E+005	3.274573E+004
Pb-212	@	0.497	2.773874E+005	7.275140E+004
Bi-214		0.409	1.621404E+005	5.409449E+004
PB-214	@	0.564	2.144667E+005	5.672476E+004
Ac-228		0.606	3.866356E+005	8.088725E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	1.5219E-001	28.70
F 3	84.73	1.0715E-001	41.69
F 6	327.92	2.6121E-002	68.04
F 10	834.49	1.5241E-002	70.46
M 12	963.94	2.4727E-002	56.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.4558E+004	4.75E+004	2.3363E+004
	1332.49	100.00	4.7520E+004		4.2653E+004
Nb-94	702.63	100.00	6.6018E+004	5.83E+004	-5.1453E+004
	871.10	100.00	5.8336E+004		-1.3789E+004
Ag-108m	79.20	7.10	2.2741E+006	6.68E+004	-5.9088E+005
	433.93	89.90	7.0025E+004		-2.7003E+004
	614.37	90.40	8.4396E+004		-2.7852E+004
	722.95	90.50	6.6793E+004		-9.3573E+003
Sb-125	176.33	6.89	1.1880E+006	2.12E+005	3.8308E+004
	427.89	29.33	2.1162E+005		1.5288E+003
	463.38	10.35	6.1042E+005		-7.0711E+005
	600.56	17.80	3.7199E+005		-1.1341E+005
	606.64	5.02	1.6440E+006		2.0481E+006
	635.90	11.32	5.6211E+005		-6.2757E+004
Cs-134	563.23	8.38	8.2639E+005	8.12E+004	3.0986E+005
	569.32	15.43	4.0136E+005		-1.5888E+005
	604.70	97.60	8.2700E+004		-1.4214E+004
	795.84	85.40	8.1229E+004		1.4566E+004
	801.93	8.73	7.1323E+005		-1.7250E+006
Cs-137	661.65	85.12	7.4787E+004	7.48E+004	2.7984E+004
Eu-152	121.78	28.40	3.6671E+005	2.73E+005	-2.1201E+005
	244.69	7.49	1.0491E+006		8.3597E+004
	344.27	26.50	2.7378E+005		-2.7625E+004
	778.89	12.74	4.9353E+005		-2.4402E+005
	867.32	4.16	1.4253E+006		-5.3522E+005
	964.01	14.40	5.9279E+005		-7.8014E+004
	1085.78	10.00	5.9493E+005		-2.7058E+005
	1112.02	13.30	4.7336E+005		-9.7740E+005
	1407.95	20.70	2.7272E+005		-7.6564E+004
Eu-154	123.07	40.50	2.5768E+005	1.92E+005	1.9232E+005
	247.94	6.60	1.1034E+006		-7.6172E+005
	591.81	4.83	1.3528E+006		-3.3745E+004
	723.30	19.70	3.0538E+005		-1.9658E+005
	756.87	4.33	1.6185E+006		1.4999E+006
	873.19	11.50	4.9216E+005		-1.1337E+005
	996.32	10.30	5.7967E+005		3.4000E+005
	1004.76	17.90	3.0783E+005		-3.4606E+004
	1274.45	35.50	1.9224E+005		1.2635E+005
Eu-155	86.54	30.90	4.6753E+005	4.68E+005	-2.3998E+005
	105.31	20.70	5.5931E+005		1.9580E+005
Am-241	59.54	35.90	5.1906E+005	5.19E+005	3.7010E+005
Cm-243	228.19	10.56	7.3311E+005	5.11E+005	5.9994E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1074E+005	5.11E+005	1.5320E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 10:18:28 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 10:03:27 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	309	291.06	72.72	1.07	1.71E+002	40.92	5.61E+002
m	2	282-	309	300.49	75.08	1.07	2.95E+002	48.64	6.13E+002
F	3	335-	343	338.76	84.65	0.71	6.55E+001	37.08	3.73E+002
F	4	946-	959	953.67	238.39	1.14	1.52E+002	31.09	1.50E+002
F	5	1346-	1358	1352.04	337.99	1.01	5.17E+001	19.56	6.33E+001
F	6	1397-	1413	1406.02	351.49	1.47	9.34E+001	22.69	7.64E+001
F	7	2031-	2051	2040.93	510.23	2.07	1.23E+002	23.07	5.78E+001
F	8	2322-	2339	2330.57	582.64	1.37	8.93E+001	21.04	4.29E+001
F	9	2425-	2442	2434.56	608.64	1.56	1.02E+002	22.66	5.14E+001
F	10	3635-	3650	3641.90	910.50	1.13	4.01E+001	15.50	2.88E+001
F	11	3866-	3877	3871.97	968.02	0.69	2.40E+001	12.25	2.23E+001
F	12	5826-	5853	5840.36	1460.16	2.01	4.48E+002	41.04	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.982	511.00*	100.00	1.33965E+005	3.13820E+004
K-40	0.987	1460.81*	10.67	6.80164E+006	8.31473E+005
TL-208	0.746	277.35	6.80		
		510.84*	21.60	6.20207E+005	1.53863E+005
		583.14*	84.20	1.22099E+005	3.30050E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.65003E+006	6.79234E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.81971E+005	7.26830E+004
Bi-214	0.410	609.31*	46.30	2.58648E+005	6.58290E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.984	338.32*	11.40	4.22252E+005	1.72945E+005
		911.07*	27.70	1.95736E+005	7.90077E+004
		969.11*	16.60	2.00584E+005	1.04676E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.982	1.075913E+005	3.217013E+004
K-40	0.987	6.801638E+006	8.314725E+005
TL-208	0.746	1.220987E+005	3.276425E+004
Pb-212 @	0.497	2.819714E+005	7.268299E+004
Bi-214	0.410	2.586481E+005	6.582899E+004
Ac-228	0.984	2.238714E+005	5.924549E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	1.9010E-001	23.92
F 3	84.65	7.2739E-002	56.64
F 6	351.49	1.0377E-001	24.29

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6015E+004	5.65E+004	-5.1691E+002
	1332.49	100.00	5.6481E+004		4.7340E+004
Nb-94	702.63	100.00	6.1329E+004	5.94E+004	-4.2553E+004
	871.10	100.00	5.9379E+004		3.1115E+004
Ag-108m	79.20	7.10	2.2501E+006	6.98E+004	-1.1754E+006
	433.93	89.90	6.9818E+004		-3.2431E+003
	614.37	90.40	8.7516E+004		-3.7887E+004
	722.95	90.50	7.2751E+004		3.9898E+004
Sb-125	176.33	6.89	1.2055E+006	2.11E+005	7.5073E+005
	427.89	29.33	2.1098E+005		6.3684E+004
	463.38	10.35	5.7528E+005		-1.0901E+005
	600.56	17.80	3.6133E+005		9.9658E+004
	606.64	5.02	1.7275E+006		2.7037E+006
	635.90	11.32	5.7330E+005		3.0266E+005
Cs-134	563.23	8.38	7.5804E+005	7.01E+004	3.3685E+004
	569.32	15.43	3.8228E+005		-3.3773E+005
	604.70	97.60	8.7635E+004		-2.9610E+003
	795.84	85.40	7.0148E+004		5.5384E+004
	801.93	8.73	6.4218E+005		-9.1258E+005
Cs-137	661.65	85.12	7.6932E+004	7.69E+004	5.2358E+003
Eu-152	121.78	28.40	3.5691E+005	2.46E+005	-1.8135E+004
	244.69	7.49	1.0596E+006		-7.4880E+005
	344.27	26.50	2.4737E+005		1.3998E+005
	778.89	12.74	4.8879E+005		-1.7761E+005
	867.32	4.16	1.3661E+006		-9.0211E+005
	964.01	14.40	5.2497E+005		9.2383E+005
	1085.78	10.00	5.9906E+005		-4.9809E+005
	1112.02	13.30	4.9386E+005		-4.7358E+005
	1407.95	20.70	2.4557E+005		-1.0140E+005
Eu-154	123.07	40.50	2.5111E+005	1.60E+005	2.0323E+005
	247.94	6.60	1.1260E+006		-5.6272E+004
	591.81	4.83	1.3283E+006		1.1878E+005
	723.30	19.70	3.3973E+005		1.2242E+004
	756.87	4.33	1.4655E+006		7.6572E+005
	873.19	11.50	5.1675E+005		-1.7383E+005
	996.32	10.30	5.2071E+005		-2.6752E+005
	1004.76	17.90	2.7548E+005		-1.8971E+005
	1274.45	35.50	1.5960E+005		1.3954E+004
Eu-155	86.54	30.90	4.5614E+005	4.56E+005	4.9147E+005
	105.31	20.70	5.4868E+005		1.3882E+005
Am-241	59.54	35.90	5.0610E+005	5.06E+005	6.4272E+004
Cm-243	228.19	10.56	7.1475E+005	5.16E+005	-4.2024E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1581E+005	5.16E+005	5.9101E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 10:37:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 10:22:04 AM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.84	72.92	1.09	1.80E+002	42.57	5.75E+002
m	2	285-	309	300.26	75.02	1.09	3.60E+002	51.24	6.27E+002
F	3	367-	375	370.84	92.67	0.71	4.59E+001	33.24	3.07E+002
F	4	949-	960	953.87	238.44	1.12	1.52E+002	30.95	1.26E+002
F	5	1176-	1185	1180.53	295.11	1.10	4.93E+001	21.38	7.11E+001
F	6	1347-	1357	1352.49	338.10	0.88	4.11E+001	17.46	4.73E+001
F	7	1400-	1417	1406.20	351.53	1.21	7.75E+001	22.19	8.84E+001
F	8	1995-	2004	1999.28	499.81	0.91	1.97E+001	12.31	1.98E+001
F	9	2322-	2340	2331.42	582.85	1.09	8.41E+001	21.71	6.92E+001
F	10	2426-	2441	2434.30	608.58	1.32	1.02E+002	23.46	5.17E+001
F	11	3171-	3183	3176.19	794.06	0.87	2.22E+001	11.86	1.75E+001
F	12	3634-	3651	3641.88	910.50	1.68	7.62E+001	19.21	2.45E+001
F	13	3864-	3881	3872.89	968.25	1.59	6.38E+001	17.06	1.58E+001
F	14	4351-	4362	4356.40	1089.14	1.03	1.23E+001	10.13	1.34E+001
F	15	4472-	4485	4478.08	1119.57	1.52	3.19E+001	14.02	1.75E+001
F	16	5826-	5853	5840.37	1460.16	2.02	4.50E+002	41.31	1.41E+001
F	17	7048-	7061	7054.75	1763.78	1.65	2.15E+001	9.82	1.76E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.987	1460.81*		10.67	6.82764E+006	8.35904E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.14980E+005	3.33611E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	3.24412E+006	7.85665E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.82268E+005	7.25118E+004
Bi-214	0.984	609.31*		46.30	2.59069E+005	6.76459E+004
		1120.29*		15.10	3.12016E+005	1.41136E+005
		1764.49*		15.80	2.34885E+005	1.09591E+005
PB-214	0.564	74.82*	@	6.21	5.58971E+006	1.41323E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.28162E+005	1.06214E+005
		351.92*		37.20	1.96481E+005	6.51525E+004
Ac-228	0.988	338.32*		11.40	3.35883E+005	1.52002E+005
		911.07*		27.70	3.72218E+005	1.03175E+005
		969.11*		16.60	5.33832E+005	1.53355E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.987	6.827640E+006	8.359037E+005
TL-208		0.469	1.149804E+005	3.336106E+004
Pb-212	@	0.497	2.822676E+005	7.251178E+004
Bi-214		0.984	2.608998E+005	5.330034E+004
PB-214	@	0.564	2.051422E+005	5.553664E+004
Ac-228		0.988	4.017008E+005	7.458883E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.92	1.9982E-001	23.67
F	3	92.67	5.0985E-002	72.43
F	8	499.81	2.1844E-002	62.62
F	11	794.06	2.4613E-002	53.54
F	14	1089.14	1.3612E-002	82.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0609E+004	5.85E+004	7.1051E+004
	1332.49	100.00	5.8491E+004		-1.4089E+004
Nb-94	702.63	100.00	6.9380E+004	6.07E+004	3.2676E+003
	871.10	100.00	6.0739E+004		4.9336E+004
Ag-108m	79.20	7.10	2.3089E+006	7.35E+004	-6.6753E+005
	433.93	89.90	7.3451E+004		-2.7450E+004
	614.37	90.40	9.1574E+004		-3.2928E+004
	722.95	90.50	7.4820E+004		-1.7634E+004
Sb-125	176.33	6.89	1.1306E+006	2.12E+005	6.3561E+005
	427.89	29.33	2.1162E+005		6.8407E+004
	463.38	10.35	6.3271E+005		-3.1178E+004
	600.56	17.80	3.4753E+005		-3.9990E+004
	606.64	5.02	1.7660E+006		4.0715E+006
	635.90	11.32	5.7990E+005		-3.4309E+004
Cs-134	563.23	8.38	7.7438E+005	7.38E+004	-6.7556E+005
	569.32	15.43	4.2248E+005		-2.7942E+005
	604.70	97.60	8.8186E+004		-1.0172E+004
	795.84	85.40	7.3801E+004		1.4636E+004
	801.93	8.73	6.1792E+005		-2.0752E+005
Cs-137	661.65	85.12	7.5098E+004	7.51E+004	4.7275E+004
Eu-152	121.78	28.40	3.6493E+005	2.62E+005	-2.2797E+005
	244.69	7.49	1.0517E+006		6.5324E+003
	344.27	26.50	2.6226E+005		-6.0078E+004
	778.89	12.74	5.0745E+005		3.0216E+004
	867.32	4.16	1.5440E+006		-1.6372E+006
	964.01	14.40	5.8025E+005		2.9446E+005
	1085.78	10.00	6.7242E+005		4.4932E+005
	1112.02	13.30	5.2704E+005		-2.6593E+005
	1407.95	20.70	2.7272E+005		2.0630E+005
Eu-154	123.07	40.50	2.5574E+005	1.72E+005	9.7575E+004
	247.94	6.60	1.1576E+006		1.8225E+005
	591.81	4.83	1.2780E+006		7.0053E+005
	723.30	19.70	3.4776E+005		1.7158E+005
	756.87	4.33	1.5312E+006		-2.2339E+004
	873.19	11.50	5.2271E+005		-3.4006E+005
	996.32	10.30	5.8338E+005		-2.5008E+005
	1004.76	17.90	3.6349E+005		1.6638E+005
	1274.45	35.50	1.7166E+005		7.2450E+004
Eu-155	86.54	30.90	4.6889E+005	4.69E+005	5.2847E+005
	105.31	20.70	5.7001E+005		4.9888E+005
Am-241	59.54	35.90	5.0937E+005	5.09E+005	3.6276E+005
Cm-243	228.19	10.56	7.2123E+005	5.15E+005	5.8113E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1497E+005	5.15E+005	2.0618E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 10:55:52 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 10:40:50 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.35	72.80	0.91	1.77E+002	42.54	5.21E+002
m	2	282-	306	300.27	75.03	0.92	2.66E+002	49.68	5.86E+002
F	3	367-	374	370.99	92.71	0.83	5.24E+001	33.84	2.53E+002
F	4	946-	961	953.81	238.42	1.09	1.66E+002	31.30	1.58E+002
F	5	1346-	1358	1352.10	338.01	1.09	4.12E+001	19.72	7.83E+001
F	6	1400-	1413	1406.56	351.62	1.24	9.89E+001	23.31	6.16E+001
F	7	2323-	2338	2330.80	582.70	1.37	1.10E+002	23.41	4.57E+001
F	8	2427-	2442	2434.77	608.70	1.33	8.42E+001	21.62	5.03E+001
F	9	3635-	3649	3641.88	910.50	1.27	7.36E+001	19.95	3.15E+001
F	10	4471-	4484	4478.24	1119.60	1.25	2.07E+001	12.33	1.93E+001
F	11	5828-	5852	5840.40	1460.17	1.97	4.45E+002	41.11	1.22E+001
F	12	7050-	7063	7057.03	1764.35	1.70	2.80E+001	11.78	5.10E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.988	1460.81*	10.67	6.75146E+006	8.29543E+005
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.50675E+005	3.77144E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.39215E+006	6.48038E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.07790E+005	7.55067E+004
Bi-214	0.990	609.31*	46.30	2.13440E+005	6.08908E+004
		1120.29*	15.10	2.02578E+005	1.22529E+005
		1764.49*	15.80	3.05202E+005	1.31980E+005
Ac-228	0.541	338.32*	11.40	3.36129E+005	1.69481E+005
		911.07*	27.70	3.59378E+005	1.05889E+005
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.988	6.751462E+006	8.295433E+005
TL-208		0.467	1.506747E+005	3.771444E+004
Pb-212	@	0.497	3.077896E+005	7.550673E+004
Bi-214		0.990	2.249825E+005	5.039678E+004
Ac-228		0.541	3.528505E+005	8.980259E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.9693E-001	24.00
F	3	92.71	5.8240E-002	64.56
F	6	351.62	1.0983E-001	23.58

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7195E+004	5.22E+004	4.7637E+003
	1332.49	100.00	5.2210E+004		1.9099E+003
Nb-94	702.63	100.00	6.7850E+004	6.14E+004	1.1285E+004
	871.10	100.00	6.1407E+004		2.7768E+004
Ag-108m	79.20	7.10	2.3105E+006	6.64E+004	-1.4429E+004
	433.93	89.90	6.6414E+004		-6.0756E+004
	614.37	90.40	8.7297E+004		2.0043E+003
	722.95	90.50	7.6547E+004		-1.8331E+004
Sb-125	176.33	6.89	1.2163E+006	1.94E+005	-3.6145E+005
	427.89	29.33	1.9365E+005		-2.3149E+005
	463.38	10.35	6.3271E+005		-2.0200E+005
	600.56	17.80	3.7590E+005		-2.7234E+005
	606.64	5.02	1.6402E+006		2.1399E+006
	635.90	11.32	5.0981E+005		-4.7504E+005
Cs-134	563.23	8.38	8.1372E+005	7.42E+004	-2.4695E+005
	569.32	15.43	4.3263E+005		3.1594E+005
	604.70	97.60	8.5205E+004		-4.1929E+004
	795.84	85.40	7.4155E+004		4.8534E+003
	801.93	8.73	7.5113E+005		-3.3240E+005
Cs-137	661.65	85.12	7.2575E+004	7.26E+004	-5.5473E+003
Eu-152	121.78	28.40	3.6274E+005	2.40E+005	2.5821E+005
	244.69	7.49	1.0196E+006		8.1130E+004
	344.27	26.50	2.4907E+005		-1.2518E+005
	778.89	12.74	5.2320E+005		-2.1614E+005
	867.32	4.16	1.5133E+006		-9.1396E+004
	964.01	14.40	5.5807E+005		7.1981E+005
	1085.78	10.00	6.4262E+005		-4.4581E+005
	1112.02	13.30	4.2923E+005		-3.9261E+005
	1407.95	20.70	2.3973E+005		-8.9328E+003
Eu-154	123.07	40.50	2.5210E+005	1.65E+005	1.3725E+005
	247.94	6.60	1.0566E+006		-1.2239E+006
	591.81	4.83	1.4096E+006		-1.2853E+005
	723.30	19.70	3.4644E+005		-2.8884E+005
	756.87	4.33	1.3606E+006		-7.8517E+005
	873.19	11.50	5.0768E+005		-2.7143E+005
	996.32	10.30	6.1565E+005		1.2045E+005
	1004.76	17.90	3.4322E+005		-7.4566E+004
	1274.45	35.50	1.6507E+005		-1.6703E+005
Eu-155	86.54	30.90	4.6256E+005	4.63E+005	6.6880E+005
	105.31	20.70	5.6147E+005		-5.1606E+004
Am-241	59.54	35.90	5.1930E+005	5.19E+005	1.8119E+004
Cm-243	228.19	10.56	6.9781E+005	4.98E+005	1.6999E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9785E+005	4.98E+005	-1.6335E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 11:22:05 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 11:07:03 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	302-	309	305.18	76.25	0.51	6.96E+001	36.73	4.20E+002
F	2	943-	958	953.08	238.24	1.24	5.05E+001	25.50	1.71E+002
F	3	3865-	3879	3872.50	968.16	1.65	3.64E+001	15.12	2.41E+001
F	4	5824-	5855	5840.06	1460.09	3.02	4.26E+002	37.97	1.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.984	1460.81*		10.67	6.46011E+006	7.78309E+005
Pb-212	0.632	74.81	@	10.70		
		77.11*	@	18.00	3.66368E+005	2.06280E+005
		87.30	@	8.00		
		238.63*		44.60	9.36228E+004	4.95306E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.984	6.460115E+006	7.783093E+005
Pb-212	@	0.632	9.362280E+004	4.953057E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	968.16	4.0498E-002	41.48

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7969E+004	5.28E+004	2.0244E+004
	1332.49	100.00	5.2765E+004		-2.0148E+004
Nb-94	702.63	100.00	6.8620E+004	5.47E+004	3.8018E+004
	871.10	100.00	5.4707E+004		-8.9905E+003
Ag-108m	79.20	7.10	2.2805E+006	6.96E+004	-3.0321E+006
	433.93	89.90	6.9611E+004		-4.0647E+004
	614.37	90.40	7.9958E+004		-6.4924E+004
	722.95	90.50	7.4235E+004		-1.1358E+004
Sb-125	176.33	6.89	1.1024E+006	2.01E+005	-4.7896E+005
	427.89	29.33	2.0117E+005		5.0490E+004
	463.38	10.35	6.3089E+005		1.6089E+005
	600.56	17.80	3.4040E+005		-3.7873E+005
	606.64	5.02	1.6177E+006		2.8333E+006
	635.90	11.32	5.2946E+005		-9.0466E+004
Cs-134	563.23	8.38	7.0368E+005	7.34E+004	-1.6280E+005
	569.32	15.43	3.7900E+005		1.6001E+004
	604.70	97.60	8.1716E+004		8.9832E+004
	795.84	85.40	7.3444E+004		-1.8909E+004
	801.93	8.73	6.7682E+005		-3.4874E+005
Cs-137	661.65	85.12	7.8722E+004	7.87E+004	3.0487E+004
Eu-152	121.78	28.40	3.5914E+005	2.34E+005	-3.5322E+004
	244.69	7.49	1.0648E+006		-5.8948E+005
	344.27	26.50	2.4963E+005		-3.8910E+005
	778.89	12.74	4.8401E+005		-3.1318E+005
	867.32	4.16	1.4417E+006		8.6813E+005
	964.01	14.40	5.7112E+005		6.4134E+005
	1085.78	10.00	6.4262E+005		6.4714E+005
	1112.02	13.30	4.9955E+005		-5.5246E+005
	1407.95	20.70	2.3373E+005		-4.1639E+004
Eu-154	123.07	40.50	2.4841E+005	1.65E+005	-1.0174E+005
	247.94	6.60	1.1050E+006		-1.3243E+006
	591.81	4.83	1.3084E+006		1.2315E+005
	723.30	19.70	3.4108E+005		-3.9955E+004
	756.87	4.33	1.2856E+006		-4.9287E+005
	873.19	11.50	4.7935E+005		1.2440E+005
	996.32	10.30	5.4511E+005		-4.0328E+005
	1004.76	17.90	2.9828E+005		3.1536E+004
	1274.45	35.50	1.6507E+005		-9.2258E+004
Eu-155	86.54	30.90	4.5893E+005	4.59E+005	3.4734E+005
	105.31	20.70	5.3388E+005		-9.2073E+004
Am-241	59.54	35.90	5.0255E+005	5.03E+005	5.4912E+004
Cm-243	228.19	10.56	7.1102E+005	5.07E+005	-4.3456E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0734E+005	5.07E+005	-1.0844E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 1:48:55 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 1:33:52 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	306	291.94	72.94	0.94	1.04E+002	38.06	4.12E+002
m	2	288-	306	300.27	75.03	0.95	3.01E+002	50.06	5.61E+002
F	3	332-	344	339.38	84.80	0.92	9.96E+001	39.51	4.93E+002
F	4	946-	959	954.22	238.53	1.04	1.29E+002	29.57	1.48E+002
F	5	1348-	1358	1352.45	338.09	1.13	3.62E+001	18.16	5.25E+001
F	6	1397-	1413	1406.98	351.73	1.01	9.24E+001	22.48	7.03E+001
F	7	2323-	2341	2330.99	582.75	1.93	1.00E+002	21.16	4.06E+001
F	8	2427-	2444	2435.86	608.97	1.21	8.31E+001	21.54	5.63E+001
M	9	2641-	2665	2645.54	661.39	0.48	1.20E+001	8.59	1.32E+001
m	10	2641-	2665	2659.39	664.85	0.48	1.28E+001	8.70	1.14E+001
F	11	3634-	3652	3643.23	910.83	1.57	6.66E+001	17.80	2.12E+001
F	12	3867-	3880	3873.54	968.42	1.31	3.14E+001	14.65	2.26E+001
F	13	4971-	4984	4977.42	1244.41	0.86	1.25E+001	8.50	8.75E+000
F	14	5830-	5854	5842.15	1460.61	2.00	3.56E+002	36.81	9.26E+000
F	15	7050-	7065	7058.66	1764.76	2.27	3.74E+001	12.93	3.83E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	5.40966E+006	7.09935E+005
Cs-137	0.998	661.65*	85.12	1.70772E+004	1.24247E+004
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.37248E+005	3.41651E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.70644E+006	6.96166E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.38931E+005	6.64498E+004
Bi-214	0.702	609.31*	46.30	2.10626E+005	6.05585E+004
		1120.29	15.10		
		1764.49*	15.80	4.07536E+005	1.46728E+005
Ac-228	0.995	338.32*	11.40	2.95359E+005	1.55428E+005
		911.07*	27.70	3.25428E+005	9.47279E+004
		969.11*	16.60	2.62471E+005	1.25687E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	5.409657E+006	7.099354E+005
Cs-137		0.998	1.707723E+004	1.242466E+004
TL-208		0.467	1.372476E+005	3.416515E+004
Pb-212	@	0.497	2.389310E+005	6.644984E+004
Bi-214		0.702	2.392864E+005	5.597814E+004
Ac-228		0.995	3.012307E+005	6.801968E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	1.1559E-001	36.58
F 3	84.80	1.1064E-001	39.68
F 6	351.73	1.0271E-001	24.32
m 10	664.85	1.4244E-002	67.89
F 13	1244.41	1.3859E-002	68.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.1909E+004	4.87E+004	-6.9489E+004
		1332.49	100.00	4.8739E+004		-3.1437E+004
	Nb-94	702.63	100.00	6.6018E+004	5.40E+004	1.0617E+004
		871.10	100.00	5.3950E+004		-3.1452E+004
	Ag-108m	79.20	7.10	2.2136E+006	7.17E+004	-1.5031E+006
		433.93	89.90	7.1659E+004		-1.9918E+004
		614.37	90.40	8.9675E+004		1.3834E+004
		722.95	90.50	7.8234E+004		3.0587E+004
	Sb-125	176.33	6.89	1.1557E+006	2.13E+005	9.5345E+004
		427.89	29.33	2.1289E+005		2.1852E+005
		463.38	10.35	6.2537E+005		7.1875E+004
		600.56	17.80	3.5998E+005		-2.8364E+005
		606.64	5.02	1.6328E+006		4.6935E+005
		635.90	11.32	5.1231E+005		3.4115E+005
	Cs-134	563.23	8.38	7.7438E+005	7.38E+004	2.0557E+005
		569.32	15.43	3.9668E+005		-1.9696E+005
		604.70	97.60	8.5772E+004		7.2252E+003
		795.84	85.40	7.3801E+004		2.2102E+004
		801.93	8.73	6.7682E+005		-2.4939E+005
+	Cs-137	661.65*	85.12	2.8031E+004	2.80E+004	1.7077E+004
	Eu-152	121.78	28.40	3.5201E+005	2.39E+005	-3.5634E+005
		244.69	7.49	1.1018E+006		-8.9915E+005
		344.27	26.50	2.3868E+005		-4.5469E+004
		778.89	12.74	4.6436E+005		-6.3323E+005
		867.32	4.16	1.4003E+006		-9.6713E+005
		964.01	14.40	5.4856E+005		4.6321E+005
		1085.78	10.00	5.4273E+005		-2.0054E+005
		1112.02	13.30	4.6428E+005		-1.1082E+006
		1407.95	20.70	2.3973E+005		-8.5567E+004
	Eu-154	123.07	40.50	2.4597E+005	1.66E+005	-1.2488E+005
		247.94	6.60	1.1260E+006		-6.4964E+005
		591.81	4.83	1.2984E+006		-3.1343E+005
		723.30	19.70	3.5818E+005		6.6724E+004
		756.87	4.33	1.4105E+006		-7.6038E+005
		873.19	11.50	4.8259E+005		1.4497E+005
		996.32	10.30	5.4907E+005		-4.0269E+005
		1004.76	17.90	3.1708E+005		3.8511E+004
		1274.45	35.50	1.6641E+005		1.0118E+005
	Eu-155	86.54	30.90	4.4820E+005	4.48E+005	5.0262E+005
		105.31	20.70	5.4398E+005		-1.8067E+005
	Am-241	59.54	35.90	4.7884E+005	4.79E+005	-1.8150E+005
	Cm-243	228.19	10.56	6.9876E+005	5.07E+005	-9.3743E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0734E+005	5.07E+005	9.3770E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:59:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 2:44:18 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.22	72.76	0.98	2.17E+002	43.20	5.39E+002
m	2	282-	305	300.12	74.99	0.99	2.98E+002	51.00	6.10E+002
F	3	330-	345	338.99	84.71	0.93	1.16E+002	42.11	6.77E+002
F	4	948-	960	953.86	238.44	0.95	1.43E+002	31.65	1.69E+002
F	5	1176-	1186	1180.95	295.21	0.52	3.46E+001	17.76	9.42E+001
F	6	1345-	1362	1352.74	338.16	1.09	4.98E+001	20.93	1.16E+002
F	7	1399-	1414	1407.38	351.83	1.51	1.19E+002	25.25	8.76E+001
F	8	1516-	1525	1520.78	380.18	0.83	2.12E+001	14.13	3.49E+001
F	9	2034-	2054	2042.50	510.62	1.95	1.12E+002	24.26	8.88E+001
F	10	2323-	2339	2330.79	582.70	1.22	8.44E+001	22.37	6.83E+001
F	11	2429-	2443	2436.11	609.03	1.26	1.08E+002	23.26	4.13E+001
F	12	3634-	3650	3642.98	910.77	1.49	6.72E+001	19.57	4.03E+001
F	13	4471-	4486	4478.87	1119.76	1.24	2.50E+001	13.52	2.61E+001
F	14	5828-	5855	5842.05	1460.58	2.10	5.12E+002	43.95	1.40E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*	100.00	1.22210E+005	3.14961E+004
K-40	0.998	1460.81*	10.67	7.77716E+006	9.17410E+005
TL-208	0.749	277.35	6.80		
		510.84*	21.60	5.65787E+005	1.52961E+005
		583.14*	84.20	1.15387E+005	3.41951E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.68923E+006	6.99266E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.65493E+005	7.19827E+004
Bi-214	0.710	609.31*	46.30	2.74922E+005	6.81687E+004
		1120.29*	15.10	2.44781E+005	1.34888E+005
		1764.49	15.80		
PB-214	0.566	74.82* @	6.21	4.63362E+006	1.25093E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.60252E+005	8.66001E+004
		351.92*	37.20	3.01756E+005	8.15442E+004
Ac-228	0.545	338.32*	11.40	4.07016E+005	1.82485E+005
		911.07*	27.70	3.28222E+005	1.02815E+005
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	9.728642E+004	3.234039E+004
K-40		0.998	7.777160E+006	9.174105E+005
TL-208		0.749	1.153870E+005	3.398771E+004
Pb-212	@	0.497	2.654928E+005	7.198269E+004
Bi-214		0.710	2.687899E+005	6.084062E+004
PB-214	@	0.566	2.352552E+005	5.936739E+004
Ac-228		0.545	3.472077E+005	8.957577E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.76	2.4114E-001	19.90
F	3	84.71	1.2850E-001	36.42
F	8	380.18	2.3538E-002	66.70

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.4208E+004	5.39E+004	5.4529E+004
	1332.49	100.00	5.3855E+004		1.7615E+004
Nb-94	702.63	100.00	6.3857E+004	6.39E+004	-8.4404E+004
	871.10	100.00	6.4953E+004		2.8637E+004
Ag-108m	79.20	7.10	2.2773E+006	7.39E+004	-2.5190E+006
	433.93	89.90	7.7652E+004		-1.4679E+004
	614.37	90.40	9.5452E+004		6.1882E+003
	722.95	90.50	7.3941E+004		-3.6939E+004
Sb-125	176.33	6.89	1.2522E+006	2.26E+005	6.3128E+005
	427.89	29.33	2.2576E+005		2.5282E+004
	463.38	10.35	6.8346E+005		5.4953E+005
	600.56	17.80	3.7977E+005		2.2717E+005
	606.64	5.02	1.7832E+006		2.8887E+006
	635.90	11.32	5.4604E+005		-1.2965E+005
Cs-134	563.23	8.38	7.5804E+005	7.45E+004	-3.4279E+004
	569.32	15.43	4.0445E+005		5.1733E+002
	604.70	97.60	9.0889E+004		-2.4577E+004
	795.84	85.40	7.4508E+004		-1.2542E+004
	801.93	8.73	7.1323E+005		-1.9740E+005
Cs-137	661.65	85.12	8.3020E+004	8.30E+004	3.5119E+004
Eu-152	121.78	28.40	3.6334E+005	2.65E+005	-1.2166E+005
	244.69	7.49	1.0943E+006		-1.5503E+005
	344.27	26.50	2.6913E+005		7.3358E+004
	778.89	12.74	4.7918E+005		-7.2675E+005
	867.32	4.16	1.5364E+006		-6.3496E+005
	964.01	14.40	5.4470E+005		2.6963E+005
	1085.78	10.00	5.8657E+005		-3.4196E+005
	1112.02	13.30	4.4232E+005		-6.4964E+005
	1407.95	20.70	2.6489E+005		1.2437E+005
Eu-154	123.07	40.50	2.5295E+005	1.72E+005	5.5559E+003
	247.94	6.60	1.1638E+006		-7.4889E+005
	591.81	4.83	1.3034E+006		-7.5635E+005
	723.30	19.70	3.4243E+005		-2.4329E+004
	756.87	4.33	1.5817E+006		-1.8515E+005
	873.19	11.50	5.6253E+005		3.3217E+005
	996.32	10.30	6.0153E+005		-2.8134E+005
	1004.76	17.90	3.4322E+005		1.1253E+005
	1274.45	35.50	1.7166E+005		-1.1154E+004
Eu-155	86.54	30.90	4.6753E+005	4.68E+005	8.9152E+004
	105.31	20.70	5.8543E+005		5.1434E+005
Am-241	59.54	35.90	5.1881E+005	5.19E+005	-3.9351E+005
Cm-243	228.19	10.56	7.4658E+005	5.17E+005	-2.9845E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1749E+005	5.17E+005	-1.1249E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 3:47:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 3:32:27 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	304	291.07	72.73	0.93	1.48E+002	41.14	5.15E+002
m	2	285-	304	300.28	75.03	0.93	2.53E+002	50.17	5.95E+002
F	3	332-	345	338.40	84.56	0.98	1.08E+002	42.10	6.05E+002
F	4	948-	972	954.56	238.61	1.13	1.92E+002	32.87	2.59E+002
F	5	1169-	1189	1179.52	294.86	1.26	7.24E+001	22.97	1.44E+002
F	6	1401-	1416	1406.77	351.67	0.93	7.46E+001	23.67	1.21E+002
F	7	2322-	2339	2330.68	582.67	1.34	9.68E+001	21.68	4.27E+001
F	8	2428-	2443	2435.48	608.87	1.13	1.12E+002	24.64	6.22E+001
F	9	2641-	2652	2646.35	661.59	0.87	1.88E+001	10.26	2.06E+001
F	10	2902-	2915	2907.83	726.97	1.04	3.24E+001	13.66	1.88E+001
F	11	3636-	3652	3642.28	910.60	1.57	7.34E+001	20.24	3.83E+001
M	12	3850-	3883	3855.04	963.79	1.94	2.43E+001	12.25	1.52E+001
m	13	3850-	3883	3874.50	968.66	1.94	6.74E+001	16.81	1.77E+001
F	14	5829-	5853	5841.80	1460.52	1.81	5.18E+002	44.69	1.57E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.998	1460.81*		10.67	7.85945E+006	9.30066E+005
Cs-137	1.000	661.65*		85.12	2.67800E+004	1.49843E+004
TL-208	0.466	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.32331E+005	3.44401E+004
		860.37		12.46		
Bi-212	0.999	727.17*		11.80	3.44454E+005	1.50752E+005
Pb-212	0.498	74.81*	@	10.70	2.27963E+006	6.35420E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.56916E+005	8.27905E+004
Bi-214	0.414	609.31*		46.30	2.84691E+005	7.18025E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	3.92786E+006	1.13137E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.35240E+005	1.20415E+005
		351.92*		37.20	1.89266E+005	6.78755E+004
Ac-228	0.615	338.32		11.40		
		911.07*		27.70	3.58475E+005	1.07173E+005
		969.11*		16.60	5.64111E+005	1.52661E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.998	7.859451E+006	9.300661E+005
Cs-137		1.000	2.677999E+004	1.498432E+004
TL-208		0.466	1.323315E+005	3.444011E+004
Bi-212		0.999	3.444542E+005	1.507522E+005
Pb-212	@	0.498	3.569156E+005	8.279049E+004
Bi-214		0.414	2.846910E+005	7.180253E+004
PB-214	@	0.564	2.244631E+005	5.912880E+004
Ac-228		0.615	4.263638E+005	8.771597E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	1.6496E-001	27.71
F 3	84.56	1.1988E-001	39.02
M 12	963.79	2.7039E-002	50.33

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	7.2791E+004	6.46E+004	3.8278E+004
		1332.49	100.00	6.4561E+004		6.2087E+004
	Nb-94	702.63	100.00	6.6810E+004	5.87E+004	-8.7275E+003
		871.10	100.00	5.8686E+004		-2.1644E+004
	Ag-108m	79.20	7.10	2.2813E+006	7.85E+004	-5.2628E+006
		433.93	89.90	8.0742E+004		6.4935E+004
		614.37	90.40	9.8596E+004		-3.7715E+004
		722.95	90.50	7.8511E+004		1.2887E+004
	Sb-125	176.33	6.89	1.2174E+006	2.20E+005	-6.7492E+004
		427.89	29.33	2.2034E+005		-1.6253E+005
		463.38	10.35	6.6814E+005		4.6558E+003
		600.56	17.80	3.5450E+005		-4.3642E+004
		606.64	5.02	1.8138E+006		3.3252E+006
		635.90	11.32	5.9925E+005		4.9000E+005
	Cs-134	563.23	8.38	7.8772E+005	8.06E+004	3.3544E+005
		569.32	15.43	4.2395E+005		-2.6702E+005
		604.70	97.60	9.1066E+004		-5.4642E+003
		795.84	85.40	8.0583E+004		-3.3704E+004
		801.93	8.73	7.8070E+005		-8.9764E+005
+	Cs-137	661.65*	85.12	3.7666E+004	3.77E+004	2.6780E+004
	Eu-152	121.78	28.40	3.6214E+005	2.40E+005	-2.0344E+005
		244.69	7.49	1.0398E+006		3.3244E+004
		344.27	26.50	2.6704E+005		-3.8111E+005
		778.89	12.74	5.3631E+005		1.1523E+004
		867.32	4.16	1.4335E+006		-1.9039E+006
		964.01	14.40	5.8566E+005		-2.2517E+005
		1085.78	10.00	7.2817E+005		9.8448E+004
		1112.02	13.30	4.9386E+005		-1.6894E+005
		1407.95	20.70	2.3973E+005		6.2530E+004
	Eu-154	123.07	40.50	2.5295E+005	1.70E+005	-3.9636E+004
		247.94	6.60	1.1356E+006		-7.3693E+005
		591.81	4.83	1.3184E+006		-2.4115E+005
		723.30	19.70	3.5818E+005		3.9556E+005
		756.87	4.33	1.4587E+006		-5.5597E+005
		873.19	11.50	5.2566E+005		-6.7271E+004
		996.32	10.30	6.0153E+005		2.2876E+005
		1004.76	17.90	3.2824E+005		-2.6609E+004
		1274.45	35.50	1.7036E+005		-4.0967E+004
	Eu-155	86.54	30.90	4.7914E+005	4.79E+005	7.4805E+005
		105.31	20.70	5.7054E+005		9.0304E+004
	Am-241	59.54	35.90	5.0280E+005	5.03E+005	-1.7948E+005
	Cm-243	228.19	10.56	7.6675E+005	5.24E+005	2.2508E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2414E+005	5.24E+005	-8.8172E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 3:28:42 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 3:13:40 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	291.24	72.77	1.05	1.48E+002	40.52	5.97E+002
m	2	283-	307	300.03	74.97	1.06	3.17E+002	51.18	6.72E+002
F	3	333-	345	339.32	84.79	0.88	8.19E+001	39.40	5.22E+002
F	4	946-	960	954.07	238.49	1.06	1.70E+002	32.31	1.67E+002
F	5	1344-	1359	1352.39	338.08	1.00	5.38E+001	19.34	7.40E+001
F	6	1399-	1415	1407.09	351.75	1.62	9.75E+001	22.42	6.57E+001
F	7	2036-	2052	2042.72	510.67	1.46	8.51E+001	21.65	5.57E+001
F	8	2323-	2342	2331.88	582.97	1.58	9.74E+001	21.76	5.22E+001
F	9	2427-	2444	2435.52	608.88	1.50	1.13E+002	23.83	5.64E+001
F	10	3634-	3651	3642.98	910.77	1.27	7.86E+001	19.81	3.14E+001
F	11	3866-	3880	3873.74	968.47	1.59	4.16E+001	15.20	2.04E+001
F	12	4472-	4485	4478.37	1119.64	1.41	3.19E+001	13.41	1.23E+001
F	13	5830-	5854	5842.01	1460.58	2.06	4.38E+002	40.65	9.23E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	9.26391E+004	2.69251E+004
K-40	0.998	1460.81*		10.67	6.65433E+006	8.19177E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	4.28884E+005	1.29481E+005
		583.14*		84.20	1.33219E+005	3.45931E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.85670E+006	7.25448E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.15473E+005	7.77241E+004
Bi-214	0.708	609.31*		46.30	2.87500E+005	7.02020E+004
		1120.29*		15.10	3.11977E+005	1.35312E+005
		1764.49		15.80		
Ac-228	0.995	338.32*		11.40	4.39343E+005	1.72357E+005
		911.07*		27.70	3.84105E+005	1.06425E+005
		969.11*		16.60	3.48376E+005	1.32390E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	6.386372E+004	2.792694E+004
K-40		0.998	6.654327E+006	8.191772E+005
TL-208		0.752	1.332192E+005	3.431962E+004
Pb-212	@	0.497	3.154728E+005	7.772412E+004
Bi-214		0.708	2.926916E+005	6.231457E+004
Ac-228		0.995	3.831047E+005	7.474212E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	1.6422E-001	27.42
F 3	84.79	9.0969E-002	48.12
F 6	351.75	1.0831E-001	23.00

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4406E+004	5.49E+004	5.8055E+004
	1332.49	100.00	5.4922E+004		3.0651E+004
Nb-94	702.63	100.00	6.3857E+004	5.76E+004	3.3019E+004
	871.10	100.00	5.7630E+004		2.5552E+004
Ag-108m	79.20	7.10	2.2242E+006	6.96E+004	-1.5933E+006
	433.93	89.90	6.9611E+004		-2.8798E+004
	614.37	90.40	8.9675E+004		-1.4965E+004
	722.95	90.50	7.3348E+004		-6.1227E+004
Sb-125	176.33	6.89	1.1614E+006	2.09E+005	-3.0119E+005
	427.89	29.33	2.0906E+005		-1.2218E+004
	463.38	10.35	6.3816E+005		7.4230E+005
	600.56	17.80	3.4040E+005		-3.7587E+005
	606.64	5.02	1.7416E+006		3.5433E+006
	635.90	11.32	5.1480E+005		2.2476E+005
Cs-134	563.23	8.38	7.1255E+005	7.13E+004	-3.7447E+005
	569.32	15.43	4.3263E+005		5.1926E+005
	604.70	97.60	8.9097E+004		-1.5627E+003
	795.84	85.40	7.1265E+004		-1.6156E+004
	801.93	8.73	6.9891E+005		-1.1046E+006
Cs-137	661.65	85.12	7.5407E+004	7.54E+004	5.6664E+004
Eu-152	121.78	28.40	3.5304E+005	2.43E+005	1.3515E+005
	244.69	7.49	9.7226E+005		-1.5303E+006
	344.27	26.50	2.4335E+005		-2.2423E+004
	778.89	12.74	4.9588E+005		-2.7698E+005
	867.32	4.16	1.4003E+006		-8.0830E+005
	964.01	14.40	5.3493E+005		7.3184E+005
	1085.78	10.00	6.0316E+005		2.3669E+005
	1112.02	13.30	4.5501E+005		-2.6499E+005
	1407.95	20.70	2.6489E+005		1.6559E+005
Eu-154	123.07	40.50	2.4669E+005	1.49E+005	1.4843E+005
	247.94	6.60	1.0617E+006		4.1236E+005
	591.81	4.83	1.2882E+006		-2.2520E+005
	723.30	19.70	3.3427E+005		-1.8575E+005
	756.87	4.33	1.4105E+006		-1.6568E+006
	873.19	11.50	4.7281E+005		4.3078E+004
	996.32	10.30	5.9434E+005		6.9148E+004
	1004.76	17.90	3.5553E+005		-2.3317E+005
	1274.45	35.50	1.4949E+005		-1.9136E+004
Eu-155	86.54	30.90	4.5753E+005	4.58E+005	9.9951E+005
	105.31	20.70	5.4564E+005		-5.5411E+004
Am-241	59.54	35.90	4.9175E+005	4.92E+005	-1.3801E+005
Cm-243	228.19	10.56	7.0633E+005	5.15E+005	4.4171E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1497E+005	5.15E+005	-2.2064E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 2:18:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-09-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 2:03:26 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-09-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	309	300.98	75.10	0.85	1.79E+002	49.83	8.06E+002
F	2	946-	961	954.37	238.91	1.12	1.49E+002	31.51	1.75E+002
F	3	1175-	1187	1180.99	295.68	1.24	4.91E+001	21.01	8.00E+001
F	4	1349-	1359	1354.27	339.07	0.74	2.21E+001	15.97	6.20E+001
F	5	1401-	1415	1407.18	352.32	1.44	1.01E+002	25.26	9.16E+001
F	6	2323-	2342	2331.15	583.47	1.63	9.50E+001	21.32	4.36E+001
F	7	2428-	2443	2435.38	609.53	1.23	1.06E+002	23.97	5.38E+001
F	8	3635-	3652	3642.88	911.18	1.64	5.58E+001	17.90	3.28E+001
F	9	3866-	3885	3874.92	969.10	2.20	6.81E+001	17.91	2.58E+001
F	10	4473-	4484	4478.74	1119.79	0.47	1.57E+001	10.01	2.33E+001
F	11	5827-	5855	5841.52	1459.76	2.22	4.06E+002	38.75	1.46E+001
F	12	7048-	7067	7057.35	1763.04	2.36	5.37E+001	14.76	2.32E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.967	1460.81*		10.67	5.91774E+006	7.40783E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.24705E+005	3.24808E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	1.56554E+006	5.32108E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.68320E+005	7.07190E+004
Bi-214	0.985	609.31*		46.30	2.57500E+005	6.64187E+004
		1120.29*		15.10	1.46648E+005	9.50425E+004
		1764.49*		15.80	5.63078E+005	1.64676E+005
PB-214	0.562	74.82*	@	6.21	2.69746E+006	9.37515E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.21028E+005	1.01626E+005
		351.92*		37.20	2.48948E+005	7.48913E+004
Ac-228	0.996	338.32*		11.40	1.75319E+005	1.29775E+005
		911.07*		27.70	2.59475E+005	8.84148E+004
		969.11*		16.60	5.43168E+005	1.53801E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.967	5.917739E+006	7.407826E+005
TL-208		0.469	1.247048E+005	3.248079E+004
Pb-212	@	0.496	2.683197E+005	7.071902E+004
Bi-214		0.985	2.548189E+005	5.169062E+004
PB-214	@	0.562	2.391220E+005	6.028911E+004
Ac-228		0.996	2.899500E+005	6.599902E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8488E+004	4.90E+004	-1.0324E+005
	1332.49	100.00	4.9047E+004		-1.2635E+004
Nb-94	702.63	100.00	5.2391E+004	5.24E+004	-4.4328E+004
	871.10	100.00	5.9672E+004		5.1836E+004
Ag-108m	79.20	7.10	2.1347E+006	6.28E+004	-2.1886E+006
	433.93	89.90	6.2761E+004		-8.0699E+004
	614.37	90.40	9.0766E+004		4.4122E+004
	722.95	90.50	6.4595E+004		4.9764E+004
Sb-125	176.33	6.89	1.1011E+006	1.97E+005	-8.7205E+005
	427.89	29.33	1.9662E+005		1.2216E+005
	463.38	10.35	6.0194E+005		-2.6057E+005
	600.56	17.80	3.3016E+005		1.8138E+005
	606.64	5.02	1.6909E+006		2.8200E+006
	635.90	11.32	4.8954E+005		-9.4868E+004
Cs-134	563.23	8.38	7.0106E+005	6.75E+004	1.1825E+005
	569.32	15.43	3.7165E+005		1.8669E+002
	604.70	97.60	8.6692E+004		1.5884E+004
	795.84	85.40	6.7508E+004		5.6826E+004
	801.93	8.73	6.8248E+005		-8.0007E+004
Cs-137	661.65	85.12	6.7055E+004	6.71E+004	1.5663E+004
Eu-152	121.78	28.40	3.3769E+005	2.33E+005	-3.2485E+005
	244.69	7.49	1.0268E+006		-5.7741E+005
	344.27	26.50	2.4566E+005		-1.5973E+005
	778.89	12.74	4.3987E+005		-3.4902E+005
	867.32	4.16	1.4100E+006		-2.1890E+006
	964.01	14.40	5.5120E+005		-1.4045E+005
	1085.78	10.00	5.5265E+005		-8.0173E+004
	1112.02	13.30	5.2174E+005		-7.8516E+004
	1407.95	20.70	2.3309E+005		-9.7567E+004
Eu-154	123.07	40.50	2.3651E+005	1.62E+005	-3.8542E+004
	247.94	6.60	1.0672E+006		-5.2134E+005
	591.81	4.83	1.1484E+006		2.8976E+005
	723.30	19.70	2.9679E+005		2.1681E+005
	756.87	4.33	1.2394E+006		-1.2514E+005
	873.19	11.50	4.9445E+005		-9.3867E+004
	996.32	10.30	5.4573E+005		-1.9527E+005
	1004.76	17.90	3.1729E+005		3.2582E+005
	1274.45	35.50	1.6219E+005		1.0830E+005
Eu-155	86.54	30.90	4.4076E+005	4.41E+005	6.9900E+005
	105.31	20.70	5.0050E+005		-1.5711E+005
Am-241	59.54	35.90	4.7907E+005	4.79E+005	2.5830E+004
Cm-243	228.19	10.56	6.7241E+005	4.84E+005	1.5623E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8358E+005	4.84E+005	-6.7934E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 1:59:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-09-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 1:44:24 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-09-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	308	301.88	75.33	0.83	1.54E+002	48.10	6.93E+002
F	2	944-	962	954.45	238.93	1.33	1.35E+002	30.72	2.00E+002
F	3	1399-	1414	1407.27	352.34	1.02	6.48E+001	21.94	9.76E+001
F	4	2325-	2339	2332.32	583.77	1.35	5.85E+001	19.35	5.09E+001
F	5	2425-	2446	2436.00	609.69	1.78	9.97E+001	22.26	6.05E+001
F	6	2902-	2914	2907.90	727.62	1.00	1.63E+001	10.40	2.43E+001
F	7	3637-	3652	3644.22	911.51	1.92	4.47E+001	16.14	2.61E+001
F	8	5828-	5855	5842.19	1459.92	2.39	4.13E+002	38.46	1.05E+001
F	9	7054-	7067	7060.57	1763.85	1.47	2.46E+001	11.32	5.53E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.976	1460.81*	10.67	6.01676E+006	7.42804E+005
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	7.67598E+004	2.73544E+004
		860.37	12.46		
Bi-212	0.994	727.17*	11.80	1.65356E+005	1.07108E+005
Pb-212	0.495	74.81* @	10.70	1.33624E+006	4.93595E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.44252E+005	6.73713E+004
Bi-214	0.699	609.31*	46.30	2.42000E+005	6.18635E+004
		1120.29	15.10		
		1764.49*	15.80	2.58079E+005	1.21477E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.976	6.016756E+006	7.428043E+005
TL-208		0.463	7.675975E+004	2.735440E+004
Bi-212		0.994	1.653558E+005	1.071084E+005
Pb-212	@	0.495	2.442522E+005	6.737130E+004
Bi-214		0.699	2.453115E+005	5.512663E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	352.34	7.1958E-002	33.87
F	7	911.51	4.9653E-002	36.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0915E+004	5.89E+004	-7.7764E+003
	1332.49	100.00	5.8927E+004		4.9049E+004
Nb-94	702.63	100.00	6.0090E+004	5.58E+004	-3.9964E+003
	871.10	100.00	5.5832E+004		1.0438E+004
Ag-108m	79.20	7.10	2.2101E+006	6.38E+004	-1.9028E+006
	433.93	89.90	6.3842E+004		1.9847E+004
	614.37	90.40	9.0766E+004		8.9270E+004
	722.95	90.50	6.9342E+004		4.6170E+004
Sb-125	176.33	6.89	1.0411E+006	1.97E+005	-1.6928E+005
	427.89	29.33	1.9726E+005		-3.2634E+004
	463.38	10.35	6.4023E+005		3.4632E+005
	600.56	17.80	3.2188E+005		-2.9064E+005
	606.64	5.02	1.5918E+006		1.4943E+006
	635.90	11.32	4.7747E+005		-6.3704E+004
Cs-134	563.23	8.38	6.9276E+005	6.46E+004	4.4140E+005
	569.32	15.43	3.4765E+005		-2.5281E+005
	604.70	97.60	8.1408E+004		-3.5239E+004
	795.84	85.40	6.4615E+004		-8.4070E+004
	801.93	8.73	6.1895E+005		-4.2237E+005
Cs-137	661.65	85.12	7.8397E+004	7.84E+004	1.3074E+004
Eu-152	121.78	28.40	3.4112E+005	2.19E+005	9.1326E+004
	244.69	7.49	1.0268E+006		3.8957E+005
	344.27	26.50	2.3348E+005		-4.4368E+005
	778.89	12.74	4.3013E+005		-4.5259E+005
	867.32	4.16	1.2494E+006		-6.4236E+005
	964.01	14.40	4.7261E+005		5.1791E+005
	1085.78	10.00	5.8437E+005		-5.3647E+005
	1112.02	13.30	4.8593E+005		-2.8144E+005
	1407.95	20.70	2.1858E+005		3.3418E+004
Eu-154	123.07	40.50	2.4004E+005	1.50E+005	9.1923E+004
	247.94	6.60	1.0846E+006		-8.4354E+005
	591.81	4.83	1.2492E+006		6.2682E+005
	723.30	19.70	3.1728E+005		2.4214E+005
	756.87	4.33	1.3703E+006		-1.0232E+006
	873.19	11.50	5.0009E+005		5.7526E+005
	996.32	10.30	5.8050E+005		1.0952E+005
	1004.76	17.90	3.1314E+005		-4.8238E+005
	1274.45	35.50	1.5042E+005		2.1033E+004
Eu-155	86.54	30.90	4.3819E+005	4.38E+005	6.7414E+005
	105.31	20.70	5.2747E+005		4.4952E+005
Am-241	59.54	35.90	5.0765E+005	5.08E+005	1.5559E+005
Cm-243	228.19	10.56	6.5537E+005	4.72E+005	-8.5166E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7244E+005	4.72E+005	-1.3254E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:08:27 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 1:53:24 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	290.87	72.68	1.12	1.49E+002	40.02	5.09E+002
m	2	284-	309	300.13	74.99	1.13	3.20E+002	49.31	6.27E+002
F	3	335-	343	338.62	84.61	1.08	9.38E+001	40.97	3.50E+002
F	4	946-	963	954.43	238.58	1.38	1.79E+002	31.65	1.78E+002
F	5	1172-	1188	1180.30	295.05	1.73	8.17E+001	22.75	1.00E+002
F	6	1400-	1413	1406.85	351.69	1.30	6.52E+001	22.29	8.76E+001
F	7	2036-	2051	2042.16	510.53	1.38	5.71E+001	20.56	7.02E+001
F	8	2322-	2340	2331.08	582.77	1.56	9.08E+001	21.69	5.51E+001
F	9	2426-	2444	2435.50	608.88	1.45	9.77E+001	21.93	4.53E+001
F	10	2639-	2650	2645.03	661.26	0.81	3.27E+001	14.40	2.84E+001
F	11	3633-	3653	3642.23	910.59	1.71	8.40E+001	19.84	2.95E+001
F	12	3867-	3880	3873.26	968.35	1.27	3.28E+001	15.09	2.84E+001
F	13	4472-	4486	4478.91	1119.77	1.16	3.09E+001	13.69	1.96E+001
F	14	5827-	5857	5842.01	1460.57	2.12	4.45E+002	40.82	1.11E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.993	511.00*		100.00	6.21953E+004	2.40320E+004
K-40	0.998	1460.81*		10.67	6.74929E+006	8.26152E+005
Cs-137	0.996	661.65*		85.12	4.66807E+004	2.12757E+004
TL-208	0.750	277.35		6.80		
		510.84*		21.60	2.87941E+005	1.13717E+005
		583.14*		84.20	1.24203E+005	3.39108E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.88435E+006	7.18990E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.31489E+005	7.84348E+004
Bi-214	0.708	609.31*		46.30	2.47471E+005	6.35380E+004
		1120.29*		15.10	3.02503E+005	1.37772E+005
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	4.96981E+006	1.29030E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.78397E+005	1.23124E+005
		351.92*		37.20	1.65496E+005	6.29399E+004
Ac-228	0.611	338.32		11.40		
		911.07*		27.70	4.10327E+005	1.07851E+005
		969.11*		16.60	2.74767E+005	1.29562E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.993	3.536750E+004	2.510824E+004
K-40		0.998	6.749288E+006	8.261524E+005
Cs-137		0.996	4.668074E+004	2.127570E+004
TL-208		0.750	1.242029E+005	3.366836E+004
Pb-212	@	0.498	3.314891E+005	7.843481E+004
Bi-214		0.708	2.571231E+005	5.769771E+004
PB-214	@	0.565	2.096044E+005	5.604204E+004
Ac-228		0.611	3.548408E+005	8.289047E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.68	1.6551E-001	26.86
F	3	84.61	1.0420E-001	43.68

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.9866E+004	6.14E+004	2.5247E+004
		1332.49	100.00	6.1372E+004		4.9828E+004
	Nb-94	702.63	100.00	6.1615E+004	6.16E+004	-1.1894E+004
		871.10	100.00	6.2068E+004		4.2083E+004
	Ag-108m	79.20	7.10	2.2119E+006	7.21E+004	-1.1764E+006
		433.93	89.90	7.3843E+004		8.1123E+003
		614.37	90.40	8.7516E+004		-1.8239E+004
		722.95	90.50	7.2148E+004		3.7688E+004
	Sb-125	176.33	6.89	1.1924E+006	2.22E+005	-1.2475E+005
		427.89	29.33	2.2216E+005		2.2956E+004
		463.38	10.35	6.5421E+005		8.5580E+005
		600.56	17.80	3.5173E+005		2.0216E+005
		606.64	5.02	1.6662E+006		2.3891E+006
		635.90	11.32	5.4604E+005		1.2023E+005
	Cs-134	563.23	8.38	7.9822E+005	7.69E+004	5.2237E+005
		569.32	15.43	4.2248E+005		1.2434E+005
		604.70	97.60	8.6335E+004		7.0308E+003
		795.84	85.40	7.6931E+004		2.6045E+004
		801.93	8.73	7.5781E+005		1.3674E+004
+	Cs-137	661.65*	85.12	4.3458E+004	4.35E+004	4.6681E+004
	Eu-152	121.78	28.40	3.4390E+005	2.51E+005	-3.7128E+005
		244.69	7.49	1.0032E+006		-1.9799E+005
		344.27	26.50	2.5132E+005		-2.8438E+005
		778.89	12.74	4.8401E+005		2.4886E+005
		867.32	4.16	1.4253E+006		-3.8042E+006
		964.01	14.40	5.3295E+005		1.3167E+005
		1085.78	10.00	5.5627E+005		-4.1542E+005
		1112.02	13.30	4.6428E+005		-5.4728E+004
		1407.95	20.70	2.5680E+005		1.5350E+005
	Eu-154	123.07	40.50	2.4495E+005	1.52E+005	-1.0280E+004
		247.94	6.60	1.0853E+006		-3.3033E+005
		591.81	4.83	1.2092E+006		-8.4658E+005
		723.30	19.70	3.3010E+005		9.6115E+004
		756.87	4.33	1.3385E+006		-8.7323E+005
		873.19	11.50	5.2566E+005		-1.3816E+005
		996.32	10.30	6.1913E+005		5.9867E+005
		1004.76	17.90	3.3260E+005		-1.2869E+005
		1274.45	35.50	1.5246E+005		-8.2491E+003
	Eu-155	86.54	30.90	4.5753E+005	4.58E+005	3.5736E+005
		105.31	20.70	5.4063E+005		-4.8283E+005
	Am-241	59.54	35.90	4.9253E+005	4.93E+005	2.0826E+005
	Cm-243	228.19	10.56	7.6067E+005	5.18E+005	2.1059E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1832E+005	5.18E+005	4.4067E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 11:40:13 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 11:25:11 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	314	291.57	72.85	1.09	2.36E+002	42.59	5.34E+002
m	2	282-	314	300.48	75.08	1.10	4.05E+002	50.44	5.54E+002
m	3	282-	314	308.96	77.20	1.10	9.14E+001	37.10	5.34E+002
F	4	333-	344	339.19	84.76	1.07	1.31E+002	42.65	4.83E+002
F	5	948-	959	953.61	238.37	1.13	1.46E+002	30.96	1.33E+002
F	6	1174-	1188	1179.21	294.78	1.08	6.48E+001	22.09	9.70E+001
F	7	1399-	1415	1406.79	351.68	1.35	9.35E+001	22.70	7.48E+001
F	8	2034-	2048	2041.63	510.40	1.64	5.93E+001	20.55	6.81E+001
F	9	2322-	2337	2330.20	582.55	1.48	9.34E+001	21.07	3.41E+001
F	10	2426-	2444	2435.00	608.75	1.70	1.16E+002	22.06	3.03E+001
F	11	3634-	3651	3642.37	910.62	1.47	6.99E+001	19.83	3.92E+001
F	12	3865-	3879	3872.37	968.12	1.57	3.38E+001	15.28	2.63E+001
F	13	5826-	5854	5839.89	1460.05	2.12	4.59E+002	41.38	7.25E+000
F	14	7048-	7061	7054.62	1763.75	1.25	2.40E+001	11.47	8.52E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.989	511.00*		100.00	6.45556E+004	2.41404E+004
K-40	0.983	1460.81*		10.67	6.97071E+006	8.44389E+005
TL-208	0.745	277.35		6.80		
		510.84*		21.60	2.98869E+005	1.14395E+005
		583.14*		84.20	1.27761E+005	3.34051E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	3.64261E+006	8.46029E+005
		77.11*	@	18.00	4.75141E+005	2.14174E+005
		87.30	@	8.00		
		238.63*		44.60	2.70199E+005	7.13819E+004
Bi-214	0.695	609.31*		46.30	2.93784E+005	6.68071E+004
		1120.29		15.10		
		1764.49*		15.80	2.61304E+005	1.27747E+005
PB-214	0.758	74.82*	@	6.21	6.27632E+006	1.52727E+006
		77.11*	@	10.50	8.14527E+005	3.72158E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.00048E+005	1.14078E+005
		351.92*		37.20	2.37091E+005	6.98998E+004
Ac-228	0.608	338.32		11.40		
		911.07*		27.70	3.41386E+005	1.04576E+005
		969.11*		16.60	2.82455E+005	1.31261E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.989	3.695925E+004	2.517961E+004
K-40		0.983	6.970711E+006	8.443892E+005
TL-208		0.745	1.277610E+005	3.314465E+004
Pb-212	@	0.837	2.701987E+005	7.138186E+004
Bi-214		0.695	2.868086E+005	5.920043E+004
PB-214	@	0.758	2.542761E+005	5.960099E+004
Ac-228		0.608	3.185042E+005	8.179141E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.85	2.6206E-001	18.06
F 4	84.76	1.4502E-001	32.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	8.0901E+004	6.93E+004	1.8407E+004
	1332.49	100.00	6.9256E+004		9.0877E+003
Nb-94	702.63	100.00	6.4405E+004	6.17E+004	-2.6822E+004
	871.10	100.00	6.1739E+004		3.2299E+004
Ag-108m	79.20	7.10	2.2757E+006	7.48E+004	2.7108E+005
	433.93	89.90	7.4814E+004		-9.3214E+003
	614.37	90.40	8.2558E+004		-1.6994E+004
	722.95	90.50	7.7395E+004		1.0404E+005
Sb-125	176.33	6.89	1.2044E+006	2.07E+005	1.3982E+005
	427.89	29.33	2.0712E+005		1.8222E+005
	463.38	10.35	6.8346E+005		-4.7565E+005
	600.56	17.80	3.9239E+005		2.8894E+005
	606.64	5.02	1.7204E+006		1.7846E+006
	635.90	11.32	5.5068E+005		3.0983E+005
Cs-134	563.23	8.38	7.7438E+005	8.03E+004	3.9947E+005
	569.32	15.43	3.9825E+005		-1.8661E+005
	604.70	97.60	9.0712E+004		3.3441E+004
	795.84	85.40	8.0258E+004		3.2637E+004
	801.93	8.73	7.8711E+005		4.0520E+005
Cs-137	661.65	85.12	8.5219E+004	8.52E+004	7.3192E+004
Eu-152	121.78	28.40	3.6632E+005	2.63E+005	-5.5316E+004
	244.69	7.49	1.0530E+006		-1.0605E+006
	344.27	26.50	2.6280E+005		-1.8888E+005
	778.89	12.74	5.0285E+005		-2.5109E+005
	867.32	4.16	1.4820E+006		-2.5086E+005
	964.01	14.40	5.5618E+005		6.3539E+005
	1085.78	10.00	5.5627E+005		-7.9123E+005
	1112.02	13.30	4.7932E+005		-7.3486E+005
	1407.95	20.70	2.9250E+005		3.1312E+005
Eu-154	123.07	40.50	2.5602E+005	1.68E+005	-1.3210E+005
	247.94	6.60	1.0952E+006		-3.5178E+005
	591.81	4.83	1.3234E+006		3.5920E+005
	723.30	19.70	3.5560E+005		3.6972E+005
	756.87	4.33	1.4788E+006		-7.1005E+005
	873.19	11.50	5.2566E+005		-3.5126E+005
	996.32	10.30	6.7533E+005		1.1263E+005
	1004.76	17.90	3.7699E+005		3.9798E+004
	1274.45	35.50	1.6774E+005		-1.1562E+005
Eu-155	86.54	30.90	4.7160E+005	4.72E+005	5.4418E+005
	105.31	20.70	5.5823E+005		1.4919E+005
Am-241	59.54	35.90	4.9949E+005	4.99E+005	-1.5676E+005
Cm-243	228.19	10.56	7.3853E+005	5.17E+005	-1.2025E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1749E+005	5.17E+005	-9.3358E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 1:04:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 12:49:24 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	304	300.81	75.16	1.15	1.72E+002	49.64	5.41E+002
F	2	946-	961	953.68	238.39	1.18	1.24E+002	31.48	2.31E+002
F	3	1402-	1413	1406.81	351.68	0.90	4.39E+001	19.81	7.46E+001
F	4	2322-	2339	2330.55	582.64	1.58	8.60E+001	20.73	4.56E+001
F	5	2428-	2443	2435.08	608.77	1.37	6.99E+001	20.79	5.34E+001
F	6	3634-	3652	3642.23	910.58	1.74	6.49E+001	18.45	3.21E+001
F	7	5827-	5855	5840.37	1460.17	2.08	4.61E+002	41.92	1.79E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.988	1460.81*	10.67	6.93962E+006	8.45252E+005
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.16344E+005	3.19834E+004
		860.37	12.46		
Pb-212	0.495	74.81* @	10.70	1.51484E+006	5.27832E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.27964E+005	6.78883E+004
Bi-214	0.414	609.31*	46.30	1.74988E+005	5.64407E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.988	6.939618E+006	8.452517E+005
TL-208		0.466	1.163445E+005	3.198341E+004
Pb-212	@	0.495	2.279636E+005	6.788828E+004
Bi-214		0.414	1.749878E+005	5.644068E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	351.68	4.8743E-002	45.16
F	6	910.58	7.2101E-002	28.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9053E+004	5.12E+004	3.5012E+004
	1332.49	100.00	5.1186E+004		-3.5216E+004
Nb-94	702.63	100.00	6.2223E+004	6.22E+004	-1.6862E+004
	871.10	100.00	6.3229E+004		2.4341E+004
Ag-108m	79.20	7.10	2.3096E+006	7.03E+004	-4.6031E+006
	433.93	89.90	7.1740E+004		4.8445E+004
	614.37	90.40	8.5166E+004		1.9477E+004
	722.95	90.50	7.0332E+004		-4.5901E+003
Sb-125	176.33	6.89	1.1379E+006	2.11E+005	-1.6966E+005
	427.89	29.33	2.1068E+005		3.9662E+004
	463.38	10.35	6.1848E+005		-4.1335E+005
	600.56	17.80	3.5980E+005		-8.0698E+004
	606.64	5.02	1.6357E+006		1.8250E+006
	635.90	11.32	4.9349E+005		3.4666E+005
Cs-134	563.23	8.38	7.4443E+005	7.22E+004	-3.0401E+005
	569.32	15.43	4.0458E+005		3.0211E+004
	604.70	97.60	8.4208E+004		4.6198E+002
	795.84	85.40	7.2179E+004		6.5373E+004
	801.93	8.73	6.3423E+005		-8.1845E+005
Cs-137	661.65	85.12	7.9146E+004	7.91E+004	8.7234E+004
Eu-152	121.78	28.40	3.5201E+005	2.47E+005	-1.5785E+005
	244.69	7.49	1.0690E+006		-9.7074E+005
	344.27	26.50	2.4723E+005		-3.7837E+005
	778.89	12.74	4.9886E+005		-2.2743E+005
	867.32	4.16	1.5327E+006		-1.3832E+006
	964.01	14.40	5.5776E+005		6.4807E+005
	1085.78	10.00	6.7424E+005		5.8984E+005
	1112.02	13.30	5.0692E+005		-1.2075E+006
	1407.95	20.70	2.5473E+005		9.2248E+004
Eu-154	123.07	40.50	2.4755E+005	1.56E+005	-2.1968E+004
	247.94	6.60	1.1427E+006		-2.7029E+005
	591.81	4.83	1.2429E+006		4.5351E+005
	723.30	19.70	3.2867E+005		2.3268E+005
	756.87	4.33	1.4928E+006		-6.3449E+005
	873.19	11.50	5.3360E+005		2.2412E+005
	996.32	10.30	5.8850E+005		4.9833E+005
	1004.76	17.90	3.0486E+005		-1.9818E+005
	1274.45	35.50	1.5552E+005		-1.8509E+005
Eu-155	86.54	30.90	4.5699E+005	4.57E+005	5.0725E+005
	105.31	20.70	5.5827E+005		3.2017E+005
Am-241	59.54	35.90	4.9612E+005	4.96E+005	-2.6528E+005
Cm-243	228.19	10.56	7.0619E+005	5.24E+005	3.4427E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2414E+005	5.24E+005	2.8834E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 12:00:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 11:45:21 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	292.01	72.96	0.86	1.53E+002	40.56	5.19E+002
m	2	285-	305	300.42	75.06	0.86	2.83E+002	49.97	5.60E+002
F	3	948-	960	953.96	238.46	1.02	1.40E+002	29.85	1.32E+002
F	4	1344-	1357	1351.97	337.97	0.59	2.93E+001	15.90	8.05E+001
F	5	1399-	1414	1406.47	351.60	1.38	1.12E+002	24.75	8.21E+001
F	6	2030-	2050	2041.26	510.31	1.91	1.01E+002	21.29	5.26E+001
F	7	2324-	2339	2331.38	582.84	1.45	8.10E+001	20.42	4.07E+001
F	8	2427-	2442	2435.44	608.86	1.44	8.95E+001	21.84	4.80E+001
F	9	2742-	2753	2746.75	686.70	1.19	1.46E+001	11.73	2.18E+001
F	10	3634-	3650	3642.35	910.61	1.64	6.32E+001	17.79	2.35E+001
F	11	3867-	3881	3873.09	968.30	1.48	3.45E+001	16.00	3.16E+001
F	12	5828-	5854	5840.46	1460.19	1.99	4.77E+002	42.75	1.91E+001
F	13	7048-	7061	7054.85	1763.81	1.80	2.44E+001	10.72	3.47E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*		100.00	1.10237E+005	2.78726E+004
K-40	0.988	1460.81*		10.67	7.24609E+006	8.74759E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	5.10358E+005	1.35604E+005
		583.14*		84.20	1.10811E+005	3.15484E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.54510E+006	6.71675E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.60182E+005	6.87860E+004
Bi-214	0.698	609.31*		46.30	2.26748E+005	6.21315E+004
		1120.29		15.10		
		1764.49*		15.80	2.65680E+005	1.19904E+005
Ac-228	0.990	338.32*		11.40	2.39625E+005	1.35204E+005
		911.07*		27.70	3.08581E+005	9.39265E+004
		969.11*		16.60	2.89132E+005	1.37275E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	8.630212E+004	2.868293E+004
K-40		0.988	7.246090E+006	8.747587E+005
TL-208		0.750	1.108111E+005	3.134103E+004
Pb-212	@	0.497	2.601820E+005	6.878600E+004
Bi-214		0.698	2.349886E+005	5.516527E+004
Ac-228		0.990	2.868540E+005	6.724890E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	1.6976E-001	26.55
F 5	351.60	1.2464E-001	22.07
F 9	686.70	1.6180E-002	80.56

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4812E+004	5.28E+004	3.8797E+004
	1332.49	100.00	5.2765E+004		6.9160E+004
Nb-94	702.63	100.00	6.2466E+004	5.94E+004	1.3018E+003
	871.10	100.00	5.9379E+004		-6.1010E+004
Ag-108m	79.20	7.10	2.2388E+006	7.21E+004	-2.6437E+006
	433.93	89.90	7.2061E+004		-7.5401E+004
	614.37	90.40	8.5747E+004		-6.3170E+004
	722.95	90.50	7.2751E+004		9.2819E+004
Sb-125	176.33	6.89	1.1602E+006	2.07E+005	5.6729E+005
	427.89	29.33	2.0712E+005		8.4555E+003
	463.38	10.35	6.7329E+005		5.4997E+005
	600.56	17.80	3.3164E+005		-7.5359E+004
	606.64	5.02	1.6252E+006		2.0843E+006
	635.90	11.32	5.7108E+005		-3.2461E+005
Cs-134	563.23	8.38	7.0961E+005	6.75E+004	7.6109E+004
	569.32	15.43	3.7900E+005		-1.0901E+005
	604.70	97.60	8.3285E+004		-1.0976E+004
	795.84	85.40	6.7467E+004		6.6420E+003
	801.93	8.73	7.0252E+005		-9.1011E+005
Cs-137	661.65	85.12	7.1605E+004	7.16E+004	-8.5180E+003
Eu-152	121.78	28.40	3.5057E+005	2.43E+005	-2.4475E+004
	244.69	7.49	1.0073E+006		-3.8821E+005
	344.27	26.50	2.4566E+005		1.3951E+004
	778.89	12.74	4.8641E+005		-2.5253E+005
	867.32	4.16	1.4977E+006		6.0994E+005
	964.01	14.40	5.5238E+005		-4.9299E+005
	1085.78	10.00	5.4729E+005		-4.3807E+005
	1112.02	13.30	4.7932E+005		-9.2398E+005
	1407.95	20.70	2.4267E+005		-1.6378E+005
Eu-154	123.07	40.50	2.4350E+005	1.55E+005	-2.5570E+004
	247.94	6.60	1.0902E+006		-5.9623E+005
	591.81	4.83	1.1816E+006		1.4400E+005
	723.30	19.70	3.3427E+005		9.0554E+004
	756.87	4.33	1.4035E+006		8.0766E+005
	873.19	11.50	5.2271E+005		3.7850E+005
	996.32	10.30	5.6075E+005		2.3892E+004
	1004.76	17.90	3.2383E+005		-3.6377E+004
	1274.45	35.50	1.5536E+005		-1.6109E+005
Eu-155	86.54	30.90	4.5421E+005	4.54E+005	5.5622E+005
	105.31	20.70	5.5307E+005		1.3065E+005
Am-241	59.54	35.90	4.9667E+005	4.97E+005	2.6653E+005
Cm-243	228.19	10.56	7.1289E+005	4.79E+005	-7.4099E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7919E+005	4.79E+005	-5.6550E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 2:37:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-09-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 2:22:22 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-09-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.46	72.82	0.96	1.29E+002	38.70	4.99E+002
m	2	285-	306	300.17	75.00	0.96	2.46E+002	49.42	6.09E+002
M	3	322-	357	326.56	81.60	1.00	6.68E+001	33.55	3.37E+002
m	4	322-	357	339.16	84.75	1.01	1.23E+002	38.43	5.00E+002
F	5	945-	962	954.30	238.55	0.98	1.40E+002	29.50	1.73E+002
F	6	1346-	1359	1352.62	338.14	1.44	4.93E+001	19.06	6.35E+001
F	7	1400-	1412	1407.05	351.74	0.98	9.10E+001	23.58	6.98E+001
F	8	2032-	2053	2043.24	510.80	1.93	1.11E+002	22.36	6.27E+001
F	9	2322-	2338	2331.69	582.92	1.39	7.85E+001	21.07	5.33E+001
F	10	2426-	2444	2435.82	608.96	1.40	9.57E+001	21.79	4.98E+001
F	11	3432-	3443	3437.89	859.49	0.98	1.58E+001	10.42	1.35E+001
F	12	3635-	3651	3642.92	910.76	1.58	6.15E+001	18.00	2.53E+001
F	13	4473-	4486	4478.98	1119.79	0.85	2.17E+001	11.09	1.51E+001
F	14	5828-	5855	5842.18	1460.62	2.14	4.07E+002	39.13	1.40E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.20429E+005	2.96430E+004
K-40	0.999	1460.81*		10.67	6.17643E+006	7.76457E+005
TL-208	0.897	277.35		6.80		
		510.84*		21.60	5.57543E+005	1.44593E+005
		583.14*		84.20	1.07333E+005	3.21264E+004
		860.37*		12.46	1.68399E+005	1.12787E+005
Pb-212	0.497	74.81*	@	10.70	2.21228E+006	6.21436E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.59919E+005	6.82511E+004
Bi-214	0.710	609.31*		46.30	2.42637E+005	6.29468E+004
		1120.29*		15.10	2.12470E+005	1.10815E+005
		1764.49		15.80		
Ac-228	0.545	338.32*		11.40	4.03104E+005	1.68017E+005
		911.07*		27.70	3.00644E+005	9.45063E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	9.626422E+004	3.037684E+004
K-40		0.999	6.176426E+006	7.764570E+005
TL-208		0.897	1.118753E+005	3.072463E+004
Pb-212	@	0.497	2.599193E+005	6.825108E+004
Bi-214		0.710	2.352779E+005	5.473290E+004
Ac-228		0.545	3.252698E+005	8.237009E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	1.4373E-001	29.92
M 3	81.60	7.4252E-002	50.20
m 4	84.75	1.3717E-001	31.13
F 7	351.74	1.0114E-001	25.91

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4812E+004	4.75E+004	3.7958E+004
	1332.49	100.00	4.7520E+004		-2.0771E+003
Nb-94	702.63	100.00	6.3026E+004	5.69E+004	4.2146E+004
	871.10	100.00	5.6914E+004		8.6846E+003
Ag-108m	79.20	7.10	2.2331E+006	7.00E+004	4.1070E+005
	433.93	89.90	7.0025E+004		3.0531E+004
	614.37	90.40	8.8818E+004		-3.6489E+004
	722.95	90.50	7.6831E+004		1.7288E+004
Sb-125	176.33	6.89	1.1236E+006	2.04E+005	-8.7976E+005
	427.89	29.33	2.0450E+005		1.3591E+005
	463.38	10.35	6.3816E+005		2.2725E+005
	600.56	17.80	3.3896E+005		-7.6471E+005
	606.64	5.02	1.6772E+006		3.6735E+006
	635.90	11.32	4.4534E+005		-6.0436E+005
Cs-134	563.23	8.38	7.2996E+005	6.94E+004	2.6754E+005
	569.32	15.43	3.9353E+005		9.2538E+003
	604.70	97.60	8.5205E+004		-2.0405E+004
	795.84	85.40	6.9394E+004		-1.2952E+005
	801.93	8.73	6.5782E+005		-7.7006E+005
Cs-137	661.65	85.12	7.1930E+004	7.19E+004	5.6403E+004
Eu-152	121.78	28.40	3.5488E+005	2.40E+005	-6.6726E+004
	244.69	7.49	9.9900E+005		3.2005E+004
	344.27	26.50	2.3985E+005		-6.9529E+004
	778.89	12.74	4.5675E+005		-3.3831E+005
	867.32	4.16	1.3487E+006		-5.5150E+005
	964.01	14.40	5.5047E+005		6.8129E+005
	1085.78	10.00	5.9906E+005		1.8371E+005
	1112.02	13.30	4.6733E+005		-2.6176E+005
	1407.95	20.70	2.6753E+005		1.3690E+005
Eu-154	123.07	40.50	2.5012E+005	1.57E+005	-2.0808E+004
	247.94	6.60	1.1180E+006		-3.6979E+005
	591.81	4.83	1.3381E+006		4.2508E+005
	723.30	19.70	3.5040E+005		2.5478E+005
	756.87	4.33	1.4035E+006		6.9532E+005
	873.19	11.50	4.9843E+005		3.2861E+005
	996.32	10.30	5.4907E+005		6.7999E+004
	1004.76	17.90	3.1935E+005		-1.9710E+003
	1274.45	35.50	1.5678E+005		-1.4533E+005
Eu-155	86.54	30.90	4.5421E+005	4.54E+005	6.3116E+004
	105.31	20.70	5.3047E+005		-2.7536E+005
Am-241	59.54	35.90	4.9175E+005	4.92E+005	2.5383E+005
Cm-243	228.19	10.56	7.0539E+005	4.78E+005	-3.7178E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7828E+005	4.78E+005	-6.6479E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 2:59:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-09-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 2:44:32 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-09-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	292.26	72.92	1.00	1.22E+002	40.24	5.05E+002
m	2	287-	307	300.39	74.95	1.01	2.80E+002	50.88	6.31E+002
F	3	332-	344	339.67	84.81	1.12	1.16E+002	41.16	4.49E+002
F	4	949-	962	954.63	238.98	0.98	1.48E+002	31.22	1.56E+002
F	5	1174-	1185	1179.33	295.26	0.90	4.29E+001	20.07	8.07E+001
F	6	1398-	1415	1407.03	352.28	1.40	1.32E+002	26.08	8.34E+001
F	7	2034-	2051	2042.49	511.29	1.37	7.24E+001	21.66	7.80E+001
F	8	2323-	2339	2332.06	583.70	1.60	7.88E+001	20.02	4.04E+001
F	9	2429-	2444	2435.72	609.62	1.36	1.14E+002	24.44	5.41E+001
F	10	3636-	3651	3643.73	911.39	1.39	7.30E+001	19.06	2.54E+001
F	11	5828-	5854	5841.68	1459.80	1.97	4.32E+002	40.46	1.68E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	7.60814E+004	2.51354E+004
K-40	0.969	1460.81*		10.67	6.29663E+006	7.79770E+005
TL-208	0.745	277.35		6.80		
		510.84*		21.60	3.52229E+005	1.19870E+005
		583.14*		84.20	1.03404E+005	2.96163E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.44816E+006	6.54271E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.67419E+005	7.02210E+004
Bi-214	0.416	609.31*		46.30	2.76770E+005	6.86011E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	4.21825E+006	1.16817E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.93144E+005	9.60038E+004
		351.92*		37.20	3.24525E+005	8.41082E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	5.374616E+004	2.592650E+004
K-40		0.969	6.296627E+006	7.797702E+005
TL-208		0.745	1.034040E+005	2.942400E+004
Pb-212	@	0.495	2.674193E+005	7.022097E+004
Bi-214		0.416	2.767703E+005	6.860114E+004
PB-214	@	0.564	2.674742E+005	6.326362E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	1.3558E-001	32.98
F 3	84.81	1.2873E-001	35.52
F 10	911.39	8.1113E-002	26.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M).
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8073E+004	4.79E+004	3.4294E+004
	1332.49	100.00	4.7936E+004		6.8978E+003
Nb-94	702.63	100.00	5.4498E+004	5.45E+004	-3.0340E+004
	871.10	100.00	5.5500E+004		5.0370E+004
Ag-108m	79.20	7.10	2.0456E+006	6.23E+004	-1.6417E+005
	433.93	89.90	6.2323E+004		-5.3400E+004
	614.37	90.40	9.3421E+004		2.6180E+004
	722.95	90.50	6.8188E+004		4.0801E+004
Sb-125	176.33	6.89	1.0517E+006	1.86E+005	4.3390E+005
	427.89	29.33	1.8597E+005		7.1060E+004
	463.38	10.35	5.7618E+005		-7.7780E+005
	600.56	17.80	3.0461E+005		-3.8396E+005
	606.64	5.02	1.7204E+006		3.6103E+006
	635.90	11.32	4.7502E+005		-1.4025E+005
Cs-134	563.23	8.38	6.6428E+005	6.68E+004	1.4697E+004
	569.32	15.43	3.6225E+005		-1.2068E+005
	604.70	97.60	8.6007E+004		-6.9164E+004
	795.84	85.40	6.6798E+004		-5.6750E+004
	801.93	8.73	6.7233E+005		-3.4859E+005
Cs-137	661.65	85.12	7.8128E+004	7.81E+004	1.1529E+005
Eu-152	121.78	28.40	3.3114E+005	2.19E+005	-2.0436E+005
	244.69	7.49	1.0127E+006		9.3776E+005
	344.27	26.50	2.5467E+005		-1.5313E+005
	778.89	12.74	4.4939E+005		-1.4461E+005
	867.32	4.16	1.3871E+006		-7.4614E+005
	964.01	14.40	5.2638E+005		6.9612E+005
	1085.78	10.00	5.3604E+005		-5.9731E+004
	1112.02	13.30	4.8593E+005		-1.7017E+005
	1407.95	20.70	2.1858E+005		-3.5387E+004
Eu-154	123.07	40.50	2.3321E+005	1.61E+005	3.8284E+004
	247.94	6.60	1.0672E+006		-1.1503E+006
	591.81	4.83	1.1641E+006		6.4711E+005
	723.30	19.70	3.1196E+005		1.4303E+005
	756.87	4.33	1.2893E+006		2.3480E+005
	873.19	11.50	4.4667E+005		-7.8362E+004
	996.32	10.30	5.4213E+005		2.0871E+005
	1004.76	17.90	3.2342E+005		6.2477E+004
	1274.45	35.50	1.6093E+005		8.3721E+003
Eu-155	86.54	30.90	4.3630E+005	4.36E+005	7.8297E+005
	105.31	20.70	5.0107E+005		1.5048E+005
Am-241	59.54	35.90	4.6898E+005	4.69E+005	1.4047E+005
Cm-243	228.19	10.56	6.7799E+005	4.93E+005	6.7344E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9280E+005	4.93E+005	1.6736E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 2:40:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-09-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 2:25:57 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-09-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	313	291.97	72.84	0.93	1.47E+002	40.90	4.99E+002
m	2	286-	313	300.19	74.90	0.94	3.53E+002	50.46	4.57E+002
m	3	286-	313	308.54	77.00	0.94	1.13E+002	36.85	4.17E+002
F	4	948-	960	954.28	238.89	1.12	1.17E+002	28.77	1.27E+002
F	5	1174-	1186	1179.70	295.36	1.29	5.63E+001	22.56	9.05E+001
F	6	1400-	1415	1406.75	352.21	1.28	1.38E+002	26.86	7.73E+001
F	7	2031-	2052	2042.04	511.18	1.84	1.06E+002	21.87	5.39E+001
F	8	2321-	2338	2330.94	583.42	1.82	7.82E+001	19.67	4.03E+001
F	9	2427-	2444	2435.61	609.59	1.62	1.32E+002	24.00	3.34E+001
F	10	3633-	3651	3643.02	911.21	1.91	7.77E+001	18.24	1.66E+001
F	11	3865-	3880	3872.10	968.40	1.56	3.43E+001	14.85	2.42E+001
F	12	4474-	4486	4479.77	1120.05	1.50	3.17E+001	14.35	1.77E+001
F	13	5829-	5854	5841.32	1459.71	2.07	4.21E+002	39.97	2.11E+001
F	14	7050-	7063	7056.80	1762.91	2.05	3.84E+001	13.10	5.16E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.11003E+005	2.77502E+004
K-40	0.964	1460.81*		10.67	6.13907E+006	7.65992E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	5.13903E+005	1.35154E+005
		583.14*		84.20	1.02667E+005	2.91640E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	3.08407E+006	7.48510E+005
		77.11*	@	18.00	5.70930E+005	2.17353E+005
		87.30	@	8.00		
		238.63*		44.60	2.11791E+005	6.16135E+004
Bi-214	0.983	609.31*		46.30	3.20509E+005	7.05929E+004
		1120.29*		15.10	2.97222E+005	1.38065E+005
		1764.49*		15.80	4.03132E+005	1.43138E+005
PB-214	0.759	74.82*	@	6.21	5.31394E+006	1.34616E+006
		77.11*	@	10.50	9.78737E+005	3.79704E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.53494E+005	1.10118E+005
		351.92*		37.20	3.40370E+005	8.72954E+004
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	3.61262E+005	9.44507E+004
		969.11*		16.60	2.73248E+005	1.21877E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.882693E+004	2.844705E+004
K-40		0.964	6.139067E+006	7.659925E+005
TL-208		0.751	1.026668E+005	2.897148E+004
Pb-212	@	0.837	2.117910E+005	6.161345E+004
Bi-214		0.983	3.298193E+005	5.754956E+004
PB-214	@	0.759	3.068438E+005	6.840781E+004
Ac-228		0.618	3.282365E+005	7.465641E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.6385E-001	27.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1310E+004	5.07E+004	-5.2017E+004
	1332.49	100.00	5.0662E+004		1.8865E+003
Nb-94	702.63	100.00	5.9556E+004	5.62E+004	3.9895E+004
	871.10	100.00	5.6163E+004		1.2252E+004
Ag-108m	79.20	7.10	2.0976E+006	6.34E+004	-1.0508E+006
	433.93	89.90	6.3412E+004		-1.9056E+003
	614.37	90.40	8.9993E+004		-3.8855E+004
	722.95	90.50	6.5513E+004		7.5735E+003
Sb-125	176.33	6.89	1.0784E+006	2.00E+005	-1.4325E+005
	427.89	29.33	2.0046E+005		1.0877E+005
	463.38	10.35	5.8737E+005		-1.0658E+005
	600.56	17.80	3.3288E+005		-7.4154E+004
	606.64	5.02	1.6776E+006		2.5352E+006
	635.90	11.32	4.9664E+005		1.2125E+005
Cs-134	563.23	8.38	6.5843E+005	6.96E+004	-3.0061E+005
	569.32	15.43	3.6855E+005		1.9514E+005
	604.70	97.60	8.6179E+004		9.1271E+003
	795.84	85.40	6.9594E+004		-1.7428E+004
	801.93	8.73	6.3001E+005		-4.5235E+005
Cs-137	661.65	85.12	7.8397E+004	7.84E+004	6.9302E+004
Eu-152	121.78	28.40	3.4432E+005	1.96E+005	2.2768E+005
	244.69	7.49	9.2635E+005		-8.1947E+005
	344.27	26.50	2.3405E+005		-4.3299E+005
	778.89	12.74	4.3987E+005		-9.7030E+005
	867.32	4.16	1.3482E+006		-1.6260E+006
	964.01	14.40	4.8068E+005		5.2900E+005
	1085.78	10.00	5.7270E+005		-2.0218E+005
	1112.02	13.30	5.3632E+005		-5.1041E+005
	1407.95	20.70	1.9628E+005		-6.5979E+004
Eu-154	123.07	40.50	2.3708E+005	1.62E+005	-9.6305E+004
	247.94	6.60	9.6478E+005		-1.1867E+006
	591.81	4.83	1.3331E+006		9.2181E+005
	723.30	19.70	3.0653E+005		1.8176E+005
	756.87	4.33	1.2823E+006		-3.5475E+005
	873.19	11.50	4.9728E+005		-3.0332E+005
	996.32	10.30	5.1228E+005		-3.1871E+005
	1004.76	17.90	2.9367E+005		-2.6056E+005
	1274.45	35.50	1.6219E+005		9.8355E+004
Eu-155	86.54	30.90	4.3837E+005	4.38E+005	9.3491E+005
	105.31	20.70	5.2448E+005		-1.9100E+005
Am-241	59.54	35.90	4.7304E+005	4.73E+005	-4.0668E+004
Cm-243	228.19	10.56	6.9806E+005	4.66E+005	-7.3829E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6633E+005	4.66E+005	-4.2793E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/25/2005 3:17:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-09-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/25/2005 3:02:51 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-09-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	306	300.43	74.96	0.69	2.21E+002	49.12	6.62E+002
F	2	335-	345	339.31	84.72	0.81	8.68E+001	38.98	4.23E+002
F	3	947-	959	953.84	238.78	1.04	1.55E+002	32.53	1.56E+002
F	4	1172-	1184	1179.55	295.32	1.28	6.44E+001	23.40	9.52E+001
F	5	1396-	1411	1406.51	352.15	1.21	1.03E+002	24.44	7.52E+001
F	6	2031-	2048	2041.86	511.13	1.47	1.05E+002	24.23	7.80E+001
F	7	2323-	2340	2331.06	583.45	1.47	9.86E+001	21.89	4.30E+001
F	8	2428-	2445	2435.58	609.58	1.21	1.35E+002	25.11	4.59E+001
F	9	3635-	3652	3642.52	911.09	1.42	7.44E+001	18.96	2.37E+001
F	10	3868-	3881	3874.67	969.04	1.13	3.40E+001	16.20	3.59E+001
F	11	4470-	4487	4478.81	1119.81	1.70	5.01E+001	15.66	1.56E+001
F	12	5828-	5854	5841.74	1459.81	2.01	4.68E+002	41.91	1.35E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.09925E+005	2.97587E+004
K-40	0.970	1460.81*		10.67	6.82857E+006	8.24067E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	5.08910E+005	1.43904E+005
		583.14*		84.20	1.29447E+005	3.34349E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.93133E+006	5.72367E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.78997E+005	7.31929E+004
Bi-214	0.711	609.31*		46.30	3.26438E+005	7.32322E+004
		1120.29*		15.10	4.68676E+005	1.54832E+005
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	3.32773E+006	1.01536E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.89903E+005	1.16050E+005
		351.92*		37.20	2.53665E+005	7.36655E+004
Ac-228	0.623	338.32		11.40		
		911.07*		27.70	3.46019E+005	9.67189E+004
		969.11*		16.60	2.71206E+005	1.32367E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.196408E+004	3.060896E+004
K-40		0.970	6.828573E+006	8.240674E+005
TL-208		0.750	1.294471E+005	3.316770E+004
Pb-212	@	0.497	2.789968E+005	7.319290E+004
Bi-214		0.711	3.524410E+005	6.620078E+004
PB-214	@	0.565	2.640726E+005	6.219348E+004
Ac-228		0.623	3.199789E+005	7.809303E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 2	84.72	9.6467E-002	44.89

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2091E+004	5.98E+004	-1.1301E+004
	1332.49	100.00	5.9819E+004		4.5797E+004
Nb-94	702.63	100.00	6.5179E+004	5.84E+004	4.1210E+003
	871.10	100.00	5.8422E+004		-4.4897E+003
Ag-108m	79.20	7.10	2.1057E+006	6.59E+004	-3.8158E+005
	433.93	89.90	6.5949E+004		-2.2068E+004
	614.37	90.40	9.3421E+004		-3.2346E+004
	722.95	90.50	7.5620E+004		8.9885E+004
Sb-125	176.33	6.89	1.1134E+006	2.05E+005	-1.1767E+006
	427.89	29.33	2.0546E+005		-5.5210E+004
	463.38	10.35	6.1965E+005		-4.1649E+005
	600.56	17.80	3.4087E+005		-1.4593E+005
	606.64	5.02	1.7366E+006		3.0062E+006
	635.90	11.32	5.5204E+005		-3.9845E+005
Cs-134	563.23	8.38	7.0381E+005	7.67E+004	-2.5967E+004
	569.32	15.43	3.8231E+005		-3.0938E+005
	604.70	97.60	8.9708E+004		1.2895E+004
	795.84	85.40	7.6734E+004		3.7865E+004
	801.93	8.73	6.9576E+005		-5.8894E+005
Cs-137	661.65	85.12	7.7586E+004	7.76E+004	-4.6257E+004
Eu-152	121.78	28.40	3.5276E+005	2.09E+005	9.3412E+003
	244.69	7.49	1.0205E+006		-1.2805E+006
	344.27	26.50	2.5674E+005		-2.5318E+005
	778.89	12.74	4.4227E+005		-6.5339E+005
	867.32	4.16	1.3871E+006		-2.6088E+006
	964.01	14.40	5.4247E+005		3.8860E+005
	1085.78	10.00	5.5265E+005		-9.3297E+005
	1112.02	13.30	5.5513E+005		3.8150E+005
	1407.95	20.70	2.0935E+005		1.1696E+005
Eu-154	123.07	40.50	2.4748E+005	1.54E+005	1.4493E+005
	247.94	6.60	1.0688E+006		-1.8195E+006
	591.81	4.83	1.3012E+006		3.7443E+005
	723.30	19.70	3.4383E+005		2.2410E+005
	756.87	4.33	1.4403E+006		1.1796E+006
	873.19	11.50	5.0841E+005		-2.3814E+005
	996.32	10.30	5.2743E+005		2.1130E+005
	1004.76	17.90	2.9812E+005		-3.1070E+004
	1274.45	35.50	1.5445E+005		-1.0058E+005
Eu-155	86.54	30.90	4.4076E+005	4.41E+005	8.1102E+005
	105.31	20.70	5.2747E+005		1.0255E+005
Am-241	59.54	35.90	4.8895E+005	4.89E+005	4.4331E+004
Cm-243	228.19	10.56	7.1053E+005	4.92E+005	5.8172E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9196E+005	4.92E+005	2.2326E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-10-101-F-G.RPT	TBN-01-10-101-F-G	0.00	26-Oct-05	8:06:19	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49000			65800			56800			5370973
TBN-01-10-102-F-G.RPT	TBN-01-10-102-F-G	0.00	26-Oct-05	8:25:36	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	46800			59300			61700			5580517
TBN-01-10-103-F-G.RPT	TBN-01-10-103-F-G	0.00	26-Oct-05	8:43:13	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	52700			64100			64300			5281476
TBN-01-10-104-F-G.RPT	TBN-01-10-104-F-G	0.00	26-Oct-05	9:51:34	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	50700			69200			61700			5316027
TBN-01-10-105-F-G.RPT	TBN-01-10-105-F-G	0.00	26-Oct-05	10:10:43	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	51200			68000			66200			5331129
TBN-01-10-106-F-G.RPT	TBN-01-10-106-F-G	0.00	26-Oct-05	11:31:29	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	53200			65500			58000			5521850
TBN-01-10-107-F-G.RPT	TBN-01-10-107-F-G	0.00	26-Oct-05	11:13:06	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	43800			64800			60100			5621958
TBN-01-10-108-F-G.RPT	TBN-01-10-108-F-G	0.00	26-Oct-05	10:51:34	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	47900			67700			61200			5448390
TBN-01-10-109-F-G.RPT	TBN-01-10-109-F-G	0.09	26-Oct-05	10:31:34	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	56200			42000	35852.56	19784.57	63800			5885853
TBN-01-10-110-F-G.RPT	TBN-01-10-110-F-G	0.00	26-Oct-05	12:56:08	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	43800			62800			62100			5585629
TBN-01-10-111-F-G.RPT	TBN-01-10-111-F-G	0.00	26-Oct-05	13:19:58	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	45000			71900			61900			5676882
TBN-01-10-112-F-G.RPT	TBN-01-10-112-F-G	0.00	26-Oct-05	13:37:42	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	54700			65800			60100			5211093
TBN-01-10-113-F-G.RPT	TBN-01-10-113-F-G	0.00	26-Oct-05	13:59:32	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	57100			73400			65200			5839052
TBN-01-10-118-F-G.RPT	TBN-01-10-118-F-G	0.00	26-Oct-05	14:21:06	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	47900			73700			64900			6335812
TBN-01-10-117-F-G.RPT	TBN-01-10-117-F-G	0.00	26-Oct-05	14:40:29	900.8	BLUE6279	BLUE_CONC_2M90	dpm/m2	49600			65800			60500			5662775
TBN-01-10-114-F-G.RPT	TBN-01-10-114-F-G	0.00	26-Oct-05	15:26:26	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49000			68300			63400			5903590
TBN-01-10-115-F-G.RPT	TBN-01-10-115-F-G	0.00	26-Oct-05	15:46:18	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	52700			70100			66200			6098389
TBN-01-10-116-F-G.RPT	TBN-01-10-116-F-G	0.00	26-Oct-05	15:04:57	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	43800			67100			64500			5802671
TBN-01-10-119-F-G.RPT	TBN-01-10-119-F-G	0.00	27-Oct-05	16:00:44	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	54000			76100			68100			7729760
TBN-01-10-120-F-G.RPT	TBN-01-10-120-F-G	0.00	27-Oct-05	16:24:15	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	47000			70200			64200			6957758
TBN-01-10-121-F-G.RPT	TBN-01-10-121-F-G	0.00	27-Oct-05	16:43:54	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	45300			57000			55500			4727681
TBN-01-10-125-F-G.RPT	TBN-01-10-125-F-G	0.00	28-Oct-05	8:44:29	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	42800			63500			66100			4394010
TBN-01-10-122-F-G.RPT	TBN-01-10-122-F-G	0.00	27-Oct-05	17:04:52	900.4	BLUE6279	BLUE_CONC_1M90	dpm/m2	47000			64500			59100			4831695
TBN-01-10-124-F-G.RPT	TBN-01-10-124-F-G	0.00	28-Oct-05	7:47:03	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	45900			64800			61400			5485293
TBN-01-10-123-F-G.RPT	TBN-01-10-123-F-G	0.00	28-Oct-05	8:11:15	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	53500			62800			58800			5733331

Report Generated On 10/26/2005 8:21:21 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 8:06:19 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	305	300.22	74.91	0.80	1.46E+002	45.90	5.55E+002
F	2	946-	960	953.48	238.69	1.14	1.19E+002	29.50	1.62E+002
F	3	1399-	1412	1406.06	352.04	1.29	6.00E+001	21.77	8.25E+001
F	4	2032-	2051	2040.44	510.78	2.22	8.23E+001	19.76	4.55E+001
F	5	2322-	2337	2329.71	583.11	1.32	5.91E+001	18.96	4.42E+001
F	6	2425-	2444	2435.35	609.52	1.83	8.69E+001	20.67	4.75E+001
F	7	4472-	4485	4479.04	1119.87	1.29	3.64E+001	13.88	1.22E+001
F	8	5827-	5853	5840.61	1459.53	1.98	3.68E+002	37.68	2.34E+001
F	9	7049-	7063	7055.36	1762.55	1.51	2.59E+001	11.25	5.65E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	8.63990E+004	2.40336E+004
K-40	0.951	1460.81*	10.67	5.37097E+006	7.00670E+005
TL-208	0.753	277.35	6.80		
		510.84*	21.60	3.99995E+005	1.15963E+005
		583.14*	84.20	7.74999E+004	2.69106E+004
		860.37	12.46		
Pb-212	0.498	74.81* @	10.70	1.27320E+006	4.72693E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.14606E+005	6.29530E+004
Bi-214	0.975	609.31*	46.30	2.10972E+005	5.66168E+004
		1120.29*	15.10	3.40933E+005	1.34945E+005
		1764.49*	15.80	2.71731E+005	1.21016E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	6.965901E+004	2.472052E+004
K-40		0.951	5.370973E+006	7.006701E+005
TL-208		0.753	7.749985E+004	2.679181E+004
Pb-212	@	0.498	2.146057E+005	6.295300E+004
Bi-214		0.975	2.369061E+005	4.793719E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	352.04	6.6667E-002	36.28

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4630E+004	4.90E+004	-6.8645E+004
	1332.49	100.00	4.9047E+004		-3.5218E+004
Nb-94	702.63	100.00	5.7086E+004	5.38E+004	8.9671E+003
	871.10	100.00	5.3803E+004		4.4034E+004
Ag-108m	79.20	7.10	1.9586E+006	5.68E+004	-3.4096E+006
	433.93	89.90	5.6789E+004		-9.7210E+004
	614.37	90.40	8.2055E+004		-2.3291E+004
	722.95	90.50	6.4286E+004		6.0536E+001
Sb-125	176.33	6.89	1.0243E+006	1.92E+005	-1.3160E+005
	427.89	29.33	1.9203E+005		2.0050E+004
	463.38	10.35	6.0909E+005		4.5811E+005
	600.56	17.80	3.2880E+005		5.7192E+004
	606.64	5.02	1.5269E+006		1.4014E+006
	635.90	11.32	4.9429E+005		1.1427E+005
Cs-134	563.23	8.38	7.1737E+005	6.61E+004	2.1997E+005
	569.32	15.43	3.5259E+005		3.5896E+005
	604.70	97.60	7.6521E+004		-1.4812E+004
	795.84	85.40	6.6079E+004		-4.8770E+004
	801.93	8.73	5.7241E+005		-6.0644E+005
Cs-137	661.65	85.12	6.5775E+004	6.58E+004	4.3615E+004
Eu-152	121.78	28.40	3.2233E+005	2.19E+005	1.1506E+005
	244.69	7.49	9.4039E+005		-1.0140E+005
	344.27	26.50	2.1938E+005		-4.1642E+005
	778.89	12.74	4.2517E+005		-4.6648E+005
	867.32	4.16	1.2664E+006		-8.3193E+005
	964.01	14.40	4.4964E+005		5.3972E+005
	1085.78	10.00	5.1446E+005		-5.8845E+005
	1112.02	13.30	4.7244E+005		6.5312E+004
	1407.95	20.70	2.2157E+005		9.3538E+004
Eu-154	123.07	40.50	2.2379E+005	1.50E+005	1.5772E+005
	247.94	6.60	9.7884E+005		-1.2604E+006
	591.81	4.83	1.1745E+006		-1.3825E+006
	723.30	19.70	2.9820E+005		4.9379E+004
	756.87	4.33	1.3304E+006		1.5773E+006
	873.19	11.50	4.6520E+005		7.6350E+004
	996.32	10.30	5.8386E+005		3.2553E+004
	1004.76	17.90	3.1935E+005		3.0667E+005
	1274.45	35.50	1.5042E+005		9.6752E+004
Eu-155	86.54	30.90	4.2759E+005	4.28E+005	8.6502E+005
	105.31	20.70	4.9098E+005		-8.9577E+004
Am-241	59.54	35.90	4.6049E+005	4.60E+005	-2.1561E+005
Cm-243	228.19	10.56	6.0856E+005	4.50E+005	-3.1304E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5022E+005	4.50E+005	-3.9178E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 8:40:38 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 8:25:36 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	314	300.11	74.88	0.61	1.68E+002	42.38	7.87E+002
F	2	944-	960	954.02	238.82	1.09	1.42E+002	30.14	1.60E+002
F	3	1398-	1415	1406.80	352.22	1.16	1.15E+002	24.10	6.52E+001
F	4	2032-	2046	2039.37	510.51	1.20	3.69E+001	18.22	6.43E+001
F	5	2322-	2338	2330.45	583.30	1.37	9.84E+001	21.53	3.36E+001
F	6	2426-	2443	2435.03	609.44	1.46	9.14E+001	21.15	3.84E+001
F	7	3635-	3650	3642.41	911.06	1.69	5.60E+001	16.48	1.83E+001
F	8	3868-	3880	3873.08	968.64	0.89	2.96E+001	13.30	1.70E+001
F	9	4472-	4483	4477.43	1119.47	0.72	2.58E+001	12.84	2.46E+001
F	10	5828-	5853	5840.68	1459.55	1.93	3.83E+002	37.88	9.64E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.953	1460.81*	10.67	5.58052E+006	7.13579E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	1.79520E+005	9.32391E+004
		583.14*	84.20	1.29092E+005	3.30133E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.46849E+006	4.69437E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.56254E+005	6.76063E+004
Bi-214	0.710	609.31*	46.30	2.21893E+005	5.82837E+004
		1120.29*	15.10	2.41355E+005	1.22955E+005
		1764.49	15.80		
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	2.60502E+005	8.23060E+004
		969.11*	16.60	2.36118E+005	1.08919E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
X	ANN		0.993		
	K-40		0.953	5.580517E+006	7.135786E+005
	TL-208		0.752	1.347097E+005	3.112018E+004
	Pb-212	@	0.497	2.562543E+005	6.760633E+004
	Bi-214		0.710	2.254639E+005	5.266624E+004
	Ac-228		0.621	2.516391E+005	6.566582E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	352.22	1.2773E-001	20.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.3733E+004	4.68E+004	0.0000E+000
	1332.49	100.00	4.6797E+004		-1.7030E+003
Nb-94	702.63	100.00	5.3002E+004	5.30E+004	-2.9552E+002
	871.10	100.00	5.8737E+004		6.3394E+003
Ag-108m	79.20	7.10	1.9906E+006	6.17E+004	-5.2931E+004
	433.93	89.90	6.1660E+004		-4.9904E+002
	614.37	90.40	7.9667E+004		1.0563E+004
	722.95	90.50	6.6117E+004		5.5455E+002
Sb-125	176.33	6.89	1.0243E+006	1.82E+005	1.0042E+005
	427.89	29.33	1.8180E+005		2.7550E+004
	463.38	10.35	6.1615E+005		1.0267E+005
	600.56	17.80	3.2880E+005		1.2022E+005
	606.64	5.02	1.5415E+006		1.9769E+006
	635.90	11.32	4.9429E+005		3.6732E+004
Cs-134	563.23	8.38	6.9554E+005	6.86E+004	4.6601E+005
	569.32	15.43	3.5906E+005		1.1352E+005
	604.70	97.60	8.0492E+004		1.5017E+004
	795.84	85.40	6.8560E+004		2.3778E+004
	801.93	8.73	6.0386E+005		-6.8654E+005
Cs-137	661.65	85.12	5.9292E+004	5.93E+004	-1.3094E+004
Eu-152	121.78	28.40	3.1653E+005	2.27E+005	-2.8761E+004
	244.69	7.49	9.4039E+005		-2.4164E+005
	344.27	26.50	2.2771E+005		-7.3809E+004
	778.89	12.74	4.3013E+005		-5.0602E+005
	867.32	4.16	1.3717E+006		1.0009E+006
	964.01	14.40	4.7464E+005		2.4885E+005
	1085.78	10.00	5.1446E+005		-5.8755E+005
	1112.02	13.30	5.3392E+005		-7.5594E+004
	1407.95	20.70	2.2741E+005		1.6152E+005
Eu-154	123.07	40.50	2.2243E+005	1.42E+005	1.4299E+005
	247.94	6.60	9.8406E+005		-1.4248E+006
	591.81	4.83	1.1898E+006		8.7197E+005
	723.30	19.70	3.0653E+005		1.1048E+005
	756.87	4.33	1.2823E+006		6.9211E+005
	873.19	11.50	5.0565E+005		-2.4741E+005
	996.32	10.30	5.8386E+005		3.7762E+005
	1004.76	17.90	3.1935E+005		9.4892E+004
	1274.45	35.50	1.4198E+005		1.0121E+005
Eu-155	86.54	30.90	4.0849E+005	4.08E+005	2.9909E+005
	105.31	20.70	4.8630E+005		-1.3605E+005
Am-241	59.54	35.90	4.3838E+005	4.38E+005	-1.3218E+005
Cm-243	228.19	10.56	6.2892E+005	4.47E+005	-1.8809E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4656E+005	4.47E+005	-1.0308E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 8:58:15 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 8:43:13 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.95	72.84	0.85	1.29E+002	37.81	4.32E+002
m	2	282-	305	300.17	74.90	0.85	1.87E+002	45.19	5.15E+002
F	3	948-	961	953.94	238.80	1.18	1.36E+002	30.08	1.39E+002
F	4	1400-	1414	1406.72	352.20	1.49	1.03E+002	23.37	5.83E+001
F	5	2032-	2051	2042.07	511.19	1.94	8.94E+001	21.93	7.25E+001
F	6	2324-	2339	2331.21	583.49	0.98	6.14E+001	18.97	4.76E+001
F	7	2427-	2444	2435.60	609.59	1.53	1.06E+002	22.26	3.81E+001
F	8	3633-	3650	3641.85	910.92	1.53	5.02E+001	17.64	3.62E+001
F	9	5828-	5852	5840.59	1459.52	1.90	3.62E+002	37.29	1.83E+001
F	10	7050-	7063	7057.00	1762.96	1.75	2.55E+001	11.47	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	9.38858E+004	2.65342E+004
K-40	0.951	1460.81*		10.67	5.28148E+006	6.91669E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	4.34656E+005	1.27869E+005
		583.14*		84.20	8.06317E+004	2.70863E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.63396E+006	5.08750E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.44448E+005	6.64234E+004
Bi-214	0.688	609.31*		46.30	2.57535E+005	6.28136E+004
		1120.29		15.10		
		1764.49*		15.80	2.67542E+005	1.23280E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	7.646934E+004	2.716565E+004
K-40		0.951	5.281476E+006	6.916688E+005
TL-208		0.750	8.063172E+004	2.695850E+004
Pb-212	@	0.497	2.444480E+005	6.642338E+004
Bi-214		0.688	2.595980E+005	5.596743E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.4350E-001	29.28
F 4	352.20	1.1451E-001	22.68
F 8	910.92	5.5734E-002	35.17

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.6380E+004	5.27E+004	2.0002E+004
	1332.49	100.00	5.2734E+004		7.1530E+003
Nb-94	702.63	100.00	5.2083E+004	4.91E+004	1.0201E+004
	871.10	100.00	4.9098E+004		3.3105E+003
Ag-108m	79.20	7.10	2.0221E+006	6.43E+004	-1.1245E+006
	433.93	89.90	6.4270E+004		2.6814E+004
	614.37	90.40	8.6626E+004		-1.6716E+004
	722.95	90.50	7.0476E+004		6.2576E+004
Sb-125	176.33	6.89	1.0634E+006	1.96E+005	-6.1480E+004
	427.89	29.33	1.9597E+005		-8.3255E+004
	463.38	10.35	5.7994E+005		4.7457E+005
	600.56	17.80	3.0903E+005		-7.1931E+004
	606.64	5.02	1.5776E+006		2.6177E+006
	635.90	11.32	4.7991E+005		1.6612E+005
Cs-134	563.23	8.38	6.5252E+005	7.19E+004	6.9494E+005
	569.32	15.43	3.4598E+005		-3.3689E+005
	604.70	97.60	7.9378E+004		-2.0989E+004
	795.84	85.40	7.1947E+004		7.3166E+004
	801.93	8.73	6.5154E+005		-7.2186E+005
Cs-137	661.65	85.12	6.4136E+004	6.41E+004	-1.1517E+004
Eu-152	121.78	28.40	3.1955E+005	2.25E+005	7.6199E+004
	244.69	7.49	9.0777E+005		-3.3362E+005
	344.27	26.50	2.4020E+005		-3.1577E+005
	778.89	12.74	4.5173E+005		-6.2815E+005
	867.32	4.16	1.1508E+006		-7.3604E+005
	964.01	14.40	4.9834E+005		3.4271E+005
	1085.78	10.00	5.2320E+005		-4.1394E+004
	1112.02	13.30	5.2665E+005		3.7594E+005
	1407.95	20.70	2.2451E+005		6.0205E+004
Eu-154	123.07	40.50	2.2499E+005	1.53E+005	5.4873E+004
	247.94	6.60	9.4510E+005		-1.9797E+006
	591.81	4.83	1.1484E+006		4.2264E+005
	723.30	19.70	3.2381E+005		1.9364E+005
	756.87	4.33	1.1564E+006		-1.2584E+005
	873.19	11.50	4.2727E+005		-1.8195E+005
	996.32	10.30	5.0060E+005		-1.8892E+005
	1004.76	17.90	3.1314E+005		-5.0608E+004
	1274.45	35.50	1.5312E+005		1.2858E+005
Eu-155	86.54	30.90	4.1471E+005	4.15E+005	4.3984E+005
	105.31	20.70	5.0533E+005		-3.2720E+004
Am-241	59.54	35.90	4.4810E+005	4.48E+005	-1.9023E+005
Cm-243	228.19	10.56	6.4277E+005	4.77E+005	-3.9647E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7675E+005	4.77E+005	-1.4696E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 10:06:35 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 9:51:34 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.77	72.79	0.95	1.25E+002	36.86	4.25E+002
m	2	282-	306	300.13	74.89	0.95	2.40E+002	46.18	4.89E+002
F	3	946-	961	953.69	238.74	1.18	1.28E+002	28.53	1.35E+002
F	4	1396-	1415	1406.74	352.21	1.48	1.14E+002	23.84	7.50E+001
F	5	2324-	2339	2331.26	583.50	1.53	6.47E+001	18.92	3.74E+001
F	6	2425-	2443	2434.90	609.41	1.40	1.02E+002	22.24	4.27E+001
F	7	3632-	3650	3641.59	910.85	1.69	5.22E+001	16.46	2.34E+001
F	8	3866-	3881	3873.35	968.71	1.44	4.94E+001	16.11	1.91E+001
F	9	5825-	5854	5840.61	1459.53	2.23	3.65E+002	36.62	1.12E+001
F	10	7050-	7065	7056.27	1762.77	2.03	4.03E+001	14.13	9.62E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.951	1460.81*	10.67	5.31603E+006	6.85802E+005
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	8.49393E+004	2.72553E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.10138E+006	5.76999E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.31734E+005	6.29891E+004
Bi-214	0.686	609.31*	46.30	2.47742E+005	6.21627E+004
		1120.29	15.10		
		1764.49*	15.80	4.22573E+005	1.54089E+005
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	2.42920E+005	8.14777E+004
		969.11*	16.60	3.94019E+005	1.35019E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.951	5.316027E+006	6.858023E+005
TL-208		0.468	8.493928E+004	2.725531E+004
Pb-212	@	0.497	2.317341E+005	6.298914E+004
Bi-214		0.686	2.722129E+005	5.764842E+004
Ac-228		0.620	2.832550E+005	6.976005E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.79	1.3894E-001	29.48
F	4	352.21	1.2626E-001	20.98

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0118E+004	5.07E+004	1.3465E+004
	1332.49	100.00	5.0662E+004		1.3368E+004
Nb-94	702.63	100.00	5.2391E+004	4.91E+004	-2.2422E+004
	871.10	100.00	4.9098E+004		-1.2957E+004
Ag-108m	79.20	7.10	1.9499E+006	6.17E+004	-2.4841E+006
	433.93	89.90	6.1660E+004		1.7473E+004
	614.37	90.40	8.3747E+004		-1.7343E+004
	722.95	90.50	6.8478E+004		3.7041E+004
Sb-125	176.33	6.89	1.0411E+006	2.00E+005	2.4778E+005
	427.89	29.33	1.9982E+005		6.5335E+004
	463.38	10.35	5.5897E+005		6.7958E+005
	600.56	17.80	2.6306E+005		-2.5799E+005
	606.64	5.02	1.5452E+006		3.2452E+006
	635.90	11.32	4.6001E+005		-1.3505E+005
Cs-134	563.23	8.38	6.9831E+005	6.72E+004	3.5236E+003
	569.32	15.43	3.7165E+005		-1.1352E+005
	604.70	97.60	7.7293E+004		-2.2116E+004
	795.84	85.40	6.7154E+004		2.0871E+004
	801.93	8.73	6.7233E+005		-1.2194E+006
Cs-137	661.65	85.12	6.9235E+004	6.92E+004	2.6552E+004
Eu-152	121.78	28.40	3.2592E+005	2.27E+005	7.2905E+003
	244.69	7.49	9.5833E+005		1.9737E+005
	344.27	26.50	2.3119E+005		-1.9012E+005
	778.89	12.74	3.9401E+005		-7.9755E+005
	867.32	4.16	1.2145E+006		-8.7856E+005
	964.01	14.40	5.1905E+005		6.0374E+005
	1085.78	10.00	5.1446E+005		-3.9738E+005
	1112.02	13.30	4.3527E+005		1.8300E+005
	1407.95	20.70	2.2741E+005		3.4243E+004
Eu-154	123.07	40.50	2.2633E+005	1.38E+005	-1.9277E+004
	247.94	6.60	1.0131E+006		-8.4642E+005
	591.81	4.83	1.0431E+006		2.3783E+005
	723.30	19.70	3.1991E+005		1.9137E+005
	756.87	4.33	1.1486E+006		3.5140E+005
	873.19	11.50	4.4350E+005		2.1983E+005
	996.32	10.30	5.5287E+005		1.5554E+005
	1004.76	17.90	2.9367E+005		-1.4851E+005
	1274.45	35.50	1.3755E+005		-2.9826E+004
Eu-155	86.54	30.90	4.2352E+005	4.24E+005	5.1263E+005
	105.31	20.70	4.8923E+005		1.0653E+005
Am-241	59.54	35.90	4.6668E+005	4.67E+005	2.1832E+005
Cm-243	228.19	10.56	6.6015E+005	4.78E+005	5.4083E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7761E+005	4.78E+005	-5.1614E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 10:25:44 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 10:10:43 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	292.31	72.93	1.09	1.63E+002	40.45	5.25E+002
m	2	282-	305	300.15	74.89	1.09	2.82E+002	49.01	5.47E+002
F	3	944-	960	953.53	238.70	1.21	1.35E+002	29.46	1.46E+002
F	4	1175-	1185	1179.64	295.34	1.19	4.76E+001	20.51	6.30E+001
F	5	1399-	1415	1406.39	352.12	1.33	9.37E+001	23.56	8.22E+001
F	6	2323-	2338	2330.88	583.41	1.43	8.42E+001	20.92	4.02E+001
F	7	2426-	2442	2434.71	609.36	1.40	9.55E+001	21.73	3.83E+001
F	8	3522-	3534	3528.42	882.60	0.77	1.67E+001	9.32	8.24E+000
F	9	3635-	3651	3642.49	911.08	1.63	4.81E+001	16.88	3.10E+001
F	10	3865-	3879	3871.73	968.31	0.89	3.04E+001	13.68	2.60E+001
F	11	5829-	5853	5840.59	1459.53	1.91	3.66E+002	37.28	9.13E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.951	1460.81*		10.67	5.33113E+006	6.94150E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.10530E+005	3.10990E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.46728E+006	6.46279E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.43029E+005	6.53824E+004
Bi-214	0.418	609.31*		46.30	2.31837E+005	6.01176E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	4.25120E+006	1.15553E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.14070E+005	9.90829E+004
		351.92*		37.20	2.30767E+005	6.96936E+004
Ac-228	0.617	338.32		11.40		
		911.07*		27.70	2.23567E+005	8.26079E+004
		969.11*		16.60	2.42668E+005	1.12016E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.951	5.331129E+006	6.941504E+005
TL-208		0.470	1.105299E+005	3.109896E+004
Pb-212	@	0.498	2.430292E+005	6.538235E+004
Bi-214		0.418	2.318367E+005	6.011765E+004
PB-214	@	0.565	2.252400E+005	5.700440E+004
Ac-228		0.617	2.302955E+005	6.648422E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.8092E-001	24.84
F 8	882.60	1.8596E-002	55.68

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0915E+004	5.12E+004	-3.5989E+004
	1332.49	100.00	5.1189E+004		-2.8507E+002
Nb-94	702.63	100.00	5.5664E+004	5.48E+004	1.7828E+004
	871.10	100.00	5.4828E+004		-3.3505E+004
Ag-108m	79.20	7.10	2.0145E+006	6.62E+004	-3.4378E+006
	433.93	89.90	6.6156E+004		1.5885E+004
	614.37	90.40	8.3327E+004		-1.8069E+004
	722.95	90.50	6.9911E+004		4.9113E+004
Sb-125	176.33	6.89	1.0657E+006	2.10E+005	4.6809E+005
	427.89	29.33	2.1034E+005		3.0505E+004
	463.38	10.35	5.7806E+005		5.2395E+005
	600.56	17.80	3.1337E+005		1.2296E+005
	606.64	5.02	1.5882E+006		2.5724E+006
	635.90	11.32	4.9664E+005		2.4172E+005
Cs-134	563.23	8.38	6.4355E+005	6.27E+004	6.0026E+004
	569.32	15.43	3.8381E+005		3.0458E+005
	604.70	97.60	8.0676E+004		2.2069E+003
	795.84	85.40	6.2735E+004		-5.3132E+004
	801.93	8.73	6.2635E+005		-7.8891E+005
Cs-137	661.65	85.12	6.7999E+004	6.80E+004	-9.8876E+003
Eu-152	121.78	28.40	3.2529E+005	2.41E+005	5.6894E+004
	244.69	7.49	9.2635E+005		-4.4742E+004
	344.27	26.50	2.4076E+005		-2.0993E+005
	778.89	12.74	4.4939E+005		-5.9382E+005
	867.32	4.16	1.3482E+006		-1.1969E+006
	964.01	14.40	5.1349E+005		5.0010E+005
	1085.78	10.00	5.2320E+005		-4.6871E+005
	1112.02	13.30	5.0926E+005		1.2259E+005
	1407.95	20.70	2.4667E+005		1.0608E+005
Eu-154	123.07	40.50	2.2648E+005	1.53E+005	3.4012E+004
	247.94	6.60	1.0397E+006		8.3167E+005
	591.81	4.83	1.0999E+006		-1.4988E+005
	723.30	19.70	3.1860E+005		2.8770E+004
	756.87	4.33	1.3505E+006		1.1406E+006
	873.19	11.50	5.0565E+005		5.3573E+005
	996.32	10.30	5.1992E+005		-2.5330E+004
	1004.76	17.90	2.8915E+005		-2.5384E+005
	1274.45	35.50	1.5312E+005		-7.8351E+004
Eu-155	86.54	30.90	4.1562E+005	4.16E+005	4.4866E+005
	105.31	20.70	5.0815E+005		4.0006E+005
Am-241	59.54	35.90	4.5262E+005	4.53E+005	9.6624E+004
Cm-243	228.19	10.56	6.6489E+005	4.59E+005	2.1012E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5924E+005	4.59E+005	-9.9538E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 11:46:30 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 11:31:29 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.76	72.79	0.88	1.31E+002	36.94	4.05E+002
m	2	282-	306	300.08	74.88	0.88	2.47E+002	46.16	4.58E+002
F	3	334-	344	338.81	84.59	1.14	1.12E+002	40.74	3.71E+002
F	4	739-	749	743.64	186.10	1.05	5.52E+001	24.43	1.15E+002
F	5	945-	988	954.09	238.84	0.98	1.63E+002	29.53	3.35E+002
F	6	1176-	1187	1180.84	295.64	1.03	4.21E+001	20.99	8.53E+001
F	7	1401-	1417	1407.07	352.29	1.44	1.01E+002	23.28	6.24E+001
F	8	2323-	2339	2331.03	583.44	1.28	8.32E+001	20.12	3.36E+001
F	9	2426-	2444	2435.10	609.46	1.33	1.13E+002	23.75	5.33E+001
F	10	3634-	3651	3642.29	911.03	2.04	6.81E+001	17.77	2.25E+001
F	11	3867-	3879	3873.34	968.71	0.86	2.51E+001	12.74	2.27E+001
F	12	5828-	5854	5841.39	1459.73	1.96	3.79E+002	38.15	1.68E+001
F	13	7050-	7064	7056.51	1762.84	1.57	3.25E+001	12.77	7.92E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.965	1460.81*		10.67	5.52185E+006	7.13635E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.09160E+005	3.00953E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.16360E+006	5.85693E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.93149E+005	7.03603E+004
Bi-214	0.687	609.31*		46.30	2.74989E+005	6.70244E+004
		1120.29		15.10		
		1764.49*		15.80	3.40534E+005	1.38174E+005
PB-214	0.563	74.82*	@	6.21	3.72795E+006	1.04482E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.89432E+005	9.97416E+004
		351.92*		37.20	2.48424E+005	7.08288E+004
Ac-228	0.621	338.32		11.40		
		911.07*		27.70	3.16841E+005	9.02994E+004
		969.11*		16.60	2.00029E+005	1.03800E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.965	5.521850E+006	7.136355E+005
TL-208		0.469	1.091598E+005	3.009525E+004
Pb-212	@	0.497	2.931487E+005	7.036031E+004
Bi-214		0.687	2.874740E+005	6.030420E+004
PB-214	@	0.563	2.286481E+005	5.774925E+004
Ac-228		0.621	2.665209E+005	6.812791E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.79	1.4575E-001	28.16
F	3	84.59	1.2469E-001	36.30
F	4	186.10	6.1360E-002	44.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7233E+004	5.32E+004	2.1528E+004
	1332.49	100.00	5.3238E+004		-3.3580E+004
Nb-94	702.63	100.00	5.6522E+004	4.79E+004	4.0964E+004
	871.10	100.00	4.7942E+004		1.1443E+004
Ag-108m	79.20	7.10	1.9992E+006	5.80E+004	-8.6424E+005
	433.93	89.90	5.7988E+004		-1.9336E+004
	614.37	90.40	9.0187E+004		-2.3063E+004
	722.95	90.50	6.4286E+004		2.0446E+004
Sb-125	176.33	6.89	1.0267E+006	1.80E+005	-4.0590E+005
	427.89	29.33	1.8039E+005		-7.2922E+004
	463.38	10.35	5.6284E+005		-5.8229E+005
	600.56	17.80	2.8305E+005		9.7289E+004
	606.64	5.02	1.6093E+006		1.8713E+006
	635.90	11.32	4.6758E+005		-6.6886E+004
Cs-134	563.23	8.38	6.1265E+005	6.57E+004	1.3010E+004
	569.32	15.43	3.2710E+005		-2.5598E+005
	604.70	97.60	8.0307E+004		-4.3835E+004
	795.84	85.40	6.5716E+004		4.4716E+003
	801.93	8.73	6.3365E+005		-5.2727E+005
Cs-137	661.65	85.12	6.5451E+004	6.55E+004	-2.9845E+004
Eu-152	121.78	28.40	3.0685E+005	2.29E+005	-2.3187E+005
	244.69	7.49	9.7054E+005		1.2636E+005
	344.27	26.50	2.2946E+005		-1.5609E+005
	778.89	12.74	4.0468E+005		-2.4782E+005
	867.32	4.16	1.1414E+006		-2.1553E+006
	964.01	14.40	4.6023E+005		6.4974E+005
	1085.78	10.00	5.8437E+005		-5.6627E+005
	1112.02	13.30	4.4995E+005		-3.0707E+005
	1407.95	20.70	2.4667E+005		2.0318E+005
Eu-154	123.07	40.50	2.1457E+005	1.53E+005	-7.7587E+004
	247.94	6.60	9.9784E+005		2.9103E+005
	591.81	4.83	1.1217E+006		5.8527E+005
	723.30	19.70	2.9537E+005		8.0779E+004
	756.87	4.33	1.2962E+006		1.8653E+005
	873.19	11.50	4.3384E+005		2.0454E+003
	996.32	10.30	4.5933E+005		-1.2749E+005
	1004.76	17.90	2.5248E+005		3.1966E+004
	1274.45	35.50	1.5312E+005		-2.0121E+005
Eu-155	86.54	30.90	4.1923E+005	4.19E+005	5.2336E+005
	105.31	20.70	4.7287E+005		-6.4344E+003
Am-241	59.54	35.90	4.4273E+005	4.43E+005	-4.2091E+005
Cm-243	228.19	10.56	6.6300E+005	4.64E+005	-1.6002E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6369E+005	4.64E+005	1.9594E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 11:28:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 11:13:06 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	292.05	72.86	0.84	1.17E+002	35.43	3.58E+002
m	2	287-	306	299.96	74.85	0.84	2.38E+002	46.55	4.31E+002
F	3	942-	960	953.23	238.63	1.37	1.37E+002	28.93	1.47E+002
F	4	1173-	1185	1179.80	295.38	1.11	5.76E+001	20.85	6.95E+001
F	5	1398-	1413	1406.06	352.04	1.12	6.71E+001	21.00	7.24E+001
F	6	2032-	2048	2040.98	510.91	1.19	6.29E+001	22.05	8.89E+001
F	7	2321-	2338	2330.72	583.37	1.35	8.47E+001	20.35	3.39E+001
F	8	2427-	2444	2435.44	609.55	1.48	1.07E+002	22.72	4.05E+001
F	9	3636-	3650	3643.20	911.26	1.36	5.30E+001	16.80	2.11E+001
F	10	3869-	3881	3874.74	969.06	0.94	2.50E+001	12.90	2.18E+001
F	11	4473-	4485	4479.79	1120.06	1.84	3.09E+001	12.54	8.09E+000
F	12	5828-	5853	5840.76	1459.57	1.89	3.86E+002	38.19	6.35E+000
F	13	7051-	7065	7056.83	1762.91	1.73	4.15E+001	13.29	2.24E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	6.61049E+004	2.49513E+004
K-40	0.954	1460.81*	10.67	5.62196E+006	7.19171E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	3.06041E+005	1.18188E+005
		583.14*	84.20	1.11117E+005	3.04796E+004
		860.37	12.46		
Pb-212	0.498	74.81* @	10.70	2.08391E+006	5.76985E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.46535E+005	6.49266E+004
Bi-214	0.983	609.31*	46.30	2.60611E+005	6.39767E+004
		1120.29*	15.10	2.88973E+005	1.21357E+005
		1764.49*	15.80	4.35541E+005	1.46059E+005
PB-214	0.565	74.82* @	6.21	3.59063E+006	1.02776E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.59111E+005	1.03460E+005
		351.92*	37.20	1.65287E+005	5.86521E+004
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	2.46675E+005	8.31082E+004
		969.11*	16.60	1.99691E+005	1.05016E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	4.210365E+004	2.579335E+004
K-40		0.954	5.621958E+006	7.191706E+005
TL-208		0.752	1.111170E+005	3.026370E+004
Pb-212	@	0.498	2.465348E+005	6.492655E+004
Bi-214		0.983	2.888087E+005	5.277108E+004
PB-214	@	0.565	1.881066E+005	5.102341E+004
Ac-228		0.622	2.285811E+005	6.516960E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	1.2961E-001	30.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.6808E+004	4.38E+004	-3.2117E+004
	1332.49	100.00	4.3806E+004		1.0847E+004
Nb-94	702.63	100.00	5.5664E+004	5.57E+004	2.2898E+004
	871.10	100.00	5.7786E+004		5.0732E+004
Ag-108m	79.20	7.10	1.9872E+006	6.01E+004	-9.4514E+005
	433.93	89.90	6.0083E+004		-1.5419E+004
	614.37	90.40	8.3117E+004		1.3734E+004
	722.95	90.50	6.5208E+004		4.4961E+004
Sb-125	176.33	6.89	1.0399E+006	1.85E+005	-1.3122E+005
	427.89	29.33	1.8528E+005		-2.7017E+004
	463.38	10.35	5.8737E+005		2.3185E+005
	600.56	17.80	3.3152E+005		-1.3571E+005
	606.64	5.02	1.5704E+006		1.5125E+006
	635.90	11.32	4.8716E+005		1.3870E+005
Cs-134	563.23	8.38	7.1468E+005	6.68E+004	7.2123E+004
	569.32	15.43	3.7319E+005		3.9785E+005
	604.70	97.60	8.3030E+004		-2.3424E+004
	795.84	85.40	6.6798E+004		2.4752E+004
	801.93	8.73	6.1895E+005		-7.3105E+005
Cs-137	661.65	85.12	6.4797E+004	6.48E+004	-2.6145E+004
Eu-152	121.78	28.40	3.2885E+005	2.19E+005	-7.1001E+004
	244.69	7.49	9.1925E+005		-3.9456E+005
	344.27	26.50	2.3405E+005		-2.2591E+005
	778.89	12.74	4.0468E+005		-4.8144E+005
	867.32	4.16	1.3482E+006		-8.6701E+005
	964.01	14.40	4.6647E+005		4.4528E+005
	1085.78	10.00	5.8437E+005		5.1963E+005
	1112.02	13.30	4.6414E+005		-9.4422E+004
	1407.95	20.70	2.1858E+005		-1.2214E+005
Eu-154	123.07	40.50	2.2574E+005	1.48E+005	-1.2376E+005
	247.94	6.60	9.6301E+005		-6.5690E+005
	591.81	4.83	1.2050E+006		-2.1762E+005
	723.30	19.70	3.0101E+005		1.3842E+005
	756.87	4.33	1.2893E+006		-1.3942E+005
	873.19	11.50	4.7121E+005		-6.6016E+004
	996.32	10.30	5.1611E+005		1.0588E+005
	1004.76	17.90	2.7988E+005		-6.8034E+003
	1274.45	35.50	1.4767E+005		-4.1861E+003
Eu-155	86.54	30.90	4.1362E+005	4.14E+005	2.2645E+005
	105.31	20.70	5.0477E+005		1.7813E+005
Am-241	59.54	35.90	4.5526E+005	4.55E+005	-1.5232E+005
Cm-243	228.19	10.56	6.2892E+005	4.75E+005	-2.9170E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7503E+005	4.75E+005	4.8543E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 11:06:34 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 10:51:34 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	316	291.99	72.85	1.04	1.30E+002	37.83	4.31E+002
m	2	286-	316	300.52	74.99	1.04	3.03E+002	46.05	4.43E+002
m	3	286-	316	309.71	77.29	1.04	9.65E+001	34.93	4.20E+002
F	4	948-	960	954.17	238.86	0.98	1.29E+002	29.96	1.41E+002
F	5	1171-	1187	1180.06	295.45	1.66	7.56E+001	21.03	7.23E+001
F	6	1397-	1415	1406.58	352.17	1.31	1.11E+002	23.13	5.93E+001
F	7	2323-	2338	2330.77	583.38	1.01	8.04E+001	20.74	4.61E+001
F	8	2428-	2444	2435.11	609.46	1.70	9.89E+001	21.34	3.36E+001
F	9	3635-	3651	3642.92	911.19	1.50	6.50E+001	18.61	2.89E+001
F	10	4472-	4484	4477.61	1119.51	0.92	2.54E+001	13.47	2.81E+001
F	11	5829-	5853	5840.88	1459.60	1.84	3.74E+002	37.91	1.50E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.956	1460.81*		10.67	5.44839E+006	7.07154E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.05547E+005	3.05906E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	2.64346E+006	6.56026E+005
		77.11*	@	18.00	4.85912E+005	2.00035E+005
		87.30	@	8.00		
		238.63*		44.60	2.32981E+005	6.52390E+004
Bi-214	0.710	609.31*		46.30	2.39995E+005	5.97847E+004
		1120.29*		15.10	2.38057E+005	1.28614E+005
		1764.49		15.80		
PB-214	0.759	74.82*	@	6.21	4.55476E+006	1.17772E+006
		77.11*	@	10.50	8.32992E+005	3.48512E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.40401E+005	1.10645E+005
		351.92*		37.20	2.72557E+005	7.29778E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.956	5.448390E+006	7.071539E+005
TL-208		0.470	1.055473E+005	3.059057E+004
Pb-212	@	0.837	2.329812E+005	6.523904E+004
Bi-214		0.710	2.396502E+005	5.421387E+004
PB-214	@	0.759	2.931240E+005	6.092017E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.85	1.4442E-001	29.11
F 9	911.19	7.2170E-002	28.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.1887E+004	4.79E+004	1.4808E+004
	1332.49	100.00	4.7936E+004		8.1265E+003
Nb-94	702.63	100.00	5.3002E+004	5.13E+004	2.9818E+004
	871.10	100.00	5.1327E+004		1.0800E+004
Ag-108m	79.20	7.10	1.9603E+006	6.12E+004	-1.3555E+006
	433.93	89.90	6.1214E+004		-3.0555E+004
	614.37	90.40	8.6017E+004		3.4826E+004
	722.95	90.50	7.5358E+004		8.9961E+004
Sb-125	176.33	6.89	1.0327E+006	1.92E+005	-8.9018E+003
	427.89	29.33	1.9203E+005		9.5244E+004
	463.38	10.35	5.9652E+005		8.2162E+005
	600.56	17.80	2.9862E+005		1.8835E+005
	606.64	5.02	1.4628E+006		1.0082E+006
	635.90	11.32	4.8954E+005		2.1415E+005
Cs-134	563.23	8.38	7.1468E+005	6.54E+004	-3.5003E+004
	569.32	15.43	3.7778E+005		-2.5317E+005
	604.70	97.60	7.4152E+004		-7.8017E+004
	795.84	85.40	6.5351E+004		1.2095E+004
	801.93	8.73	6.3365E+005		-5.1491E+005
Cs-137	661.65	85.12	6.7686E+004	6.77E+004	1.9255E+004
Eu-152	121.78	28.40	3.2381E+005	2.06E+005	-1.3665E+005
	244.69	7.49	9.6784E+005		-1.9966E+005
	344.27	26.50	2.2946E+005		-2.0700E+005
	778.89	12.74	4.3987E+005		-1.8224E+005
	867.32	4.16	1.1967E+006		-2.3773E+006
	964.01	14.40	4.7057E+005		4.3591E+005
	1085.78	10.00	5.2320E+005		1.3943E+004
	1112.02	13.30	5.3151E+005		1.4159E+004
	1407.95	20.70	2.0617E+005		4.4749E+004
Eu-154	123.07	40.50	2.2767E+005	1.50E+005	3.6301E+003
	247.94	6.60	1.0248E+006		-2.5029E+005
	591.81	4.83	1.1109E+006		-7.6831E+005
	723.30	19.70	3.4624E+005		5.3301E+005
	756.87	4.33	1.3505E+006		1.2630E+006
	873.19	11.50	4.6217E+005		2.6105E+005
	996.32	10.30	5.6340E+005		4.3390E+004
	1004.76	17.90	2.8915E+005		8.0025E+004
	1274.45	35.50	1.5042E+005		-1.1534E+005
Eu-155	86.54	30.90	4.3144E+005	4.31E+005	8.8335E+005
	105.31	20.70	4.9677E+005		-1.5982E+005
Am-241	59.54	35.90	4.6023E+005	4.60E+005	-8.4912E+004
Cm-243	228.19	10.56	6.4570E+005	4.50E+005	-2.3659E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5022E+005	4.50E+005	-1.5161E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 10:46:31 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 10:31:34 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.71	72.78	0.96	1.56E+002	40.25	4.82E+002
m	2	284-	305	300.05	74.87	0.97	2.47E+002	47.45	5.31E+002
F	3	947-	960	954.05	238.83	0.95	1.27E+002	29.33	1.42E+002
F	4	1349-	1358	1353.24	338.81	0.96	3.09E+001	17.45	4.82E+001
F	5	1401-	1414	1406.67	352.19	1.12	7.71E+001	22.07	6.68E+001
F	6	2034-	2053	2043.59	511.57	2.50	1.00E+002	21.74	6.02E+001
F	7	2325-	2342	2331.04	583.45	1.64	8.96E+001	21.81	4.95E+001
F	8	2394-	2405	2399.76	600.63	0.41	1.39E+001	8.76	1.88E+001
F	9	2427-	2442	2434.99	609.43	1.26	8.21E+001	20.55	3.77E+001
F	10	2638-	2650	2643.86	661.64	1.13	2.63E+001	14.19	2.77E+001
F	11	3637-	3651	3642.53	911.09	1.09	5.59E+001	18.19	3.68E+001
F	12	3868-	3881	3873.85	968.83	1.46	2.93E+001	14.76	2.60E+001
F	13	5828-	5853	5840.75	1459.56	2.00	4.04E+002	39.33	2.27E+001
F	14	7049-	7062	7054.64	1762.37	1.83	2.78E+001	11.31	3.94E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.990	511.00*		100.00	1.05165E+005	2.71911E+004
K-40	0.954	1460.81*		10.67	5.88585E+006	7.45646E+005
Cs-137	1.000	661.65*		85.12	3.58526E+004	1.97846E+004
TL-208	0.748	277.35		6.80		
		510.84*		21.60	4.86873E+005	1.32015E+005
		583.14*		84.20	1.17561E+005	3.25698E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.16090E+006	5.93165E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.28841E+005	6.39241E+004
Bi-214	0.676	609.31*		46.30	1.99265E+005	5.56983E+004
		1120.29		15.10		
		1764.49*		15.80	2.91895E+005	1.22148E+005
Ac-228	0.998	338.32*		11.40	2.45540E+005	1.43790E+005
		911.07*		27.70	2.59943E+005	8.97354E+004
		969.11*		16.60	2.33921E+005	1.20306E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.990	7.977155E+004	2.807423E+004
K-40		0.954	5.885853E+006	7.456456E+005
Cs-137		1.000	3.585256E+004	1.978457E+004
TL-208		0.748	1.175607E+005	3.234370E+004
Pb-212	@	0.497	2.288412E+005	6.392406E+004
Bi-214		0.676	2.152101E+005	5.067827E+004
Ac-228		0.998	2.496199E+005	6.432975E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.78	1.7317E-001	25.82
F	5	352.19	8.5635E-002	28.64
F	8	600.63	1.5430E-002	63.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.4745E+004	5.62E+004	-8.0140E+004
		1332.49	100.00	5.6160E+004		3.1330E+004
	Nb-94	702.63	100.00	5.7086E+004	5.71E+004	-3.9575E+004
		871.10	100.00	5.8737E+004		-1.1207E+004
	Ag-108m	79.20	7.10	2.0540E+006	6.38E+004	-2.6241E+006
		433.93	89.90	6.3842E+004		-7.2213E+003
		614.37	90.40	8.1841E+004		-4.1043E+004
		722.95	90.50	7.4568E+004		8.4211E+003
	Sb-125	176.33	6.89	1.1200E+006	2.00E+005	-1.3613E+005
		427.89	29.33	2.0046E+005		-5.9443E+004
		463.38	10.35	6.2139E+005		2.2686E+005
		600.56	17.80	3.1766E+005		6.1864E+004
		606.64	5.02	1.5008E+006		3.2942E+006
		635.90	11.32	5.3713E+005		-6.4215E+005
	Cs-134	563.23	8.38	7.4372E+005	6.57E+004	9.7907E+004
		569.32	15.43	4.0838E+005		-5.1437E+004
		604.70	97.60	7.8627E+004		-6.5687E+003
		795.84	85.40	6.5716E+004		-3.0309E+004
		801.93	8.73	6.4445E+005		-1.6040E+005
+	Cs-137	661.65*	85.12	4.1950E+004	4.20E+004	3.5853E+004
	Eu-152	121.78	28.40	3.2697E+005	2.12E+005	-3.3066E+005
		244.69	7.49	9.7592E+005		-3.9038E+005
		344.27	26.50	2.3854E+005		1.8697E+004
		778.89	12.74	4.2015E+005		-1.1438E+004
		867.32	4.16	1.4100E+006		-1.6322E+006
		964.01	14.40	4.6232E+005		5.4423E+005
		1085.78	10.00	5.4855E+005		-5.5345E+005
		1112.02	13.30	5.6880E+005		1.6002E+005
		1407.95	20.70	2.1248E+005		1.7955E+005
	Eu-154	123.07	40.50	2.3551E+005	1.48E+005	2.0103E+005
		247.94	6.60	1.0315E+006		-1.2330E+006
		591.81	4.83	1.1745E+006		1.5527E+005
		723.30	19.70	3.4864E+005		2.9915E+005
		756.87	4.33	1.3371E+006		1.2584E+006
		873.19	11.50	4.9445E+005		-7.9949E+004
		996.32	10.30	5.5992E+005		1.9883E+005
		1004.76	17.90	2.9590E+005		-5.0162E+005
		1274.45	35.50	1.4767E+005		-3.3489E+004
	Eu-155	86.54	30.90	4.3440E+005	4.34E+005	4.7384E+005
		105.31	20.70	5.1652E+005		-2.1870E+005
	Am-241	59.54	35.90	4.6514E+005	4.65E+005	-4.2656E+004
	Cm-243	228.19	10.56	6.6205E+005	4.93E+005	2.1573E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9280E+005	4.93E+005	-2.6747E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 1:11:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 12:56:08 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.81	72.80	0.82	1.08E+002	36.38	4.08E+002
m	2	283-	306	300.34	74.94	0.83	2.18E+002	46.96	4.85E+002
F	3	948-	961	953.71	238.75	0.97	1.40E+002	29.03	1.19E+002
F	4	1078-	1087	1082.49	271.01	0.92	2.68E+001	17.20	5.31E+001
F	5	1402-	1413	1407.07	352.29	1.38	8.90E+001	22.63	4.67E+001
F	6	2033-	2053	2042.07	511.19	1.78	9.67E+001	21.83	5.71E+001
F	7	2323-	2339	2330.52	583.32	1.29	7.29E+001	19.09	3.25E+001
F	8	2428-	2446	2435.94	609.67	1.46	1.17E+002	22.96	3.56E+001
F	9	3634-	3650	3642.12	910.99	1.59	6.70E+001	17.58	1.72E+001
F	10	3866-	3880	3873.31	968.70	1.86	3.94E+001	15.08	2.07E+001
F	11	4472-	4483	4477.95	1119.60	0.92	1.64E+001	11.57	2.10E+001
F	12	5622-	5635	5628.19	1406.55	0.95	1.13E+001	7.30	1.92E+000
F	13	5829-	5853	5841.10	1459.65	1.96	3.83E+002	38.13	1.55E+001
F	14	7052-	7065	7058.55	1763.34	1.14	1.90E+001	10.61	9.36E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.01584E+005	2.69973E+004
K-40	0.960	1460.81*	10.67	5.58563E+006	7.16701E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	4.70298E+005	1.30756E+005
		583.14*	84.20	9.56036E+004	2.80626E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.90525E+006	5.54991E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.51991E+005	6.55882E+004
Bi-214	0.987	609.31*	46.30	2.83301E+005	6.59423E+004
		1120.29*	15.10	1.53122E+005	1.09507E+005
		1764.49*	15.80	1.99113E+005	1.13002E+005
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	3.11763E+005	8.92669E+004
		969.11*	16.60	3.14079E+005	1.24695E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.093400E+004	2.766121E+004
K-40		0.960	5.585629E+006	7.167010E+005
TL-208		0.752	9.560358E+004	2.788907E+004
Pb-212	@	0.497	2.519908E+005	6.558823E+004
Bi-214		0.987	2.387522E+005	5.052878E+004
Ac-228		0.621	3.125476E+005	7.258469E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.2011E-001	33.66
F	4	271.01	2.9734E-002	64.28
F	5	352.29	9.8917E-002	25.42
F	12	1406.55	1.2516E-002	64.81

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1702E+004	4.38E+004	-1.2732E+003
	1332.49	100.00	4.3806E+004		-8.3902E+004
Nb-94	702.63	100.00	5.7366E+004	4.83E+004	-2.3513E+004
	871.10	100.00	4.8330E+004		-3.6437E+004
Ag-108m	79.20	7.10	2.0026E+006	6.21E+004	-8.2659E+004
	433.93	89.90	6.2103E+004		2.6292E+004
	614.37	90.40	8.6221E+004		2.4235E+004
	722.95	90.50	7.2416E+004		1.3147E+005
Sb-125	176.33	6.89	1.0267E+006	1.96E+005	6.8662E+005
	427.89	29.33	1.9597E+005		6.9603E+004
	463.38	10.35	5.6669E+005		-2.7134E+005
	600.56	17.80	2.8305E+005		-1.4951E+005
	606.64	5.02	1.5847E+006		2.4408E+006
	635.90	11.32	4.7007E+005		-5.0437E+004
Cs-134	563.23	8.38	6.4053E+005	6.68E+004	-2.3597E+005
	569.32	15.43	3.4930E+005		-1.0960E+005
	604.70	97.60	8.0122E+004		-3.5674E+004
	795.84	85.40	6.6798E+004		5.3320E+004
	801.93	8.73	5.9228E+005		-8.7936E+005
Cs-137	661.65	85.12	6.2793E+004	6.28E+004	-5.9097E+003
Eu-152	121.78	28.40	3.2296E+005	2.03E+005	-1.6322E+005
	244.69	7.49	9.4595E+005		2.0077E+005
	344.27	26.50	2.2771E+005		-3.9116E+005
	778.89	12.74	4.3503E+005		-6.6156E+005
	867.32	4.16	1.2664E+006		-3.2515E+005
	964.01	14.40	4.8268E+005		4.1558E+005
	1085.78	10.00	5.1446E+005		2.5562E+004
	1112.02	13.30	4.5568E+005		-1.9446E+005
	1407.95	20.70	2.0293E+005		-1.7936E+005
Eu-154	123.07	40.50	2.2648E+005	1.60E+005	-3.7388E+004
	247.94	6.60	9.9784E+005		-7.8771E+005
	591.81	4.83	1.1745E+006		3.0649E+005
	723.30	19.70	3.3147E+005		5.0069E+005
	756.87	4.33	1.3304E+006		2.3679E+004
	873.19	11.50	4.3057E+005		1.2826E+005
	996.32	10.30	5.1992E+005		-2.9298E+004
	1004.76	17.90	3.1522E+005		-6.3931E+004
	1274.45	35.50	1.5966E+005		1.4915E+005
Eu-155	86.54	30.90	4.1417E+005	4.14E+005	4.4890E+005
	105.31	20.70	4.9185E+005		-1.9708E+004
Am-241	59.54	35.90	4.6617E+005	4.66E+005	-2.9711E+005
Cm-243	228.19	10.56	6.3687E+005	4.72E+005	3.3558E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7244E+005	4.72E+005	1.7217E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 1:34:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 1:19:58 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	315	292.12	72.88	0.90	1.03E+002	36.42	4.38E+002
m	2	286-	315	300.50	74.98	0.90	2.54E+002	45.56	4.28E+002
m	3	286-	315	309.51	77.24	0.90	8.02E+001	34.68	4.17E+002
F	4	948-	961	954.34	238.90	1.08	1.52E+002	30.04	1.18E+002
F	5	1176-	1186	1181.30	295.76	1.01	4.30E+001	20.30	7.19E+001
F	6	1401-	1416	1406.72	352.20	1.05	8.89E+001	22.39	6.70E+001
F	7	2322-	2340	2330.90	583.41	1.26	7.64E+001	19.88	4.25E+001
F	8	2427-	2444	2435.75	609.62	1.47	1.03E+002	22.29	4.07E+001
F	9	3637-	3649	3643.27	911.27	1.31	3.55E+001	14.58	1.91E+001
F	10	3867-	3880	3874.29	968.94	1.13	3.69E+001	14.28	1.71E+001
F	11	4472-	4486	4479.25	1119.92	1.44	3.60E+001	12.88	7.50E+000
F	12	5829-	5854	5841.14	1459.66	1.97	3.89E+002	38.28	1.20E+001
F	13	7050-	7063	7056.68	1762.88	1.85	2.49E+001	11.96	8.78E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.961	1460.81*	10.67	5.67688E+006	7.23062E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.00282E+005	2.92670E+004
		860.37	12.46		
Pb-212	0.837	74.81* @	10.70	2.21818E+006	5.89488E+005
		77.11* @	18.00	4.04363E+005	1.91930E+005
		87.30 @	8.00		
		238.63*	44.60	2.75027E+005	6.92617E+004
Bi-214	0.981	609.31*	46.30	2.50959E+005	6.24689E+004
		1120.29*	15.10	3.37374E+005	1.25857E+005
		1764.49*	15.80	2.61368E+005	1.28138E+005
PB-214	0.757	74.82* @	6.21	3.82198E+006	1.05292E+006
		77.11* @	10.50	6.93194E+005	3.33069E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.93586E+005	9.70352E+004
		351.92*	37.20	2.19104E+005	6.62257E+004
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	1.64878E+005	7.04118E+004
		969.11*	16.60	2.94336E+005	1.18030E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.961	5.676882E+006	7.230625E+005
TL-208		0.470	1.002821E+005	2.926704E+004
Pb-212	@	0.837	2.750266E+005	6.926171E+004
Bi-214		0.981	2.669713E+005	5.127931E+004
PB-214	@	0.757	2.109951E+005	5.470032E+004
Ac-228		0.622	1.988575E+005	6.046916E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	1.1449E-001	35.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3243E+004	4.50E+004	1.3255E+004
	1332.49	100.00	4.5029E+004		2.9807E+004
Nb-94	702.63	100.00	5.5664E+004	4.87E+004	-2.4414E+004
	871.10	100.00	4.8716E+004		-2.2175E+004
Ag-108m	79.20	7.10	1.9829E+006	6.19E+004	-4.8093E+005
	433.93	89.90	6.1882E+004		3.3486E+004
	614.37	90.40	8.6423E+004		9.0973E+003
	722.95	90.50	6.3975E+004		-3.3616E+004
Sb-125	176.33	6.89	1.0121E+006	1.97E+005	1.6078E+005
	427.89	29.33	1.9662E+005		-2.9292E+004
	463.38	10.35	5.6091E+005		-5.7516E+005
	600.56	17.80	3.1048E+005		1.3966E+005
	606.64	5.02	1.5740E+006		2.8374E+006
	635.90	11.32	4.7747E+005		-2.0175E+004
Cs-134	563.23	8.38	6.6718E+005	6.64E+004	3.3865E+005
	569.32	15.43	3.4598E+005		-1.8294E+005
	604.70	97.60	7.9378E+004		-1.2912E+004
	795.84	85.40	6.6439E+004		-8.3259E+004
	801.93	8.73	6.4087E+005		-2.8289E+005
Cs-137	661.65	85.12	7.1937E+004	7.19E+004	6.1565E+004
Eu-152	121.78	28.40	3.1848E+005	2.19E+005	1.0373E+004
	244.69	7.49	9.2352E+005		-4.2864E+005
	344.27	26.50	2.3574E+005		-2.1138E+005
	778.89	12.74	4.3746E+005		-1.5236E+004
	867.32	4.16	1.2494E+006		3.7385E+005
	964.01	14.40	4.8068E+005		4.1691E+005
	1085.78	10.00	5.4024E+005		6.9716E+004
	1112.02	13.30	4.9121E+005		1.1733E+005
	1407.95	20.70	2.1858E+005		-1.7823E+005
Eu-154	123.07	40.50	2.2243E+005	1.65E+005	1.1494E+005
	247.94	6.60	9.8579E+005		-1.4189E+006
	591.81	4.83	1.1796E+006		3.5770E+004
	723.30	19.70	2.9394E+005		-1.1496E+005
	756.87	4.33	1.3168E+006		1.8277E+005
	873.19	11.50	4.1379E+005		-4.2170E+005
	996.32	10.30	5.0060E+005		4.1343E+005
	1004.76	17.90	2.8687E+005		-1.5646E+005
	1274.45	35.50	1.6469E+005		2.5083E+004
Eu-155	86.54	30.90	4.0959E+005	4.10E+005	4.6018E+005
	105.31	20.70	4.7378E+005		-1.8672E+005
Am-241	59.54	35.90	4.4219E+005	4.42E+005	-1.4870E+005
Cm-243	228.19	10.56	6.4765E+005	4.47E+005	-1.0684E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4748E+005	4.47E+005	-2.8146E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 1:52:41 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 1:37:42 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E `I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.84	72.81	0.82	8.72E+001	35.52	4.32E+002
m	2	286-	305	300.04	74.87	0.82	2.30E+002	47.74	4.72E+002
F	3	948-	959	954.00	238.82	0.93	1.38E+002	29.81	1.19E+002
F	4	1401-	1415	1406.69	352.19	1.16	1.11E+002	24.51	6.11E+001
F	5	2323-	2339	2330.78	583.38	1.10	7.70E+001	19.58	3.33E+001
F	6	2427-	2443	2435.07	609.46	1.21	9.68E+001	21.63	3.45E+001
F	7	3635-	3650	3642.82	911.16	1.49	5.58E+001	17.28	2.59E+001
F	8	3867-	3879	3872.94	968.61	1.35	3.33E+001	14.48	1.97E+001
F	9	5828-	5854	5841.58	1459.77	1.99	3.57E+002	36.99	1.69E+001
F	10	7051-	7066	7057.38	1763.05	2.23	4.62E+001	13.94	4.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.968	1460.81*		10.67	5.21109E+006	6.84784E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.01090E+005	2.89625E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.01469E+006	5.74877E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.49246E+005	6.64657E+004
Bi-214	0.691	609.31*		46.30	2.34992E+005	6.00944E+004
		1120.29		15.10		
		1764.49*		15.80	4.84978E+005	1.54006E+005
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	2.59613E+005	8.57464E+004
		969.11*		16.60	2.65813E+005	1.18808E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.968	5.211093E+006	6.847836E+005
TL-208		0.470	1.010898E+005	2.896255E+004
Pb-212	@	0.497	2.492458E+005	6.646565E+004
Bi-214		0.691	2.680256E+005	5.598333E+004
Ac-228		0.620	2.617365E+005	6.952935E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	9.6901E-002	40.73
F 4	352.19	1.2311E-001	22.12

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7233E+004	5.47E+004	-1.9774E+004
	1332.49	100.00	5.4720E+004		3.0982E+003
Nb-94	702.63	100.00	5.1772E+004	4.83E+004	-1.2048E+003
	871.10	100.00	4.8330E+004		-1.4332E+004
Ag-108m	79.20	7.10	1.9932E+006	6.01E+004	-2.1577E+006
	433.93	89.90	6.6568E+004		4.6678E+004
	614.37	90.40	8.4993E+004		1.4472E+004
	722.95	90.50	6.0116E+004		3.3286E+004
Sb-125	176.33	6.89	1.0327E+006	1.90E+005	3.8785E+004
	427.89	29.33	1.9003E+005		-2.6949E+004
	463.38	10.35	6.2486E+005		4.8102E+005
	600.56	17.80	3.2048E+005		2.2112E+005
	606.64	5.02	1.5488E+006		2.2193E+006
	635.90	11.32	5.2842E+005		2.2385E+005
Cs-134	563.23	8.38	6.8996E+005	6.86E+004	4.2107E+005
	569.32	15.43	3.4598E+005		3.5005E+005
	604.70	97.60	7.9003E+004		-2.0085E+004
	795.84	85.40	6.8560E+004		8.0394E+004
	801.93	8.73	6.4087E+005		-9.2357E+005
Cs-137	661.65	85.12	6.5775E+004	6.58E+004	2.0571E+003
Eu-152	121.78	28.40	3.2571E+005	2.16E+005	4.8582E+004
	244.69	7.49	9.0632E+005		-1.0936E+006
	344.27	26.50	2.4620E+005		-4.7340E+005
	778.89	12.74	3.8022E+005		-7.1364E+005
	867.32	4.16	1.2832E+006		-8.2530E+005
	964.01	14.40	4.9641E+005		7.4329E+005
	1085.78	10.00	5.2752E+005		-7.5293E+005
	1112.02	13.30	4.7517E+005		-4.0493E+005
	1407.95	20.70	2.1555E+005		-7.9832E+004
Eu-154	123.07	40.50	2.2752E+005	1.52E+005	7.0014E+004
	247.94	6.60	9.9098E+005		1.2512E+005
	591.81	4.83	1.0944E+006		-3.2896E+004
	723.30	19.70	2.7621E+005		1.0977E+005
	756.87	4.33	1.2539E+006		-1.0845E+005
	873.19	11.50	4.0337E+005		-3.9418E+005
	996.32	10.30	5.0842E+005		1.9222E+005
	1004.76	17.90	2.7988E+005		1.4745E+005
	1274.45	35.50	1.5178E+005		9.5434E+004
Eu-155	86.54	30.90	4.1325E+005	4.13E+005	-1.7513E+004
	105.31	20.70	4.9098E+005		2.2346E+005
Am-241	59.54	35.90	4.5024E+005	4.50E+005	-6.3859E+004
Cm-243	228.19	10.56	6.4081E+005	4.63E+005	1.1594E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6280E+005	4.63E+005	2.2289E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 2:14:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 1:59:32 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.61	72.75	0.94	1.41E+002	39.54	4.78E+002
m	2	282-	304	300.29	74.93	0.94	1.94E+002	44.73	4.50E+002
F	3	332-	347	339.50	84.76	1.17	1.10E+002	41.67	5.83E+002
F	4	948-	959	954.15	238.86	0.97	1.47E+002	30.56	1.15E+002
F	5	1172-	1190	1180.67	295.60	1.66	5.89E+001	20.63	9.55E+001
F	6	1348-	1360	1352.73	338.69	0.87	4.88E+001	18.23	4.93E+001
F	7	1399-	1413	1406.68	352.19	1.47	1.02E+002	22.84	5.25E+001
F	8	2322-	2339	2331.14	583.47	1.34	1.06E+002	22.11	3.39E+001
F	9	2427-	2444	2435.41	609.54	1.40	1.04E+002	22.85	4.99E+001
F	10	2902-	2913	2908.13	727.67	1.14	1.86E+001	10.72	1.06E+001
F	11	3636-	3651	3643.59	911.35	1.35	5.67E+001	17.57	2.74E+001
F	12	5829-	5854	5841.70	1459.80	1.94	4.00E+002	39.22	1.95E+001
F	13	7052-	7065	7058.98	1763.45	1.43	2.21E+001	11.21	8.55E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.970	1460.81*		10.67	5.83905E+006	7.42038E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.38647E+005	3.43206E+004
		860.37		12.46		
Bi-212	0.992	727.17*		11.80	1.88205E+005	1.10891E+005
Pb-212	0.497	74.81*	@	10.70	1.69711E+006	5.13439E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.65974E+005	6.91281E+004
Bi-214	0.696	609.31*		46.30	2.51638E+005	6.36946E+004
		1120.29		15.10		
		1764.49*		15.80	2.32267E+005	1.19875E+005
PB-214	0.564	74.82*	@	6.21	2.92417E+006	9.09780E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.65064E+005	1.03016E+005
		351.92*		37.20	2.52514E+005	7.03589E+004
Ac-228	0.544	338.32*		11.40	3.87372E+005	1.56943E+005
		911.07*		27.70	2.63487E+005	8.71320E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.970	5.839052E+006	7.420381E+005
TL-208		0.469	1.386475E+005	3.432060E+004
Bi-212		0.992	1.882048E+005	1.108907E+005
Pb-212	@	0.497	2.659737E+005	6.912815E+004
Bi-214		0.696	2.473730E+005	5.624762E+004
PB-214	@	0.564	2.565058E+005	5.810066E+004
Ac-228		0.544	2.926754E+005	7.617916E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	1.5642E-001	28.08
F 3	84.76	1.2255E-001	37.78

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7289E+004	5.71E+004	-1.9356E+004
	1332.49	100.00	5.7099E+004		2.2810E+004
Nb-94	702.63	100.00	5.4792E+004	4.99E+004	1.4124E+004
	871.10	100.00	4.9853E+004		1.3387E+004
Ag-108m	79.20	7.10	1.9846E+006	6.52E+004	-4.1269E+006
	433.93	89.90	6.5949E+004		3.1839E+004
	614.37	90.40	8.8028E+004		4.8727E+003
	722.95	90.50	6.5208E+004		2.9628E+004
Sb-125	176.33	6.89	1.0784E+006	2.04E+005	6.7364E+005
	427.89	29.33	2.0422E+005		-5.4431E+004
	463.38	10.35	5.8552E+005		-2.4960E+005
	600.56	17.80	3.0756E+005		-3.0880E+005
	606.64	5.02	1.6438E+006		3.4483E+006
	635.90	11.32	4.8234E+005		-1.2625E+005
Cs-134	563.23	8.38	6.8996E+005	6.79E+004	-1.7005E+005
	569.32	15.43	3.7010E+005		-3.7938E+004
	604.70	97.60	8.2313E+004		-2.0485E+004
	795.84	85.40	6.7861E+004		-2.9304E+004
	801.93	8.73	6.2266E+005		-6.3414E+004
Cs-137	661.65	85.12	7.3392E+004	7.34E+004	1.1945E+004
Eu-152	121.78	28.40	3.2487E+005	2.27E+005	1.2549E+005
	244.69	7.49	9.4733E+005		-1.5002E+006
	344.27	26.50	2.3291E+005		1.0252E+005
	778.89	12.74	4.2517E+005		-2.9984E+005
	867.32	4.16	1.1967E+006		-1.7602E+006
	964.01	14.40	4.4748E+005		2.9315E+005
	1085.78	10.00	5.9580E+005		7.4624E+005
	1112.02	13.30	4.8326E+005		-3.4862E+005
	1407.95	20.70	2.2741E+005		-2.6095E+004
Eu-154	123.07	40.50	2.2213E+005	1.54E+005	-2.6539E+005
	247.94	6.60	9.8059E+005		-1.2255E+006
	591.81	4.83	1.1898E+006		8.7119E+005
	723.30	19.70	2.9394E+005		-7.2449E+004
	756.87	4.33	1.2962E+006		6.2919E+004
	873.19	11.50	4.3384E+005		-3.8369E+005
	996.32	10.30	5.6340E+005		4.0606E+004
	1004.76	17.90	3.1935E+005		-3.0909E+003
	1274.45	35.50	1.5445E+005		1.1915E+005
Eu-155	86.54	30.90	4.2547E+005	4.25E+005	6.6008E+005
	105.31	20.70	5.0505E+005		2.6885E+005
Am-241	59.54	35.90	4.6230E+005	4.62E+005	-1.8494E+005
Cm-243	228.19	10.56	6.6584E+005	4.78E+005	2.8585E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7761E+005	4.78E+005	1.2998E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 3:41:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 3:26:26 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	316	291.82	72.80	0.94	1.58E+002	38.96	4.01E+002
m	2	286-	316	300.33	74.94	0.94	2.65E+002	44.90	4.01E+002
m	3	286-	316	308.75	77.05	0.95	8.92E+001	34.94	4.33E+002
F	4	330-	345	339.41	84.74	0.58	9.28E+001	33.55	5.13E+002
F	5	947-	960	954.51	238.95	0.81	1.23E+002	28.82	1.42E+002
F	6	1169-	1186	1179.16	295.22	1.81	6.98E+001	21.37	8.76E+001
F	7	1402-	1412	1407.40	352.37	0.86	6.54E+001	21.39	6.22E+001
F	8	1951-	1960	1955.83	489.62	0.65	1.52E+001	11.06	2.36E+001
F	9	2324-	2340	2330.69	583.36	1.23	7.31E+001	19.90	3.85E+001
F	10	2428-	2442	2435.37	609.53	1.16	8.91E+001	20.74	2.97E+001
F	11	3634-	3653	3643.28	911.28	1.78	7.94E+001	18.79	2.27E+001
F	12	3867-	3880	3873.49	968.75	1.11	2.51E+001	13.31	2.28E+001
F	13	4470-	4486	4479.12	1119.89	1.73	4.01E+001	15.79	2.73E+001
F	14	5827-	5854	5840.96	1459.62	1.98	4.05E+002	39.38	2.10E+001
F	15	7049-	7062	7055.44	1762.57	1.73	3.09E+001	11.97	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.958	1460.81*		10.67	5.90359E+006	7.47061E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	9.59797E+004	2.90330E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	2.31411E+006	5.99858E+005
		77.11*	@	18.00	4.50880E+005	1.97421E+005
		87.30	@	8.00		
		238.63*		44.60	2.22598E+005	6.26194E+004
Bi-214	0.975	609.31*		46.30	2.16281E+005	5.70775E+004
		1120.29*		15.10	3.75431E+005	1.53163E+005
		1764.49*		15.80	3.23839E+005	1.29613E+005
PB-214	0.758	74.82*	@	6.21	3.98727E+006	1.07334E+006
		77.11*	@	10.50	7.72937E+005	3.43322E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.14098E+005	1.09726E+005
		351.92*		37.20	1.61230E+005	5.92096E+004
Ac-228	0.621	338.32		11.40		
		911.07*		27.70	3.69279E+005	9.71723E+004
		969.11*		16.60	2.00484E+005	1.08248E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.958	5.903590E+006	7.470614E+005
TL-208		0.470	9.597967E+004	2.903303E+004
Pb-212	@	0.837	2.225977E+005	6.261942E+004
Bi-214		0.975	2.485140E+005	4.944049E+004
PB-214	@	0.758	1.957040E+005	5.210727E+004
Ac-228		0.621	2.939563E+005	7.231099E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.7525E-001	24.70
F	4	84.74	1.0308E-001	36.16
F	8	489.62	1.6889E-002	72.75

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4184E+004	4.90E+004	-2.7377E+004
	1332.49	100.00	4.9047E+004		2.9936E+004
Nb-94	702.63	100.00	5.9016E+004	5.78E+004	4.1060E+004
	871.10	100.00	5.7786E+004		1.6932E+004
Ag-108m	79.20	7.10	2.0060E+006	6.34E+004	-5.7555E+005
	433.93	89.90	6.3412E+004		1.5370E+003
	614.37	90.40	8.2481E+004		-6.2996E+003
	722.95	90.50	7.0194E+004		2.6365E+004
Sb-125	176.33	6.89	1.0505E+006	1.95E+005	2.9664E+005
	427.89	29.33	1.9467E+005		6.3488E+004
	463.38	10.35	6.0014E+005		6.2110E+005
	600.56	17.80	3.1048E+005		-1.2832E+005
	606.64	5.02	1.4896E+006		1.8607E+006
	635.90	11.32	5.4993E+005		2.3510E+004
Cs-134	563.23	8.38	6.7582E+005	6.86E+004	-1.1965E+004
	569.32	15.43	3.8231E+005		1.4012E+005
	604.70	97.60	7.5936E+004		-4.3529E+004
	795.84	85.40	6.8560E+004		7.6896E+003
	801.93	8.73	6.3365E+005		-1.8919E+005
Cs-137	661.65	85.12	6.8310E+004	6.83E+004	1.4864E+004
Eu-152	121.78	28.40	3.3093E+005	2.28E+005	1.3255E+005
	244.69	7.49	9.7189E+005		1.9499E+005
	344.27	26.50	2.2771E+005		-4.1327E+005
	778.89	12.74	3.9671E+005		-2.8240E+005
	867.32	4.16	1.4024E+006		-9.5974E+005
	964.01	14.40	5.0407E+005		8.0521E+005
	1085.78	10.00	5.7662E+005		6.6685E+003
	1112.02	13.30	5.3632E+005		-2.2945E+005
	1407.95	20.70	2.3862E+005		1.4922E+005
Eu-154	123.07	40.50	2.2899E+005	1.68E+005	7.4447E+004
	247.94	6.60	1.0576E+006		-4.6163E+005
	591.81	4.83	1.2199E+006		6.4299E+005
	723.30	19.70	3.2252E+005		1.9975E+005
	756.87	4.33	1.2610E+006		-7.8889E+005
	873.19	11.50	5.1388E+005		1.3069E+005
	996.32	10.30	5.1228E+005		-4.7801E+005
	1004.76	17.90	3.1729E+005		3.8077E+004
	1274.45	35.50	1.6835E+005		-1.1637E+005
Eu-155	86.54	30.90	4.1362E+005	4.14E+005	-2.2094E+004
	105.31	20.70	5.1096E+005		5.2939E+005
Am-241	59.54	35.90	4.6230E+005	4.62E+005	-1.3139E+005
Cm-243	228.19	10.56	6.6866E+005	4.59E+005	1.2654E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5924E+005	4.59E+005	-1.8087E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 4:01:18 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 3:46:18 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	305	300.35	74.95	0.77	2.10E+002	47.15	4.57E+002
F	2	947-	960	953.66	238.73	0.91	1.32E+002	29.69	1.46E+002
F	3	1176-	1186	1181.11	295.71	0.73	2.89E+001	17.41	7.15E+001
F	4	1347-	1358	1352.37	338.60	1.08	3.13E+001	18.21	6.24E+001
F	5	1397-	1414	1406.90	352.25	1.75	1.04E+002	22.34	6.09E+001
F	6	2323-	2340	2331.74	583.62	1.67	7.49E+001	20.35	5.14E+001
F	7	2428-	2442	2435.17	609.48	1.16	9.05E+001	21.78	4.13E+001
F	8	3636-	3651	3642.67	911.13	1.49	6.35E+001	18.12	2.29E+001
F	9	3868-	3881	3874.70	969.05	1.60	4.45E+001	15.15	1.43E+001
F	10	5829-	5853	5841.44	1459.74	1.97	4.18E+002	39.52	6.09E+000
F	11	7050-	7064	7056.33	1762.79	1.80	3.61E+001	11.99	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.966	1460.81*		10.67	6.09839E+006	7.58859E+005
TL-208	0.466	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	9.83416E+004	2.97062E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.83489E+006	5.47043E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.38876E+005	6.53484E+004
Bi-214	0.686	609.31*		46.30	2.19653E+005	5.94981E+004
		1120.29		15.10		
		1764.49*		15.80	3.78270E+005	1.31345E+005
PB-214	0.563	74.82*	@	6.21	3.16157E+006	9.70109E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.30319E+005	8.13744E+004
		351.92*		37.20	2.57199E+005	6.98453E+004
Ac-228	0.999	338.32*		11.40	2.48755E+005	1.49659E+005
		911.07*		27.70	2.95395E+005	9.08630E+004
		969.11*		16.60	3.55303E+005	1.26491E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.966	6.098389E+006	7.588594E+005
TL-208		0.466	9.834157E+004	2.970618E+004
Pb-212	@	0.497	2.388757E+005	6.534842E+004
Bi-214		0.686	2.466595E+005	5.419675E+004
PB-214	@	0.563	2.033765E+005	5.299967E+004
Ac-228		0.999	3.026750E+005	6.618752E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0915E+004	5.27E+004	-1.4921E+004
	1332.49	100.00	5.2734E+004		1.8747E+004
Nb-94	702.63	100.00	5.4203E+004	5.42E+004	-2.7662E+004
	871.10	100.00	5.9050E+004		1.5067E+004
Ag-108m	79.20	7.10	1.9708E+006	6.62E+004	-2.3713E+006
	433.93	89.90	6.6156E+004		-4.5509E+004
	614.37	90.40	8.6221E+004		-2.2549E+004
	722.95	90.50	6.8188E+004		3.6513E+004
Sb-125	176.33	6.89	1.1033E+006	2.04E+005	1.0818E+005
	427.89	29.33	2.0360E+005		1.2747E+005
	463.38	10.35	5.8180E+005		2.6890E+004
	600.56	17.80	2.9094E+005		5.5492E+004
	606.64	5.02	1.5561E+006		3.3122E+006
	635.90	11.32	4.9664E+005		2.3695E+005
Cs-134	563.23	8.38	7.0381E+005	6.82E+004	1.7998E+005
	569.32	15.43	3.9412E+005		1.2046E+005
	604.70	97.60	7.9378E+004		-2.8603E+004
	795.84	85.40	6.8211E+004		-6.4809E+003
	801.93	8.73	6.4445E+005		-1.2066E+006
Cs-137	661.65	85.12	7.0148E+004	7.01E+004	-1.2753E+003
Eu-152	121.78	28.40	3.3361E+005	1.93E+005	6.1554E+004
	244.69	7.49	9.8393E+005		4.3382E+004
	344.27	26.50	2.2477E+005		-5.0711E+004
	778.89	12.74	4.5173E+005		1.6788E+005
	867.32	4.16	1.4472E+006		-1.2812E+006
	964.01	14.40	4.7868E+005		4.2137E+005
	1085.78	10.00	5.4441E+005		-3.5692E+005
	1112.02	13.30	4.7244E+005		-3.4539E+005
	1407.95	20.70	1.9286E+005		-2.8814E+005
Eu-154	123.07	40.50	2.3350E+005	1.81E+005	1.4355E+005
	247.94	6.60	1.0248E+006		-6.7408E+005
	591.81	4.83	1.1271E+006		6.7869E+005
	723.30	19.70	3.1196E+005		1.4063E+005
	756.87	4.33	1.2752E+006		6.8200E+005
	873.19	11.50	5.1115E+005		2.8120E+005
	996.32	10.30	5.0060E+005		3.3524E+005
	1004.76	17.90	2.7988E+005		-4.4789E+005
	1274.45	35.50	1.8112E+005		8.3969E+004
Eu-155	86.54	30.90	4.2688E+005	4.27E+005	5.8407E+005
	105.31	20.70	4.9706E+005		-2.5958E+005
Am-241	59.54	35.90	4.4354E+005	4.44E+005	-3.2004E+003
Cm-243	228.19	10.56	6.6584E+005	4.62E+005	-1.4475E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6191E+005	4.62E+005	-1.1188E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 3:20:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 3:04:57 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.81	72.80	0.82	1.29E+002	37.32	4.01E+002
m	2	284-	306	300.40	74.96	0.83	2.61E+002	47.93	4.61E+002
M	3	333-	355	339.72	84.82	0.62	6.74E+001	31.53	2.73E+002
m	4	333-	355	349.78	87.34	0.62	5.02E+001	29.45	2.76E+002
F	5	947-	960	953.82	238.77	1.00	1.69E+002	31.71	1.32E+002
F	6	1174-	1187	1180.03	295.44	0.96	4.17E+001	19.45	8.36E+001
F	7	1396-	1417	1406.72	352.20	1.48	1.03E+002	23.05	8.24E+001
F	8	2324-	2338	2331.31	583.51	1.22	6.39E+001	19.55	4.33E+001
F	9	2427-	2444	2435.50	609.56	1.24	8.29E+001	20.93	4.69E+001
F	10	3636-	3652	3643.18	911.25	1.71	6.77E+001	18.72	2.85E+001
F	11	3865-	3880	3873.25	968.69	1.52	4.16E+001	14.60	1.59E+001
F	12	5830-	5854	5841.74	1459.81	2.07	3.98E+002	38.69	1.25E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.970	1460.81*		10.67	5.80267E+006	7.34118E+005
TL-208	0.468	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	8.38381E+004	2.79468E+004
		860.37		12.46		
Pb-212	0.659	74.81*	@	10.70	2.28193E+006	6.12859E+005
		77.11	@	18.00		
		87.30*	@	8.00	5.02504E+005	3.10795E+005
		238.63*		44.60	3.05427E+005	7.45893E+004
Bi-214	0.417	609.31*		46.30	2.01253E+005	5.66241E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.656	74.82*	@	6.21	3.93183E+006	1.09387E+006
		77.11	@	10.50		
		87.30*	@	4.67	8.60821E+005	5.36368E+005
		241.98		7.49		
		295.21*		19.20	1.87758E+005	9.30815E+004
		351.92*		37.20	2.54153E+005	7.09311E+004
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	3.14806E+005	9.43080E+004
		969.11*		16.60	3.31761E+005	1.21583E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	K-40		0.970	5.802671E+006	7.341182E+005
X	Eu-155		0.331		
	TL-208		0.468	8.383811E+004	2.794677E+004
	Pb-212	@	0.659	3.054270E+005	7.458935E+004
	Bi-214		0.417	2.012530E+005	5.662405E+004
	PB-214	@	0.656	2.297616E+005	5.641737E+004
	Ac-228		0.620	3.211752E+005	7.451831E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	1.4351E-001	28.89
M 3	84.82	7.4915E-002	46.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8073E+004	4.38E+004	-6.4201E+003
	1332.49	100.00	4.3806E+004		5.2822E+003
Nb-94	702.63	100.00	5.4792E+004	5.02E+004	-5.6752E+002
	871.10	100.00	5.0226E+004		-5.6228E+004
Ag-108m	79.20	7.10	1.9734E+006	6.45E+004	-1.1028E+006
	433.93	89.90	6.4482E+004		-9.6065E+003
	614.37	90.40	8.5814E+004		-3.5921E+004
	722.95	90.50	6.7309E+004		2.8037E+004
Sb-125	176.33	6.89	1.0761E+006	1.97E+005	7.6173E+005
	427.89	29.33	1.9662E+005		1.6058E+005
	463.38	10.35	5.7806E+005		-1.6872E+005
	600.56	17.80	3.4610E+005		2.4747E+005
	606.64	5.02	1.5882E+006		2.7977E+006
	635.90	11.32	4.5746E+005		1.8031E+005
Cs-134	563.23	8.38	6.7296E+005	7.13E+004	-2.4236E+005
	569.32	15.43	3.7626E+005		-1.6536E+005
	604.70	97.60	8.0122E+004		5.2839E+003
	795.84	85.40	7.1284E+004		-9.7772E+003
	801.93	8.73	6.8915E+005		-7.6600E+005
Cs-137	661.65	85.12	6.7055E+004	6.71E+004	-1.4199E+004
Eu-152	121.78	28.40	3.3361E+005	1.93E+005	3.1249E+004
	244.69	7.49	9.5009E+005		-1.7199E+005
	344.27	26.50	2.3061E+005		-2.8072E+005
	778.89	12.74	4.7005E+005		-1.0792E+005
	867.32	4.16	1.2748E+006		-6.1971E+005
	964.01	14.40	4.9252E+005		5.6611E+005
	1085.78	10.00	5.3604E+005		1.5083E+005
	1112.02	13.30	4.5852E+005		-4.7918E+005
	1407.95	20.70	1.9286E+005		-2.5992E+004
Eu-154	123.07	40.50	2.3104E+005	1.41E+005	-3.3704E+004
	247.94	6.60	1.0198E+006		-1.5046E+006
	591.81	4.83	1.1163E+006		-7.7521E+005
	723.30	19.70	3.0653E+005		1.1511E+005
	756.87	4.33	1.3637E+006		-1.5074E+005
	873.19	11.50	4.4981E+005		-1.0661E+005
	996.32	10.30	5.3483E+005		4.6015E+005
	1004.76	17.90	3.1522E+005		1.8123E+005
	1274.45	35.50	1.4052E+005		-1.9123E+004
Eu-155	86.54*	30.90	2.0734E+005	2.07E+005	1.3010E+005
	105.31	20.70	4.9533E+005		5.0013E+004
Am-241	59.54	35.90	4.6385E+005	4.64E+005	-2.0194E+005
Cm-243	228.19	10.56	6.6015E+005	4.53E+005	-2.7741E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5295E+005	4.53E+005	-6.6577E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 2:55:30 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 2:40:29 PM
Live Time: 900.0 seconds
Real Time: 900.8 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	291.93	72.83	0.77	9.39E+001	34.85	3.70E+002
m	2	287-	305	300.21	74.91	0.78	1.99E+002	45.04	4.18E+002
F	3	333-	364	339.65	84.80	1.38	1.46E+002	41.50	1.04E+003
F	4	946-	961	954.29	238.89	1.28	1.46E+002	30.94	1.66E+002
F	5	1348-	1357	1353.28	338.82	0.84	2.64E+001	16.38	5.28E+001
F	6	1400-	1411	1406.35	352.11	1.06	6.34E+001	21.18	6.00E+001
F	7	2032-	2053	2043.02	511.42	2.18	1.23E+002	22.24	4.35E+001
F	8	2324-	2337	2331.22	583.49	1.17	8.00E+001	20.46	3.50E+001
F	9	2428-	2442	2435.86	609.65	1.06	8.79E+001	20.89	3.38E+001
F	10	3636-	3652	3643.24	911.27	1.57	6.21E+001	18.16	2.57E+001
F	11	3868-	3884	3875.46	969.24	1.80	5.23E+001	15.67	1.43E+001
F	12	5830-	5854	5842.30	1459.95	1.97	3.88E+002	38.26	9.43E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.29223E+005	2.95682E+004
K-40	0.978	1460.81*		10.67	5.66277E+006	7.22111E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	5.98255E+005	1.45347E+005
		583.14*		84.20	1.04927E+005	3.02277E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	1.74443E+006	5.21630E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.63035E+005	6.93937E+004
Bi-214	0.416	609.31*		46.30	2.13393E+005	5.72431E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.998	338.32*		11.40	2.09815E+005	1.34126E+005
		911.07*		27.70	2.88660E+005	9.07487E+004
		969.11*		16.60	4.17488E+005	1.32498E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	1.065590E+005	3.027148E+004
K-40		0.978	5.662775E+006	7.221108E+005
TL-208		0.749	1.049268E+005	3.003362E+004
Pb-212	@	0.496	2.630349E+005	6.939367E+004
Bi-214		0.416	2.133926E+005	5.724309E+004
Ac-228		0.998	3.012912E+005	6.537538E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.0428E-001	37.13
F 3	84.80	1.6216E-001	28.43
F 6	352.11	7.0491E-002	33.38

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0118E+004	4.96E+004	2.2639E+004
	1332.49	100.00	4.9592E+004		3.2556E+004
Nb-94	702.63	100.00	5.5952E+004	5.10E+004	-1.7101E+004
	871.10	100.00	5.0963E+004		1.5840E+003
Ag-108m	79.20	7.10	1.9949E+006	6.05E+004	-1.4092E+006
	433.93	89.90	6.0538E+004		-1.0570E+004
	614.37	90.40	8.2268E+004		-1.8495E+004
	722.95	90.50	7.0476E+004		-1.2629E+003
Sb-125	176.33	6.89	1.0887E+006	2.04E+005	6.1148E+005
	427.89	29.33	2.0360E+005		3.9249E+004
	463.38	10.35	5.7241E+005		3.4020E+004
	600.56	17.80	3.1048E+005		1.0848E+005
	606.64	5.02	1.5597E+006		2.5993E+006
	635.90	11.32	4.9192E+005		4.0401E+004
Cs-134	563.23	8.38	7.0381E+005	6.89E+004	-2.5647E+004
	569.32	15.43	4.0698E+005		2.6073E+005
	604.70	97.60	7.9378E+004		-4.0745E+004
	795.84	85.40	6.8907E+004		4.0549E+003
	801.93	8.73	6.4445E+005		-2.1509E+005
Cs-137	661.65	85.12	6.5775E+004	6.58E+004	5.3862E+004
Eu-152	121.78	28.40	3.2019E+005	2.03E+005	-1.3460E+005
	244.69	7.49	9.5969E+005		-4.3874E+005
	344.27	26.50	2.1755E+005		-2.2709E+005
	778.89	12.74	4.3259E+005		-9.0208E+004
	867.32	4.16	1.1602E+006		-1.7475E+006
	964.01	14.40	5.0975E+005		1.3990E+005
	1085.78	10.00	5.3604E+005		-3.5591E+005
	1112.02	13.30	4.6969E+005		-3.7091E+004
	1407.95	20.70	2.0293E+005		-1.0954E+005
Eu-154	123.07	40.50	2.2574E+005	1.52E+005	9.4872E+004
	247.94	6.60	1.0097E+006		-9.3780E+005
	591.81	4.83	1.1378E+006		-1.1627E+005
	723.30	19.70	3.2766E+005		1.2063E+005
	756.87	4.33	1.2248E+006		3.4390E+005
	873.19	11.50	4.6822E+005		2.4687E+005
	996.32	10.30	5.2369E+005		2.3478E+005
	1004.76	17.90	2.9142E+005		-9.0726E+004
	1274.45	35.50	1.5178E+005		9.8373E+004
Eu-155	86.54	30.90	4.2934E+005	4.29E+005	-2.2875E+004
	105.31	20.70	4.9446E+005		-5.0951E+005
Am-241	59.54	35.90	4.3756E+005	4.38E+005	-3.2156E+005
Cm-243	228.19	10.56	6.2187E+005	4.85E+005	-6.3985E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8527E+005	4.85E+005	4.6661E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 2:36:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 2:21:06 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	306	291.57	72.74	0.87	1.46E+002	39.48	3.47E+002
m	2	288-	306	300.07	74.87	0.87	2.67E+002	48.82	5.10E+002
F	3	947-	961	954.05	238.83	1.15	1.48E+002	30.42	1.40E+002
F	4	1174-	1185	1179.95	295.42	0.96	2.89E+001	19.56	8.75E+001
F	5	1398-	1415	1406.43	352.13	1.25	1.27E+002	24.65	5.61E+001
F	6	1804-	1817	1811.24	453.44	0.92	2.16E+001	14.25	4.14E+001
F	7	2324-	2340	2331.50	583.56	1.43	1.07E+002	22.43	3.79E+001
F	8	2426-	2445	2435.58	609.58	1.57	9.74E+001	21.46	4.24E+001
F	9	3066-	3077	3071.47	768.48	0.85	1.76E+001	10.65	1.41E+001
F	10	3636-	3654	3644.17	911.50	2.06	7.40E+001	18.60	2.35E+001
F	11	3868-	3880	3872.95	968.61	1.18	3.28E+001	14.97	2.55E+001
F	12	4473-	4487	4479.43	1119.97	1.32	3.69E+001	13.86	1.36E+001
F	13	5828-	5855	5841.88	1459.85	2.09	4.34E+002	39.95	3.44E+000
F	14	7053-	7066	7059.14	1763.49	1.08	2.57E+001	11.63	8.69E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.972	1460.81*		10.67	6.33581E+006	7.76180E+005
TL-208	0.467	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.40421E+005	3.47988E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.33386E+006	6.25941E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.67226E+005	6.90446E+004
Bi-214	0.992	609.31*		46.30	2.36377E+005	5.98143E+004
		1120.29*		15.10	3.45259E+005	1.34865E+005
		1764.49*		15.80	2.69749E+005	1.24964E+005
PB-214	0.565	74.82*	@	6.21	4.02131E+006	1.11732E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.30083E+005	9.06961E+004
		351.92*		37.20	3.14017E+005	8.02776E+004
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	3.44355E+005	9.51387E+004
		969.11*		16.60	2.61876E+005	1.22551E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.972	6.335812E+006	7.761804E+005
TL-208		0.467	1.404207E+005	3.479880E+004
Pb-212	@	0.497	2.672258E+005	6.904459E+004
Bi-214		0.992	2.567606E+005	5.009267E+004
PB-214	@	0.565	2.332169E+005	6.011235E+004
Ac-228		0.618	3.133394E+005	7.515103E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.74	1.6188E-001	27.10
F	6	453.44	2.4050E-002	65.83
F	9	768.48	1.9525E-002	60.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0118E+004	4.79E+004	2.1659E+004
	1332.49	100.00	4.7936E+004		5.9885E+003
Nb-94	702.63	100.00	5.3305E+004	5.33E+004	1.5751E+004
	871.10	100.00	5.4488E+004		6.2725E+004
Ag-108m	79.20	7.10	2.0606E+006	6.49E+004	-8.5327E+005
	433.93	89.90	6.4905E+004		-2.0210E+004
	614.37	90.40	8.4580E+004		-1.8280E+004
	722.95	90.50	6.9342E+004		-9.8869E+003
Sb-125	176.33	6.89	1.0303E+006	1.91E+005	7.4028E+004
	427.89	29.33	1.9070E+005		-4.3316E+004
	463.38	10.35	6.1439E+005		5.2985E+005
	600.56	17.80	3.1048E+005		3.0204E+005
	606.64	5.02	1.5195E+006		2.4404E+006
	635.90	11.32	4.8475E+005		1.0087E+004
Cs-134	563.23	8.38	6.6718E+005	6.39E+004	2.9219E+005
	569.32	15.43	3.6066E+005		2.3514E+005
	604.70	97.60	7.3344E+004		-4.1892E+004
	795.84	85.40	6.3870E+004		-2.1206E+004
	801.93	8.73	6.2635E+005		-2.4294E+005
Cs-137	661.65	85.12	7.3679E+004	7.37E+004	-1.7862E+004
Eu-152	121.78	28.40	3.2318E+005	1.93E+005	-1.0696E+005
	244.69	7.49	9.3760E+005		-2.4045E+004
	344.27	26.50	2.3518E+005		-1.8783E+005
	778.89	12.74	4.3746E+005		-1.1991E+005
	867.32	4.16	1.2494E+006		-1.3677E+006
	964.01	14.40	5.2638E+005		5.4173E+005
	1085.78	10.00	5.3604E+005		2.1848E+005
	1112.02	13.30	4.3825E+005		-3.0761E+005
	1407.95	20.70	1.9286E+005		-1.5521E+005
Eu-154	123.07	40.50	2.2752E+005	1.58E+005	-3.0165E+004
	247.94	6.60	1.0013E+006		-1.5419E+006
	591.81	4.83	1.1745E+006		-4.8225E+005
	723.30	19.70	3.2122E+005		-2.2726E+004
	756.87	4.33	1.2893E+006		3.7752E+005
	873.19	11.50	4.5604E+005		-7.4955E+004
	996.32	10.30	4.9264E+005		-1.1376E+005
	1004.76	17.90	3.1314E+005		1.8046E+005
	1274.45	35.50	1.5837E+005		3.4810E+004
Eu-155	86.54	30.90	4.1453E+005	4.15E+005	1.6338E+005
	105.31	20.70	4.9792E+005		6.6200E+004
Am-241	59.54	35.90	4.4677E+005	4.47E+005	1.1442E+005
Cm-243	228.19	10.56	6.3983E+005	4.43E+005	-1.0745E+006

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4287E+005	4.43E+005	1.4380E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 4:15:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 4:00:44 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.76	72.79	0.84	1.47E+002	38.55	4.00E+002
m	2	285-	305	300.04	74.87	0.84	2.72E+002	49.99	5.45E+002
F	3	331-	343	338.86	84.60	1.08	1.40E+002	43.46	4.94E+002
F	4	600-	609	604.15	151.14	0.76	3.61E+001	25.21	1.73E+002
F	5	946-	961	953.78	238.76	1.15	1.60E+002	32.28	1.78E+002
F	6	1174-	1185	1180.45	295.54	0.92	3.39E+001	19.00	7.52E+001
F	7	1347-	1360	1353.00	338.75	1.12	5.24E+001	19.78	6.35E+001
F	8	1402-	1414	1407.26	352.34	0.95	6.15E+001	22.10	8.63E+001
F	9	2322-	2337	2330.60	583.34	1.20	8.20E+001	22.19	5.77E+001
F	10	2426-	2441	2434.66	609.35	1.33	7.02E+001	19.31	3.40E+001
F	11	3631-	3648	3640.61	910.61	1.72	6.62E+001	17.91	2.21E+001
F	12	3866-	3880	3872.75	968.56	1.46	4.44E+001	16.01	2.28E+001
F	13	4718-	4731	4724.23	1181.05	0.71	1.43E+001	9.47	1.56E+001
F	14	5827-	5852	5840.09	1459.40	1.97	5.27E+002	44.51	1.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.941	1460.81*		10.67	7.72976E+006	9.04540E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.07933E+005	3.25195E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.34274E+006	6.28952E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.87072E+005	7.33150E+004
Bi-214	0.419	609.31*		46.30	1.70949E+005	5.16357E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.561	74.82*	@	6.21	4.03661E+006	1.12262E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.52124E+005	8.89241E+004
		351.92*		37.20	1.51056E+005	5.98932E+004
Ac-228	0.993	338.32*		11.40	4.14339E+005	1.69483E+005
		911.07*		27.70	3.09579E+005	9.09538E+004
		969.11*		16.60	3.56340E+005	1.33688E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.941	7.729760E+006	9.045399E+005
TL-208		0.470	1.079335E+005	3.251948E+004
Pb-212	@	0.496	2.870723E+005	7.331505E+004
Bi-214		0.419	1.709486E+005	5.163571E+004
PB-214	@	0.561	1.513890E+005	4.967620E+004
Ac-228		0.993	3.391728E+005	6.873760E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.6336E-001	26.22
F 3	84.60	1.5535E-001	31.08
F 4	151.14	4.0115E-002	69.84
F 13	1181.05	1.5880E-002	66.25

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.8704E+004	5.40E+004	7.7396E+004
	1332.49	100.00	5.4027E+004		2.3041E+004
Nb-94	702.63	100.00	6.2257E+004	5.94E+004	4.4177E+004
	871.10	100.00	5.9360E+004		2.8951E+004
Ag-108m	79.20	7.10	2.0061E+006	6.81E+004	-1.3284E+006
	433.93	89.90	6.8097E+004		2.3133E+004
	614.37	90.40	8.1542E+004		9.4999E+003
	722.95	90.50	7.2255E+004		1.8224E+004
Sb-125	176.33	6.89	1.1247E+006	1.99E+005	-4.4726E+004
	427.89	29.33	1.9890E+005		-4.8893E+004
	463.38	10.35	6.1422E+005		3.8019E+004
	600.56	17.80	3.2594E+005		1.3174E+005
	606.64	5.02	1.4918E+006		1.6272E+006
	635.90	11.32	5.1068E+005		1.7514E+005
Cs-134	563.23	8.38	7.2480E+005	7.30E+004	2.3781E+005
	569.32	15.43	3.8347E+005		-1.6174E+004
	604.70	97.60	7.6828E+004		-1.0055E+004
	795.84	85.40	7.2991E+004		1.8947E+004
	801.93	8.73	6.7932E+005		-3.1263E+005
Cs-137	661.65	85.12	7.6074E+004	7.61E+004	1.5749E+004
Eu-152	121.78	28.40	3.3369E+005	2.43E+005	-1.7696E+005
	244.69	7.49	1.0618E+006		-1.5100E+005
	344.27	26.50	2.4814E+005		6.5507E+004
	778.89	12.74	4.5179E+005		-2.5434E+005
	867.32	4.16	1.3711E+006		-2.0763E+006
	964.01	14.40	5.0286E+005		4.6213E+005
	1085.78	10.00	5.5963E+005		-1.7481E+005
	1112.02	13.30	5.5101E+005		4.9503E+005
	1407.95	20.70	2.4279E+005		9.3388E+004
Eu-154	123.07	40.50	2.3513E+005	1.59E+005	5.8115E+003
	247.94	6.60	1.1508E+006		1.8406E+005
	591.81	4.83	1.1993E+006		-1.0183E+006
	723.30	19.70	3.3071E+005		-2.0904E+005
	756.87	4.33	1.4727E+006		7.9422E+005
	873.19	11.50	4.7963E+005		-6.5341E+005
	996.32	10.30	5.9359E+005		6.4499E+005
	1004.76	17.90	2.9745E+005		-3.5534E+005
	1274.45	35.50	1.5922E+005		0.0000E+000
Eu-155	86.54	30.90	4.5169E+005	4.52E+005	-4.7956E+004
	105.31	20.70	5.1359E+005		-1.6463E+005
Am-241	59.54	35.90	4.7101E+005	4.71E+005	6.8512E+004
Cm-243	228.19	10.56	7.4359E+005	5.11E+005	6.6000E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1147E+005	5.11E+005	4.5329E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 4:39:18 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 4:24:15 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.97	72.84	0.88	1.46E+002	38.75	4.27E+002
m	2	286-	305	300.10	74.88	0.88	2.40E+002	47.51	5.14E+002
F	3	332-	345	339.56	84.78	1.17	1.11E+002	41.36	4.87E+002
F	4	947-	961	953.70	238.74	1.01	1.21E+002	29.49	1.63E+002
F	5	1174-	1184	1179.53	295.31	1.10	5.21E+001	19.96	5.48E+001
F	6	1347-	1357	1351.24	338.31	0.79	2.94E+001	16.87	5.64E+001
F	7	1398-	1413	1406.11	352.05	1.20	5.06E+001	20.26	8.39E+001
F	8	2036-	2053	2043.43	511.53	1.52	7.14E+001	21.28	6.53E+001
F	9	2322-	2338	2330.10	583.21	1.19	8.11E+001	20.79	4.27E+001
F	10	2426-	2443	2434.90	609.41	1.42	8.03E+001	19.93	3.40E+001
F	11	3634-	3649	3641.69	910.88	1.18	6.16E+001	18.19	2.81E+001
F	12	4473-	4484	4478.97	1119.85	0.85	2.24E+001	11.95	1.76E+001
F	13	5828-	5853	5840.50	1459.50	1.92	4.74E+002	42.37	1.61E+001
F	14	7049-	7062	7054.84	1762.42	1.83	2.84E+001	10.87	1.95E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.992	511.00*		100.00	7.51456E+004	2.47472E+004
K-40	0.949	1460.81*		10.67	6.95776E+006	8.39045E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	3.47896E+005	1.18040E+005
		583.14*		84.20	1.06776E+005	3.07991E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.06315E+006	5.74732E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.17273E+005	6.28973E+004
Bi-214	0.972	609.31*		46.30	1.95712E+005	5.43328E+004
		1120.29*		15.10	2.10436E+005	1.14638E+005
		1764.49*		15.80	2.99869E+005	1.18818E+005
PB-214	0.564	74.82*	@	6.21	3.55486E+006	1.02335E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.33430E+005	9.77029E+004
		351.92*		37.20	1.24374E+005	5.39450E+004
Ac-228	0.546	338.32*		11.40	2.32721E+005	1.38333E+005
		911.07*		27.70	2.88123E+005	9.12702E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.992	5.208210E+004	2.561473E+004
K-40		0.949	6.957758E+006	8.390446E+005
TL-208		0.750	1.067757E+005	3.060191E+004
Pb-212	@	0.496	2.172733E+005	6.289728E+004
Bi-214		0.972	2.132095E+005	4.537618E+004
PB-214	@	0.564	1.498523E+005	4.722490E+004
Ac-228		0.546	2.713199E+005	7.618251E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	1.6237E-001	26.52
F 3	84.78	1.2356E-001	37.19

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7955E+004	4.70E+004	3.3418E+004
	1332.49	100.00	4.7050E+004		-3.1772E+004
Nb-94	702.63	100.00	5.9337E+004	5.58E+004	3.2106E+004
	871.10	100.00	5.5791E+004		2.6995E+004
Ag-108m	79.20	7.10	2.0225E+006	6.42E+004	-1.5268E+006
	433.93	89.90	6.4184E+004		5.4821E+002
	614.37	90.40	7.9563E+004		2.5713E+004
	722.95	90.50	6.7968E+004		-3.6174E+004
Sb-125	176.33	6.89	1.1051E+006	2.08E+005	-5.5245E+005
	427.89	29.33	2.0823E+005		2.0339E+005
	463.38	10.35	6.1069E+005		4.0324E+005
	600.56	17.80	3.5004E+005		2.9381E+005
	606.64	5.02	1.4610E+006		9.8402E+005
	635.90	11.32	4.7234E+005		-1.2918E+005
Cs-134	563.23	8.38	6.7200E+005	6.79E+004	1.0373E+005
	569.32	15.43	3.7278E+005		-1.4944E+005
	604.70	97.60	7.6633E+004		-2.0213E+004
	795.84	85.40	6.7867E+004		2.0443E+004
	801.93	8.73	6.2967E+005		-3.8967E+005
Cs-137	661.65	85.12	7.0228E+004	7.02E+004	-3.7031E+003
Eu-152	121.78	28.40	3.3208E+005	2.20E+005	2.3065E+004
	244.69	7.49	9.6091E+005		3.3543E+005
	344.27	26.50	2.3728E+005		1.2664E+005
	778.89	12.74	4.2744E+005		-1.9258E+005
	867.32	4.16	1.3230E+006		-1.9869E+006
	964.01	14.40	4.8719E+005		3.8588E+005
	1085.78	10.00	5.5963E+005		-2.3925E+005
	1112.02	13.30	5.4152E+005		-2.9775E+005
	1407.95	20.70	2.1990E+005		2.2470E+004
Eu-154	123.07	40.50	2.3019E+005	1.58E+005	7.6073E+004
	247.94	6.60	1.0354E+006		-2.2547E+005
	591.81	4.83	1.1579E+006		-5.7035E+005
	723.30	19.70	3.1229E+005		-1.2234E+005
	756.87	4.33	1.2461E+006		3.5679E+005
	873.19	11.50	4.6459E+005		-6.0969E+004
	996.32	10.30	4.7878E+005		-8.7549E+004
	1004.76	17.90	2.9520E+005		-6.4326E+004
	1274.45	35.50	1.5792E+005		-3.4193E+003
Eu-155	86.54	30.90	4.1740E+005	4.17E+005	6.3021E+005
	105.31	20.70	5.1548E+005		1.8551E+005
Am-241	59.54	35.90	4.6392E+005	4.64E+005	1.1847E+004
Cm-243	228.19	10.56	7.0690E+005	4.70E+005	-3.6076E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7020E+005	4.70E+005	-2.0672E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 4:58:57 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 4:43:54 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	306	291.73	72.78	0.84	9.93E+001	36.03	3.36E+002
m	2	288-	306	299.87	74.82	0.84	2.21E+002	46.77	4.73E+002
M	3	330-	356	339.70	84.82	1.32	1.64E+002	41.52	5.76E+002
m	4	330-	356	352.28	87.97	1.33	8.60E+001	35.30	4.63E+002
F	5	948-	960	953.95	238.81	1.15	9.80E+001	26.89	1.18E+002
F	6	1174-	1183	1178.74	295.12	0.35	2.00E+001	4.40	4.84E+001
F	7	1399-	1412	1405.66	351.94	1.41	7.00E+001	20.69	5.46E+001
F	8	2324-	2337	2330.96	583.43	1.07	4.57E+001	18.11	4.79E+001
F	9	2427-	2443	2434.64	609.35	1.26	6.08E+001	19.04	4.64E+001
F	10	3635-	3651	3641.85	910.92	1.33	5.89E+001	17.57	2.63E+001
F	11	3868-	3880	3873.39	968.72	0.91	2.15E+001	12.08	2.00E+001
F	12	5827-	5854	5840.28	1459.45	2.03	3.22E+002	34.92	1.31E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.945	1460.81*		10.67	4.72768E+006	6.39564E+005
Eu-155	0.306	86.54*		30.90	2.18102E+005	9.91697E+004
		105.31		20.70		
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	6.01541E+004	2.51455E+004
		860.37		12.46		
Pb-212	0.656	74.81*	@	10.70	1.90252E+006	5.48563E+005
		77.11	@	18.00		
		87.30*	@	8.00	8.42420E+005	3.83043E+005
		238.63*		44.60	1.75655E+005	5.55193E+004
Bi-214	0.419	609.31*		46.30	1.48232E+005	4.99180E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.656	74.82*	@	6.21	3.27810E+006	9.74684E+005
		77.11	@	10.50		
		87.30*	@	4.67	1.44312E+006	6.65171E+005
		241.98		7.49		
		295.21*		19.20	8.95086E+004	2.47999E+004
		351.92*		37.20	1.72041E+005	5.84023E+004
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	2.75389E+005	8.80222E+004
		969.11*		16.60	1.72350E+005	9.85778E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.945	4.727681E+006	6.395637E+005
Eu-155		0.306	1.572249E+005	1.002626E+005
TL-208		0.469	6.015407E+004	2.514545E+004
Pb-212	@	0.656	1.756549E+005	5.551932E+004
Bi-214		0.419	1.482317E+005	4.991803E+004
PB-214	@	0.656	1.018996E+005	2.229698E+004
Ac-228		0.620	2.296796E+005	6.565698E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	1.1034E-001	36.29
M 3	84.82	1.8237E-001	25.29

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	5.5802E+004	4.53E+004	3.6066E+004
		1332.49	100.00	4.5272E+004		6.2480E+003
	Nb-94	702.63	100.00	5.5966E+004	4.86E+004	4.5825E+004
		871.10	100.00	4.8584E+004		3.3158E+004
	Ag-108m	79.20	7.10	1.9870E+006	5.55E+004	1.6674E+005
		433.93	89.90	5.5489E+004		-1.2849E+004
		614.37	90.40	7.6842E+004		1.5077E+003
		722.95	90.50	6.1763E+004		2.1668E+004
	Sb-125	176.33	6.89	1.0168E+006	1.72E+005	5.1249E+004
		427.89	29.33	1.7218E+005		6.8636E+004
		463.38	10.35	5.2883E+005		6.8690E+005
		600.56	17.80	2.9051E+005		-3.0246E+005
		606.64	5.02	1.4335E+006		1.6880E+006
		635.90	11.32	4.1918E+005		3.8745E+004
	Cs-134	563.23	8.38	6.3010E+005	6.42E+004	6.2179E+003
		569.32	15.43	3.4198E+005		2.6418E+005
		604.70	97.60	7.2613E+004		1.5699E+004
		795.84	85.40	6.4210E+004		2.3542E+004
		801.93	8.73	5.9149E+005		-5.2464E+004
	Cs-137	661.65	85.12	5.7015E+004	5.70E+004	-6.5366E+004
	Eu-152	121.78	28.40	3.2454E+005	2.16E+005	-8.0916E+004
		244.69	7.49	8.9821E+005		-1.7914E+005
		344.27	26.50	2.1629E+005		-2.2150E+005
		778.89	12.74	3.7656E+005		3.1620E+002
		867.32	4.16	1.1185E+006		-1.6841E+006
		964.01	14.40	4.5840E+005		1.6997E+005
		1085.78	10.00	5.0818E+005		4.8644E+005
		1112.02	13.30	4.0629E+005		-4.9314E+004
		1407.95	20.70	2.1685E+005		2.8950E+004
	Eu-154	123.07	40.50	2.2804E+005	1.46E+005	1.5994E+005
		247.94	6.60	9.3433E+005		-1.1369E+006
		591.81	4.83	1.1367E+006		4.7282E+005
		723.30	19.70	2.8076E+005		-2.7158E+004
		756.87	4.33	1.1143E+006		1.0130E+006
		873.19	11.50	4.1250E+005		1.1075E+005
		996.32	10.30	4.9521E+005		4.7741E+005
		1004.76	17.90	2.7168E+005		-1.7033E+005
		1274.45	35.50	1.4563E+005		4.6337E+004
+	Eu-155	86.54*	30.90	2.6076E+005	2.61E+005	2.1810E+005
		105.31	20.70	4.9397E+005		-1.2842E+005
	Am-241	59.54	35.90	4.8747E+005	4.87E+005	-1.7324E+005
	Cm-243	228.19	10.56	6.2791E+005	4.14E+005	1.4806E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.1409E+005	4.14E+005	1.0817E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:02:42 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-10-122-F-G.CNF
Sample ID:
Sample Title: TBN-01-10-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 5:04:52 PM
Live Time: 900.0 seconds
Real Time: 900.4 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-10-122-F-G.CNF
Log Number:
Title: TBN-01-10-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.89	72.82	1.00	1.46E+002	40.62	4.62E+002
m	2	286-	305	300.79	75.06	1.01	2.49E+002	47.47	4.86E+002
F	3	739-	751	743.54	186.08	0.73	4.42E+001	22.10	1.40E+002
F	4	947-	961	954.07	238.83	0.93	9.97E+001	25.61	1.13E+002
F	5	1400-	1411	1405.58	351.92	0.97	4.22E+001	18.89	6.00E+001
F	6	2325-	2337	2330.26	583.25	1.39	3.78E+001	15.05	2.14E+001
F	7	2428-	2441	2434.71	609.36	0.93	4.71E+001	17.13	3.87E+001
F	8	3634-	3652	3642.63	911.11	1.71	7.35E+001	18.08	1.32E+001
F	9	3866-	3877	3871.11	968.15	0.45	1.75E+001	5.63	1.93E+001
F	10	5827-	5852	5840.07	1459.40	2.05	3.29E+002	34.90	6.45E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-10-122-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.941	1460.81*	10.67	4.83170E+006	6.44419E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	4.97445E+004	2.08817E+004
		860.37	12.46		
Pb-212	0.495	74.81* @	10.70	2.13669E+006	5.84060E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.78760E+005	5.37924E+004
Bi-214	0.419	609.31*	46.30	1.14811E+005	4.41221E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.613	338.32	11.40		
		911.07*	27.70	3.43547E+005	9.33170E+004
		969.11*	16.60	1.40239E+005	4.74668E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-10-122-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.941	4.831695E+006	6:444194E+005
TL-208	0.470	4.974447E+004	2.088175E+004
Pb-212	@ 0.495	1.787595E+005	5.379240E+004
Bi-214	0.419	1.148110E+005	4.412213E+004
Ac-228	0.613	1.820292E+005	4.230797E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.82	1.6184E-001	27.89
F	3	186.08	4.9065E-002	50.04
F	5	351.92	4.6887E-002	44.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-10-122-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4466E+004	4.70E+004	1.9958E+004
	1332.49	100.00	4.7050E+004		1.8967E+003
Nb-94	702.63	100.00	5.2365E+004	5.24E+004	2.3724E+004
	871.10	100.00	5.4085E+004		5.0630E+004
Ag-108m	79.20	7.10	1.9854E+006	5.91E+004	-5.0711E+006
	433.93	89.90	6.0908E+004		-4.8064E+003
	614.37	90.40	7.2559E+004		-1.1427E+004
	722.95	90.50	5.9086E+004		6.1483E+003
Sb-125	176.33	6.89	1.0544E+006	1.79E+005	1.8478E+004
	427.89	29.33	1.7943E+005		-1.3044E+005
	463.38	10.35	5.2469E+005		1.2906E+005
	600.56	17.80	3.1460E+005		1.5106E+005
	606.64	5.02	1.3727E+006		1.4717E+006
	635.90	11.32	4.9430E+005		5.8929E+005
Cs-134	563.23	8.38	6.3933E+005	6.07E+004	4.5402E+004
	569.32	15.43	3.4704E+005		1.4215E+005
	604.70	97.60	7.1149E+004		4.3734E+003
	795.84	85.40	6.0718E+004		3.8458E+004
	801.93	8.73	5.8752E+005		-5.5639E+005
Cs-137	661.65	85.12	6.4487E+004	6.45E+004	3.6414E+004
Eu-152	121.78	28.40	3.1997E+005	2.04E+005	-8.4398E+004
	244.69	7.49	9.0826E+005		3.6954E+005
	344.27	26.50	2.1568E+005		-2.8886E+005
	778.89	12.74	3.6487E+005		-3.9338E+004
	867.32	4.16	1.2120E+006		-1.4945E+006
	964.01	14.40	4.5627E+005		3.2371E+005
	1085.78	10.00	4.8500E+005		-2.2962E+005
	1112.02	13.30	3.9640E+005		-4.7220E+005
	1407.95	20.70	2.0415E+005		6.2770E+004
Eu-154	123.07	40.50	2.2528E+005	1.34E+005	-1.0468E+004
	247.94	6.60	9.8536E+005		-7.4255E+005
	591.81	4.83	1.0644E+006		4.8164E+004
	723.30	19.70	2.6185E+005		-1.9708E+005
	756.87	4.33	1.1307E+006		2.5486E+005
	873.19	11.50	4.6152E+005		7.5854E+004
	996.32	10.30	5.1881E+005		3.5372E+004
	1004.76	17.90	2.6670E+005		-2.3835E+005
	1274.45	35.50	1.3367E+005		-8.3062E+004
Eu-155	86.54	30.90	4.1247E+005	4.12E+005	4.5157E+005
	105.31	20.70	4.8227E+005		-4.4154E+005
Am-241	59.54	35.90	4.6833E+005	4.68E+005	-2.2331E+005
Cm-243	228.19	10.56	5.9536E+005	4.36E+005	-2.8441E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.3613E+005	4.36E+005	1.6417E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:13:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-10-123-F-G.CNF
Sample ID:
Sample Title: TBN-01-10-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 8:11:15 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-10-123-F-G.CNF
Log Number:
Title: TBN-01-10-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.86	72.81	1.06	1.74E+002	38.45	3.95E+002
m	2	285-	309	300.35	74.95	1.06	2.77E+002	44.40	4.09E+002
F	3	947-	962	954.26	238.88	1.20	1.12E+002	28.46	1.57E+002
F	4	1349-	1358	1352.98	338.75	0.63	2.51E+001	15.10	5.13E+001
F	5	1402-	1415	1407.96	352.51	1.22	8.96E+001	22.78	5.65E+001
F	6	2324-	2339	2331.94	583.67	1.36	7.18E+001	19.47	3.60E+001
F	7	2425-	2443	2435.44	609.55	1.73	9.11E+001	20.49	3.14E+001
F	8	3174-	3185	3179.50	795.47	0.99	1.68E+001	10.15	9.86E+000
F	9	3640-	3653	3645.79	911.90	1.32	3.28E+001	16.20	3.48E+001
F	10	3868-	3883	3874.85	969.08	1.51	4.19E+001	14.83	1.53E+001
F	11	4474-	4485	4479.57	1120.00	1.38	2.94E+001	13.56	1.52E+001
F	12	5831-	5856	5843.64	1460.29	2.17	3.91E+002	37.99	1.24E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-10-123-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.992	1460.81*	10.67	5.73333E+006	7.25543E+005
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.45497E+004	2.85264E+004
		860.37	12.46		
Pb-212	0.495	74.81* @	10.70	2.38236E+006	6.02880E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.00094E+005	5.99075E+004
Bi-214	0.713	609.31*	46.30	2.21946E+005	5.70641E+004
		1120.29*	15.10	2.76964E+005	1.30986E+005
		1764.49	15.80		
Ac-228	0.988	338.32*	11.40	1.98631E+005	1.23453E+005
		911.07*	27.70	1.53391E+005	7.77656E+004
		969.11*	16.60	3.35919E+005	1.24061E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-10-123-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.992	5.733331E+006	7.255431E+005
TL-208	0.465	9.454965E+004	2.852635E+004
Pb-212 @	0.495	2.000941E+005	5.990750E+004
Bi-214	0.713	2.307220E+005	5.231518E+004
Ac-228	0.988	2.034938E+005	5.812932E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.81	1.9295E-001	22.14
F	5	352.51	9.9503E-002	25.44
F	8	795.47	1.8618E-002	60.60

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-10-123-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.5802E+004	5.35E+004	1.7639E+004
	1332.49	100.00	5.3526E+004		5.3092E+004
Nb-94	702.63	100.00	5.7396E+004	5.27E+004	-4.4630E+003
	871.10	100.00	5.2678E+004		-1.1584E+003
Ag-108m	79.20	7.10	1.8554E+006	5.88E+004	-1.1705E+006
	433.93	89.90	5.8850E+004		-2.0581E+004
	614.37	90.40	8.4733E+004		3.0754E+003
	722.95	90.50	6.7076E+004		3.4969E+004
Sb-125	176.33	6.89	1.0590E+006	1.89E+005	-3.4337E+005
	427.89	29.33	1.8909E+005		-5.6543E+004
	463.38	10.35	5.8720E+005		-3.2783E+004
	600.56	17.80	2.8894E+005		2.2342E+005
	606.64	5.02	1.4842E+006		3.2825E+006
	635.90	11.32	4.9667E+005		1.1618E+005
Cs-134	563.23	8.38	7.0307E+005	6.89E+004	2.8057E+005
	569.32	15.43	3.6967E+005		-3.2379E+005
	604.70	97.60	7.4248E+004		1.7344E+004
	795.84	85.40	6.8924E+004		-6.6517E+003
	801.93	8.73	6.4066E+005		7.1277E+005
Cs-137	661.65	85.12	6.2794E+004	6.28E+004	3.6218E+004
Eu-152	121.78	28.40	3.2475E+005	2.17E+005	1.4539E+005
	244.69	7.49	9.6628E+005		9.6606E+003
	344.27	26.50	2.4114E+005		-1.5056E+005
	778.89	12.74	3.9883E+005		-4.0149E+004
	867.32	4.16	1.3312E+006		-1.0863E+006
	964.01	14.40	5.0861E+005		2.0350E+005
	1085.78	10.00	4.9905E+005		1.2628E+005
	1112.02	13.30	4.6936E+005		-7.8834E+005
	1407.95	20.70	2.1685E+005		1.3261E+005
Eu-154	123.07	40.50	2.2131E+005	1.53E+005	-3.2568E+005
	247.94	6.60	1.0419E+006		1.5401E+005
	591.81	4.83	1.1259E+006		3.2575E+005
	723.30	19.70	3.1093E+005		3.2300E+005
	756.87	4.33	1.2678E+006		6.4451E+005
	873.19	11.50	4.5843E+005		-9.2658E+004
	996.32	10.30	5.3018E+005		7.6007E+004
	1004.76	17.90	3.2914E+005		1.7937E+005
	1274.45	35.50	1.5259E+005		-2.4037E+004
Eu-155	86.54	30.90	4.0909E+005	4.09E+005	7.5854E+005
	105.31	20.70	4.7879E+005		2.1739E+004
Am-241	59.54	35.90	4.0428E+005	4.04E+005	-1.3358E+005
Cm-243	228.19	10.56	6.6815E+005	4.83E+005	-1.0207E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8297E+005	4.83E+005	1.4312E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:03:14 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-10-124-F-G.CNF
Sample ID:
Sample Title: TBN-01-10-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 7:47:03 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-10-124-F-G.CNF
Log Number:
Title: TBN-01-10-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	292.46	72.96	1.01	8.63E+001	35.64	4.92E+002
m	2	283-	306	300.41	74.96	1.01	2.50E+002	46.72	5.16E+002
F	3	334-	346	339.91	84.87	1.19	1.08E+002	39.38	4.08E+002
F	4	949-	960	954.19	238.87	1.06	1.25E+002	29.79	1.26E+002
F	5	1401-	1413	1406.74	352.21	1.17	7.55E+001	21.73	5.56E+001
F	6	2032-	2051	2041.73	511.10	1.45	7.35E+001	21.64	8.34E+001
F	7	2322-	2340	2330.74	583.37	1.53	8.49E+001	20.93	4.66E+001
F	8	2427-	2446	2436.60	609.84	1.38	9.09E+001	21.30	4.50E+001
M	9	3851-	3881	3857.06	964.64	1.67	3.79E+001	13.29	8.50E+000
m	10	3851-	3881	3873.34	968.71	1.67	4.62E+001	14.11	1.05E+001
F	11	5830-	5855	5843.21	1460.18	2.07	3.74E+002	37.44	1.31E+001
F	12	7053-	7066	7059.14	1763.49	1.90	2.02E+001	10.21	5.04E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-10-124-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	7.73184E+004	2.52186E+004
K-40	0.988	1460.81*	10.67	5.48529E+006	7.06566E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	3.57956E+005	1.20357E+005
		583.14*	84.20	1.11791E+005	3.12724E+004
		860.37	12.46		
Pb-212	0.495	74.81* @	10.70	2.14611E+006	5.81282E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.24007E+005	6.39347E+004
Bi-214	0.693	609.31*	46.30	2.21603E+005	5.87733E+004
		1120.29	15.10		
		1764.49*	15.80	2.13263E+005	1.10070E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-10-124-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	1.000	5.317165E+004	2.609576E+004
K-40	0.988	5.485293E+006	7.065660E+005
TL-208	0.751	1.117907E+005	3.105947E+004
Pb-212 @	0.495	2.240067E+005	6.393472E+004
Bi-214	0.693	2.197524E+005	5.184522E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	9.5873E-002	41.31
F 3	84.87	1.2001E-001	36.46
F 5	352.21	8.3894E-002	28.78
M 9	964.64	4.2092E-002	35.09
m 10	968.71	5.1357E-002	30.52

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-10-124-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.3555E+004	4.59E+004	5.3759E+002
	1332.49	100.00	4.5873E+004		-1.1760E+004
Nb-94	702.63	100.00	5.5676E+004	5.16E+004	1.7365E+004
	871.10	100.00	5.1596E+004		1.8229E+004
Ag-108m	79.20	7.10	1.8784E+006	6.14E+004	-1.6980E+006
	433.93	89.90	6.1355E+004		2.7570E+004
	614.37	90.40	8.1325E+004		-8.6652E+003
	722.95	90.50	6.7968E+004		4.4354E+004
Sb-125	176.33	6.89	1.0417E+006	1.93E+005	6.4331E+004
	427.89	29.33	1.9308E+005		2.8534E+004
	463.38	10.35	5.7035E+005		-3.8281E+004
	600.56	17.80	3.2314E+005		-4.4036E+004
	606.64	5.02	1.5032E+006		1.5922E+006
	635.90	11.32	4.6984E+005		-1.8136E+005
Cs-134	563.23	8.38	6.6032E+005	6.31E+004	-2.9778E+005
	569.32	15.43	3.5854E+005		1.0675E+005
	604.70	97.60	7.6241E+004		-1.8122E+004
	795.84	85.40	6.3069E+004		2.1731E+004
	801.93	8.73	5.7137E+005		-4.1894E+005
Cs-137	661.65	85.12	6.4821E+004	6.48E+004	-2.7221E+004
Eu-152	121.78	28.40	3.1956E+005	2.07E+005	-9.7736E+004
	244.69	7.49	9.6628E+005		-1.0575E+005
	344.27	26.50	2.2645E+005		-3.7427E+005
	778.89	12.74	4.3243E+005		-9.3618E+004
	867.32	4.16	1.2815E+006		-1.3203E+006
	964.01	14.40	5.0286E+005		4.2021E+005
	1085.78	10.00	5.2156E+005		-1.0276E+005
	1112.02	13.30	4.2842E+005		-6.5288E+005
	1407.95	20.70	2.0741E+005		-4.7145E+004
Eu-154	123.07	40.50	2.2440E+005	1.37E+005	1.2805E+005
	247.94	6.60	1.0174E+006		-8.9724E+005
	591.81	4.83	1.2293E+006		-6.4741E+005
	723.30	19.70	3.1499E+005		3.0296E+005
	756.87	4.33	1.2606E+006		-2.4806E+005
	873.19	11.50	4.5217E+005		-3.5572E+004
	996.32	10.30	4.9116E+005		1.2160E+005
	1004.76	17.90	3.2101E+005		-9.4765E+004
	1274.45	35.50	1.3677E+005		-3.6644E+004
Eu-155	86.54	30.90	3.9545E+005	3.95E+005	4.9618E+005
	105.31	20.70	4.8715E+005		-2.0839E+005
Am-241	59.54	35.90	4.1437E+005	4.14E+005	-1.9978E+005
Cm-243	228.19	10.56	6.8010E+005	4.67E+005	1.6696E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6674E+005	4.67E+005	-1.1201E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 8:59:30 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-10-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 8:44:29 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-10-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.83	72.81	0.83	1.56E+002	43.30	5.72E+002
m	2	286-	306	300.35	74.94	0.84	2.98E+002	53.22	5.92E+002
F	3	330-	345	339.37	84.73	0.96	1.36E+002	45.81	7.24E+002
F	4	441-	456	449.83	112.44	0.86	6.57E+001	34.55	4.69E+002
F	5	949-	959	954.56	238.96	1.02	8.57E+001	28.34	1.37E+002
F	6	1403-	1412	1407.78	352.47	0.83	4.59E+001	19.66	6.18E+001
F	7	2030-	2054	2043.66	511.58	2.38	1.11E+002	21.81	6.25E+001
F	8	2322-	2341	2331.50	583.56	1.80	7.48E+001	19.42	4.54E+001
F	9	2429-	2444	2436.48	609.81	1.19	5.53E+001	18.07	4.00E+001
F	10	3639-	3651	3645.29	911.78	1.12	2.79E+001	13.85	2.47E+001
F	11	5829-	5854	5843.19	1460.17	1.94	2.99E+002	33.78	9.99E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.990	511.00*	100.00	1.16517E+005	2.81648E+004
K-40	0.988	1460.81*	10.67	4.39401E+006	6.10168E+005
TL-208	0.746	277.35	6.80		
		510.84*	21.60	5.39430E+005	1.37633E+005
		583.14*	84.20	9.85129E+004	2.86967E+004
		860.37	12.46		
Pb-212	0.494	74.81* @	10.70	2.55673E+006	6.78272E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.53650E+005	5.62503E+004
Bi-214	0.414	609.31*	46.30	1.34888E+005	4.71357E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.990	9.523821E+004	2.883046E+004
K-40		0.988	4.394010E+006	6.101677E+005
TL-208		0.746	9.851285E+004	2.851651E+004
Pb-212	@	0.494	1.536502E+005	5.625034E+004
Bi-214		0.414	1.348876E+005	4.713570E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.81	1.7323E-001	27.77
F	3	84.73	1.5078E-001	33.76
F	4	112.44	7.2966E-002	52.61
F	6	352.47	5.0988E-002	42.84
F	10	911.78	3.0969E-002	49.68

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.3555E+004	4.28E+004	2.8694E+004
	1332.49	100.00	4.2775E+004		-1.0040E+004
Nb-94	702.63	100.00	5.8513E+004	4.94E+004	2.8642E+004
	871.10	100.00	4.9355E+004		3.4446E+003
Ag-108m	79.20	7.10	2.2722E+006	6.61E+004	-8.0262E+005
	433.93	89.90	6.6068E+004		-5.1274E+004
	614.37	90.40	7.6610E+004		7.4568E+002
	722.95	90.50	6.8848E+004		-2.1952E+003
Sb-125	176.33	6.89	1.2018E+006	2.11E+005	-2.2048E+005
	427.89	29.33	2.1125E+005		-3.6693E+003
	463.38	10.35	5.9997E+005		-9.5310E+004
	600.56	17.80	3.2314E+005		-2.7098E+004
	606.64	5.02	1.4414E+006		1.2094E+006
	635.90	11.32	4.5449E+005		6.0291E+004
Cs-134	563.23	8.38	6.9194E+005	6.38E+004	-1.8375E+005
	569.32	15.43	3.6494E+005		-2.6590E+005
	604.70	97.60	7.2405E+004		-1.7288E+004
	795.84	85.40	6.3832E+004		3.6723E+004
	801.93	8.73	5.4618E+005		-5.0561E+005
Cs-137	661.65	85.12	6.3477E+004	6.35E+004	-5.3875E+004
Eu-152	121.78	28.40	3.7639E+005	1.76E+005	-4.9251E+004
	244.69	7.49	1.0667E+006		-9.3201E+005
	344.27	26.50	2.5130E+005		-4.5343E+005
	778.89	12.74	4.6803E+005		-3.0533E+005
	867.32	4.16	1.2298E+006		6.7388E+005
	964.01	14.40	5.0861E+005		7.3888E+005
	1085.78	10.00	5.5141E+005		1.8317E+005
	1112.02	13.30	4.5230E+005		-4.6273E+005
	1407.95	20.70	1.7567E+005		-6.0702E+003
Eu-154	123.07	40.50	2.6565E+005	1.38E+005	2.4982E+005
	247.94	6.60	1.1610E+006		-1.7887E+006
	591.81	4.83	1.2194E+006		-2.0798E+005
	723.30	19.70	3.1900E+005		1.0513E+005
	756.87	4.33	1.3170E+006		1.1074E+005
	873.19	11.50	4.3282E+005		-1.2235E+005
	996.32	10.30	5.4495E+005		3.2770E+005
	1004.76	17.90	2.7168E+005		-1.2719E+005
	1274.45	35.50	1.3829E+005		8.4694E+004
Eu-155	86.54	30.90	4.7867E+005	4.79E+005	-1.0189E+005
	105.31	20.70	5.7922E+005		5.7721E+005
Am-241	59.54	35.90	5.5800E+005	5.58E+005	-3.8952E+005
Cm-243	228.19	10.56	7.3438E+005	5.01E+005	-5.6177E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0108E+005	5.01E+005	1.8936E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Uncel	K-40 Activity
TBN-01-11-101-F-G.RPT	TBN-01-11-101-F-G	0.00	21-Oct-05	13:05:48	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	64100			73400			64900			6423713
TBN-01-11-102-F-G.RPT	TBN-01-11-102-F-G	0.00	21-Oct-05	13:32:57	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60300			69500			64500			6546941
TBN-01-11-103-F-G.RPT	TBN-01-11-103-F-G	0.00	21-Oct-05	13:55:00	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	61600			67400			65700			7341727
TBN-01-11-104-F-G.RPT	TBN-01-11-104-F-G	0.18	21-Oct-05	14:21:33	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	36300	53418.31	15262	74000			71300			7871038
TBN-01-11-105-F-G.RPT	TBN-01-11-105-F-G	0.22	21-Oct-05	15:43:36	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	28500	65123.48	16206	77000			67400			6314197
TBN-01-11-106-F-G.RPT	TBN-01-11-106-F-G	0.00	21-Oct-05	15:23:52	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60900			68600			64100			7055802
TBN-01-11-107-F-G.RPT	TBN-01-11-107-F-G	0.10	21-Oct-05	15:03:26	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	68100			48900	37987.44	18637.63	70700			8213486
TBN-01-11-108-F-G.RPT	TBN-01-11-108-F-G	0.00	21-Oct-05	14:42:30	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60700			77600			69000			7174259
TBN-01-11-117-F-G.RPT	TBN-01-11-117-F-G	0.00	22-Oct-05	8:25:32	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	62400			68900			63800			6141426
TBN-01-11-118-F-G.RPT	TBN-01-11-118-F-G	0.00	22-Oct-05	8:46:01	122.8	BLUE6279	BLUE_CONC_2M90	dpm/m2	176000			188000			182000			7020177
TBN-01-11-109-F-G.RPT	TBN-01-11-109-F-G	0.00	22-Oct-05	11:39:48	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	54500			68700			58100			5989602
TBN-01-11-115-F-G.RPT	TBN-01-11-115-F-G	0.00	22-Oct-05	10:45:14	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	51700			61800			62800			5602716
TBN-01-11-116-F-G.RPT	TBN-01-11-116-F-G	0.00	22-Oct-05	11:05:12	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49000			65800			63300			6024024
TBN-01-11-119-F-G.RPT	TBN-01-11-119-F-G	0.00	22-Oct-05	9:11:08	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	46800			65500			59900			5888937
TBN-01-11-101-F-G.RPT	TBN-01-11-101-F-G	0.00	21-Oct-05	13:05:48	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	64100			73400			64900			6423713
TBN-01-11-102-F-G.RPT	TBN-01-11-102-F-G	0.00	21-Oct-05	13:32:57	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60300			69500			64500			6546941
TBN-01-11-103-F-G.RPT	TBN-01-11-103-F-G	0.00	21-Oct-05	13:55:00	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	61600			67400			65700			7341727
TBN-01-11-104-F-G.RPT	TBN-01-11-104-F-G	0.18	21-Oct-05	14:21:33	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	36300	53418.31	15262	74000			71300			7871038
TBN-01-11-105-F-G.RPT	TBN-01-11-105-F-G	0.22	21-Oct-05	15:43:36	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	28500	65123.48	16206	77000			67400			6314197
TBN-01-11-106-F-G.RPT	TBN-01-11-106-F-G	0.00	21-Oct-05	15:23:52	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60900			68600			64100			7055802
TBN-01-11-107-F-G.RPT	TBN-01-11-107-F-G	0.10	21-Oct-05	15:03:26	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	68100			48900	37987.44	18637.63	70700			8213486
TBN-01-11-108-F-G.RPT	TBN-01-11-108-F-G	0.00	21-Oct-05	14:42:30	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60700			77600			69000			7174259
TBN-01-11-109-F-G.RPT	TBN-01-11-109-F-G	0.00	22-Oct-05	11:39:48	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	54500			68700			58100			5989602
TBN-01-11-115-F-G.RPT	TBN-01-11-115-F-G	0.00	22-Oct-05	10:45:14	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	51700			61800			62800			5602716
TBN-01-11-116-F-G.RPT	TBN-01-11-116-F-G	0.00	22-Oct-05	11:05:12	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49000			65800			63300			6024024
TBN-01-11-117-F-G.RPT	TBN-01-11-117-F-G	0.00	22-Oct-05	8:25:32	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	62400			68900			63800			6141426
TBN-01-11-118-F-G.RPT	TBN-01-11-118-F-G	0.00	22-Oct-05	8:52:01	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	52200			71000			61900			5863270
TBN-01-11-119-F-G.RPT	TBN-01-11-119-F-G	0.00	22-Oct-05	9:11:08	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	46800			65500			59900			5888937
TBN-01-11-121-F-G.RPT	TBN-01-11-121-F-G	0.00	22-Oct-05	12:57:15	171.7	BLUE6279	BLUE_CONC_2M90	dpm/m2	104000			176000			179000			4100114
TBN-01-11-110-F-G.RPT	TBN-01-11-110-F-G	0.00	22-Oct-05	13:02:15	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	52000			70500			64000			5919876
TBN-01-11-111-F-G.RPT	TBN-01-11-111-F-G	0.00	22-Oct-05	14:25:22	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	47600			73200			63800			5802678
TBN-01-11-113-F-G.RPT	TBN-01-11-113-F-G	0.00	22-Oct-05	13:45:40	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	44000			71400			65200			6860059
TBN-01-11-114-F-G.RPT	TBN-01-11-114-F-G	0.00	22-Oct-05	13:23:47	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	44000			62100			64000			6385146
TBN-01-11-124-F-G.RPT	TBN-01-11-124-F-G	0.06	22-Oct-05	14:47:46	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	66100			46700	23861.78	17142.61	73900			7100441
TBN-01-11-125-F-G.RPT	TBN-01-11-125-F-G	0.00	22-Oct-05	15:21:07	104.1	BLUE6279	BLUE_CONC_2M90	dpm/m2	273000			342000			247000			7663757
TBN-01-11-120-F-G.RPT	TBN-01-11-120-F-G	0.47	24-Oct-05	8:35:24	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	38000	106678.4	20291	48100	40221.21	22608.28	66800			6194652
TBN-01-11-121-F-G.RPT	TBN-01-11-121-F-G	0.55	24-Oct-05	7:56:25	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	24000	107263.5	19450	55500	73287.98	26982.38	64100			6683524
TBN-01-11-122-F-G.RPT	TBN-01-11-122-F-G	0.00	24-Oct-05	7:35:55	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	64100			77300			72100			6623636
TBN-01-11-123-F-G.RPT	TBN-01-11-123-F-G	0.00	24-Oct-05	7:15:07	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	56200			68600			63800			6785846
TBN-01-11-125-F-G.RPT	TBN-01-11-125-F-G	0.66	24-Oct-05	8:16:20	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	45700	134203	22748	52400	77151.44	26529.73	75200			7815266
TBN-01-11-110-F-G.RPT	TBN-01-11-110-F-G	0.00	22-Oct-05	13:02:15	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	52000			70500			64000			5919876
TBN-01-11-111-F-G.RPT	TBN-01-11-111-F-G	0.00	22-Oct-05	14:25:22	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	47600			73200			63800			5802678
TBN-01-11-113-F-G.RPT	TBN-01-11-113-F-G	0.00	22-Oct-05	13:45:40	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	44000			71400			65200			6860059
TBN-01-11-114-F-G.RPT	TBN-01-11-114-F-G	0.00	22-Oct-05	13:23:47	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	44000			62100			64000			6385146
TBN-01-11-112-F-G.RPT	TBN-01-11-112-F-G	0.00	22-Oct-05	14:05:37	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	54000			71400			66700			6411339

Report Generated On 10/21/2005 4:09:58 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-11-101-F-G.CNF
Sample ID:
Sample Title: TBN-01-11-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 1:05:48 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-11-101-F-G.CNF
Log Number:
Title: TBN-01-11-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.35	72.69	0.83	1.77E+002	39.99	4.04E+002
m	2	282-	305	300.20	74.91	0.83	3.14E+002	50.64	5.16E+002
M	3	333-	354	339.79	84.84	1.19	1.79E+002	42.66	4.68E+002
m	4	333-	354	349.83	87.36	1.19	7.22E+001	36.19	4.60E+002
F	5	949-	962	954.34	238.90	1.14	1.50E+002	30.70	1.35E+002
F	6	1174-	1186	1180.37	295.52	1.01	6.63E+001	22.28	8.03E+001
F	7	1346-	1359	1352.23	338.56	1.33	6.38E+001	20.35	5.75E+001
F	8	1399-	1414	1407.14	352.31	1.31	1.14E+002	25.65	8.94E+001
F	9	2032-	2054	2042.59	511.32	1.99	1.13E+002	22.55	6.06E+001
F	10	2324-	2341	2331.96	583.68	1.58	8.60E+001	20.86	4.47E+001
F	11	2427-	2444	2436.37	609.78	1.39	9.86E+001	21.69	4.00E+001
F	12	3634-	3652	3642.93	911.19	1.36	7.25E+001	18.81	2.78E+001
F	13	3868-	3882	3874.84	969.08	1.42	4.43E+001	16.70	2.90E+001
F	14	5322-	5336	5329.18	1331.96	1.80	3.04E+001	13.27	1.32E+001
F	15	5830-	5855	5842.73	1460.06	1.95	4.40E+002	40.91	1.59E+001
F	16	7053-	7066	7059.02	1763.46	1.90	3.04E+001	11.44	1.49E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-11-101-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.18527E+005	2.89426E+004
K-40	0.983	1460.81*		10.67	6.42371E+006	7.91494E+005
TL-208	0.746	277.35		6.80		
		510.84*		21.60	5.48735E+005	1.41289E+005
		583.14*		84.20	1.12928E+005	3.11836E+004
		860.37		12.46		
Pb-212	0.658	74.81*	@	10.70	2.74337E+006	6.96654E+005
		77.11	@	18.00		
		87.30*	@	8.00	7.22212E+005	3.88872E+005
		238.63*		44.60	2.71104E+005	6.98163E+004
Bi-214	0.694	609.31*		46.30	2.39231E+005	6.04881E+004
		1120.29		15.10		
		1764.49*		15.80	3.19287E+005	1.24177E+005
PB-214	0.655	74.82*	@	6.21	4.72691E+006	1.24844E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.23719E+006	6.72687E+005
		241.98		7.49		
		295.21*		19.20	2.98559E+005	1.12169E+005
		351.92*		37.20	2.80825E+005	7.87339E+004
Ac-228	0.999	338.32*		11.40	5.06003E+005	1.79908E+005
		911.07*		27.70	3.37126E+005	9.56898E+004
		969.11*		16.60	3.53319E+005	1.38284E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-11-101-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		0.997	9.413434E+004	2.970545E+004
	K-40		0.983	6.423713E+006	7.914940E+005
X	Eu-155		0.330		
	TL-208		0.746	1.129277E+005	3.096566E+004
	Pb-212	@	0.658	2.711037E+005	6.981630E+004
	Bi-214		0.694	2.545836E+005	5.437964E+004
	PB-214	@	0.655	2.866786E+005	6.444298E+004
	Ac-228		0.999	3.686450E+005	7.209341E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	1.9675E-001	22.59
M 3	84.84	1.9897E-001	23.82
F 14	1331.96	3.3822E-002	43.59

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-11-101-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9391E+004	6.41E+004	5.6736E+004
	1332.49	100.00	6.4080E+004		7.3253E+004
Nb-94	702.63	100.00	6.0090E+004	6.01E+004	2.4884E+003
	871.10	100.00	6.3265E+004		4.3213E+004
Ag-108m	79.20	7.10	2.1089E+006	6.49E+004	-3.0787E+006
	433.93	89.90	6.5325E+004		-3.7081E+003
	614.37	90.40	8.7829E+004		-2.8975E+003
	722.95	90.50	6.4903E+004		2.6299E+004
Sb-125	176.33	6.89	1.1011E+006	2.05E+005	1.0167E+005
	427.89	29.33	2.0484E+005		-7.1651E+004
	463.38	10.35	5.8737E+005		-1.0565E+005
	600.56	17.80	3.2743E+005		-6.7475E+004
	606.64	5.02	1.5811E+006		1.8935E+006
	635.90	11.32	4.8234E+005		5.7332E+004
Cs-134	563.23	8.38	7.4113E+005	7.55E+004	-2.7919E+005
	569.32	15.43	3.9412E+005		-1.6098E+005
	604.70	97.60	8.0492E+004		-8.1476E+003
	795.84	85.40	7.5489E+004		2.3161E+004
	801.93	8.73	7.4335E+005		-1.8863E+005
Cs-137	661.65	85.12	7.3392E+004	7.34E+004	1.1875E+004
Eu-152	121.78	28.40	3.4847E+005	2.12E+005	-3.2741E+004
	244.69	7.49	9.8526E+005		4.0668E+005
	344.27	26.50	2.3798E+005		-2.9523E+004
	778.89	12.74	4.3746E+005		-2.3644E+005
	867.32	4.16	1.5394E+006		-4.6617E+005
	964.01	14.40	5.4423E+005		7.7309E+005
	1085.78	10.00	6.8322E+005		5.6582E+004
	1112.02	13.30	5.1679E+005		-5.9156E+005
	1407.95	20.70	2.1248E+005		6.2883E+003
Eu-154	123.07	40.50	2.4530E+005	1.52E+005	9.1902E+004
	247.94	6.60	1.0348E+006		-1.1609E+006
	591.81	4.83	1.2540E+006		7.9915E+005
	723.30	19.70	2.9394E+005		-6.0569E+003
	756.87	4.33	1.3703E+006		1.3474E+005
	873.19	11.50	5.2729E+005		2.3803E+005
	996.32	10.30	5.6340E+005		3.4909E+004
	1004.76	17.90	3.4676E+005		2.0387E+005
	1274.45	35.50	1.5178E+005		7.0821E+004
Eu-155	86.54*	30.90	2.6566E+005	2.66E+005	1.8698E+005
	105.31	20.70	5.4320E+005		3.3847E+005
Am-241	59.54	35.90	4.7782E+005	4.78E+005	-1.8675E+004
Cm-243	228.19	10.56	6.8169E+005	4.99E+005	-4.5262E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9939E+005	4.99E+005	1.9264E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 1:47:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 1:32:57 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.84	72.81	0.91	1.70E+002	40.13	4.37E+002
m	2	282-	305	300.08	74.88	0.91	3.05E+002	50.77	5.22E+002
F	3	945-	960	953.88	238.79	1.29	1.63E+002	32.09	1.65E+002
F	4	1172-	1186	1179.88	295.40	1.45	6.32E+001	21.66	8.42E+001
F	5	1401-	1413	1407.05	352.29	1.15	1.01E+002	24.24	6.58E+001
F	6	2033-	2051	2042.49	511.29	1.97	1.00E+002	21.64	5.23E+001
F	7	2324-	2340	2331.36	583.53	1.39	1.06E+002	22.58	4.01E+001
F	8	2427-	2445	2435.89	609.66	1.43	1.09E+002	21.89	2.83E+001
F	9	3636-	3652	3643.70	911.38	1.49	7.46E+001	18.83	2.31E+001
F	10	3866-	3883	3874.58	969.02	1.64	4.31E+001	15.15	2.01E+001
F	11	5829-	5855	5842.12	1459.91	1.98	4.49E+002	40.85	6.75E+000
F	12	7051-	7064	7056.88	1762.93	1.37	2.53E+001	10.82	3.66E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.05394E+005	2.71197E+004
K-40	0.976	1460.81*		10.67	6.54694E+006	7.97401E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	4.87934E+005	1.31726E+005
		583.14*		84.20	1.38481E+005	3.48362E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.67065E+006	6.86562E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.94329E+005	7.40320E+004
Bi-214	0.687	609.31*		46.30	2.63397E+005	6.24350E+004
		1120.29		15.10		
		1764.49*		15.80	2.65301E+005	1.16572E+005
PB-214	0.564	74.82*	@	6.21	4.60161E+006	1.22922E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.84324E+005	1.08617E+005
		351.92*		37.20	2.47823E+005	7.27086E+004
Ac-228	0.621	338.32		11.40		
		911.07*		27.70	3.46811E+005	9.62266E+004
		969.11*		16.60	3.43940E+005	1.26147E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	7.548185E+004	2.812736E+004
K-40		0.976	6.546941E+006	7.974011E+005
TL-208		0.749	1.384811E+005	3.454265E+004
Pb-212	@	0.497	2.943289E+005	7.403199E+004
Bi-214		0.687	2.638213E+005	5.503803E+004
PB-214	@	0.564	2.591181E+005	6.042069E+004
Ac-228		0.621	3.457549E+005	7.650808E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.8938E-001	23.54

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3622E+004	6.03E+004	1.5774E+004
	1332.49	100.00	6.0260E+004		5.6100E+004
Nb-94	702.63	100.00	5.7645E+004	5.35E+004	3.9370E+004
	871.10	100.00	5.3457E+004		2.5986E+004
Ag-108m	79.20	7.10	2.1138E+006	6.45E+004	-3.2476E+006
	433.93	89.90	6.4482E+004		-1.9084E+004
	614.37	90.40	8.6626E+004		-2.0763E+004
	722.95	90.50	7.1314E+004		-2.3118E+004
Sb-125	176.33	6.89	1.0634E+006	2.09E+005	-4.9377E+005
	427.89	29.33	2.0913E+005		1.8769E+005
	463.38	10.35	6.3685E+005		2.0864E+005
	600.56	17.80	3.1481E+005		1.9295E+005
	606.64	5.02	1.5488E+006		1.9304E+006
	635.90	11.32	5.3061E+005		-5.6035E+005
Cs-134	563.23	8.38	7.2272E+005	7.45E+004	2.0493E+005
	569.32	15.43	4.2884E+005		4.8793E+005
	604.70	97.60	7.9003E+004		-2.5940E+004
	795.84	85.40	7.4541E+004		4.0376E+004
	801.93	8.73	7.1200E+005		-2.2349E+005
Cs-137	661.65	85.12	6.9541E+004	6.95E+004	1.0227E+004
Eu-152	121.78	28.40	3.4292E+005	2.25E+005	3.0221E+005
	244.69	7.49	1.0332E+006		-9.1304E+005
	344.27	26.50	2.4020E+005		-2.5284E+005
	778.89	12.74	4.2015E+005		-4.9228E+005
	867.32	4.16	1.3242E+006		2.3446E+005
	964.01	14.40	5.0407E+005		6.3315E+004
	1085.78	10.00	5.5265E+005		3.5522E+004
	1112.02	13.30	5.0417E+005		-1.0988E+005
	1407.95	20.70	2.2451E+005		1.0646E+005
Eu-154	123.07	40.50	2.3565E+005	1.60E+005	7.7080E+003
	247.94	6.60	1.1124E+006		-7.5216E+005
	591.81	4.83	1.1109E+006		-6.0412E+005
	723.30	19.70	3.2381E+005		-6.8738E+004
	756.87	4.33	1.3168E+006		-3.8213E+005
	873.19	11.50	4.6217E+005		7.9949E+004
	996.32	10.30	5.4213E+005		4.8830E+004
	1004.76	17.90	2.9812E+005		-2.6665E+005
	1274.45	35.50	1.5966E+005		-2.2879E+004
Eu-155	86.54	30.90	4.5072E+005	4.51E+005	5.0066E+005
	105.31	20.70	5.2175E+005		-1.5482E+004
Am-241	59.54	35.90	4.7982E+005	4.80E+005	-3.9077E+004
Cm-243	228.19	10.56	6.5249E+005	4.66E+005	1.7651E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6633E+005	4.66E+005	2.1309E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 2:10:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 1:55:00 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.08	72.87	0.92	1.82E+002	41.58	4.69E+002
m	2	283-	305	300.32	74.94	0.93	3.41E+002	51.56	4.93E+002
F	3	331-	344	339.47	84.76	0.87	8.51E+001	39.72	5.36E+002
F	4	949-	960	953.73	238.75	1.10	1.35E+002	30.89	1.32E+002
F	5	1347-	1359	1353.15	338.79	0.86	3.63E+001	18.56	7.73E+001
F	6	1399-	1412	1406.20	352.07	1.06	1.01E+002	23.48	5.61E+001
F	7	2031-	2052	2041.72	511.10	1.83	1.18E+002	23.57	6.62E+001
F	8	2322-	2338	2331.26	583.50	1.20	7.54E+001	21.03	5.52E+001
F	9	2428-	2445	2435.58	609.58	1.38	8.53E+001	21.28	4.67E+001
F	10	3633-	3651	3642.82	911.16	1.45	8.42E+001	20.29	3.08E+001
F	11	3869-	3882	3874.63	969.03	1.25	3.54E+001	14.72	1.95E+001
F	12	4472-	4485	4479.38	1119.96	1.03	2.33E+001	11.86	1.40E+001
F	13	4686-	4699	4692.47	1173.12	1.11	2.77E+001	13.57	2.23E+001
F	14	5828-	5856	5842.07	1459.89	2.03	5.03E+002	43.08	7.25E+000
F	15	6345-	6358	6351.50	1586.96	0.77	1.35E+001	8.11	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.23952E+005	3.02593E+004
K-40	0.975	1460.81*		10.67	7.34173E+006	8.64856E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	5.73851E+005	1.47720E+005
		583.14*		84.20	9.89708E+004	3.05487E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.98388E+006	7.38413E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.44348E+005	6.76194E+004
Bi-214	0.712	609.31*		46.30	2.07025E+005	5.77207E+004
		1120.29*		15.10	2.18518E+005	1.13468E+005
		1764.49		15.80		
Ac-228	0.998	338.32*		11.40	2.88022E+005	1.54112E+005
		911.07*		27.70	3.91660E+005	1.04578E+005
		969.11*		16.60	2.82350E+005	1.21125E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	1.000	1.025741E+005	3.096255E+004
K-40	0.975	7.341727E+006	8.648561E+005
TL-208	0.750	9.897084E+004	3.037791E+004
Pb-212 @	0.497	2.443476E+005	6.761936E+004
Bi-214	0.712	2.093879E+005	5.144675E+004
Ac-228	0.998	3.330869E+005	7.041199E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	2.0246E-001	22.82
F 3	84.76	9.4568E-002	46.67
F 6	352.07	1.1261E-001	23.17
F 13	1173.12	3.0814E-002	48.92
F 15	1586.96	1.5043E-002	59.91

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.5955E+004	6.16E+004	9.3170E+004
	1332.49	100.00	6.1561E+004		1.2327E+004
Nb-94	702.63	100.00	5.8198E+004	5.81E+004	-2.7433E+004
	871.10	100.00	5.8105E+004		2.6986E+004
Ag-108m	79.20	7.10	2.1122E+006	6.57E+004	-1.6069E+006
	433.93	89.90	6.5742E+004		-3.8921E+004
	614.37	90.40	8.9016E+004		3.9305E+003
	722.95	90.50	7.1591E+004		2.9843E+004
Sb-125	176.33	6.89	1.1266E+006	2.09E+005	4.6371E+005
	427.89	29.33	2.0913E+005		2.0005E+004
	463.38	10.35	6.1965E+005		6.0754E+004
	600.56	17.80	3.5505E+005		-6.7287E+004
	606.64	5.02	1.5882E+006		2.0490E+006
	635.90	11.32	4.8475E+005		-2.0329E+005
Cs-134	563.23	8.38	7.0106E+005	6.93E+004	-3.3724E+005
	569.32	15.43	3.9557E+005		-1.5480E+005
	604.70	97.60	8.0676E+004		3.1833E+004
	795.84	85.40	6.9251E+004		4.5033E+004
	801.93	8.73	6.6202E+005		-8.0434E+004
Cs-137	661.65	85.12	6.7371E+004	6.74E+004	-1.6040E+004
Eu-152	121.78	28.40	3.4748E+005	2.30E+005	2.7178E+005
	244.69	7.49	9.7054E+005		1.3318E+005
	344.27	26.50	2.3518E+005		1.2951E+005
	778.89	12.74	4.5869E+005		-6.8928E+005
	867.32	4.16	1.3402E+006		-2.9655E+006
	964.01	14.40	4.7868E+005		6.8198E+005
	1085.78	10.00	5.7662E+005		1.0260E+005
	1112.02	13.30	5.3392E+005		-2.3629E+003
	1407.95	20.70	2.3027E+005		5.9861E+004
Eu-154	123.07	40.50	2.3736E+005	1.71E+005	-2.0660E+005
	247.94	6.60	1.0013E+006		-2.2910E+006
	591.81	4.83	1.2636E+006		-3.4257E+005
	723.30	19.70	3.2510E+005		4.8051E+004
	756.87	4.33	1.3768E+006		-1.3353E+006
	873.19	11.50	5.0565E+005		2.4934E+005
	996.32	10.30	5.3114E+005		3.5483E+005
	1004.76	17.90	3.3724E+005		-1.5111E+005
	1274.45	35.50	1.7075E+005		7.3256E+004
Eu-155	86.54	30.90	4.4450E+005	4.45E+005	2.5272E+005
	105.31	20.70	5.2638E+005		-2.0003E+005
Am-241	59.54	35.90	4.8773E+005	4.88E+005	-1.9392E+004
Cm-243	228.19	10.56	6.7147E+005	4.97E+005	-7.9017E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9693E+005	4.97E+005	1.1908E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 2:36:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 2:21:33 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	292.10	72.87	0.88	1.33E+002	39.55	5.02E+002
m	2	282-	306	300.24	74.92	0.89	2.88E+002	51.63	5.71E+002
F	3	331-	346	339.02	84.64	0.97	1.31E+002	44.00	6.66E+002
F	4	948-	959	954.49	238.94	0.98	1.88E+002	33.83	1.41E+002
F	5	1398-	1412	1406.11	352.05	1.18	7.21E+001	22.80	8.44E+001
F	6	2033-	2051	2042.29	511.24	1.81	9.10E+001	23.18	8.35E+001
F	7	2324-	2340	2331.10	583.46	1.10	9.41E+001	22.90	6.31E+001
F	8	2427-	2444	2435.30	609.51	1.32	8.97E+001	22.93	6.63E+001
F	9	3636-	3652	3643.63	911.36	1.24	6.48E+001	18.28	2.74E+001
F	10	3869-	3883	3875.19	969.17	1.56	6.03E+001	18.76	2.92E+001
F	11	4473-	4486	4479.74	1120.05	1.54	3.39E+001	15.01	2.24E+001
F	12	4684-	4699	4691.17	1172.80	1.74	3.41E+001	14.66	2.05E+001
F	13	5321-	5337	5328.25	1331.73	1.56	3.82E+001	14.04	1.31E+001
F	14	5830-	5854	5842.37	1459.97	1.94	5.40E+002	44.87	6.25E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	9.56644E+004	2.78086E+004
K-40	0.979	1460.81*	10.67	7.87104E+006	9.13346E+005
Co-60	0.989	1173.22*	100.00	4.91963E+004	2.15131E+004
		1332.49*	100.00	5.76965E+004	2.16560E+004
TL-208	0.750	277.35	6.80		
		510.84*	21.60	4.42891E+005	1.33728E+005
		583.14*	84.20	1.23466E+005	3.42052E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.51578E+006	6.68631E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.39028E+005	8.09401E+004
Bi-214	0.713	609.31*	46.30	2.17751E+005	6.18883E+004
		1120.29*	15.10	3.17434E+005	1.44518E+005
		1764.49	15.80		
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	3.01425E+005	9.17930E+004
		969.11*	16.60	4.81231E+005	1.57969E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	6.899584E+004	2.876022E+004
K-40		0.979	7.871038E+006	9.133456E+005
Co-60		0.989	5.341831E+004	1.526232E+004
TL-208		0.750	1.234657E+005	3.396769E+004
Pb-212	@	0.496	3.390279E+005	8.094009E+004
Bi-214		0.713	2.331987E+005	5.689116E+004
Ac-228		0.621	3.468126E+005	7.936648E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.87	1.4756E-001	29.78
F	3	84.64	1.4578E-001	33.54
F	5	352.05	8.0133E-002	31.62

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.1935E+004	3.63E+004	4.9196E+004
		1332.49*	100.00	3.6296E+004		5.7697E+004
	Nb-94	702.63	100.00	6.0090E+004	5.94E+004	8.8987E+003
		871.10	100.00	5.9362E+004		1.7853E+004
	Ag-108m	79.20	7.10	2.1395E+006	7.13E+004	-5.5690E+005
		433.93	89.90	7.1314E+004		1.6384E+004
		614.37	90.40	8.9016E+004		-5.9217E+003
		722.95	90.50	7.6399E+004		1.5497E+004
	Sb-125	176.33	6.89	1.1504E+006	2.24E+005	-3.2585E+005
		427.89	29.33	2.2376E+005		-1.1110E+005
		463.38	10.35	7.0127E+005		7.5677E+005
		600.56	17.80	3.4480E+005		-1.2411E+005
		606.64	5.02	1.6709E+006		2.7177E+006
		635.90	11.32	5.0593E+005		-3.1484E+005
	Cs-134	563.23	8.38	7.8883E+005	7.39E+004	-5.7895E+004
		569.32	15.43	4.5086E+005		3.9160E+005
		604.70	97.60	8.4444E+004		-8.1489E+003
		795.84	85.40	7.3901E+004		-5.7349E+004
		801.93	8.73	6.5154E+005		-1.3839E+006
	Cs-137	661.65	85.12	7.3966E+004	7.40E+004	-5.9188E+004
	Eu-152	121.78	28.40	3.5872E+005	2.39E+005	4.3223E+004
		244.69	7.49	1.0166E+006		-1.7689E+006
		344.27	26.50	2.6832E+005		-3.7537E+005
		778.89	12.74	5.0251E+005		-5.3543E+005
		867.32	4.16	1.4545E+006		-3.9285E+005
		964.01	14.40	6.1642E+005		8.2585E+004
		1085.78	10.00	6.2876E+005		-4.1787E+004
		1112.02	13.30	5.2665E+005		-1.1248E+005
		1407.95	20.70	2.3862E+005		3.4857E+004
	Eu-154	123.07	40.50	2.4991E+005	1.63E+005	-1.1697E+005
		247.94	6.60	1.1001E+006		-5.9994E+005
		591.81	4.83	1.3687E+006		1.2173E+006
		723.30	19.70	3.5457E+005		1.0625E+005
		756.87	4.33	1.4341E+006		-1.0669E+006
		873.19	11.50	5.1659E+005		3.1361E+005
		996.32	10.30	6.1950E+005		-8.2433E+004
		1004.76	17.90	3.3531E+005		2.5607E+005
		1274.45	35.50	1.6345E+005		1.3733E+005
	Eu-155	86.54	30.90	4.6144E+005	4.61E+005	2.5382E+005
		105.31	20.70	5.4973E+005		-1.5549E+005
	Am-241	59.54	35.90	4.9767E+005	4.98E+005	8.2617E+004
	Cm-243	228.19	10.56	6.9536E+005	5.08E+005	-1.3940E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0831E+005	5.08E+005	2.3633E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 3:58:38 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 3:43:36 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	315	292.09	72.87	0.84	1.54E+002	39.30	4.68E+002
m	2	285-	315	300.25	74.92	0.84	3.41E+002	50.17	4.63E+002
m	3	285-	315	308.64	77.02	0.84	7.41E+001	34.59	4.20E+002
F	4	949-	961	954.23	238.88	0.96	1.44E+002	31.25	1.53E+002
F	5	1173-	1184	1179.76	295.37	0.81	5.19E+001	20.73	8.40E+001
F	6	1347-	1357	1353.29	338.82	0.69	2.77E+001	15.78	8.02E+001
F	7	1402-	1417	1407.42	352.38	0.94	7.67E+001	22.25	7.56E+001
F	8	2034-	2046	2041.36	511.01	1.83	5.84E+001	20.86	6.70E+001
F	9	2323-	2340	2331.67	583.61	1.21	9.37E+001	21.45	3.82E+001
F	10	2424-	2444	2435.33	609.52	1.60	1.15E+002	22.71	4.21E+001
F	11	3518-	3529	3523.85	881.46	0.85	1.16E+001	8.95	1.06E+001
F	12	3635-	3651	3643.27	911.27	1.14	4.97E+001	17.69	4.02E+001
F	13	3866-	3882	3874.47	968.99	1.63	4.99E+001	15.94	1.90E+001
M	14	4473-	4510	4479.10	1119.89	1.01	3.18E+001	13.69	2.15E+001
m	15	4473-	4510	4505.56	1126.49	1.01	1.33E+001	8.72	8.54E+000
F	16	4684-	4697	4690.79	1172.70	1.16	3.49E+001	14.90	2.52E+001
F	17	5320-	5337	5328.16	1331.71	1.93	5.51E+001	15.40	7.00E+000
F	18	5830-	5856	5842.56	1460.02	1.93	4.33E+002	40.57	1.71E+001
F	19	7053-	7066	7059.69	1763.63	1.86	2.89E+001	11.86	5.32E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	6.14002E+004	2.35480E+004
K-40	0.981	1460.81*		10.67	6.31420E+006	7.81942E+005
Co-60	0.987	1173.22*		100.00	5.03758E+004	2.18692E+004
		1332.49*		100.00	8.30855E+004	2.41350E+004
TL-208	0.748	277.35		6.80		
		510.84*		21.60	2.84260E+005	1.11463E+005
		583.14*		84.20	1.23011E+005	3.25154E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	2.98464E+006	7.31259E+005
		77.11*	@	18.00	3.74375E+005	1.89610E+005
		87.30	@	8.00		
		238.63*		44.60	2.59223E+005	6.95021E+004
Bi-214	0.994	609.31*		46.30	2.79628E+005	6.51831E+004
		1120.29*		15.10	2.97558E+005	1.32014E+005
		1764.49*		15.80	3.02848E+005	1.28047E+005
PB-214	0.757	74.82*	@	6.21	5.14261E+006	1.31412E+006
		77.11*	@	10.50	6.41785E+005	3.28559E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.33523E+005	1.01216E+005
		351.92*		37.20	1.88947E+005	6.32775E+004
Ac-228	0.998	338.32*		11.40	2.19530E+005	1.29869E+005
		911.07*		27.70	2.31048E+005	8.64408E+004
		969.11*		16.60	3.97853E+005	1.33832E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	3.482971E+004	2.455782E+004
K-40		0.981	6.314197E+006	7.819418E+005
Co-60		0.987	6.512348E+004	1.620582E+004
TL-208		0.748	1.230115E+005	3.226738E+004
Pb-212	@	0.837	2.592226E+005	6.950209E+004
Bi-214		0.994	2.865399E+005	5.316974E+004
PB-214	@	0.757	2.014735E+005	5.365498E+004
Ac-228		0.998	2.657132E+005	6.337810E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	1.7101E-001	25.54
F 11	881.46	1.2942E-002	76.87
m 15	1126.49	1.4785E-002	65.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.4051E+004	2.85E+004	5.0376E+004
		1332.49*	100.00	2.8482E+004		8.3085E+004
	Nb-94	702.63	100.00	6.0882E+004	5.31E+004	-8.5163E+003
		871.10	100.00	5.3108E+004		-3.0167E+004
	Ag-108m	79.20	7.10	2.0820E+006	6.74E+004	-8.1633E+005
		433.93	89.90	6.7383E+004		2.6930E+002
		614.37	90.40	8.8820E+004		2.6006E+004
		722.95	90.50	7.1036E+004		3.7962E+004
	Sb-125	176.33	6.89	1.0841E+006	2.08E+005	-2.8887E+005
		427.89	29.33	2.0792E+005		9.8828E+004
		463.38	10.35	6.1086E+005		-1.6186E+005
		600.56	17.80	3.2048E+005		1.4564E+005
		606.64	5.02	1.6023E+006		2.7132E+006
		635.90	11.32	4.9192E+005		-1.7241E+004
	Cs-134	563.23	8.38	7.1737E+005	6.93E+004	-3.2346E+004
		569.32	15.43	3.8231E+005		-2.5896E+005
		604.70	97.60	8.2133E+004		-5.5557E+003
		795.84	85.40	6.9251E+004		2.6717E+004
		801.93	8.73	6.8915E+005		-1.3137E+005
	Cs-137	661.65	85.12	7.7041E+004	7.70E+004	3.6580E+004
	Eu-152	121.78	28.40	3.4172E+005	2.25E+005	3.4895E+004
		244.69	7.49	9.7860E+005		-1.1107E+006
		344.27	26.50	2.4888E+005		-3.2187E+005
		778.89	12.74	4.5869E+005		-3.1258E+005
		867.32	4.16	1.2998E+006		-1.3419E+006
		964.01	14.40	5.2090E+005		7.5046E+005
		1085.78	10.00	5.4441E+005		-5.0858E+003
		1112.02	13.30	5.4815E+005		-3.7855E+005
		1407.95	20.70	2.2451E+005		3.0235E+003
	Eu-154	123.07	40.50	2.3933E+005	1.53E+005	-2.7592E+004
		247.94	6.60	1.0527E+006		-3.6141E+005
		591.81	4.83	1.1217E+006		-8.7668E+004
		723.30	19.70	3.2894E+005		2.2588E+005
		756.87	4.33	1.4770E+006		8.0035E+004
		873.19	11.50	4.5911E+005		4.2611E+005
		996.32	10.30	5.3114E+005		-1.6277E+005
		1004.76	17.90	3.3917E+005		-1.2064E+005
		1274.45	35.50	1.5312E+005		-1.9844E+005
	Eu-155	86.54	30.90	4.4145E+005	4.41E+005	2.6446E+005
		105.31	20.70	5.3845E+005		1.5727E+005
	Am-241	59.54	35.90	4.8156E+005	4.82E+005	-3.8394E+005
	Cm-243	228.19	10.56	6.8261E+005	4.80E+005	6.6260E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8018E+005	4.80E+005	3.2559E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 3:38:53 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 3:23:52 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.24	72.66	0.91	1.79E+002	41.02	4.43E+002
m	2	284-	306	300.26	74.92	0.91	2.99E+002	49.50	4.91E+002
F	3	947-	960	954.01	238.82	1.01	1.44E+002	30.35	1.35E+002
F	4	1173-	1187	1181.12	295.71	1.12	5.20E+001	21.69	9.96E+001
F	5	1400-	1413	1407.19	352.32	1.08	1.11E+002	24.61	6.30E+001
F	6	2029-	2049	2040.75	510.86	1.94	8.44E+001	22.57	9.00E+001
F	7	2324-	2339	2330.73	583.37	1.11	8.86E+001	21.43	4.18E+001
F	8	2430-	2444	2435.98	609.68	1.16	8.78E+001	21.02	3.54E+001
F	9	3636-	3648	3642.09	910.98	1.18	7.19E+001	18.63	1.50E+001
F	10	4474-	4487	4479.92	1120.09	1.39	2.90E+001	13.38	1.51E+001
F	11	5829-	5854	5842.49	1460.00	1.83	4.84E+002	42.80	6.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	8.86484E+004	2.67722E+004
K-40	0.980	1460.81*		10.67	7.05580E+006	8.46128E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	4.10409E+005	1.28397E+005
		583.14*		84.20	1.16317E+005	3.20506E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.61408E+006	6.70763E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.58975E+005	6.81566E+004
Bi-214	0.711	609.31*		46.30	2.13069E+005	5.75026E+004
		1120.29*		15.10	2.71241E+005	1.28533E+005
		1764.49		15.80		
PB-214	0.562	74.82*	@	6.21	4.50414E+006	1.20110E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.34146E+005	1.05288E+005
		351.92*		37.20	2.74145E+005	7.60274E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	6.352390E+004	2.764069E+004
K-40		0.980	7.055802E+006	8.461282E+005
TL-208		0.752	1.163172E+005	3.182567E+004
Pb-212	@	0.497	2.589746E+005	6.815660E+004
Bi-214		0.711	2.227700E+005	5.248929E+004
PB-214	@	0.562	2.604365E+005	6.163763E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	1.9888E-001	22.92
F 9	910.98	7.9870E-002	25.92

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0915E+004	6.09E+004	-1.1279E+005
	1332.49	100.00	6.1131E+004		5.9545E+004
Nb-94	702.63	100.00	5.6522E+004	5.65E+004	-2.0994E+004
	871.10	100.00	5.8737E+004		3.2658E+004
Ag-108m	79.20	7.10	2.0196E+006	6.41E+004	-2.4149E+006
	433.93	89.90	6.4056E+004		-3.4309E+004
	614.37	90.40	8.8028E+004		-1.0098E+004
	722.95	90.50	7.1036E+004		-2.2971E+004
Sb-125	176.33	6.89	1.0634E+006	2.08E+005	-5.8502E+005
	427.89	29.33	2.0792E+005		1.0420E+005
	463.38	10.35	6.5850E+005		3.8382E+005
	600.56	17.80	3.3288E+005		-4.7491E+004
	606.64	5.02	1.5704E+006		2.4594E+006
	635.90	11.32	5.4357E+005		-2.5892E+005
Cs-134	563.23	8.38	7.3067E+005	6.68E+004	6.1724E+004
	569.32	15.43	3.7778E+005		-4.6317E+005
	604.70	97.60	7.9751E+004		-4.3209E+004
	795.84	85.40	6.6798E+004		2.5075E+004
	801.93	8.73	6.8582E+005		-4.4013E+005
Cs-137	661.65	85.12	6.8620E+004	6.86E+004	3.9397E+004
Eu-152	121.78	28.40	3.5392E+005	2.44E+005	2.8143E+005
	244.69	7.49	9.7993E+005		2.0380E+005
	344.27	26.50	2.4835E+005		-3.4317E+005
	778.89	12.74	4.4703E+005		-2.6348E+005
	867.32	4.16	1.3871E+006		-1.4638E+006
	964.01	14.40	4.7261E+005		3.2713E+005
	1085.78	10.00	5.6875E+005		1.5244E+005
	1112.02	13.30	5.1927E+005		-5.2265E+005
	1407.95	20.70	2.4402E+005		1.0909E+005
Eu-154	123.07	40.50	2.4337E+005	1.79E+005	-2.6548E+004
	247.94	6.60	1.0380E+006		-8.1534E+005
	591.81	4.83	1.2825E+006		6.3717E+005
	723.30	19.70	3.2638E+005		6.1570E+003
	756.87	4.33	1.3505E+006		-3.9849E+005
	873.19	11.50	5.3255E+005		2.8878E+005
	996.32	10.30	5.5287E+005		1.6446E+005
	1004.76	17.90	3.2342E+005		1.5970E+005
	1274.45	35.50	1.7887E+005		4.1267E+004
Eu-155	86.54	30.90	4.3214E+005	4.32E+005	6.2438E+005
	105.31	20.70	5.2038E+005		-1.3972E+005
Am-241	59.54	35.90	4.6745E+005	4.67E+005	-2.9082E+005
Cm-243	228.19	10.56	6.6866E+005	4.91E+005	-8.8324E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9113E+005	4.91E+005	-2.9764E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 3:18:28 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 3:03:26 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.94	72.83	0.93	1.57E+002	41.25	5.50E+002
m	2	284-	305	300.23	74.91	0.93	3.76E+002	54.58	5.64E+002
F	3	949-	959	954.43	238.93	1.08	2.08E+002	34.60	1.13E+002
F	4	1347-	1358	1353.02	338.76	1.25	5.39E+001	22.18	8.11E+001
F	5	1400-	1415	1407.17	352.32	1.28	1.03E+002	24.41	8.12E+001
F	6	2324-	2338	2331.50	583.56	1.06	8.40E+001	23.40	7.52E+001
F	7	2429-	2446	2436.20	609.74	1.34	1.04E+002	23.60	5.80E+001
F	8	2640-	2652	2645.69	662.10	0.55	2.79E+001	13.28	3.85E+001
F	9	3093-	3104	3098.85	775.32	0.65	1.63E+001	9.93	1.50E+001
F	10	3635-	3652	3642.81	911.16	1.42	7.81E+001	19.12	2.14E+001
F	11	3868-	3879	3873.34	968.71	1.02	2.68E+001	15.21	3.63E+001
F	12	5324-	5337	5328.34	1331.75	2.64	3.19E+001	13.69	6.17E+000
F	13	5828-	5854	5842.09	1459.90	1.95	5.63E+002	45.94	1.02E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.975	1460.81*	10.67	8.21349E+006	9.43958E+005
Cs-137	0.994	661.65*	85.12	3.79874E+004	1.86376E+004
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.10296E+005	3.39928E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	3.28798E+006	8.01988E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.74506E+005	8.57034E+004
Bi-214	0.415	609.31*	46.30	2.51595E+005	6.52755E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.997	338.32*	11.40	4.27754E+005	1.88362E+005
		911.07*	27.70	3.63419E+005	9.82503E+004
		969.11*	16.60	2.13498E+005	1.23417E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.975	8.213486E+006	9.439580E+005
Cs-137		0.994	3.798744E+004	1.863763E+004
TL-208		0.467	1.102961E+005	3.399279E+004
Pb-212	@	0.496	3.745056E+005	8.570336E+004
Bi-214		0.415	2.515952E+005	6.527550E+004
Ac-228		0.997	3.227498E+005	7.116941E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.7422E-001	26.31
F 5	352.32	1.1422E-001	23.75
F 9	775.32	1.8091E-002	60.99
F 12	1331.75	3.5491E-002	42.87

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	8.1388E+004	6.81E+004	8.4277E+004
		1332.49	100.00	6.8057E+004		3.9239E+004
	Nb-94	702.63	100.00	6.2434E+004	5.71E+004	1.8067E+004
		871.10	100.00	5.7143E+004		1.5954E+004
	Ag-108m	79.20	7.10	2.1656E+006	7.07E+004	-3.9522E+006
		433.93	89.90	7.0739E+004		-3.5908E+004
		614.37	90.40	9.2670E+004		-4.1686E+003
		722.95	90.50	7.4832E+004		6.4924E+004
	Sb-125	176.33	6.89	1.1884E+006	2.22E+005	-1.5088E+005
		427.89	29.33	2.2206E+005		-4.3117E+004
		463.38	10.35	7.1943E+005		7.3673E+005
		600.56	17.80	3.4219E+005		-2.1027E+005
		606.64	5.02	1.7008E+006		2.6237E+006
		635.90	11.32	5.6653E+005		-8.9258E+004
	Cs-134	563.23	8.38	7.5653E+005	7.13E+004	2.7042E+005
		569.32	15.43	3.8974E+005		-2.0279E+005
		604.70	97.60	8.6863E+004		-4.9871E+003
		795.84	85.40	7.1284E+004		2.2786E+004
		801.93	8.73	7.0230E+005		-1.1746E+006
+	Cs-137	661.65*	85.12	4.8931E+004	4.89E+004	3.7987E+004
	Eu-152	121.78	28.40	3.6720E+005	2.62E+005	2.2574E+004
		244.69	7.49	1.0668E+006		-2.0935E+006
		344.27	26.50	2.8316E+005		-1.3764E+005
		778.89	12.74	4.8331E+005		-5.1470E+005
		867.32	4.16	1.4024E+006		-4.4185E+005
		964.01	14.40	5.4947E+005		3.1213E+005
		1085.78	10.00	6.8647E+005		-1.4550E+005
		1112.02	13.30	5.2908E+005		-5.2037E+005
		1407.95	20.70	2.6196E+005		2.0115E+005
	Eu-154	123.07	40.50	2.5733E+005	1.81E+005	8.1237E+004
		247.94	6.60	1.1381E+006		-1.0141E+006
		591.81	4.83	1.3331E+006		-3.8215E+004
		723.30	19.70	3.4017E+005		1.3174E+005
		756.87	4.33	1.4588E+006		-7.9685E+005
		873.19	11.50	4.9728E+005		-1.4003E+005
		996.32	10.30	5.9380E+005		-4.8638E+005
		1004.76	17.90	3.5964E+005		9.0036E+004
		1274.45	35.50	1.8112E+005		7.9535E+004
	Eu-155	86.54	30.90	4.6307E+005	4.63E+005	5.0656E+005
		105.31	20.70	5.4057E+005		-1.2097E+005
	Am-241	59.54	35.90	4.9090E+005	4.91E+005	-1.0450E+005
	Cm-243	228.19	10.56	7.3054E+005	4.95E+005	-6.2630E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9528E+005	4.95E+005	-5.1727E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 2:57:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 2:42:30 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	274-	313	277.73	69.27	0.88	4.29E+001	32.43	3.21E+002
m	2	274-	313	292.03	72.86	0.88	1.40E+002	38.42	4.53E+002
m	3	274-	313	300.20	74.91	0.89	3.23E+002	49.87	4.76E+002
m	4	274-	313	308.60	77.01	0.89	6.67E+001	36.28	4.99E+002
M	5	333-	354	339.26	84.71	0.90	9.21E+001	40.08	4.84E+002
m	6	333-	354	350.16	87.44	0.90	4.92E+001	34.91	4.24E+002
F	7	509-	521	516.72	129.21	0.67	5.29E+001	28.42	2.95E+002
F	8	943-	959	953.88	238.79	1.06	1.52E+002	31.95	1.78E+002
F	9	1396-	1414	1407.10	352.30	1.54	1.10E+002	24.45	9.00E+001
F	10	1845-	1855	1850.37	463.23	1.17	2.78E+001	13.77	1.94E+001
F	11	2030-	2053	2042.46	511.28	1.88	1.22E+002	23.37	6.26E+001
F	12	2322-	2339	2331.14	583.47	1.18	8.34E+001	22.17	6.51E+001
F	13	2429-	2445	2435.97	609.68	1.62	9.68E+001	22.37	4.62E+001
F	14	3634-	3651	3642.94	911.19	1.78	6.20E+001	18.15	3.17E+001
F	15	3866-	3880	3874.03	968.88	1.30	2.90E+001	14.92	3.18E+001
F	16	5829-	5855	5842.15	1459.91	2.13	4.92E+002	42.37	3.27E+000
F	17	7052-	7065	7058.30	1763.28	1.96	2.66E+001	11.13	2.94E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	1.28698E+005	3.04708E+004
K-40	0.976	1460.81*	10.67	7.17426E+006	8.48034E+005
TL-208	0.750	277.35	6.80		
		510.84*	21.60	5.95824E+005	1.49225E+005
		583.14*	84.20	1.09389E+005	3.24902E+004
		860.37	12.46		
Pb-212	0.999	74.81* @	10.70	2.82548E+006	7.04994E+005
		77.11* @	18.00	3.37149E+005	1.94967E+005
		87.30* @	8.00	4.91935E+005	3.62084E+005
		238.63*	44.60	2.73715E+005	7.18486E+004
Bi-214	0.693	609.31*	46.30	2.35011E+005	6.16666E+004
		1120.29	15.10		
		1764.49*	15.80	2.79284E+005	1.20074E+005
PB-214	0.485	74.82* @	6.21	4.86838E+006	1.26509E+006
		77.11* @	10.50	5.77970E+005	3.37003E+005
		87.30* @	4.67	8.42715E+005	6.23531E+005
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.70432E+005	7.53265E+004
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	2.88504E+005	9.06993E+004
		969.11*	16.60	2.31300E+005	1.21443E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		0.998	1.050700E+005	3.125901E+004
	K-40		0.976	7.174259E+006	8.480337E+005
X	Eu-155		0.328		
	TL-208		0.750	1.093889E+005	3.229401E+004
	Pb-212	@	0.999	2.737150E+005	7.184860E+004
	Bi-214		0.693	2.442509E+005	5.485523E+004
	PB-214	@	0.485	2.704318E+005	7.375069E+004
	Ac-228		0.622	2.680212E+005	7.266934E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	69.27	4.7617E-002	75.68
m 2	72.86	1.5568E-001	27.42
M 5	84.71	1.0236E-001	43.51
F 7	129.21	5.8826E-002	53.68
F 10	463.23	3.0924E-002	49.49

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S,
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.2422E+004	6.07E+004	4.0997E+004
	1332.49	100.00	6.0697E+004		-1.8929E+004
Nb-94	702.63	100.00	6.8506E+004	5.35E+004	2.1510E+004
	871.10	100.00	5.3457E+004		-5.7815E+003
Ag-108m	79.20	7.10	2.1797E+006	6.90E+004	-1.3982E+005
	433.93	89.90	6.8984E+004		1.4943E+004
	614.37	90.40	8.8028E+004		-6.0193E+004
	722.95	90.50	7.1036E+004		-1.7922E+004
Sb-125	176.33	6.89	1.1526E+006	2.10E+005	2.7715E+005
	427.89	29.33	2.0974E+005		5.2922E+004
	463.38	10.35	5.9287E+005		-3.6487E+005
	600.56	17.80	3.3955E+005		1.2361E+004
	606.64	5.02	1.6232E+006		2.4720E+006
	635.90	11.32	4.7502E+005		-2.6640E+005
Cs-134	563.23	8.38	7.2538E+005	7.33E+004	-2.8024E+005
	569.32	15.43	3.8530E+005		-6.0868E+005
	604.70	97.60	8.3208E+004		-3.7962E+004
	795.84	85.40	7.3256E+004		-5.8501E+004
	801.93	8.73	7.4335E+005		-1.7063E+005
Cs-137	661.65	85.12	7.7586E+004	7.76E+004	4.8996E+004
Eu-152	121.78	28.40	3.5662E+005	2.33E+005	8.6246E+004
	244.69	7.49	1.0024E+006		-1.5993E+006
	344.27	26.50	2.3965E+005		-2.5579E+005
	778.89	12.74	4.7452E+005		-4.9617E+005
	867.32	4.16	1.3482E+006		-1.5946E+006
	964.01	14.40	5.2273E+005		7.6255E+005
	1085.78	10.00	6.1068E+005		-1.7161E+005
	1112.02	13.30	5.2665E+005		-6.7776E+005
	1407.95	20.70	2.3309E+005		7.0549E+004
Eu-154	123.07	40.50	2.4544E+005	1.73E+005	-1.0964E+005
	247.94	6.60	1.0592E+006		-1.5394E+006
	591.81	4.83	1.2540E+006		-2.2613E+005
	723.30	19.70	3.2381E+005		-1.6724E+005
	756.87	4.33	1.3371E+006		-1.9917E+006
	873.19	11.50	4.6520E+005		-4.8429E+005
	996.32	10.30	5.7031E+005		7.8128E+004
	1004.76	17.90	3.2342E+005		-1.4772E+005
	1274.45	35.50	1.7311E+005		-1.3957E+005
Eu-155	86.54*	30.90	2.5496E+005	2.55E+005	1.2736E+005
	105.31	20.70	5.4189E+005		4.0767E+004
Am-241	59.54	35.90	4.9430E+005	4.94E+005	-6.4952E+004
Cm-243	228.19	10.56	6.9355E+005	5.21E+005	1.7665E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2101E+005	5.21E+005	2.7376E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 11:54:49 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 11:39:48 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	307	291.84	72.81	0.98	1.50E+002	40.89	5.21E+002
m	2	284-	307	300.37	74.95	0.99	2.96E+002	50.63	6.03E+002
F	3	948-	960	954.20	238.87	0.93	1.30E+002	30.18	1.44E+002
F	4	1399-	1414	1406.56	352.16	0.93	7.42E+001	20.92	6.62E+001
F	5	2032-	2052	2042.10	511.20	1.72	9.87E+001	22.43	6.81E+001
F	6	2322-	2338	2330.50	583.31	1.34	7.32E+001	19.43	3.59E+001
F	7	2427-	2445	2435.55	609.57	1.28	7.58E+001	20.50	5.23E+001
F	8	3635-	3650	3642.75	911.14	1.30	4.90E+001	15.80	1.86E+001
F	9	3865-	3880	3872.13	968.41	1.55	4.52E+001	15.77	2.00E+001
M	10	4472-	4512	4477.87	1119.58	1.13	3.25E+001	12.58	8.30E+000
m	11	4472-	4512	4506.40	1126.70	1.13	1.20E+001	9.27	1.30E+001
F	12	5827-	5853	5840.31	1459.45	1.96	4.08E+002	39.39	1.66E+001
F	13	7048-	7061	7054.55	1762.35	1.71	3.61E+001	13.53	8.83E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.03840E+005	2.77284E+004
K-40	0.946	1460.81*	10.67	5.98960E+006	7.54485E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.80740E+005	1.34241E+005
		583.14*	84.20	9.64026E+004	2.85819E+004
		860.37	12.46		
Pb-212	0.495	74.81* @	10.70	2.53832E+006	6.60764E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.33564E+005	6.53508E+004
Bi-214	0.968	609.31*	46.30	1.84701E+005	5.49881E+004
		1120.29*	15.10	3.06116E+005	1.22767E+005
		1764.49*	15.80	3.81624E+005	1.48152E+005
Ac-228	0.617	338.32	11.40		
		911.07*	27.70	2.28960E+005	7.84176E+004
		969.11*	16.60	3.62598E+005	1.32033E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.301682E+004	2.839922E+004
K-40		0.946	5.989602E+006	7.544847E+005
TL-208		0.751	9.640262E+004	2.840871E+004
Pb-212	@	0.495	2.335641E+005	6.535077E+004
Bi-214		0.968	2.231702E+005	4.753118E+004
Ac-228		0.617	2.638082E+005	6.742252E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.6625E-001	27.33
F 4	352.16	8.2403E-002	28.20
m 11	1126.70	1.3384E-002	76.99

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9405E+004	5.45E+004	5.8276E+004
	1332.49	100.00	5.4524E+004		5.5763E+004
Nb-94	702.63	100.00	5.9608E+004	5.34E+004	1.2313E+004
	871.10	100.00	5.3387E+004		3.0778E+004
Ag-108m	79.20	7.10	2.1088E+006	5.81E+004	1.6516E+005
	433.93	89.90	5.8147E+004		-1.0953E+005
	614.37	90.40	8.2191E+004		3.3977E+004
	722.95	90.50	6.4944E+004		3.4610E+004
Sb-125	176.33	6.89	1.1365E+006	1.82E+005	1.2769E+005
	427.89	29.33	1.8225E+005		-2.7983E+004
	463.38	10.35	5.6653E+005		3.4001E+005
	600.56	17.80	3.1747E+005		-1.8728E+005
	606.64	5.02	1.5182E+006		2.5192E+006
	635.90	11.32	4.7234E+005		-2.1061E+005
Cs-134	563.23	8.38	6.5141E+005	6.82E+004	1.4567E+004
	569.32	15.43	3.6015E+005		1.1386E+005
	604.70	97.60	7.7023E+004		-2.7846E+004
	795.84	85.40	6.8222E+004		2.5353E+003
	801.93	8.73	6.4427E+005		3.4959E+005
Cs-137	661.65	85.12	6.8684E+004	6.87E+004	2.2638E+004
Eu-152	121.78	28.40	3.4704E+005	2.29E+005	6.1514E+002
	244.69	7.49	9.7295E+005		-5.3997E+005
	344.27	26.50	2.4331E+005		-4.2634E+004
	778.89	12.74	5.0309E+005		8.4535E+004
	867.32	4.16	1.2209E+006		-5.6569E+005
	964.01	14.40	4.9509E+005		1.3751E+005
	1085.78	10.00	5.7568E+005		3.7492E+005
	1112.02	13.30	4.7214E+005		4.7640E+004
	1407.95	20.70	2.2878E+005		6.3711E+004
Eu-154	123.07	40.50	2.4377E+005	1.53E+005	9.6346E+004
	247.94	6.60	1.0643E+006		-6.5048E+005
	591.81	4.83	1.2343E+006		1.0535E+006
	723.30	19.70	2.9839E+005		1.6596E+005
	756.87	4.33	1.3101E+006		3.2410E+005
	873.19	11.50	4.6764E+005		3.0346E+005
	996.32	10.30	5.2642E+005		-2.5474E+004
	1004.76	17.90	2.8370E+005		-3.9801E+005
	1274.45	35.50	1.5259E+005		-8.9631E+003
Eu-155	86.54	30.90	4.5137E+005	4.51E+005	5.1062E+005
	105.31	20.70	5.3663E+005		-4.1858E+003
Am-241	59.54	35.90	4.9144E+005	4.91E+005	5.6333E+005
Cm-243	228.19	10.56	6.6629E+005	5.03E+005	-3.0078E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0350E+005	5.03E+005	2.6894E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 1:17:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:02:15 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	305	291.65	72.76	0.84	1.59E+002	39.02	3.27E+002
m	2	288-	305	300.30	74.93	0.85	3.15E+002	49.25	4.58E+002
F	3	949-	958	953.64	238.73	0.98	1.31E+002	30.84	1.20E+002
F	4	1347-	1360	1352.71	338.68	1.38	4.83E+001	19.06	6.01E+001
F	5	1400-	1414	1406.03	352.03	0.87	9.34E+001	22.82	6.75E+001
F	6	2034-	2053	2042.28	511.24	2.06	1.07E+002	22.24	4.96E+001
F	7	2322-	2339	2330.95	583.43	1.39	7.89E+001	20.95	5.40E+001
F	8	2428-	2443	2435.41	609.54	1.16	9.62E+001	22.68	4.77E+001
F	9	3636-	3649	3641.57	910.85	1.17	5.73E+001	17.79	2.80E+001
F	10	3867-	3879	3873.26	968.69	1.67	3.47E+001	14.11	1.46E+001
F	11	5829-	5853	5841.38	1459.72	1.98	4.03E+002	39.05	1.22E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	1.12873E+005	2.82484E+004
K-40	0.965	1460.81*	10.67	5.91988E+006	7.47125E+005
TL-208	0.750	277.35	6.80		
		510.84*	21.60	5.22561E+005	1.37566E+005
		583.14*	84.20	1.03894E+005	3.08132E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.70938E+006	6.78983E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.35427E+005	6.64772E+004
Bi-214	0.418	609.31*	46.30	2.34376E+005	6.24930E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.997	338.32*	11.40	3.82485E+005	1.62252E+005
		911.07*	27.70	2.67876E+005	8.86814E+004
		969.11*	16.60	2.78514E+005	1.16868E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	9.043208E+004	2.901267E+004
K-40		0.965	5.919876E+006	7.471248E+005
TL-208		0.750	1.038943E+005	3.062662E+004
Pb-212	@	0.496	2.354267E+005	6.647724E+004
Bi-214		0.418	2.343755E+005	6.249302E+004
Ac-228		0.997	2.894085E+005	6.477168E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	1.7668E-001	24.54
F 5	352.03	1.0376E-001	24.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7997E+004	5.20E+004	4.3561E+004
	1332.49	100.00	5.1989E+004		3.5774E+004
Nb-94	702.63	100.00	5.4497E+004	5.45E+004	3.9983E+004
	871.10	100.00	5.7116E+004		5.9193E+004
Ag-108m	79.20	7.10	2.0176E+006	6.40E+004	-2.0252E+006
	433.93	89.90	6.3971E+004		5.4764E+003
	614.37	90.40	8.9987E+004		5.9362E+003
	722.95	90.50	6.5253E+004		1.0719E+004
Sb-125	176.33	6.89	1.1257E+006	2.00E+005	-1.6528E+005
	427.89	29.33	2.0017E+005		1.5113E+005
	463.38	10.35	6.0714E+005		3.2349E+005
	600.56	17.80	2.9208E+005		-2.6603E+005
	606.64	5.02	1.5840E+006		3.1619E+006
	635.90	11.32	4.8951E+005		-3.9914E+005
Cs-134	563.23	8.38	6.6032E+005	6.93E+004	-6.7563E+005
	569.32	15.43	3.8347E+005		-1.9570E+004
	604.70	97.60	7.9697E+004		8.0904E+003
	795.84	85.40	6.9273E+004		-2.7842E+004
	801.93	8.73	6.4066E+005		-9.9179E+005
Cs-137	661.65	85.12	7.0532E+004	7.05E+004	2.6113E+004
Eu-152	121.78	28.40	3.3945E+005	2.26E+005	-1.5003E+005
	244.69	7.49	1.0385E+006		-1.6019E+006
	344.27	26.50	2.5025E+005		-3.0340E+004
	778.89	12.74	4.3979E+005		-3.7728E+005
	867.32	4.16	1.4098E+006		-1.0382E+006
	964.01	14.40	4.8319E+005		5.0639E+005
	1085.78	10.00	5.6369E+005		2.3250E+005
	1112.02	13.30	4.9641E+005		-3.0862E+005
	1407.95	20.70	2.2586E+005		4.8562E+004
Eu-154	123.07	40.50	2.3942E+005	1.50E+005	1.2026E+005
	247.94	6.60	1.0769E+006		-1.7165E+006
	591.81	4.83	1.1526E+006		-3.5095E+005
	723.30	19.70	3.0403E+005		1.4290E+005
	756.87	4.33	1.3170E+006		-1.9469E+006
	873.19	11.50	4.8551E+005		3.5998E+005
	996.32	10.30	4.8707E+005		-5.6997E+004
	1004.76	17.90	2.9066E+005		-5.9651E+004
	1274.45	35.50	1.4984E+005		2.3777E+003
Eu-155	86.54	30.90	4.2863E+005	4.29E+005	1.6875E+005
	105.31	20.70	5.1575E+005		-1.5317E+005
Am-241	59.54	35.90	4.5771E+005	4.58E+005	-1.1193E+005
Cm-243	228.19	10.56	7.0075E+005	4.96E+005	2.2163E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9621E+005	4.96E+005	1.4499E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 2:40:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 2:25:22 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	314	291.97	72.84	0.93	1.99E+002	41.64	4.67E+002
m	2	285-	314	300.33	74.94	0.93	3.23E+002	48.49	4.23E+002
m	3	285-	314	309.23	77.17	0.94	7.57E+001	34.74	4.17E+002
F	4	330-	344	338.92	84.62	1.09	1.02E+002	40.68	5.20E+002
F	5	946-	960	954.22	238.87	0.95	1.25E+002	29.90	1.71E+002
F	6	1174-	1185	1180.04	295.44	0.77	4.41E+001	19.45	7.82E+001
F	7	1346-	1360	1352.68	338.67	1.27	4.48E+001	19.35	7.41E+001
F	8	1401-	1413	1406.98	352.27	1.11	8.20E+001	22.99	6.65E+001
F	9	2034-	2052	2042.59	511.32	1.81	9.94E+001	22.71	6.55E+001
F	10	2322-	2338	2330.73	583.37	1.61	8.09E+001	19.66	2.96E+001
F	11	2425-	2444	2434.91	609.42	1.46	1.06E+002	22.54	4.54E+001
F	12	3635-	3651	3642.18	911.00	1.70	7.03E+001	19.04	3.02E+001
M	13	3851-	3879	3856.11	964.41	1.18	1.21E+001	10.21	1.95E+001
m	14	3851-	3879	3871.47	968.24	1.18	3.01E+001	13.94	2.25E+001
F	15	4472-	4484	4478.88	1119.83	0.90	2.35E+001	12.42	2.00E+001
F	16	5829-	5854	5841.27	1459.70	1.87	3.95E+002	38.86	9.91E+000
F	17	7051-	7064	7057.20	1763.01	1.57	3.57E+001	12.58	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.04560E+005	2.80362E+004
K-40	0.963	1460.81*		10.67	5.80268E+006	7.38832E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	4.84075E+005	1.35684E+005
		583.14*		84.20	1.06490E+005	2.94652E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	2.77837E+006	6.85588E+005
		77.11*	@	18.00	3.75577E+005	1.87349E+005
		87.30	@	8.00		
		238.63*		44.60	2.23616E+005	6.40637E+004
Bi-214	0.985	609.31*		46.30	2.58807E+005	6.36848E+004
		1120.29*		15.10	2.21434E+005	1.19258E+005
		1764.49*		15.80	3.77150E+005	1.38353E+005
PB-214	0.758	74.82*	@	6.21	4.78722E+006	1.23134E+006
		77.11*	@	10.50	6.43847E+005	3.24747E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.97588E+005	9.32983E+004
		351.92*		37.20	2.01465E+005	6.57766E+004
Ac-228	0.992	338.32*		11.40	3.54087E+005	1.62867E+005
		911.07*		27.70	3.28602E+005	9.67001E+004
		969.11*		16.60	2.40996E+005	1.14574E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	8.155834E+004	2.873974E+004
K-40		0.963	5.802678E+006	7.388321E+005
TL-208		0.750	1.064899E+005	2.926011E+004
Pb-212	@	0.837	2.236157E+005	6.406369E+004
Bi-214		0.985	2.684375E+005	5.204969E+004
PB-214	@	0.758	2.001780E+005	5.375934E+004
Ac-228		0.992	3.027306E+005	6.729493E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	2.2148E-001	20.89
F 4	84.62	1.1278E-001	40.07
M 13	964.41	1.3411E-002	84.61

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T .

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.5455E+004	4.76E+004	7.2575E+002
	1332.49	100.00	4.7626E+004		2.0205E+004
Nb-94	702.63	100.00	5.3897E+004	5.39E+004	-3.9814E+004
	871.10	100.00	6.1819E+004		2.9383E+003
Ag-108m	79.20	7.10	1.9837E+006	6.38E+004	3.3486E+004
	433.93	89.90	6.3757E+004		1.3869E+004
	614.37	90.40	8.4942E+004		1.7494E+004
	722.95	90.50	6.7672E+004		4.5725E+004
Sb-125	176.33	6.89	1.1503E+006	1.99E+005	-4.2198E+004
	427.89	29.33	1.9890E+005		1.9783E+004
	463.38	10.35	5.7790E+005		-2.0412E+005
	600.56	17.80	3.3008E+005		8.8812E+004
	606.64	5.02	1.5515E+006		2.6140E+006
	635.90	11.32	5.0838E+005		2.7979E+005
Cs-134	563.23	8.38	7.0857E+005	6.79E+004	-3.7089E+005
	569.32	15.43	3.6494E+005		-1.3751E+005
	604.70	97.60	8.0630E+004		8.0015E+003
	795.84	85.40	6.7867E+004		-7.5930E+004
	801.93	8.73	6.5853E+005		2.3784E+005
Cs-137	661.65	85.12	7.3212E+004	7.32E+004	2.6183E+004
Eu-152	121.78	28.40	3.4375E+005	2.11E+005	1.9293E+005
	244.69	7.49	9.3773E+005		-3.1286E+005
	344.27	26.50	2.4277E+005		5.1043E+004
	778.89	12.74	4.1728E+005		-6.7356E+005
	867.32	4.16	1.4694E+006		-4.8514E+005
	964.01	14.40	4.8719E+005		1.2914E+005
	1085.78	10.00	5.5553E+005		1.4350E+004
	1112.02	13.30	5.0680E+005		-5.9358E+005
	1407.95	20.70	2.1061E+005		-2.9585E+005
Eu-154	123.07	40.50	2.3735E+005	1.62E+005	-8.8812E+004
	247.94	6.60	9.7849E+005		-1.1382E+006
	591.81	4.83	1.2343E+006		-3.4014E+005
	723.30	19.70	3.0681E+005		1.1163E+005
	756.87	4.33	1.3577E+006		1.1246E+005
	873.19	11.50	5.5598E+005		1.0552E+004
	996.32	10.30	5.6634E+005		3.6942E+004
	1004.76	17.90	2.9520E+005		-3.4022E+005
	1274.45	35.50	1.6179E+005		3.7929E+004
Eu-155	86.54	30.90	4.3185E+005	4.32E+005	1.1577E+005
	105.31	20.70	5.0869E+005		-1.1678E+005
Am-241	59.54	35.90	4.6416E+005	4.64E+005	-2.1434E+005
Cm-243	228.19	10.56	7.0953E+005	5.21E+005	3.2732E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2088E+005	5.21E+005	7.8412E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 2:20:38 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 2:05:37 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	316	291.51	72.73	0.91	1.85E+002	41.17	4.44E+002
m	2	285-	316	300.45	74.97	0.92	3.69E+002	50.83	4.44E+002
m	3	285-	316	308.71	77.04	0.92	7.40E+001	35.21	4.81E+002
F	4	948-	958	953.94	238.80	1.06	1.16E+002	29.58	1.25E+002
F	5	1174-	1186	1180.40	295.53	1.03	3.84E+001	20.84	9.65E+001
F	6	1346-	1358	1352.26	338.57	0.78	3.30E+001	16.57	6.03E+001
F	7	1400-	1412	1407.09	352.30	1.22	8.62E+001	22.45	5.52E+001
F	8	2034-	2046	2040.14	510.70	0.79	4.67E+001	18.51	6.31E+001
F	9	2323-	2338	2330.76	583.38	1.20	6.87E+001	19.77	4.59E+001
F	10	2427-	2444	2435.48	609.56	1.52	1.01E+002	21.56	3.31E+001
F	11	2900-	2914	2907.04	727.40	1.71	4.20E+001	14.73	1.83E+001
F	12	3634-	3651	3642.33	911.04	1.83	5.98E+001	17.29	2.49E+001
F	13	3866-	3880	3873.96	968.86	1.64	3.86E+001	15.65	2.63E+001
F	14	5829-	5853	5841.56	1459.77	2.03	4.37E+002	40.41	9.36E+000
F	15	7049-	7062	7055.76	1762.65	1.61	2.55E+001	11.68	8.72E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*	100.00	4.91045E+004	2.06470E+004
K-40	0.967	1460.81*	10.67	6.41134E+006	7.88148E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	2.27336E+005	9.73744E+004
		583.14*	84.20	9.04465E+004	2.86547E+004
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	4.28252E+005	1.58235E+005
Pb-212	0.838	74.81* @	10.70	3.16995E+006	7.59296E+005
		77.11* @	18.00	3.67557E+005	1.89157E+005
		87.30 @	8.00		
		238.63*	44.60	2.07515E+005	6.22215E+004
Bi-214	0.682	609.31*	46.30	2.46185E+005	6.08176E+004
		1120.29	15.10		
		1764.49*	15.80	2.69674E+005	1.26448E+005
PB-214	0.758	74.82* @	6.21	5.46192E+006	1.36705E+006
		77.11* @	10.50	6.30099E+005	3.27665E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.72324E+005	9.77970E+004
		351.92*	37.20	2.11878E+005	6.55638E+004
Ac-228	0.999	338.32*	11.40	2.61175E+005	1.37319E+005
		911.07*	27.70	2.79735E+005	8.70115E+004
		969.11*	16.60	3.09901E+005	1.29620E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	2.956802E+004	2.154538E+004
K-40		0.967	6.411339E+006	7.881485E+005
TL-208		0.751	9.044651E+004	2.850274E+004
Bi-212		0.998	4.282521E+005	1.582350E+005
Pb-212	@	0.838	2.075145E+005	6.222146E+004
Bi-214		0.682	2.505979E+005	5.480768E+004
PB-214	@	0.758	1.996131E+005	5.445820E+004
Ac-228		0.999	2.830509E+005	6.393537E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	2.0546E-001	22.27

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6191E+004	5.40E+004	-1.6308E+004
	1332.49	100.00	5.4027E+004		2.5090E+004
Nb-94	702.63	100.00	5.3594E+004	5.36E+004	1.4065E+004
	871.10	100.00	5.6788E+004		-2.6774E+003
Ag-108m	79.20	7.10	2.0661E+006	6.67E+004	-5.7267E+004
	433.93	89.90	6.6683E+004		-2.0010E+004
	614.37	90.40	8.3895E+004		-2.1560E+004
	722.95	90.50	7.3354E+004		-6.1630E+004
Sb-125	176.33	6.89	1.1460E+006	2.06E+005	5.1338E+005
	427.89	29.33	2.0579E+005		-9.8579E+004
	463.38	10.35	5.7035E+005		-8.6680E+004
	600.56	17.80	3.3955E+005		8.8204E+004
	606.64	5.02	1.5732E+006		2.2937E+006
	635.90	11.32	5.3317E+005		9.4971E+004
Cs-134	563.23	8.38	6.5141E+005	6.72E+004	-4.1913E+005
	569.32	15.43	3.6494E+005		5.4776E+004
	604.70	97.60	8.1917E+004		2.3642E+004
	795.84	85.40	6.7153E+004		2.0842E+004
	801.93	8.73	6.3336E+005		-3.8867E+005
Cs-137	661.65	85.12	7.1437E+004	7.14E+004	4.1737E+004
Eu-152	121.78	28.40	3.4200E+005	2.07E+005	3.9472E+004
	244.69	7.49	9.9268E+005		-1.5488E+006
	344.27	26.50	2.4331E+005		6.2650E+004
	778.89	12.74	4.5649E+005		1.2461E+005
	867.32	4.16	1.3392E+006		-9.1380E+005
	964.01	14.40	5.2729E+005		4.1717E+005
	1085.78	10.00	5.8742E+005		1.2323E+005
	1112.02	13.30	4.9641E+005		-1.8720E+005
	1407.95	20.70	2.0741E+005		-6.0026E+004
Eu-154	123.07	40.50	2.3708E+005	1.58E+005	9.2164E+004
	247.94	6.60	1.0516E+006		-8.4958E+005
	591.81	4.83	1.1788E+006		-1.1415E+005
	723.30	19.70	3.3704E+005		1.9363E+005
	756.87	4.33	1.3375E+006		2.1373E+005
	873.19	11.50	4.7963E+005		-5.8679E+005
	996.32	10.30	5.4858E+005		-2.2123E+004
	1004.76	17.90	3.1054E+005		-1.0618E+004
	1274.45	35.50	1.5792E+005		1.4410E+005
Eu-155	86.54	30.90	4.4122E+005	4.41E+005	6.7955E+005
	105.31	20.70	5.2458E+005		-2.0617E+005
Am-241	59.54	35.90	4.6539E+005	4.65E+005	-1.5499E+005
Cm-243	228.19	10.56	7.0163E+005	4.74E+005	1.2855E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7450E+005	4.74E+005	-1.9491E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 2:00:41 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:45:40 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.51	72.73	1.00	1.53E+002	40.04	5.13E+002
m	2	283-	306	300.36	74.95	1.00	3.15E+002	51.46	6.03E+002
F	3	335-	344	338.92	84.62	1.28	1.53E+002	45.34	3.66E+002
F	4	949-	961	953.96	238.81	0.95	1.55E+002	31.38	1.35E+002
F	5	1172-	1187	1180.28	295.50	1.12	6.29E+001	21.53	9.16E+001
F	6	1401-	1416	1406.53	352.16	0.84	7.94E+001	22.03	8.09E+001
F	7	2323-	2338	2330.59	583.34	1.26	8.59E+001	21.21	4.32E+001
F	8	2429-	2443	2434.84	609.40	1.32	9.85E+001	21.36	2.48E+001
F	9	3634-	3650	3641.57	910.85	1.45	8.60E+001	19.63	1.93E+001
F	10	3868-	3881	3873.62	968.78	0.98	2.95E+001	13.32	1.96E+001
F	11	4473-	4485	4478.96	1119.85	1.63	3.35E+001	14.87	1.95E+001
F	12	5828-	5854	5841.15	1459.66	2.02	4.67E+002	41.70	6.53E+000
F	13	7051-	7064	7057.22	1763.01	1.53	2.79E+001	12.84	1.24E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.961	1460.81*		10.67	6.86006E+006	8.26479E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.13108E+005	3.16850E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.70715E+006	6.90551E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.78100E+005	7.11805E+004
Bi-214	0.985	609.31*		46.30	2.40082E+005	6.00245E+004
		1120.29*		15.10	3.14893E+005	1.43931E+005
		1764.49*		15.80	2.95069E+005	1.38960E+005
PB-214	0.563	74.82*	@	6.21	4.66450E+006	1.23708E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.81865E+005	1.07544E+005
		351.92*		37.20	1.95187E+005	6.32144E+004
Ac-228	0.620	338.32		11.40		
		911.07*		27.70	4.02003E+005	1.02763E+005
		969.11*		16.60	2.36533E+005	1.09663E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.961	6.860059E+006	8.264785E+005
TL-208		0.470	1.131078E+005	3.168502E+004
Pb-212	@	0.496	2.781001E+005	7.118046E+004
Bi-214		0.985	2.571867E+005	5.146107E+004
PB-214	@	0.563	2.174451E+005	5.449703E+004
Ac-228		0.620	3.246369E+005	7.498504E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.73	1.6948E-001	26.25
F	3	84.62	1.6969E-001	29.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3573E+004	4.40E+004	-1.5371E+004
	1332.49	100.00	4.4043E+004		-1.1333E+004
Nb-94	702.63	100.00	5.4794E+004	5.41E+004	-8.3194E+003
	871.10	100.00	5.4085E+004		5.2383E+004
Ag-108m	79.20	7.10	2.0192E+006	6.52E+004	-3.2431E+006
	433.93	89.90	6.5237E+004		1.1643E+004
	614.37	90.40	8.4733E+004		1.4572E+004
	722.95	90.50	7.0003E+004		-1.4825E+003
Sb-125	176.33	6.89	1.2168E+006	2.11E+005	1.0058E+006
	427.89	29.33	2.1065E+005		8.5165E+004
	463.38	10.35	6.2295E+005		8.5691E+004
	600.56	17.80	3.4221E+005		1.4583E+005
	606.64	5.02	1.5368E+006		3.0547E+006
	635.90	11.32	5.0139E+005		1.8932E+005
Cs-134	563.23	8.38	6.9194E+005	6.89E+004	3.9828E+005
	569.32	15.43	3.6015E+005		1.1198E+005
	604.70	97.60	7.8943E+004		-1.0931E+005
	795.84	85.40	6.8924E+004		2.9683E+004
	801.93	8.73	6.1470E+005		-4.3892E+005
Cs-137	661.65	85.12	7.1437E+004	7.14E+004	1.1583E+004
Eu-152	121.78	28.40	3.4954E+005	2.39E+005	1.3589E+005
	244.69	7.49	1.0030E+006		3.0925E+005
	344.27	26.50	2.3894E+005		-2.4949E+005
	778.89	12.74	4.0684E+005		-2.4405E+005
	867.32	4.16	1.2209E+006		-5.5207E+005
	964.01	14.40	5.0479E+005		8.1573E+005
	1085.78	10.00	6.5314E+005		-1.8173E+005
	1112.02	13.30	5.2939E+005		-6.5050E+005
	1407.95	20.70	2.5340E+005		1.2057E+005
Eu-154	123.07	40.50	2.4106E+005	1.46E+005	-2.5383E+005
	247.94	6.60	1.1077E+006		-5.0941E+005
	591.81	4.83	1.2441E+006		-5.7550E+005
	723.30	19.70	3.2426E+005		8.4093E+004
	756.87	4.33	1.3032E+006		-7.9869E+005
	873.19	11.50	4.4261E+005		-7.0573E+005
	996.32	10.30	5.2263E+005		-2.9957E+005
	1004.76	17.90	3.0407E+005		4.7515E+004
	1274.45	35.50	1.4563E+005		1.3073E+004
Eu-155	86.54	30.90	4.4255E+005	4.43E+005	8.8509E+005
	105.31	20.70	5.2985E+005		1.0000E+005
Am-241	59.54	35.90	4.4913E+005	4.49E+005	-1.2932E+005
Cm-243	228.19	10.56	7.3438E+005	5.12E+005	-1.8102E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1226E+005	5.12E+005	-5.9140E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 1:38:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:23:47 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.33	72.68	1.00	1.74E+002	41.56	5.24E+002
m	2	282-	306	299.91	74.83	1.00	2.92E+002	50.81	5.61E+002
F	3	331-	344	339.35	84.73	1.02	1.32E+002	41.78	4.92E+002
F	4	943-	960	953.87	238.78	1.14	1.64E+002	31.00	1.51E+002
F	5	1174-	1205	1180.33	295.51	0.91	5.24E+001	20.33	1.92E+002
F	6	1401-	1411	1406.60	352.17	0.97	8.93E+001	23.30	5.63E+001
F	7	2034-	2051	2042.20	511.22	1.78	9.07E+001	21.64	5.80E+001
F	8	2324-	2337	2331.62	583.59	1.16	5.35E+001	19.23	5.08E+001
F	9	2426-	2444	2435.04	609.45	1.30	8.86E+001	21.48	4.99E+001
F	10	3633-	3651	3642.62	911.11	1.85	6.57E+001	17.92	2.81E+001
F	11	3867-	3880	3873.09	968.65	1.63	4.79E+001	16.40	1.94E+001
F	12	4943-	4956	4949.26	1237.19	1.06	1.35E+001	11.27	2.33E+001
F	13	5829-	5853	5841.25	1459.69	1.96	4.35E+002	40.83	1.89E+001
F	14	7050-	7065	7055.43	1762.57	1.77	2.34E+001	11.92	1.04E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	9.54708E+004	2.64148E+004
K-40	0.963	1460.81*		10.67	6.38515E+006	7.91346E+005
TL-208	0.748	277.35		6.80		
		510.84*		21.60	4.41994E+005	1.27507E+005
		583.14*		84.20	7.04606E+004	2.69902E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.51126E+006	6.58223E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.94864E+005	7.22924E+004
Bi-214	0.681	609.31*		46.30	2.15876E+005	5.88321E+004
		1120.29		15.10		
		1764.49*		15.80	2.47818E+005	1.28513E+005
PB-214	0.563	74.82*	@	6.21	4.32696E+006	1.17683E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.34875E+005	9.93422E+004
		351.92*		37.20	2.19512E+005	6.80140E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	3.07303E+005	9.09140E+004
		969.11*		16.60	3.83781E+005	1.37545E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.025127E+004	2.704597E+004
K-40		0.963	6.385146E+006	7.913463E+005
TL-208		0.748	7.046061E+004	2.689234E+004
Pb-212	@	0.496	2.948640E+005	7.229240E+004
Bi-214		0.681	2.214102E+005	5.349320E+004
PB-214	@	0.563	2.244149E+005	5.612113E+004
Ac-228		0.619	3.305562E+005	7.584361E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.68	1.9341E-001	23.88
F 3	84.73	1.4623E-001	31.74
F 12	1237.19	1.4946E-002	83.78

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0026E+004	4.40E+004	-1.9595E+004
	1332.49	100.00	4.4043E+004		-4.1490E+004
Nb-94	702.63	100.00	5.5676E+004	4.94E+004	-2.9177E+004
	871.10	100.00	4.9355E+004		-7.6047E+004
Ag-108m	79.20	7.10	2.0355E+006	6.40E+004	-7.2754E+005
	433.93	89.90	6.3971E+004		-4.0110E+004
	614.37	90.40	8.5975E+004		1.6276E+004
	722.95	90.50	6.5561E+004		4.1431E+004
Sb-125	176.33	6.89	1.0590E+006	2.00E+005	-7.0130E+005
	427.89	29.33	2.0017E+005		-5.3442E+004
	463.38	10.35	5.8164E+005		-2.8188E+005
	600.56	17.80	3.1747E+005		1.3033E+005
	606.64	5.02	1.5515E+006		1.7572E+006
	635.90	11.32	5.5470E+005		4.4599E+004
Cs-134	563.23	8.38	7.5102E+005	7.10E+004	4.8454E+005
	569.32	15.43	3.9967E+005		2.3505E+004
	604.70	97.60	7.8753E+004		4.0012E+004
	795.84	85.40	7.0989E+004		-6.8526E+004
	801.93	8.73	6.7247E+005		-7.7188E+005
Cs-137	661.65	85.12	6.2103E+004	6.21E+004	-7.2996E+003
Eu-152	121.78	28.40	3.3668E+005	2.11E+005	-1.1036E+005
	244.69	7.49	1.0133E+006		-3.6067E+005
	344.27	26.50	2.3839E+005		-2.8863E+005
	778.89	12.74	4.5414E+005		-3.0379E+005
	867.32	4.16	1.2645E+006		-2.1162E+006
	964.01	14.40	5.2546E+005		3.8056E+005
	1085.78	10.00	5.5963E+005		4.1812E+005
	1112.02	13.30	4.9377E+005		-1.8715E+005
	1407.95	20.70	2.1061E+005		1.7028E+005
Eu-154	123.07	40.50	2.3928E+005	1.80E+005	2.8734E+005
	247.94	6.60	1.0831E+006		-5.9204E+005
	591.81	4.83	1.1632E+006		-4.0017E+004
	723.30	19.70	2.9697E+005		-9.2618E+004
	756.87	4.33	1.3577E+006		-1.6253E+005
	873.19	11.50	4.4901E+005		-2.9552E+005
	996.32	10.30	5.8353E+005		2.8990E+005
	1004.76	17.90	3.5232E+005		3.2054E+005
	1274.45	35.50	1.7983E+005		1.9148E+005
Eu-155	86.54	30.90	4.3923E+005	4.39E+005	4.2789E+004
	105.31	20.70	5.2643E+005		1.0173E+005
Am-241	59.54	35.90	4.5821E+005	4.58E+005	3.4667E+005
Cm-243	228.19	10.56	6.8010E+005	4.99E+005	5.8777E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9946E+005	4.99E+005	3.4762E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 11:00:13 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 10:45:14 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.30	72.68	1.05	1.59E+002	40.82	4.76E+002
m	2	285-	306	300.30	74.93	1.06	2.93E+002	50.07	5.72E+002
F	3	946-	958	953.85	238.78	1.01	1.48E+002	31.08	1.36E+002
F	4	1345-	1357	1352.23	338.56	0.96	3.17E+001	18.05	7.01E+001
F	5	1400-	1414	1406.29	352.09	1.22	1.02E+002	24.08	6.82E+001
F	6	2035-	2049	2041.36	511.01	1.05	5.94E+001	19.86	6.00E+001
F	7	2322-	2340	2330.95	583.43	1.56	7.45E+001	19.19	3.54E+001
F	8	2425-	2444	2435.22	609.49	1.65	1.02E+002	21.32	3.50E+001
F	9	3633-	3650	3642.22	911.01	1.61	6.46E+001	17.09	1.52E+001
F	10	3864-	3881	3873.58	968.77	1.52	5.05E+001	16.37	2.46E+001
F	11	4471-	4483	4477.09	1119.38	1.36	2.57E+001	13.02	1.64E+001
F	12	5827-	5852	5840.33	1459.46	1.86	3.84E+002	38.24	9.72E+000
F	13	7049-	7062	7054.63	1762.37	1.20	2.09E+001	11.20	1.05E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	6.23854E+004	2.26197E+004
K-40	0.946	1460.81*		10.67	5.60272E+006	7.18816E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	2.88821E+005	1.07345E+005
		583.14*		84.20	9.77602E+004	2.83057E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.56140E+006	6.66160E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.67597E+005	7.00214E+004
Bi-214	0.967	609.31*		46.30	2.47970E+005	6.02526E+004
		1120.29*		15.10	2.40402E+005	1.24519E+005
		1764.49*		15.80	2.19102E+005	1.19522E+005
Ac-228	0.999	338.32*		11.40	2.51346E+005	1.48560E+005
		911.07*		27.70	3.00547E+005	8.66747E+004
		969.11*		16.60	4.03122E+005	1.37265E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	4.126917E+004	2.342137E+004
K-40		0.946	5.602716E+006	7.188156E+005
TL-208		0.751	9.776017E+004	2.812579E+004
Pb-212	@	0.497	2.675968E+005	7.002135E+004
Bi-214		0.967	2.418502E+005	4.938956E+004
Ac-228		0.999	3.144340E+005	6.572471E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.68	1.7679E-001	25.65
F 5	352.09	1.1311E-001	23.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1702E+004	5.17E+004	-1.2274E+004
	1332.49	100.00	5.1709E+004		1.6486E+004
Nb-94	702.63	100.00	5.7645E+004	5.20E+004	-3.1488E+004
	871.10	100.00	5.2047E+004		2.9732E+004
Ag-108m	79.20	7.10	2.0348E+006	6.28E+004	-2.1677E+006
	433.93	89.90	6.2761E+004		-2.3821E+004
	614.37	90.40	8.3956E+004		-3.5426E+004
	722.95	90.50	7.0194E+004		5.2004E+003
Sb-125	176.33	6.89	1.1266E+006	2.02E+005	-2.2135E+005
	427.89	29.33	2.0172E+005		1.1453E+005
	463.38	10.35	5.6477E+005		-1.4838E+005
	600.56	17.80	3.0313E+005		-1.3622E+005
	606.64	5.02	1.5232E+006		1.8699E+006
	635.90	11.32	5.1279E+005		-4.2188E+004
Cs-134	563.23	8.38	6.7868E+005	6.82E+004	2.7661E+004
	569.32	15.43	3.7319E+005		-9.1769E+003
	604.70	97.60	7.7485E+004		1.7008E+003
	795.84	85.40	6.8211E+004		-3.5024E+004
	801.93	8.73	6.8248E+005		-7.8682E+004
Cs-137	661.65	85.12	6.1765E+004	6.18E+004	-1.1009E+004
Eu-152	121.78	28.40	3.4590E+005	2.37E+005	-2.9840E+003
	244.69	7.49	9.8260E+005		-2.7224E+006
	344.27	26.50	2.3687E+005		-2.0355E+005
	778.89	12.74	4.7452E+005		-6.4930E+005
	867.32	4.16	1.2832E+006		6.0899E+005
	964.01	14.40	5.2090E+005		4.1292E+003
	1085.78	10.00	5.5265E+005		-3.5267E+005
	1112.02	13.30	4.8058E+005		-5.5579E+004
	1407.95	20.70	2.3862E+005		2.9705E+005
Eu-154	123.07	40.50	2.4379E+005	1.62E+005	3.1566E+005
	247.94	6.60	1.0939E+006		-1.6415E+005
	591.81	4.83	1.0999E+006		-1.7876E+005
	723.30	19.70	3.1991E+005		-2.8274E+004
	756.87	4.33	1.3031E+006		3.2308E+005
	873.19	11.50	4.5294E+005		1.9290E+005
	996.32	10.30	5.3483E+005		1.4209E+005
	1004.76	17.90	2.9590E+005		5.4954E+004
	1274.45	35.50	1.6219E+005		7.0047E+004
Eu-155	86.54	30.90	4.4400E+005	4.44E+005	4.5533E+005
	105.31	20.70	5.4268E+005		3.3805E+005
Am-241	59.54	35.90	4.5024E+005	4.50E+005	-2.1808E+005
Cm-243	228.19	10.56	7.1230E+005	4.85E+005	3.8074E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8527E+005	4.85E+005	-5.5569E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 11:20:14 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 11:05:12 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.39	72.70	0.84	1.50E+002	39.19	4.20E+002
m	2	285-	305	300.38	74.95	0.85	2.79E+002	48.92	4.60E+002
F	3	945-	959	953.62	238.72	1.00	1.52E+002	30.03	1.24E+002
F	4	1174-	1187	1180.07	295.45	1.08	6.32E+001	23.26	1.06E+002
F	5	1399-	1412	1406.81	352.23	1.18	7.82E+001	22.92	7.91E+001
F	6	2323-	2339	2329.97	583.18	1.33	1.04E+002	22.95	4.68E+001
F	7	2426-	2441	2434.54	609.32	1.16	9.92E+001	21.44	2.80E+001
F	8	3637-	3650	3643.02	911.21	1.44	4.80E+001	17.08	2.65E+001
F	9	3866-	3882	3873.73	968.80	1.63	4.31E+001	15.45	2.13E+001
F	10	4472-	4484	4478.71	1119.79	1.45	4.15E+001	15.25	1.63E+001
F	11	5828-	5853	5840.20	1459.43	1.99	4.13E+002	39.31	6.96E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.944	1460.81*		10.67	6.02402E+006	7.52629E+005
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.36394E+005	3.51072E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.44192E+006	6.41823E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.74253E+005	6.91506E+004
Bi-214	0.713	609.31*		46.30	2.40621E+005	6.00375E+004
		1120.29*		15.10	3.88661E+005	1.48606E+005
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	4.20749E+006	1.14728E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.84323E+005	1.15100E+005
		351.92*		37.20	1.92594E+005	6.50063E+004
Ac-228	0.621	338.32		11.40		
		911.07*		27.70	2.23085E+005	8.34579E+004
		969.11*		16.60	3.43886E+005	1.28419E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.944	6.024024E+006	7.526288E+005
TL-208		0.471	1.363942E+005	3.510721E+004
Pb-212	@	0.497	2.742526E+005	6.915060E+004
Bi-214		0.713	2.613939E+005	5.566624E+004
PB-214	@	0.564	2.147770E+005	5.660272E+004
Ac-228		0.621	2.589554E+005	6.997833E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.70	1.6646E-001	26.16

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.9715E+004	4.90E+004	1.9541E+004
	1332.49	100.00	4.9047E+004		5.1856E+004
Nb-94	702.63	100.00	5.3002E+004	4.99E+004	2.0149E+004
	871.10	100.00	4.9853E+004		-1.6841E+004
Ag-108m	79.20	7.10	2.0779E+006	6.33E+004	-3.6566E+006
	433.93	89.90	6.4270E+004		-5.3465E+003
	614.37	90.40	8.5609E+004		-9.9415E+003
	722.95	90.50	6.3349E+004		7.4932E+003
Sb-125	176.33	6.89	1.1156E+006	1.78E+005	1.4089E+005
	427.89	29.33	1.7754E+005		-2.2176E+005
	463.38	10.35	6.1263E+005		-1.3583E+005
	600.56	17.80	3.0609E+005		-1.8894E+004
	606.64	5.02	1.5633E+006		2.3578E+006
	635.90	11.32	4.8716E+005		-1.0781E+005
Cs-134	563.23	8.38	7.2538E+005	6.89E+004	3.0501E+005
	569.32	15.43	3.9120E+005		2.3058E+004
	604.70	97.60	7.9191E+004		-2.9303E+004
	795.84	85.40	6.8907E+004		-2.9902E+004
	801.93	8.73	6.8248E+005		1.1261E+004
Cs-137	661.65	85.12	6.5775E+004	6.58E+004	6.8007E+004
Eu-152	121.78	28.40	3.4092E+005	2.16E+005	-3.2717E+005
	244.69	7.49	1.0024E+006		3.8302E+005
	344.27	26.50	2.3854E+005		-1.6672E+005
	778.89	12.74	4.2766E+005		-4.6117E+005
	867.32	4.16	1.2145E+006		-3.6668E+005
	964.01	14.40	4.9447E+005		5.9677E+005
	1085.78	10.00	5.6076E+005		1.1187E+005
	1112.02	13.30	5.1927E+005		-2.5963E+005
	1407.95	20.70	2.1555E+005		-3.0111E+004
Eu-154	123.07	40.50	2.4129E+005	1.48E+005	-5.3883E+004
	247.94	6.60	1.0688E+006		-9.6897E+005
	591.81	4.83	1.1217E+006		4.6486E+005
	723.30	19.70	2.9537E+005		1.5525E+005
	756.87	4.33	1.3438E+006		1.1131E+006
	873.19	11.50	4.3384E+005		-1.6452E+005
	996.32	10.30	5.7031E+005		-1.9532E+004
	1004.76	17.90	3.2139E+005		-3.3947E+004
	1274.45	35.50	1.4767E+005		2.5971E+004
Eu-155	86.54	30.90	4.4838E+005	4.48E+005	5.7723E+005
	105.31	20.70	5.4373E+005		-1.1834E+005
Am-241	59.54	35.90	4.5866E+005	4.59E+005	-9.6405E+004
Cm-243	228.19	10.56	6.8169E+005	4.84E+005	3.7185E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8358E+005	4.84E+005	4.5309E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 8:40:32 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 8:25:32 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.87	72.82	0.82	1.33E+002	37.85	4.19E+002
m	2	285-	305	300.17	74.90	0.82	2.57E+002	46.98	4.44E+002
F	3	333-	345	339.47	84.76	1.04	1.07E+002	39.31	4.18E+002
F	4	949-	960	953.38	238.66	0.88	1.10E+002	26.92	1.07E+002
F	5	1397-	1414	1406.80	352.22	1.30	9.40E+001	22.96	7.65E+001
F	6	2033-	2052	2041.12	510.95	1.77	8.15E+001	21.62	7.14E+001
F	7	2321-	2338	2329.86	583.15	1.77	6.67E+001	18.90	4.27E+001
F	8	2425-	2443	2433.95	609.17	1.51	7.91E+001	20.13	4.40E+001
F	9	3634-	3649	3642.01	910.96	1.55	4.67E+001	16.13	2.39E+001
F	10	3849-	3860	3854.86	964.10	1.13	1.71E+001	10.79	1.31E+001
F	11	5826-	5852	5839.53	1459.26	2.12	4.21E+002	39.73	1.68E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	8.55864E+004	2.56922E+004
K-40	0.930	1460.81*		10.67	6.14143E+006	7.63451E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	3.96233E+005	1.23268E+005
		583.14*		84.20	8.74976E+004	2.73627E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.24851E+006	6.02641E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.97963E+005	5.76210E+004
Bi-214	0.418	609.31*		46.30	1.91841E+005	5.43604E+004
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	1.000	6.668690E+004	2.635607E+004
K-40	0.930	6.141426E+006	7.634505E+005
TL-208	0.753	8.749757E+004	2.721373E+004
Pb-212 @	0.498	1.979628E+005	5.762099E+004
Bi-214	0.418	1.918411E+005	5.436038E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	1.4735E-001	28.55
F 3	84.76	1.1869E-001	36.80
F 5	352.22	1.0439E-001	24.43
F 9	910.96	5.1847E-002	34.57
F 10	964.10	1.8988E-002	63.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9391E+004	6.24E+004	-4.9703E+003
	1332.49	100.00	6.2413E+004		-5.0526E+003
Nb-94	702.63	100.00	5.6522E+004	5.31E+004	-1.0287E+004
	871.10	100.00	5.3108E+004		2.3336E+003
Ag-108m	79.20	7.10	1.9638E+006	6.38E+004	-3.1603E+006
	433.93	89.90	6.3842E+004		-2.0539E+004
	614.37	90.40	8.0544E+004		-3.5174E+003
	722.95	90.50	6.9055E+004		7.2377E+004
Sb-125	176.33	6.89	1.0267E+006	1.91E+005	-3.7056E+004
	427.89	29.33	1.9070E+005		-2.5107E+004
	463.38	10.35	6.0552E+005		-7.1360E+005
	600.56	17.80	3.2467E+005		6.1198E+004
	606.64	5.02	1.4858E+006		1.6888E+006
	635.90	11.32	5.0363E+005		-8.5204E+003
Cs-134	563.23	8.38	7.1198E+005	7.16E+004	4.5535E+005
	569.32	15.43	3.8678E+005		5.6100E+004
	604.70	97.60	7.6908E+004		1.7281E+004
	795.84	85.40	7.1616E+004		0.0000E+000
	801.93	8.73	6.5154E+005		-2.5510E+005
Cs-137	661.65	85.12	6.8928E+004	6.89E+004	8.0659E+003
Eu-152	121.78	28.40	3.2718E+005	2.32E+005	-1.4110E+005
	244.69	7.49	9.4317E+005		2.8870E+004
	344.27	26.50	2.3176E+005		-3.1698E+005
	778.89	12.74	4.3503E+005		-3.9491E+005
	867.32	4.16	1.1967E+006		-6.0444E+005
	964.01	14.40	4.6023E+005		3.9093E+005
	1085.78	10.00	5.6076E+005		4.8640E+004
	1112.02	13.30	4.6134E+005		3.4510E+004
	1407.95	20.70	2.4402E+005		1.8238E+005
Eu-154	123.07	40.50	2.3046E+005	1.41E+005	7.9045E+004
	247.94	6.60	9.8925E+005		-1.1989E+006
	591.81	4.83	1.1641E+006		-2.8162E+005
	723.30	19.70	3.2122E+005		4.6188E+005
	756.87	4.33	1.2962E+006		4.6713E+004
	873.19	11.50	4.6217E+005		8.1269E+004
	996.32	10.30	5.1992E+005		-3.1088E+005
	1004.76	17.90	3.3139E+005		4.5271E+004
	1274.45	35.50	1.4052E+005		-8.4863E+004
Eu-155	86.54	30.90	4.0719E+005	4.07E+005	3.1387E+005
	105.31	20.70	5.0250E+005		-2.0421E+005
Am-241	59.54	35.90	4.7025E+005	4.70E+005	1.6977E+005
Cm-243	228.19	10.56	6.4668E+005	4.71E+005	4.3628E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7070E+005	4.71E+005	2.4368E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 9:07:03 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 8:52:01 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	291.27	72.67	0.85	1.42E+002	38.09	3.47E+002
m	2	287-	305	300.12	74.89	0.86	2.23E+002	45.50	4.74E+002
F	3	945-	961	953.96	238.81	1.20	1.13E+002	26.66	1.28E+002
F	4	1175-	1185	1179.40	295.28	1.20	5.52E+001	20.50	5.18E+001
F	5	1348-	1360	1352.72	338.68	0.87	2.74E+001	16.05	5.32E+001
F	6	1400-	1417	1406.50	352.15	1.28	8.13E+001	22.44	8.30E+001
F	7	2030-	2049	2041.72	511.10	1.71	7.74E+001	20.16	5.76E+001
F	8	2324-	2337	2331.00	583.44	1.40	4.14E+001	16.07	2.96E+001
F	9	2427-	2443	2434.99	609.43	1.27	9.03E+001	21.09	3.80E+001
F	10	3635-	3651	3642.27	911.02	1.53	4.96E+001	16.47	2.25E+001
F	11	4472-	4483	4477.72	1119.54	1.23	2.52E+001	12.56	1.51E+001
F	12	4684-	4698	4691.07	1172.77	1.27	2.63E+001	13.23	2.11E+001
F	13	5828-	5852	5839.83	1459.33	1.91	4.02E+002	39.37	1.88E+001
F	14	7050-	7064	7056.83	1762.91	0.80	2.20E+001	10.40	9.86E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	8.13193E+004	2.40516E+004
K-40	0.936	1460.81*		10.67	5.86327E+006	7.44847E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	3.76478E+005	1.15517E+005
		583.14*		84.20	5.43170E+004	2.22793E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.95413E+006	5.52418E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.02939E+005	5.76675E+004
Bi-214	0.981	609.31*		46.30	2.19022E+005	5.79873E+004
		1120.29*		15.10	2.36348E+005	1.20218E+005
		1764.49*		15.80	2.30391E+005	1.11490E+005
PB-214	0.565	74.82*	@	6.21	3.36702E+006	9.82713E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.48399E+005	1.01266E+005
		351.92*		37.20	2.00430E+005	6.46548E+004
Ac-228	0.545	338.32*		11.40	2.17482E+005	1.31887E+005
		911.07*		27.70	2.30513E+005	8.10407E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	6.958683E+004	2.452531E+004
K-40		0.936	5.863270E+006	7.448472E+005
TL-208		0.751	5.431698E+004	2.220887E+004
Pb-212	@	0.497	2.029392E+005	5.766749E+004
Bi-214		0.981	2.237499E+005	4.729632E+004
PB-214	@	0.565	2.143212E+005	5.449477E+004
Ac-228		0.545	2.269416E+005	6.904709E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.67	1.5769E-001	26.84
F 12	1172.77	2.9189E-002	50.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9045E+004	5.22E+004	2.8065E+004
	1332.49	100.00	5.2224E+004		-2.4268E+004
Nb-94	702.63	100.00	5.0829E+004	5.08E+004	-8.9364E+003
	871.10	100.00	5.3457E+004		-2.0891E+004
Ag-108m	79.20	7.10	1.9638E+006	6.19E+004	-1.6453E+006
	433.93	89.90	6.1882E+004		2.2606E+004
	614.37	90.40	8.2905E+004		-3.8647E+004
	722.95	90.50	7.0757E+004		2.6859E+004
Sb-125	176.33	6.89	1.0399E+006	1.97E+005	3.8566E+005
	427.89	29.33	1.9726E+005		-1.6806E+005
	463.38	10.35	5.7618E+005		8.3339E+005
	600.56	17.80	3.3556E+005		1.1055E+005
	606.64	5.02	1.5704E+006		2.1644E+006
	635.90	11.32	5.3061E+005		6.2939E+005
Cs-134	563.23	8.38	7.3067E+005	7.23E+004	3.2907E+005
	569.32	15.43	3.9989E+005		-7.2201E+004
	604.70	97.60	8.0492E+004		6.5270E+003
	795.84	85.40	7.2277E+004		1.3392E+004
	801.93	8.73	6.7573E+005		-4.6613E+005
Cs-137	661.65	85.12	7.1048E+004	7.10E+004	1.8031E+004
Eu-152	121.78	28.40	3.3093E+005	1.93E+005	-9.0688E+004
	244.69	7.49	8.8434E+005		2.3459E+004
	344.27	26.50	2.2771E+005		-2.6489E+003
	778.89	12.74	4.5869E+005		1.9665E+005
	867.32	4.16	1.3080E+006		-6.2053E+005
	964.01	14.40	4.6440E+005		3.3497E+005
	1085.78	10.00	5.9580E+005		-2.0990E+005
	1112.02	13.30	5.0417E+005		-3.4258E+004
	1407.95	20.70	1.9286E+005		1.3902E+005
Eu-154	123.07	40.50	2.3031E+005	1.68E+005	4.6632E+003
	247.94	6.60	9.3051E+005		-1.1113E+006
	591.81	4.83	1.1796E+006		-2.0602E+005
	723.30	19.70	3.2381E+005		1.2566E+005
	756.87	4.33	1.3371E+006		-2.6655E+005
	873.19	11.50	4.6822E+005		2.4717E+005
	996.32	10.30	5.8386E+005		1.4327E+005
	1004.76	17.90	3.1104E+005		-7.8974E+004
	1274.45	35.50	1.6835E+005		1.0438E+005
Eu-155	86.54	30.90	4.2173E+005	4.22E+005	2.9289E+005
	105.31	20.70	5.0306E+005		-1.4102E+005
Am-241	59.54	35.90	4.5971E+005	4.60E+005	-2.9829E+005
Cm-243	228.19	10.56	6.2288E+005	4.69E+005	-1.5429E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6896E+005	4.69E+005	4.1840E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 9:26:10 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 9:11:08 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	305	291.91	72.83	0.80	1.32E+002	37.11	3.22E+002
m	2	288-	305	299.88	74.83	0.80	2.40E+002	46.42	4.55E+002
F	3	949-	959	953.85	238.78	1.13	9.71E+001	26.32	8.98E+001
F	4	1174-	1186	1179.81	295.38	1.36	6.44E+001	21.92	7.48E+001
F	5	1400-	1413	1406.44	352.13	1.18	8.99E+001	23.32	6.69E+001
F	6	2032-	2049	2040.30	510.74	1.63	7.96E+001	20.85	5.90E+001
F	7	2323-	2338	2330.37	583.28	1.44	4.93E+001	17.77	4.21E+001
F	8	2426-	2442	2434.74	609.37	1.27	1.22E+002	22.56	1.70E+001
F	9	3635-	3648	3641.68	910.88	1.00	4.81E+001	16.21	2.45E+001
F	10	4472-	4483	4477.68	1119.53	1.05	2.08E+001	13.41	2.66E+001
F	11	5826-	5852	5839.97	1459.37	1.81	4.04E+002	39.50	1.68E+001
F	12	7048-	7061	7053.77	1762.15	1.58	2.65E+001	11.88	7.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	8.36241E+004	2.48468E+004
K-40	0.939	1460.81*		10.67	5.88894E+006	7.47655E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	3.87149E+005	1.19298E+005
		583.14*		84.20	6.46576E+004	2.48403E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.10196E+006	5.78772E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.75150E+005	5.48372E+004
Bi-214	0.963	609.31*		46.30	2.97171E+005	6.60783E+004
		1120.29*		15.10	1.95029E+005	1.27243E+005
		1764.49*		15.80	2.78237E+005	1.27626E+005
PB-214	0.565	74.82*	@	6.21	3.62174E+006	1.03131E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.89834E+005	1.10042E+005
		351.92*		37.20	2.21481E+005	6.83630E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	6.965808E+004	2.541548E+004
K-40		0.939	5.888937E+006	7.476555E+005
TL-208		0.752	6.465760E+004	2.475077E+004
Pb-212	@	0.497	1.751504E+005	5.483719E+004
Bi-214		0.963	2.759573E+005	5.328639E+004
PB-214	@	0.565	2.405149E+005	5.806960E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.4694E-001	28.06
F 9	910.88	5.3422E-002	33.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4184E+004	4.68E+004	1.3047E+004
	1332.49	100.00	4.6797E+004		2.4565E+004
Nb-94	702.63	100.00	5.8745E+004	5.81E+004	2.9276E+004
	871.10	100.00	5.8105E+004		4.3931E+004
Ag-108m	79.20	7.10	2.0213E+006	5.99E+004	-1.2722E+006
	433.93	89.90	5.9854E+004		1.8432E+004
	614.37	90.40	8.4580E+004		-3.7400E+004
	722.95	90.50	6.4903E+004		3.4275E+002
Sb-125	176.33	6.89	9.9611E+005	1.78E+005	-3.8473E+005
	427.89	29.33	1.7754E+005		-7.1424E+004
	463.38	10.35	5.5897E+005		7.5763E+004
	600.56	17.80	3.0461E+005		2.2496E+005
	606.64	5.02	1.5379E+006		2.4702E+006
	635.90	11.32	4.9192E+005		-2.4163E+004
Cs-134	563.23	8.38	6.6428E+005	6.68E+004	1.6377E+005
	569.32	15.43	3.6855E+005		-8.3363E+004
	604.70	97.60	7.9937E+004		-1.6777E+004
	795.84	85.40	6.6798E+004		-2.8322E+004
	801.93	8.73	6.0386E+005		-1.3358E+005
Cs-137	661.65	85.12	6.5451E+004	6.55E+004	-7.8400E+004
Eu-152	121.78	28.40	3.1805E+005	2.09E+005	-4.0450E+004
	244.69	7.49	8.9905E+005		-5.7075E+005
	344.27	26.50	2.2477E+005		-2.0149E+005
	778.89	12.74	4.3987E+005		1.1991E+005
	867.32	4.16	1.3161E+006		-1.9892E+005
	964.01	14.40	4.8861E+005		3.2214E+005
	1085.78	10.00	5.8051E+005		1.9431E+005
	1112.02	13.30	5.5049E+005		-2.3402E+005
	1407.95	20.70	2.0935E+005		1.1696E+005
Eu-154	123.07	40.50	2.1984E+005	1.48E+005	-1.1016E+005
	247.94	6.60	9.4690E+005		-1.5047E+006
	591.81	4.83	1.1163E+006		-4.8720E+005
	723.30	19.70	3.0101E+005		1.8120E+005
	756.87	4.33	1.2321E+006		3.2743E+003
	873.19	11.50	4.9728E+005		4.3389E+005
	996.32	10.30	5.4213E+005		1.3245E+005
	1004.76	17.90	3.0031E+005		-1.6923E+004
	1274.45	35.50	1.4767E+005		-2.8405E+004
Eu-155	86.54	30.90	4.2298E+005	4.23E+005	3.8675E+005
	105.31	20.70	4.9821E+005		7.7933E+004
Am-241	59.54	35.90	4.5997E+005	4.60E+005	5.3625E+004
Cm-243	228.19	10.56	6.4277E+005	4.45E+005	1.0812E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4472E+005	4.45E+005	-1.1946E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 8:50:26 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 8:35:24 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.65	72.76	0.95	1.04E+002	38.85	5.59E+002
m	2	284-	305	299.96	74.85	0.95	3.01E+002	50.67	5.53E+002
F	3	335-	344	339.21	84.69	0.73	8.35E+001	37.28	3.73E+002
F	4	947-	959	953.38	238.66	0.96	1.35E+002	30.14	1.38E+002
F	5	1072-	1081	1076.64	269.54	0.65	2.29E+001	16.14	6.88E+001
F	6	1402-	1411	1406.73	352.21	0.91	8.19E+001	22.89	5.61E+001
F	7	2032-	2053	2041.92	511.15	2.35	1.41E+002	24.10	5.80E+001
F	8	2322-	2338	2330.02	583.19	1.49	9.89E+001	22.35	4.54E+001
F	9	2425-	2443	2434.90	609.41	1.10	7.56E+001	20.46	5.48E+001
F	10	2639-	2650	2644.01	661.68	1.26	2.95E+001	16.23	3.82E+001
F	11	3634-	3650	3641.99	910.96	1.79	7.16E+001	18.07	1.90E+001
F	12	4681-	4697	4689.87	1172.47	1.50	8.03E+001	19.80	2.55E+001
F	13	5318-	5334	5326.63	1331.33	1.49	6.55E+001	17.52	1.49E+001
F	14	5828-	5853	5840.69	1459.55	1.93	4.25E+002	40.04	9.39E+000
F	15	7051-	7064	7058.62	1763.36	0.91	1.80E+001	10.09	1.01E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.48657E+005	3.27995E+004
K-40	0.953	1460.81*		10.67	6.19465E+006	7.69638E+005
Co-60	0.972	1173.22*		100.00	1.15930E+005	2.99963E+004
		1332.49*		100.00	9.88736E+004	2.75514E+004
Cs-137	1.000	661.65*		85.12	4.02212E+004	2.26083E+004
TL-208	0.752	277.35		6.80		
		510.84*		21.60	6.88227E+005	1.61917E+005
		583.14*		84.20	1.29741E+005	3.39784E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.63421E+006	6.80678E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.42945E+005	6.63709E+004
Bi-214	0.696	609.31*		46.30	1.83425E+005	5.46391E+004
		1120.29		15.10		
		1764.49*		15.80	1.88724E+005	1.07487E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.999	1.206331E+005	3.359817E+004
K-40	0.953	6.194652E+006	7.696383E+005
Co-60	0.972	1.066784E+005	2.029116E+004
Cs-137	1.000	4.022121E+004	2.260828E+004
TL-208	0.752	1.297406E+005	3.371431E+004
Pb-212 @	0.498	2.429451E+005	6.637088E+004
Bi-214	0.696	1.845129E+005	4.870722E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.76	1.1501E-001	37.53
F	3	84.69	9.2821E-002	44.63
F	5	269.54	2.5457E-002	70.44
F	6	352.21	9.1054E-002	27.93
F	11	910.96	7.9560E-002	25.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.6316E+004	3.80E+004	1.1593E+005
		1332.49*	100.00	3.8003E+004		9.8874E+004
	Nb-94	702.63	100.00	6.3195E+004	5.68E+004	2.2149E+004
		871.10	100.00	5.6818E+004		-4.1129E+004
	Ag-108m	79.20	7.10	2.0878E+006	6.68E+004	-1.7844E+006
		433.93	89.90	6.6773E+004		3.8233E+003
		614.37	90.40	8.4580E+004		4.4006E+004
		722.95	90.50	7.2142E+004		3.7842E+004
	Sb-125	176.33	6.89	1.1321E+006	2.21E+005	1.6600E+005
		427.89	29.33	2.2148E+005		1.2803E+005
		463.38	10.35	6.1086E+005		2.4828E+005
		600.56	17.80	3.2605E+005		-3.3625E+003
		606.64	5.02	1.5597E+006		1.9093E+006
		635.90	11.32	5.4782E+005		2.5423E+003
	Cs-134	563.23	8.38	7.5907E+005	7.29E+004	6.4086E+005
		569.32	15.43	3.9989E+005		2.5845E+004
		604.70	97.60	8.0122E+004		4.3127E+004
		795.84	85.40	7.2931E+004		5.8703E+004
		801.93	8.73	6.7911E+005		-1.6519E+006
+	Cs-137	661.65*	85.12	4.8138E+004	4.81E+004	4.0221E+004
	Eu-152	121.78	28.40	3.5276E+005	1.71E+005	9.8875E+004
		244.69	7.49	9.9845E+005		-6.7698E+005
		344.27	26.50	2.5415E+005		-4.3804E+005
		778.89	12.74	4.6781E+005		-4.3670E+005
		867.32	4.16	1.3871E+006		-2.6133E+005
		964.01	14.40	5.6824E+005		4.0290E+005
		1085.78	10.00	6.2519E+005		4.8138E+005
		1112.02	13.30	5.2174E+005		-1.5589E+005
		1407.95	20.70	1.7071E+005		3.9476E+004
	Eu-154	123.07	40.50	2.4789E+005	1.52E+005	3.6669E+004
		247.94	6.60	1.1048E+006		-2.0510E+005
		591.81	4.83	1.2346E+006		5.1641E+005
		723.30	19.70	3.3147E+005		1.5330E+005
		756.87	4.33	1.5128E+006		8.3715E+005
		873.19	11.50	4.9445E+005		-1.5482E+005
		996.32	10.30	6.0033E+005		-3.0121E+005
		1004.76	17.90	3.5049E+005		1.9315E+005
		1274.45	35.50	1.5178E+005		7.5068E+003
	Eu-155	86.54	30.90	4.3092E+005	4.31E+005	2.4542E+005
		105.31	20.70	5.3098E+005		-2.6601E+004
	Am-241	59.54	35.90	5.1000E+005	5.10E+005	3.3919E+005
	Cm-243	228.19	10.56	6.8810E+005	5.17E+005	-5.4678E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1708E+005	5.17E+005	1.7196E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 8:11:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 7:56:25 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	309	291.79	72.80	1.12	2.00E+002	42.77	5.78E+002
m	2	283-	309	300.52	74.99	1.13	3.68E+002	52.85	6.56E+002
F	3	947-	960	953.51	238.70	1.14	1.45E+002	31.95	1.69E+002
F	4	1173-	1184	1179.14	295.22	0.81	3.22E+001	19.89	9.79E+001
F	5	1399-	1412	1407.00	352.27	1.43	7.35E+001	21.53	7.15E+001
F	6	2032-	2054	2043.56	511.56	2.28	1.08E+002	21.40	5.31E+001
F	7	2324-	2340	2331.60	583.59	1.39	8.91E+001	21.86	5.07E+001
F	8	2428-	2445	2435.54	609.57	1.20	9.39E+001	22.40	5.46E+001
F	9	2638-	2652	2644.67	661.84	1.11	5.38E+001	18.77	4.65E+001
F	10	3635-	3650	3642.22	911.01	1.22	7.59E+001	19.69	3.11E+001
F	11	3867-	3882	3873.98	968.87	1.38	3.55E+001	16.71	4.00E+001
F	12	4472-	4486	4478.35	1119.70	1.56	3.04E+001	14.39	2.03E+001
F	13	4680-	4697	4689.72	1172.44	1.96	6.14E+001	17.06	1.81E+001
F	14	5318-	5336	5327.19	1331.47	1.98	8.80E+001	18.60	4.75E+000
F	15	5828-	5852	5840.60	1459.53	1.99	4.58E+002	41.48	9.35E+000
F	16	7050-	7063	7055.75	1762.65	1.20	2.19E+001	10.70	5.71E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.991	511.00*		100.00	1.13860E+005	2.75808E+004
K-40	0.951	1460.81*		10.67	6.68352E+006	8.11519E+005
Co-60	0.975	1173.22*		100.00	8.86454E+004	2.55915E+004
		1332.49*		100.00	1.32723E+005	2.99263E+004
Cs-137	0.999	661.65*		85.12	7.32880E+004	2.69824E+004
TL-208	0.746	277.35		6.80		
		510.84*		21.60	5.27130E+005	1.34751E+005
		583.14*		84.20	1.16992E+005	3.25955E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	3.21215E+006	7.80808E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.61144E+005	7.06842E+004
Bi-214	0.976	609.31*		46.30	2.27861E+005	6.13205E+004
		1120.29*		15.10	2.84985E+005	1.38093E+005
		1764.49*		15.80	2.29528E+005	1.14536E+005
PB-214	0.564	74.82*	@	6.21	5.53462E+006	1.40406E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.44788E+005	9.27587E+004
		351.92*		37.20	1.81072E+005	6.10840E+004
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	3.52699E+005	1.00166E+005
		969.11*		16.60	2.83060E+005	1.36609E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.991	8.858977E+004	2.845338E+004
K-40		0.951	6.683524E+006	8.115190E+005
Co-60		0.975	1.072635E+005	1.944967E+004
Cs-137		0.999	7.328798E+004	2.698238E+004
TL-208		0.746	1.169921E+005	3.237176E+004
Pb-212	@	0.497	2.611436E+005	7.068423E+004
Bi-214		0.976	2.357745E+005	5.034025E+004
PB-214	@	0.564	1.700965E+005	5.101581E+004
Ac-228		0.622	3.283502E+005	8.077806E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	2.2167E-001	21.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.0546E+004	2.40E+004	8.8645E+004
		1332.49*	100.00	2.3965E+004		1.3272E+005
	Nb-94	702.63	100.00	5.7922E+004	5.79E+004	2.7104E+004
		871.10	100.00	6.1496E+004		1.9442E+004
	Ag-108m	79.20	7.10	2.1154E+006	6.41E+004	-1.4107E+006
		433.93	89.90	6.4056E+004		-6.8190E+004
		614.37	90.40	8.7230E+004		-3.1429E+004
		722.95	90.50	7.7170E+004		-1.4885E+004
	Sb-125	176.33	6.89	1.1332E+006	2.06E+005	-8.3984E+005
		427.89	29.33	2.0608E+005		-2.8507E+004
		463.38	10.35	6.3345E+005		-2.3957E+005
		600.56	17.80	3.5124E+005		-3.4603E+005
		606.64	5.02	1.6370E+006		1.5140E+006
		635.90	11.32	5.5622E+005		2.8658E+005
	Cs-134	563.23	8.38	6.9831E+005	7.26E+004	-4.1375E+005
		569.32	15.43	4.1256E+005		3.6893E+005
		604.70	97.60	8.4269E+004		-4.9314E+004
		795.84	85.40	7.2605E+004		-4.6011E+003
		801.93	8.73	6.8582E+005		-7.0244E+005
+	Cs-137	661.65*	85.12	5.5536E+004	5.55E+004	7.3288E+004
	Eu-152	121.78	28.40	3.5392E+005	2.06E+005	7.3822E+004
		244.69	7.49	9.9056E+005		-3.9653E+005
		344.27	26.50	2.6184E+005		-3.7117E+005
		778.89	12.74	4.3259E+005		-1.0836E+006
		867.32	4.16	1.5599E+006		-3.1583E+005
		964.01	14.40	5.3894E+005		7.9280E+005
		1085.78	10.00	6.1798E+005		1.5686E+005
		1112.02	13.30	5.3632E+005		-3.2064E+005
		1407.95	20.70	2.0617E+005		-2.0793E+005
	Eu-154	123.07	40.50	2.4639E+005	1.70E+005	-2.7222E+004
		247.94	6.60	1.0767E+006		-5.7122E+005
		591.81	4.83	1.3643E+006		-9.9688E+005
		723.30	19.70	3.5691E+005		-6.2457E+004
		756.87	4.33	1.4215E+006		-4.8963E+005
		873.19	11.50	5.3255E+005		-1.3842E+005
		996.32	10.30	6.1318E+005		7.4600E+005
		1004.76	17.90	3.0249E+005		-1.7212E+005
		1274.45	35.50	1.6956E+005		7.1258E+004
	Eu-155	86.54	30.90	4.5039E+005	4.50E+005	4.9750E+005
		105.31	20.70	5.4583E+005		5.0436E+005
	Am-241	59.54	35.90	4.7582E+005	4.76E+005	-1.0559E+005
	Cm-243	228.19	10.56	7.2538E+005	5.09E+005	1.4366E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0912E+005	5.09E+005	-2.7559E+002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 7:50:56 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 7:35:55 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.35	72.69	1.02	1.86E+002	42.22	4.84E+002
m	2	285-	305	300.43	74.96	1.02	3.16E+002	51.60	5.60E+002
F	3	334-	353	340.12	84.92	1.17	1.36E+002	43.80	7.62E+002
F	4	947-	959	953.85	238.78	1.10	1.94E+002	32.83	1.17E+002
F	5	1170-	1184	1179.91	295.41	0.70	3.42E+001	17.81	9.37E+001
F	6	1400-	1412	1406.50	352.15	0.81	7.74E+001	23.89	1.04E+002
F	7	2324-	2338	2330.37	583.28	1.20	8.92E+001	22.37	5.31E+001
F	8	2426-	2442	2435.10	609.46	1.25	9.10E+001	21.90	4.68E+001
F	9	3635-	3650	3642.97	911.20	1.34	7.14E+001	19.63	3.41E+001
F	10	3866-	3883	3873.77	968.82	1.61	4.29E+001	15.23	2.13E+001
F	11	4683-	4697	4690.28	1172.58	1.16	3.45E+001	14.74	2.50E+001
F	12	5828-	5852	5840.41	1459.48	1.90	4.54E+002	41.57	1.25E+001
F	13	7051-	7064	7057.02	1762.96	2.22	2.94E+001	11.06	1.92E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.948	1460.81*		10.67	6.62364E+006	8.09292E+005
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.17108E+005	3.31902E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.75869E+006	7.04136E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.49637E+005	8.06970E+004
Bi-214	0.689	609.31*		46.30	2.20899E+005	5.98373E+004
		1120.29		15.10		
		1764.49*		15.80	3.08146E+005	1.20049E+005
PB-214	0.565	74.82*	@	6.21	4.75329E+006	1.26136E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.53996E+005	8.42566E+004
		351.92*		37.20	1.90759E+005	6.69459E+004
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	3.32067E+005	9.89531E+004
		969.11*		16.60	3.42380E+005	1.26663E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.948	6.623636E+006	8.092919E+005
TL-208		0.471	1.171080E+005	3.319017E+004
Pb-212	@	0.497	3.496366E+005	8.069701E+004
Bi-214		0.689	2.382610E+005	5.355350E+004
PB-214	@	0.565	1.765322E+005	5.241505E+004
Ac-228		0.622	3.359757E+005	7.797823E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	2.0701E-001	22.66
F 3	84.92	1.5092E-001	32.25
F 11	1172.58	3.8339E-002	42.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.2092E+004	6.41E+004	7.1052E+004
	1332.49	100.00	6.4080E+004		5.4926E+004
Nb-94	702.63	100.00	5.6238E+004	5.62E+004	-3.0505E+002
	871.10	100.00	6.0591E+004		6.0325E+003
Ag-108m	79.20	7.10	2.1546E+006	7.21E+004	-3.0284E+006
	433.93	89.90	7.3197E+004		-5.7247E+003
	614.37	90.40	8.7829E+004		-3.4713E+004
	722.95	90.50	7.2142E+004		2.6602E+003
Sb-125	176.33	6.89	1.1462E+006	2.25E+005	2.8592E+005
	427.89	29.33	2.2488E+005		7.8744E+004
	463.38	10.35	6.3854E+005		2.3080E+005
	600.56	17.80	3.5881E+005		4.3623E+005
	606.64	5.02	1.6335E+006		2.7089E+006
	635.90	11.32	5.1730E+005		-5.4102E+005
Cs-134	563.23	8.38	7.1198E+005	7.03E+004	-2.0499E+005
	569.32	15.43	4.2483E+005		3.5296E+005
	604.70	97.60	8.3917E+004		-1.8485E+004
	795.84	85.40	7.0275E+004		1.1374E+004
	801.93	8.73	6.8248E+005		-1.7334E+005
Cs-137	661.65	85.12	7.7314E+004	7.73E+004	1.8066E+004
Eu-152	121.78	28.40	3.5179E+005	1.96E+005	-4.0551E+004
	244.69	7.49	1.0217E+006		-1.2025E+006
	344.27	26.50	2.5519E+005		-5.0749E+005
	778.89	12.74	4.5639E+005		-4.6365E+005
	867.32	4.16	1.4545E+006		-5.8134E+005
	964.01	14.40	5.1721E+005		-2.2601E+005
	1085.78	10.00	5.6076E+005		-2.8551E+005
	1112.02	13.30	5.0417E+005		-6.6546E+004
	1407.95	20.70	1.9628E+005		-1.8566E+004
Eu-154	123.07	40.50	2.4598E+005	1.50E+005	-1.4824E+004
	247.94	6.60	1.1063E+006		3.3498E+005
	591.81	4.83	1.2248E+006		-7.6824E+005
	723.30	19.70	3.2638E+005		2.1612E+004
	756.87	4.33	1.4278E+006		-5.8038E+005
	873.19	11.50	5.2464E+005		4.2716E+004
	996.32	10.30	6.0033E+005		-5.0873E+005
	1004.76	17.90	3.5418E+005		4.8512E+005
	1274.45	35.50	1.5042E+005		2.7681E+004
Eu-155	86.54	30.90	4.4905E+005	4.49E+005	5.5598E+005
	105.31	20.70	5.3925E+005		3.4055E+005
Am-241	59.54	35.90	4.9236E+005	4.92E+005	-1.4546E+005
Cm-243	228.19	10.56	7.1406E+005	4.83E+005	-1.9637E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8273E+005	4.83E+005	-3.1837E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 7:30:08 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 7:15:07 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	314	292.12	72.88	1.08	1.60E+002	40.67	5.42E+002
m	2	284-	314	300.30	74.93	1.09	3.44E+002	49.65	5.34E+002
m	3	284-	314	308.99	77.11	1.09	8.28E+001	36.91	4.90E+002
F	4	331-	345	339.76	84.83	0.88	1.07E+002	41.22	5.78E+002
F	5	946-	959	954.13	238.85	0.86	1.40E+002	29.53	1.32E+002
F	6	1171-	1184	1179.42	295.29	0.86	3.34E+001	20.02	1.08E+002
F	7	1348-	1359	1352.54	338.64	0.84	3.20E+001	17.23	6.02E+001
F	8	1400-	1415	1406.44	352.13	1.08	9.67E+001	23.73	7.71E+001
F	9	2030-	2051	2040.88	510.89	2.47	1.15E+002	22.59	6.60E+001
F	10	2324-	2339	2331.00	583.44	1.49	1.03E+002	22.74	4.18E+001
F	11	2427-	2441	2434.71	609.36	1.16	8.34E+001	21.20	4.31E+001
F	12	3633-	3649	3642.28	911.03	1.44	8.41E+001	19.28	1.70E+001
F	13	3868-	3879	3874.74	969.06	1.77	3.22E+001	13.56	1.19E+001
F	14	4470-	4483	4476.78	1119.31	1.47	3.45E+001	14.55	1.77E+001
F	15	5827-	5854	5840.72	1459.56	1.97	4.65E+002	41.91	1.70E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.21051E+005	2.91824E+004
K-40	0.954	1460.81*	10.67	6.78585E+006	8.21709E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	5.60422E+005	1.42645E+005
		583.14*	84.20	1.35198E+005	3.47888E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.01094E+006	7.32638E+005
		77.11* @	18.00	4.17875E+005	2.03530E+005
		87.30 @	8.00		
		238.63*	44.60	2.52074E+005	6.63276E+004
Bi-214	0.708	609.31*	46.30	2.02316E+005	5.72723E+004
		1120.29*	15.10	3.23326E+005	1.40447E+005
		1764.49	15.80		
PB-214	0.760	74.82* @	6.21	5.18794E+006	1.31734E+006
		77.11* @	10.50	7.16358E+005	3.52985E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.50164E+005	9.35814E+004
		351.92*	37.20	2.38186E+005	7.07479E+004
Ac-228	0.999	338.32*	11.40	2.53812E+005	1.42421E+005
		911.07*	27.70	3.91218E+005	1.00338E+005
		969.11*	16.60	2.56613E+005	1.11464E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	9.184822E+004	3.011933E+004
K-40		0.954	6.785846E+006	8.217086E+005
TL-208		0.751	1.351984E+005	3.450867E+004
Pb-212	@	0.838	2.520735E+005	6.632763E+004
Bi-214		0.708	2.195693E+005	5.303238E+004
PB-214	@	0.760	2.061740E+005	5.643527E+004
Ac-228		0.999	3.143643E+005	6.606515E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	1.7741E-001	25.47
F 4	84.83	1.1839E-001	38.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4745E+004	5.62E+004	8.7298E+003
	1332.49	100.00	5.6160E+004		3.7668E+004
Nb-94	702.63	100.00	6.1921E+004	5.68E+004	2.3641E+004
	871.10	100.00	5.6818E+004		1.8304E+004
Ag-108m	79.20	7.10	2.0556E+006	6.38E+004	1.1898E+005
	433.93	89.90	6.3842E+004		8.7947E+003
	614.37	90.40	8.4165E+004		-1.4344E+004
	722.95	90.50	7.5358E+004		4.1982E+004
Sb-125	176.33	6.89	1.0853E+006	1.99E+005	-3.6640E+005
	427.89	29.33	1.9855E+005		-1.4870E+005
	463.38	10.35	6.0731E+005		3.8987E+002
	600.56	17.80	3.4610E+005		1.4995E+005
	606.64	5.02	1.5740E+006		2.0712E+006
	635.90	11.32	5.2400E+005		1.6482E+004
Cs-134	563.23	8.38	7.2272E+005	7.29E+004	-8.9214E+005
	569.32	15.43	4.0698E+005		1.3476E+005
	604.70	97.60	8.0859E+004		-2.1233E+004
	795.84	85.40	7.2931E+004		7.6778E+004
	801.93	8.73	6.6202E+005		-1.2770E+006
Cs-137	661.65	85.12	6.8620E+004	6.86E+004	1.4340E+004
Eu-152	121.78	28.40	3.4292E+005	2.03E+005	-1.2461E+005
	244.69	7.49	9.8260E+005		-1.4433E+006
	344.27	26.50	2.3798E+005		5.0641E+004
	778.89	12.74	4.4227E+005		-1.6446E+005
	867.32	4.16	1.2832E+006		-1.7930E+006
	964.01	14.40	4.7261E+005		7.3409E+004
	1085.78	10.00	6.4630E+005		7.3229E+005
	1112.02	13.30	5.3632E+005		-1.0749E+005
	1407.95	20.70	2.0293E+005		-1.0954E+005
Eu-154	123.07	40.50	2.3962E+005	1.56E+005	-7.5657E+004
	247.94	6.60	1.0893E+006		4.1265E+005
	591.81	4.83	1.1693E+006		-2.6356E+005
	723.30	19.70	3.4864E+005		1.5120E+005
	756.87	4.33	1.3637E+006		-8.2894E+004
	873.19	11.50	5.1929E+005		2.0582E+005
	996.32	10.30	5.8050E+005		2.7381E+005
	1004.76	17.90	3.3336E+005		-1.0257E+005
	1274.45	35.50	1.5577E+005		2.2357E+004
Eu-155	86.54	30.90	4.4332E+005	4.43E+005	4.4379E+004
	105.31	20.70	5.1486E+005		8.3327E+004
Am-241	59.54	35.90	4.6334E+005	4.63E+005	2.5666E+005
Cm-243	228.19	10.56	6.7054E+005	4.74E+005	1.9343E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7417E+005	4.74E+005	-7.9353E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 3:02:50 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 2:47:46 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.26	72.66	0.87	1.16E+002	39.68	5.43E+002
m	2	283-	306	300.19	74.90	0.87	2.71E+002	51.85	6.17E+002
M	3	331-	355	339.61	84.79	1.29	1.48E+002	42.60	6.41E+002
m	4	331-	355	349.16	87.19	1.30	8.63E+001	38.88	6.14E+002
F	5	945-	961	953.85	238.78	0.89	1.31E+002	30.70	2.11E+002
F	6	1175-	1189	1181.17	295.73	1.54	7.72E+001	24.32	1.05E+002
F	7	1401-	1412	1406.66	352.19	0.99	1.38E+002	27.36	6.63E+001
F	8	2034-	2053	2042.90	511.39	2.56	1.08E+002	23.62	7.37E+001
F	9	2325-	2338	2330.80	583.39	1.17	7.98E+001	22.35	5.97E+001
F	10	2425-	2444	2435.50	609.56	1.41	1.69E+002	27.85	5.98E+001
F	11	2639-	2650	2644.26	661.74	0.71	1.74E+001	12.35	3.47E+001
F	12	3634-	3650	3641.86	910.92	1.59	6.43E+001	18.83	3.42E+001
F	13	3866-	3879	3873.00	968.62	1.18	3.31E+001	15.38	2.79E+001
F	14	4470-	4485	4477.81	1119.56	1.35	4.69E+001	16.37	2.58E+001
F	15	4684-	4697	4690.50	1172.63	1.77	3.18E+001	13.90	1.56E+001
F	16	5829-	5855	5841.39	1459.73	1.94	4.84E+002	43.30	3.07E+001
F	17	7051-	7066	7057.96	1763.20	1.57	4.41E+001	14.20	6.35E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.13636E+005	2.95213E+004
K-40	0.965	1460.81*	10.67	7.10044E+006	8.56921E+005
Cs-137	1.000	661.65*	85.12	2.38618E+004	1.71426E+004
Eu-155	0.335	86.54*	30.90	2.20824E+005	1.08463E+005
		105.31	20.70		
TL-208	0.750	277.35	6.80		
		510.84*	21.60	5.26091E+005	1.43267E+005
		583.14*	84.20	1.05118E+005	3.25465E+004
		860.37	12.46		
Pb-212	0.657	74.81* @	10.70	2.32529E+006	6.37381E+005
		77.11 @	18.00		
		87.30* @	8.00	8.52931E+005	4.18939E+005
		238.63*	44.60	2.34489E+005	6.61878E+004
Bi-214	0.985	609.31*	46.30	4.10871E+005	8.49773E+004
		1120.29*	15.10	4.41410E+005	1.61008E+005
		1764.49*	15.80	4.66269E+005	1.57328E+005
PB-214	0.654	74.82* @	6.21	4.00653E+006	1.13608E+006
		77.11 @	10.50		
		87.30* @	4.67	1.46112E+006	7.26108E+005
		241.98	7.49		
		295.21*	19.20	3.45969E+005	1.23598E+005
		351.92*	37.20	3.39646E+005	8.80071E+004
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	3.00353E+005	9.45406E+004
		969.11*	16.60	2.65567E+005	1.26411E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	9.093018E+004	3.033775E+004
K-40		0.965	7.100441E+006	8.569208E+005
Cs-137		1.000	2.386178E+004	1.714261E+004
Eu-155		0.335	1.084657E+005	1.103187E+005
TL-208		0.750	1.051178E+005	3.236573E+004
Pb-212	@	0.657	2.344894E+005	6.618782E+004
Bi-214		0.985	4.265804E+005	6.781299E+004
PB-214	@	0.654	3.417432E+005	7.012528E+004
Ac-228		0.619	2.878749E+005	7.570932E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy, (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	1.2913E-001	34.15
M 3	84.79	1.6434E-001	28.80
F 15	1172.63	3.5364E-002	43.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	7.3786E+004	6.61E+004	-4.3545E+003
		1332.49	100.00	6.6057E+004		8.5835E+004
	Nb-94	702.63	100.00	6.5287E+004	5.84E+004	2.4067E+004
		871.10	100.00	5.8409E+004		4.4250E+003
	Ag-108m	79.20	7.10	2.1773E+006	7.39E+004	-1.0399E+006
		433.93	89.90	7.4750E+004		-7.0262E+004
		614.37	90.40	1.0612E+005		-1.2237E+004
		722.95	90.50	7.3897E+004		-1.1011E+004
	Sb-125	176.33	6.89	1.1407E+006	2.23E+005	-1.5224E+005
		427.89	29.33	2.2344E+005		-3.3064E+004
		463.38	10.35	6.6483E+005		7.2107E+005
		600.56	17.80	3.7372E+005		1.1027E+004
		606.64	5.02	1.9510E+006		3.8703E+006
		635.90	11.32	5.7742E+005		2.4789E+005
	Cs-134	563.23	8.38	7.4585E+005	7.13E+004	-8.6782E+005
		569.32	15.43	4.0111E+005		-3.1674E+005
		604.70	97.60	9.8729E+004		1.4074E+004
		795.84	85.40	7.1326E+004		-9.1995E+003
		801.93	8.73	6.9282E+005		-5.8785E+004
+	Cs-137	661.65*	85.12	4.6746E+004	4.67E+004	2.3862E+004
	Eu-152	121.78	28.40	3.5125E+005	2.63E+005	2.6920E+004
		244.69	7.49	1.0385E+006		6.9065E+005
		344.27	26.50	2.6257E+005		-2.8312E+005
		778.89	12.74	4.8370E+005		-3.4948E+005
		867.32	4.16	1.3066E+006		-2.0258E+006
		964.01	14.40	5.2729E+005		4.4045E+005
		1085.78	10.00	6.4268E+005		2.4022E+005
		1112.02	13.30	5.8074E+005		-2.4513E+005
		1407.95	20.70	2.6846E+005		1.6810E+005
	Eu-154	123.07	40.50	2.4390E+005	1.81E+005	-4.8547E+004
		247.94	6.60	1.1197E+006		-2.4339E+005
		591.81	4.83	1.3152E+006		-1.3993E+006
		723.30	19.70	3.4077E+005		-1.0578E+005
		756.87	4.33	1.4036E+006		-1.0918E+006
		873.19	11.50	5.1657E+005		1.5672E+005
		996.32	10.30	5.8013E+005		-1.7147E+005
		1004.76	17.90	3.2914E+005		2.1309E+005
		1274.45	35.50	1.8096E+005		1.6779E+005
+	Eu-155	86.54*	30.90	3.0182E+005	3.02E+005	2.2082E+005
		105.31	20.70	5.4690E+005		-1.2844E+005
	Am-241	59.54	35.90	5.0316E+005	5.03E+005	-3.3975E+004
	Cm-243	228.19	10.56	7.3185E+005	5.22E+005	1.0073E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2243E+005	5.22E+005	1.0487E+003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 8:31:22 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-11-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 8:16:20 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-11-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	313	291.84	72.81	1.04	1.06E+002	40.85	5.29E+002
m	2	287-	313	300.38	74.95	1.05	3.55E+002	51.97	5.59E+002
m	3	287-	313	309.15	77.15	1.05	1.27E+002	38.43	4.63E+002
F	4	334-	346	339.33	84.72	1.27	1.31E+002	45.23	5.42E+002
F	5	946-	963	953.84	238.78	1.09	1.79E+002	33.92	2.26E+002
F	6	1175-	1187	1180.17	295.47	1.08	4.82E+001	22.13	9.82E+001
F	7	1397-	1413	1406.62	352.18	1.19	8.55E+001	23.43	9.58E+001
F	8	2322-	2340	2330.83	583.39	1.54	1.05E+002	23.27	6.05E+001
F	9	2426-	2444	2435.39	609.53	1.52	8.71E+001	22.04	6.19E+001
F	10	2637-	2651	2645.34	662.01	1.10	5.66E+001	18.30	4.12E+001
F	11	3636-	3650	3642.52	911.09	1.26	6.81E+001	20.26	4.07E+001
F	12	3866-	3881	3873.89	968.85	1.47	5.27E+001	17.89	3.20E+001
F	13	4681-	4699	4689.93	1172.49	1.52	1.07E+002	22.00	2.31E+001
F	14	5317-	5335	5326.49	1331.29	1.64	7.83E+001	19.35	2.11E+001
F	15	5828-	5854	5840.49	1459.50	1.98	5.36E+002	44.86	1.54E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.949	1460.81*	10.67	7.81527E+006	9.10033E+005
Co-60	0.971	1173.22*	100.00	1.53903E+005	3.39751E+004
		1332.49*	100.00	1.18194E+005	3.06267E+004
Cs-137	0.996	661.65*	85.12	7.71514E+004	2.65297E+004
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.37488E+005	3.55347E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.10737E+006	7.59812E+005
		77.11* @	18.00	6.42477E+005	2.31206E+005
		87.30 @	8.00		
		238.63*	44.60	3.22684E+005	7.93899E+004
Bi-214	0.417	609.31*	46.30	2.11412E+005	5.96073E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.759	74.82* @	6.21	5.35408E+006	1.36565E+006
		77.11* @	10.50	1.10139E+006	4.04795E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.16922E+005	1.06071E+005
		351.92*	37.20	2.10749E+005	6.76286E+004
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	3.16522E+005	1.01015E+005
		969.11*	16.60	4.20753E+005	1.49398E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.949	7.815266E+006	9.100333E+005
Co-60		0.971	1.342030E+005	2.274827E+004
Cs-137		0.996	7.715144E+004	2.652973E+004
TL-208		0.470	1.374883E+005	3.553468E+004
Pb-212	@	0.838	3.226836E+005	7.938992E+004
Bi-214		0.417	2.114115E+005	5.960735E+004
PB-214	@	0.759	2.125329E+005	5.702424E+004
Ac-228		0.622	3.492238E+005	8.368182E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.1729E-001	38.69
F 4	84.72	1.4530E-001	34.59

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.5725E+004	4.57E+004	1.5390E+005
		1332.49*	100.00	4.6560E+004		1.1819E+005
	Nb-94	702.63	100.00	6.4935E+004	6.03E+004	4.0059E+004
		871.10	100.00	6.0286E+004		-3.5096E+004
	Ag-108m	79.20	7.10	2.1899E+006	7.52E+004	-1.8164E+006
		433.93	89.90	7.5212E+004		1.1446E+004
		614.37	90.40	8.8425E+004		3.5590E+003
		722.95	90.50	8.0420E+004		1.1105E+005
	Sb-125	176.33	6.89	1.2292E+006	2.21E+005	5.2537E+005
		427.89	29.33	2.2148E+005		-1.3461E+005
		463.38	10.35	6.5686E+005		1.6368E+005
		600.56	17.80	3.6622E+005		2.9524E+005
		606.64	5.02	1.6506E+006		2.0299E+006
		635.90	11.32	5.8461E+005		4.1213E+005
	Cs-134	563.23	8.38	6.9554E+005	8.06E+004	-3.9661E+005
		569.32	15.43	4.2214E+005		-2.1380E+004
		604.70	97.60	8.3386E+004		9.9007E+003
		795.84	85.40	8.0641E+004		2.4999E+004
		801.93	8.73	7.6450E+005		-7.1644E+004
+	Cs-137	661.65*	85.12	5.2445E+004	5.24E+004	7.7151E+004
	Eu-152	121.78	28.40	3.6906E+005	2.30E+005	-8.1836E+004
		244.69	7.49	1.0886E+006		-1.7026E+005
		344.27	26.50	2.5100E+005		-4.3797E+005
		778.89	12.74	4.8980E+005		-2.0862E+005
		867.32	4.16	1.4175E+006		-2.6858E+006
		964.01	14.40	5.6319E+005		7.3728E+005
		1085.78	10.00	6.5659E+005		-6.6219E+005
		1112.02	13.30	5.3632E+005		2.1729E+005
		1407.95	20.70	2.3027E+005		1.7231E+005
	Eu-154	123.07	40.50	2.5837E+005	1.71E+005	1.6412E+005
		247.94	6.60	1.1676E+006		1.6118E+005
		591.81	4.83	1.3331E+006		2.7187E+005
		723.30	19.70	3.6950E+005		3.9604E+005
		756.87	4.33	1.4890E+006		5.5928E+005
		873.19	11.50	5.4035E+005		1.1634E+005
		996.32	10.30	6.1635E+005		3.3530E+005
		1004.76	17.90	3.3917E+005		8.0423E+003
		1274.45	35.50	1.7075E+005		1.2607E+005
	Eu-155	86.54	30.90	4.5718E+005	4.57E+005	3.3240E+005
		105.31	20.70	5.6104E+005		1.4332E+005
	Am-241	59.54	35.90	5.0765E+005	5.08E+005	2.6845E+005
	Cm-243	228.19	10.56	7.1843E+005	5.25E+005	-1.6801E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2491E+005	5.25E+005	-5.8176E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

This page intentionally left blank.

FileName	SampleTitle	Unity	AcquisitionStartedD	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Uncel	K-40 Activity
TBN-01-12-101-F-G.RPT	TBN-01-12-101-F-G	0.00	21-Oct-05	13:15:14	900.6	RED6264	RED_CONC_2M90D	dpm/m2	57000			76900			66200			6141762
TBN-01-12-102-F-G.RPT	TBN-01-12-102-F-G	0.11	21-Oct-05	13:35:46	900.7	RED6264	RED_CONC_2M90D	dpm/m2	57000			48800	43062.89	21774.48	74500			7979020
TBN-01-12-103-F-G.RPT	TBN-01-12-103-F-G	0.00	21-Oct-05	13:54:33	900.7	RED6264	RED_CONC_2M90D	dpm/m2	60000			79300			73600			8076799
TBN-01-12-104-F-G.RPT	TBN-01-12-104-F-G	0.00	21-Oct-05	14:22:19	900.6	RED6264	RED_CONC_2M90D	dpm/m2	49900			77500			70800			7183061
TBN-01-12-105-F-G.RPT	TBN-01-12-105-F-G	0.00	22-Oct-05	9:07:04	900.6	RED6264	RED_CONC_2M90D	dpm/m2	64200			80200			72900			6145778
TBN-01-12-107-F-G.RPT	TBN-01-12-107-F-G	0.09	21-Oct-05	15:25:04	900.6	RED6264	RED_CONC_2M90D	dpm/m2	45600			40200	34958.27	19726.88	68900			6076943
TBN-01-12-108-F-G.RPT	TBN-01-12-108-F-G	0.00	21-Oct-05	15:04:05	900.6	RED6264	RED_CONC_2M90D	dpm/m2	49300			83300			71500			6337845
TBN-01-12-109-F-G.RPT	TBN-01-12-109-F-G	0.00	21-Oct-05	14:43:26	900.6	RED6264	RED_CONC_2M90D	dpm/m2	49300			76000			68100			5609696
TBN-01-12-110-F-G.RPT	TBN-01-12-110-F-G	0.00	22-Oct-05	8:41:32	900.6	RED6264	RED_CONC_2M90D	dpm/m2	70900			80500			70900			6265221
TBN-01-12-111-F-G.RPT	TBN-01-12-111-F-G	0.19	21-Oct-05	15:44:32	900.6	RED6264	RED_CONC_2M90D	dpm/m2	53800			46800	73714.69	24843.63	67400			6651363
TBN-01-12-112-F-G.RPT	TBN-01-12-112-F-G	0.00	22-Oct-05	9:26:34	900.6	RED6264	RED_CONC_2M90D	dpm/m2	56000			66500			68400			6012034
TBN-01-12-113-F-G.RPT	TBN-01-12-113-F-G	0.00	22-Oct-05	9:47:43	900.6	RED6264	RED_CONC_2M90D	dpm/m2	49300			75400			65800			6227023
TBN-01-12-114-F-G.RPT	TBN-01-12-114-F-G	0.00	22-Oct-05	10:44:29	900.6	RED6264	RED_CONC_2M90D	dpm/m2	48100			70000			70300			6091574
TBN-01-12-115-F-G.RPT	TBN-01-12-115-F-G	0.00	22-Oct-05	11:03:33	900.6	RED6264	RED_CONC_2M90D	dpm/m2	48700			73200			72700			6521773
TBN-01-12-116-F-G.RPT	TBN-01-12-116-F-G	0.00	22-Oct-05	11:31:29	900.6	RED6264	RED_CONC_2M90D	dpm/m2	53300			80800			64600			7033386
TBN-01-12-117-F-G.RPT	TBN-01-12-117-F-G	0.11	22-Oct-05	11:51:36	900.6	RED6264	RED_CONC_2M90D	dpm/m2	57500			41200	45204.02	20949.02	71200			6242432
TBN-01-12-118-F-G.RPT	TBN-01-12-118-F-G	0.00	22-Oct-05	13:56:46	900.7	RED6264	RED_CONC_2M90D	dpm/m2	62300			80200			71100			7378743
TBN-01-12-119-F-G.RPT	TBN-01-12-119-F-G	0.00	22-Oct-05	13:37:59	900.7	RED6264	RED_CONC_2M90D	dpm/m2	53900			72900			71900			8074946
TBN-01-12-120-F-G.RPT	TBN-01-12-120-F-G	0.00	22-Oct-05	13:20:15	900.7	RED6264	RED_CONC_2M90D	dpm/m2	57000			82700			73800			8615325
TBN-01-12-121-F-G.RPT	TBN-01-12-121-F-G	0.00	22-Oct-05	13:01:07	900.6	RED6264	RED_CONC_2M90D	dpm/m2	57000			74500			74000			7110873
TBN-01-12-122-F-G.RPT	TBN-01-12-122-F-G	0.10	22-Oct-05	14:39:18	900.6	RED6264	RED_CONC_1M90D	dpm/m2	45900			42100	38435.21	20393.09	61700			5875701
TBN-01-12-123-F-G.RPT	TBN-01-12-123-F-G	0.00	22-Oct-05	14:17:41	900.6	RED6264	RED_CONC_1M90D	dpm/m2	46500			73500			65900			5721333
TBN-01-12-124-F-G.RPT	TBN-01-12-124-F-G	0.00	24-Oct-05	7:37:23	900.6	RED6264	RED_CONC_2M90D	dpm/m2	58000			69300			66200			6539616
TBN-01-12-125-F-G.RPT	TBN-01-12-125-F-G	0.00	24-Oct-05	7:55:25	900.6	RED6264	RED_CONC_2M90D	dpm/m2	48100			78400			66400			5973620
TBN-01-12-126-F-G.RPT	TBN-01-12-126-F-G	0.00	24-Oct-05	8:14:52	900.6	RED6264	RED_CONC_2M90D	dpm/m2	56000			81300			73100			6320546
TBN-01-12-106-F-G.RPT	TBN-01-12-106-F-G	0.10	22-Oct-05	8:19:22	900.6	RED6264	RED_CONC_2M90D	dpm/m2	70200			57500	39689.78	21320.71	71600			6578009
TBN-01-12-118-F-G.RPT	TBN-01-12-118-F-G	0.00	22-Oct-05	13:56:46	900.7	RED6264	RED_CONC_2M90D	dpm/m2	62300			80200			71100			7378743
TBN-01-12-119-F-G.RPT	TBN-01-12-119-F-G	0.00	22-Oct-05	13:37:59	900.7	RED6264	RED_CONC_2M90D	dpm/m2	53900			72900			71900			8074946
TBN-01-12-120-F-G.RPT	TBN-01-12-120-F-G	0.00	22-Oct-05	13:20:15	900.7	RED6264	RED_CONC_2M90D	dpm/m2	57000			82700			73800			8615325
TBN-01-12-121-F-G.RPT	TBN-01-12-121-F-G	0.00	22-Oct-05	13:01:07	900.6	RED6264	RED_CONC_2M90D	dpm/m2	57000			74500			74000			7110873
TBN-01-12-123-F-G.RPT	TBN-01-12-123-F-G	0.00	22-Oct-05	14:17:41	900.6	RED6264	RED_CONC_1M90D	dpm/m2	46500			73500			65900			5721333

Report Generated On 10/21/2005 1:30:16 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 1:15:14 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	292.21	73.01	0.95	1.52E+002	39.34	4.87E+002
m	2	284-	305	300.33	75.04	0.96	3.00E+002	49.56	5.54E+002
F	3	946-	962	954.66	238.64	1.12	1.73E+002	31.73	1.70E+002
F	4	1172-	1205	1181.09	295.25	1.66	8.74E+001	22.08	1.78E+002
F	5	1401-	1419	1408.85	352.19	1.68	1.07E+002	23.40	7.91E+001
F	6	2327-	2343	2333.67	583.42	1.20	7.81E+001	20.31	4.01E+001
F	7	2428-	2445	2437.44	609.36	1.44	8.07E+001	20.20	4.06E+001
F	8	3635-	3653	3644.16	911.07	2.07	8.58E+001	19.17	1.94E+001
F	9	3870-	3885	3876.90	969.26	1.30	4.22E+001	15.70	2.39E+001
F	10	4475-	4489	4482.93	1120.78	0.48	1.95E+001	7.03	2.76E+001
F	11	5834-	5859	5845.89	1461.55	1.91	4.05E+002	39.82	2.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.984	1460.81*	10.67	6.14176E+006	7.82857E+005
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.06872E+005	3.11785E+004
		860.37	12.46		
Pb-212	0.498	74.81* @	10.70	2.69928E+006	6.92109E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.21546E+005	7.75309E+004
Bi-214	0.712	609.31*	46.30	2.04604E+005	5.71869E+004
		1120.29*	15.10	1.90536E+005	7.17631E+004
		1764.49	15.80		
PB-214	0.565	74.82* @	6.21	4.65093E+006	1.23940E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.04985E+005	1.22911E+005
		351.92*	37.20	2.70330E+005	7.46300E+004
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	4.19519E+005	1.05412E+005
		969.11*	16.60	3.53034E+005	1.36551E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.984	6.141762E+006	7.828566E+005
TL-208		0.469	1.068723E+005	3.117846E+004
Pb-212	@	0.498	3.215457E+005	7.753085E+004
Bi-214		0.712	1.991400E+005	4.472335E+004
PB-214	@	0.565	3.066013E+005	6.379156E+004
Ac-228		0.620	3.946935E+005	8.344169E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.01	1.6905E-001	25.85

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4406E+004	5.70E+004	3.8104E+004
	1332.49	100.00	5.6991E+004		1.4539E+004
Nb-94	702.63	100.00	5.9581E+004	5.94E+004	1.9929E+004
	871.10	100.00	5.9379E+004		-1.5663E+003
Ag-108m	79.20	7.10	2.2315E+006	6.62E+004	-3.1258E+006
	433.93	89.90	6.6195E+004		-2.6915E+004
	614.37	90.40	8.6636E+004		-1.4934E+003
	722.95	90.50	6.9682E+004		1.3495E+004
Sb-125	176.33	6.89	1.1236E+006	1.94E+005	-3.5590E+005
	427.89	29.33	1.9365E+005		-6.0000E+004
	463.38	10.35	6.5772E+005		2.2722E+005
	600.56	17.80	3.4893E+005		-3.4889E+004
	606.64	5.02	1.6024E+006		2.6095E+006
	635.90	11.32	5.2946E+005		-3.3431E+005
Cs-134	563.23	8.38	7.6626E+005	6.71E+004	-2.5374E+004
	569.32	15.43	4.0751E+005		1.9031E+005
	604.70	97.60	8.0919E+004		-1.8442E+004
	795.84	85.40	6.7074E+004		2.4592E+004
	801.93	8.73	6.3420E+005		-1.2786E+005
Cs-137	661.65	85.12	7.6932E+004	7.69E+004	5.4765E+004
Eu-152	121.78	28.40	3.5365E+005	2.43E+005	1.1722E+005
	244.69	7.49	9.7083E+005		1.8073E+005
	344.27	26.50	2.5794E+005		-2.3429E+005
	778.89	12.74	4.7674E+005		3.5917E+005
	867.32	4.16	1.4003E+006		-1.3730E+006
	964.01	14.40	5.7844E+005		1.6049E+005
	1085.78	10.00	5.9493E+005		-1.3246E+005
	1112.02	13.30	4.8226E+005		-2.5353E+005
	1407.95	20.70	2.4267E+005		-6.5208E+004
Eu-154	123.07	40.50	2.4812E+005	1.60E+005	1.1687E+005
	247.94	6.60	1.0359E+006		-1.5502E+006
	591.81	4.83	1.1704E+006		-4.6800E+005
	723.30	19.70	3.2446E+005		1.3115E+005
	756.87	4.33	1.4383E+006		-3.9136E+005
	873.19	11.50	5.2566E+005		2.3458E+003
	996.32	10.30	5.7218E+005		-9.9509E+003
	1004.76	17.90	3.0548E+005		-2.4263E+005
	1274.45	35.50	1.5960E+005		-1.7453E+004
Eu-155	86.54	30.90	4.5736E+005	4.57E+005	3.0439E+005
	105.31	20.70	5.4702E+005		3.8003E+005
Am-241	59.54	35.90	5.0051E+005	5.01E+005	-3.9811E+005
Cm-243	228.19	10.56	6.8820E+005	4.94E+005	3.9195E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9435E+005	4.94E+005	-3.2735E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 1:50:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 1:35:46 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	306	291.95	72.95	0.81	1.26E+002	39.12	4.00E+002
m	2	288-	306	300.51	75.09	0.81	2.42E+002	48.31	5.33E+002
F	3	335-	346	339.94	84.94	0.99	1.25E+002	43.43	5.29E+002
F	4	948-	961	954.74	238.66	1.18	1.79E+002	33.54	1.71E+002
F	5	1176-	1190	1181.02	295.23	1.17	4.78E+001	21.02	1.05E+002
F	6	1403-	1416	1407.85	351.94	1.15	1.13E+002	24.77	6.36E+001
F	7	2033-	2055	2043.02	510.75	2.19	1.16E+002	22.47	6.35E+001
F	8	2326-	2341	2332.88	583.22	1.07	8.48E+001	21.85	5.46E+001
F	9	2429-	2445	2437.27	609.32	1.56	1.04E+002	22.29	4.19E+001
F	10	2640-	2654	2647.21	661.81	1.34	3.02E+001	14.83	3.17E+001
F	11	3638-	3655	3646.17	911.57	1.53	7.27E+001	19.40	3.06E+001
F	12	3868-	3884	3876.72	969.21	1.19	4.17E+001	15.90	2.76E+001
F	13	4475-	4489	4481.93	1120.53	1.27	2.32E+001	14.23	3.05E+001
F	14	4654-	4667	4661.25	1165.36	0.48	9.97E+000	2.20	1.22E+001
F	15	5831-	5858	5846.02	1461.58	1.99	5.26E+002	44.47	1.07E+001
F	16	7056-	7070	7061.74	1765.53	1.70	2.58E+001	11.24	4.19E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.26066E+005	3.01979E+004
K-40	0.982	1460.81*		10.67	7.97902E+006	9.34416E+005
Cs-137	0.999	661.65*		85.12	4.30629E+004	2.17745E+004
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.83637E+005	1.47707E+005
		583.14*		84.20	1.16059E+005	3.36096E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.17524E+006	6.08851E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.33082E+005	8.12553E+004
Bi-214	0.993	609.31*		46.30	2.64757E+005	6.54079E+004
		1120.29*		15.10	2.27338E+005	1.41408E+005
		1764.49*		15.80	2.81898E+005	1.25799E+005
PB-214	0.566	74.82*	@	6.21	3.74800E+006	1.08378E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.21509E+005	1.04264E+005
		351.92*		37.20	2.87962E+005	7.91731E+004
Ac-228	0.616	338.32		11.40		
		911.07*		27.70	3.55296E+005	1.03251E+005
		969.11*		16.60	3.49226E+005	1.38054E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	1.009968E+005	3.104754E+004
K-40		0.982	7.979020E+006	9.344164E+005
Cs-137		0.999	4.306289E+004	2.177448E+004
TL-208		0.753	1.160594E+005	3.339614E+004
Pb-212	@	0.497	3.330817E+005	8.125533E+004
Bi-214		0.993	2.624851E+005	5.368723E+004
PB-214	@	0.566	2.636584E+005	6.305424E+004
Ac-228		0.616	3.531183E+005	8.268387E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	1.3987E-001	31.08
F 3	84.94	1.3854E-001	34.83
F 14	1165.36	1.1079E-002	22.07

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.8353E+004	5.70E+004	7.3874E+004
		1332.49	100.00	5.6991E+004		3.7270E+004
	Nb-94	702.63	100.00	6.6547E+004	6.17E+004	4.2464E+004
		871.10	100.00	6.1739E+004		1.0807E+004
	Ag-108m	79.20	7.10	2.2501E+006	7.45E+004	-1.6958E+006
		433.93	89.90	7.6530E+004		-2.0122E+003
		614.37	90.40	9.0524E+004		2.3599E+004
		722.95	90.50	7.4528E+004		5.4451E+004
	Sb-125	176.33	6.89	1.1902E+006	2.20E+005	-6.1298E+005
		427.89	29.33	2.2034E+005		-4.3434E+004
		463.38	10.35	6.8009E+005		1.8354E+005
		600.56	17.80	3.5450E+005		-4.7509E+004
		606.64	5.02	1.6551E+006		1.4614E+006
		635.90	11.32	5.5985E+005		-7.1956E+004
	Cs-134	563.23	8.38	7.4133E+005	7.66E+004	-3.6012E+005
		569.32	15.43	4.0904E+005		2.8765E+005
		604.70	97.60	8.6522E+004		-3.5392E+004
		795.84	85.40	7.6590E+004		1.6868E+004
		801.93	8.73	7.1323E+005		-4.4315E+005
+	Cs-137	661.65*	85.12	4.8768E+004	4.88E+004	4.3063E+004
	Eu-152	121.78	28.40	3.7180E+005	2.43E+005	1.3698E+005
		244.69	7.49	1.0700E+006		1.9932E+004
		344.27	26.50	2.4277E+005		-5.3444E+005
		778.89	12.74	4.9117E+005		-3.1130E+005
		867.32	4.16	1.5889E+006		1.0435E+006
		964.01	14.40	5.8386E+005		-2.4991E+004
		1085.78	10.00	6.3494E+005		2.9260E+005
		1112.02	13.30	4.9672E+005		-9.0143E+004
		1407.95	20.70	2.5405E+005		-2.3378E+004
	Eu-154	123.07	40.50	2.5864E+005	1.75E+005	-1.4552E+004
		247.94	6.60	1.1388E+006		-1.8142E+006
		591.81	4.83	1.3381E+006		4.3440E+005
		723.30	19.70	3.4108E+005		1.7538E+005
		756.87	4.33	1.5118E+006		1.7022E+006
		873.19	11.50	5.5425E+005		-8.9586E+004
		996.32	10.30	6.0153E+005		3.5496E+005
		1004.76	17.90	3.4738E+005		-1.0925E+005
		1274.45	35.50	1.7548E+005		-3.6886E+004
	Eu-155	86.54	30.90	4.6821E+005	4.68E+005	7.3600E+005
		105.31	20.70	5.7344E+005		3.8835E+005
	Am-241	59.54	35.90	4.9898E+005	4.99E+005	-3.4983E+005
	Cm-243	228.19	10.56	7.3583E+005	5.12E+005	5.9413E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1159E+005	5.12E+005	4.3581E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 2:09:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 1:54:33 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	316	292.01	72.96	1.04	1.83E+002	41.35	4.85E+002
m	2	286-	316	300.88	75.18	1.04	3.91E+002	50.29	5.26E+002
m	3	286-	316	309.49	77.33	1.05	1.48E+002	38.26	4.94E+002
	4	330-	345	339.98	84.95	1.02	7.87E+001	89.49	6.68E+002
F	5	948-	962	954.74	238.66	1.17	1.54E+002	32.00	1.84E+002
F	6	1347-	1359	1353.53	338.36	0.56	3.46E+001	16.55	7.62E+001
F	7	1399-	1415	1407.67	351.90	1.28	8.58E+001	23.76	1.04E+002
F	8	2326-	2341	2332.32	583.08	1.13	7.91E+001	21.62	5.59E+001
F	9	2427-	2445	2437.16	609.29	1.64	8.71E+001	21.10	4.65E+001
F	10	3636-	3654	3645.18	911.32	1.77	8.84E+001	20.36	3.00E+001
F	11	3868-	3884	3876.04	969.04	1.44	2.98E+001	16.39	4.73E+001
F	12	5833-	5858	5845.69	1461.49	2.14	5.32E+002	44.28	6.50E+000
F	13	7058-	7072	7065.85	1766.56	0.61	1.73E+001	9.17	1.08E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.986	1460.81*	10.67	8.07680E+006	9.37915E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.08156E+005	3.28529E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.50941E+006	8.23039E+005
		77.11* @	18.00	7.68883E+005	2.49265E+005
		87.30 @	8.00		
		238.63*	44.60	2.85680E+005	7.43995E+004
Bi-214	0.678	609.31*	46.30	2.20831E+005	6.01440E+004
		1120.29	15.10		
		1764.49*	15.80	1.88252E+005	1.01769E+005
PB-214	0.395	74.82* @	6.21	6.04681E+006	1.48450E+006
		77.11* @	10.50	1.31808E+006	4.38498E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.17602E+005	7.03972E+004
Ac-228	0.999	338.32*	11.40	2.83054E+005	1.42348E+005
		911.07*	27.70	4.32227E+005	1.11222E+005
		969.11*	16.60	2.49269E+005	1.39716E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.986	8.076799E+006	9.379152E+005
TL-208		0.470	1.081555E+005	3.285288E+004
Pb-212	@	0.838	2.856800E+005	7.439950E+004
Bi-214		0.678	2.123976E+005	5.177780E+004
PB-214	@	0.395	2.176024E+005	6.930847E+004
Ac-228		0.999	3.399845E+005	7.424361E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	2.0292E-001	22.64
4	84.95	8.7488E-002	113.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2753E+004	6.00E+004	-5.4880E+004
	1332.49	100.00	5.9950E+004		1.5718E+003
Nb-94	702.63	100.00	6.7072E+004	6.27E+004	-2.2093E+004
	871.10	100.00	6.2721E+004		-1.2525E+004
Ag-108m	79.20	7.10	2.3159E+006	7.36E+004	3.8595E+005
	433.93	89.90	7.3648E+004		6.3233E+004
	614.37	90.40	9.1365E+004		-2.4527E+003
	722.95	90.50	8.2029E+004		8.2507E+004
Sb-125	176.33	6.89	1.1880E+006	2.22E+005	8.8797E+005
	427.89	29.33	2.2216E+005		-2.7799E+004
	463.38	10.35	6.4713E+005		5.6123E+004
	600.56	17.80	3.3896E+005		1.8522E+005
	606.64	5.02	1.6290E+006		2.0507E+006
	635.90	11.32	5.2462E+005		1.4329E+005
Cs-134	563.23	8.38	7.6353E+005	7.79E+004	-3.3188E+005
	569.32	15.43	4.4255E+005		3.6768E+005
	604.70	97.60	8.2308E+004		-3.5958E+003
	795.84	85.40	7.7945E+004		-2.9029E+004
	801.93	8.73	7.2028E+005		-1.5347E+006
Cs-137	661.65	85.12	7.9309E+004	7.93E+004	5.8352E+004
Eu-152	121.78	28.40	3.6274E+005	2.70E+005	6.2328E+004
	244.69	7.49	1.0477E+006		-1.5822E+005
	344.27	26.50	2.6965E+005		1.7108E+004
	778.89	12.74	4.9588E+005		-5.6886E+005
	867.32	4.16	1.5287E+006		-3.2753E+006
	964.01	14.40	5.8566E+005		2.9336E+005
	1085.78	10.00	6.3106E+005		1.1399E+005
	1112.02	13.30	4.8519E+005		-3.5449E+005
	1407.95	20.70	2.7272E+005		1.4914E+005
Eu-154	123.07	40.50	2.5168E+005	1.79E+005	-9.4175E+004
	247.94	6.60	1.1212E+006		-1.1375E+006
	591.81	4.83	1.2200E+006		-6.9303E+005
	723.30	19.70	3.7689E+005		2.5721E+005
	756.87	4.33	1.4314E+006		-1.2442E+006
	873.19	11.50	5.2271E+005		-1.4255E+005
	996.32	10.30	6.0864E+005		1.0353E+005
	1004.76	17.90	3.6349E+005		8.3598E+003
	1274.45	35.50	1.7921E+005		6.7292E+004
Eu-155	86.54	30.90	4.7295E+005	4.73E+005	1.6643E+005
	105.31	20.70	5.5715E+005		-1.0659E+005
Am-241	59.54	35.90	5.1112E+005	5.11E+005	-4.5635E+005
Cm-243	228.19	10.56	7.2491E+005	5.24E+005	1.5001E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2414E+005	5.24E+005	-5.1531E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 2:37:20 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 2:22:19 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	292.35	73.05	0.89	1.76E+002	40.28	4.48E+002
m	2	285-	306	300.46	75.07	0.89	2.82E+002	49.47	5.22E+002
F	3	332-	345	338.27	84.53	1.46	1.24E+002	41.60	5.24E+002
F	4	948-	961	954.81	238.67	0.82	1.34E+002	30.20	1.71E+002
F	5	1176-	1186	1180.58	295.12	0.81	4.26E+001	20.57	8.88E+001
F	6	1348-	1357	1352.93	338.21	0.92	3.51E+001	18.84	6.03E+001
F	7	1401-	1416	1408.15	352.02	1.41	1.13E+002	24.20	7.03E+001
F	8	2033-	2055	2043.57	510.89	2.68	1.19E+002	21.88	5.51E+001
F	9	2324-	2342	2332.10	583.02	1.39	8.56E+001	20.80	4.88E+001
F	10	2428-	2446	2438.04	609.51	1.56	8.85E+001	20.70	4.28E+001
F	11	2902-	2913	2907.32	726.84	0.83	1.62E+001	12.28	3.15E+001
F	12	3637-	3653	3645.08	911.30	1.31	7.31E+001	19.91	3.63E+001
F	13	3869-	3884	3875.73	968.96	1.56	3.69E+001	16.57	3.49E+001
F	14	4474-	4489	4481.67	1120.46	1.22	3.38E+001	14.38	2.21E+001
F	15	5834-	5859	5846.24	1461.63	1.91	4.73E+002	42.66	1.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.29273E+005	2.99530E+004
K-40	0.980	1460.81*		10.67	7.18306E+006	8.70468E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.98485E+005	1.47033E+005
		583.14*		84.20	1.17061E+005	3.23939E+004
		860.37		12.46		
Bi-212	0.997	727.17*		11.80	1.72400E+005	1.32012E+005
Pb-212	0.497	74.81*	@	10.70	2.54173E+006	6.68140E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.48371E+005	6.82629E+004
Bi-214	0.712	609.31*		46.30	2.24236E+005	5.94404E+004
		1120.29*		15.10	3.30512E+005	1.45093E+005
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	4.37946E+006	1.19431E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.97108E+005	1.00890E+005
		351.92*		37.20	2.86872E+005	7.79095E+004
Ac-228	0.999	338.32*		11.40	2.86553E+005	1.60347E+005
		911.07*		27.70	3.57070E+005	1.05647E+005
		969.11*		16.60	3.08913E+005	1.42473E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	1.039877E+005	3.074837E+004
K-40		0.980	7.183061E+006	8.704676E+005
TL-208		0.753	1.170607E+005	3.216850E+004
Bi-212		0.997	1.723999E+005	1.320124E+005
Pb-212	@	0.497	2.483706E+005	6.826292E+004
Bi-214		0.712	2.395090E+005	5.500368E+004
PB-214	@	0.565	2.533400E+005	6.166379E+004
Ac-228		0.999	3.282938E+005	7.500498E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.05	1.9511E-001	22.94
F 3	84.53	1.3793E-001	33.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6804E+004	4.99E+004	2.5482E+003
	1332.49	100.00	4.9925E+004		-2.1643E+004
Nb-94	702.63	100.00	5.9581E+004	5.96E+004	-3.5139E+003
	871.10	100.00	6.2068E+004		-1.1060E+004
Ag-108m	79.20	7.10	2.1963E+006	7.08E+004	-2.8326E+006
	433.93	89.90	7.0847E+004		-1.4782E+004
	614.37	90.40	8.6415E+004		-1.7520E+004
	722.95	90.50	7.5976E+004		-3.6036E+004
Sb-125	176.33	6.89	1.1131E+006	2.10E+005	2.4200E+005
	427.89	29.33	2.1034E+005		2.1566E+004
	463.38	10.35	6.3089E+005		-2.1888E+005
	600.56	17.80	3.4327E+005		1.2589E+004
	606.64	5.02	1.6062E+006		2.8366E+006
	635.90	11.32	5.4371E+005		3.5381E+005
Cs-134	563.23	8.38	7.2131E+005	7.34E+004	2.2690E+005
	569.32	15.43	3.8065E+005		-1.9343E+005
	604.70	97.60	8.2111E+004		-1.1175E+004
	795.84	85.40	7.3444E+004		4.0361E+004
	801.93	8.73	7.1323E+005		-4.5912E+005
Cs-137	661.65	85.12	7.7534E+004	7.75E+004	3.3281E+004
Eu-152	121.78	28.40	3.6214E+005	2.47E+005	2.0037E+005
	244.69	7.49	1.0018E+006		-8.5372E+005
	344.27	26.50	2.4737E+005		-1.0748E+005
	778.89	12.74	4.7429E+005		-2.3099E+005
	867.32	4.16	1.4499E+006		4.7957E+004
	964.01	14.40	5.5238E+005		1.0721E+005
	1085.78	10.00	5.6947E+005		4.9870E+005
	1112.02	13.30	4.2251E+005		3.6343E+004
	1407.95	20.70	2.5405E+005		-4.2890E+004
Eu-154	123.07	40.50	2.5267E+005	1.64E+005	-2.5112E+004
	247.94	6.60	1.0600E+006		-8.0305E+005
	591.81	4.83	1.3332E+006		6.5428E+005
	723.30	19.70	3.4511E+005		-3.0820E+005
	756.87	4.33	1.5247E+006		1.1725E+006
	873.19	11.50	5.4866E+005		8.2934E+004
	996.32	10.30	5.9795E+005		5.1748E+005
	1004.76	17.90	3.2383E+005		-3.0342E+005
	1274.45	35.50	1.6372E+005		-2.8061E+005
Eu-155	86.54	30.90	4.6135E+005	4.61E+005	9.6896E+005
	105.31	20.70	5.6362E+005		2.9753E+005
Am-241	59.54	35.90	5.0077E+005	5.01E+005	-5.3087E+005
Cm-243	228.19	10.56	7.0256E+005	5.43E+005	-3.7616E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.4280E+005	5.43E+005	4.3042E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 9:22:06 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 9:07:04 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	304	291.33	72.79	0.97	1.53E+002	40.24	5.20E+002
m	2	285-	304	299.96	74.95	0.98	3.32E+002	51.21	5.34E+002
F	3	330-	345	339.32	84.79	0.93	7.27E+001	39.87	6.35E+002
F	4	947-	959	953.95	238.46	1.01	1.41E+002	30.16	1.36E+002
F	5	1171-	1187	1180.61	295.13	1.21	6.30E+001	22.00	1.08E+002
F	6	1346-	1359	1352.85	338.19	1.00	3.15E+001	18.08	7.60E+001
F	7	1399-	1414	1407.37	351.82	1.26	1.35E+002	26.18	7.60E+001
F	8	2325-	2341	2332.02	583.01	1.50	1.01E+002	22.31	4.35E+001
F	9	2427-	2444	2435.91	608.98	1.38	1.52E+002	26.51	4.93E+001
F	10	2739-	2750	2743.91	685.99	0.69	1.56E+001	10.89	2.37E+001
F	11	3634-	3651	3642.81	910.73	1.95	7.36E+001	18.27	2.02E+001
F	12	4472-	4486	4478.90	1119.77	1.23	3.85E+001	15.59	2.63E+001
F	13	5828-	5853	5841.28	1460.39	1.97	4.05E+002	39.55	1.30E+001
F	14	7052-	7065	7058.34	1764.68	1.69	2.51E+001	11.15	5.08E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.995	1460.81*		10.67	6.14578E+006	7.79732E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.37851E+005	3.55557E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.99392E+006	7.46613E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.60732E+005	6.93125E+004
Bi-214	0.996	609.31*		46.30	3.85790E+005	8.26345E+004
		1120.29*		15.10	3.77337E+005	1.57893E+005
		1764.49*		15.80	2.73995E+005	1.24700E+005
PB-214	0.565	74.82*	@	6.21	5.16231E+006	1.34079E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.92047E+005	1.13195E+005
		351.92*		37.20	3.43884E+005	8.78746E+004
Ac-228	0.545	338.32*		11.40	2.57065E+005	1.53099E+005
		911.07*		27.70	3.59681E+005	9.83942E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.995	6.145778E+006	7.797317E+005
TL-208		0.470	1.378509E+005	3.555569E+004
Pb-212	@	0.497	2.607322E+005	6.931255E+004
Bi-214		0.996	3.557798E+005	6.313624E+004
PB-214	@	0.565	3.243912E+005	6.941324E+004
Ac-228		0.545	3.296858E+005	8.277356E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.6982E-001	26.33
F 3	84.79	8.0766E-002	54.85
F 10	685.99	1.7328E-002	69.86

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	8.4508E+004	6.42E+004	3.4212E+004
	1332.49	100.00	6.4216E+004		-1.3005E+004
Nb-94	702.63	100.00	6.0465E+004	5.66E+004	3.8143E+004
	871.10	100.00	5.6556E+004		9.7939E+003
Ag-108m	79.20	7.10	2.2835E+006	7.29E+004	-4.8723E+006
	433.93	89.90	7.2917E+004		1.1600E+004
	614.37	90.40	9.9881E+004		1.9892E+004
	722.95	90.50	7.9224E+004		4.0628E+004
Sb-125	176.33	6.89	1.8047E+006	3.34E+005	-1.4906E+006
	427.89	29.33	3.3440E+005		3.6353E+005
	463.38	10.35	1.0112E+006		8.6432E+005
	600.56	17.80	5.2169E+005		-7.4513E+004
	606.64	5.02	2.7401E+006		5.3412E+006
	635.90	11.32	8.2643E+005		-1.3386E+004
Cs-134	563.23	8.38	1.3418E+006	1.29E+005	-4.0468E+005
	569.32	15.43	7.2946E+005		7.3733E+005
	604.70	97.60	1.6196E+005		-5.0473E+004
	795.84	85.40	1.2878E+005		1.6073E+004
	801.93	8.73	1.2132E+006		-6.4097E+005
Cs-137	661.65	85.12	8.0229E+004	8.02E+004	-3.2384E+004
Eu-152	121.78	28.40	3.8857E+005	2.73E+005	-1.8834E+005
	244.69	7.49	1.1529E+006		-6.1947E+005
	344.27	26.50	2.8478E+005		2.8237E+005
	778.89	12.74	4.9138E+005		-2.2025E+005
	867.32	4.16	1.4288E+006		-7.2694E+005
	964.01	14.40	5.9477E+005		7.7266E+005
	1085.78	10.00	6.4280E+005		-5.9853E+005
	1112.02	13.30	4.7421E+005		-5.0227E+005
	1407.95	20.70	2.7338E+005		8.2532E+004
Eu-154	123.07	40.50	2.8433E+005	1.98E+005	4.6096E+004
	247.94	6.60	1.2866E+006		-1.1296E+006
	591.81	4.83	1.4677E+006		3.2329E+005
	723.30	19.70	4.1244E+005		1.1600E+005
	756.87	4.33	1.7000E+006		3.9529E+005
	873.19	11.50	5.6073E+005		2.8308E+005
	996.32	10.30	6.7302E+005		3.6543E+005
	1004.76	17.90	3.3984E+005		-1.2564E+005
	1274.45	35.50	1.9849E+005		7.3014E+004
Eu-155	86.54	30.90	5.9377E+005	5.94E+005	1.9101E+005
	105.31	20.70	6.9606E+005		2.4453E+005
Am-241	59.54	35.90	4.9306E+005	4.93E+005	-1.2006E+005
Cm-243	228.19	10.56	7.5375E+005	5.50E+005	3.0146E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.4997E+005	5.50E+005	2.9574E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 11:41:30 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-12-106-F-G.CNF
Sample ID: QC102205 AM
Sample Title: TBN-01-12-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 8:19:22 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-12-106-F-G.CNF
Log Number: QC102205 AM
Title: TBN-01-12-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	304	291.78	72.90	0.87	1.15E+002	38.44	4.70E+002
m	2	286-	304	299.98	74.95	0.87	2.68E+002	49.60	5.17E+002
F	3	332-	343	339.01	84.71	0.50	6.99E+001	32.62	4.76E+002
F	4	945-	964	954.42	238.58	0.90	1.46E+002	30.87	2.34E+002
F	5	1172-	1189	1180.31	295.05	1.73	7.17E+001	21.32	9.45E+001
F	6	1347-	1361	1352.67	338.15	1.29	5.21E+001	20.28	7.81E+001
F	7	1399-	1413	1406.67	351.65	1.19	9.24E+001	23.03	6.77E+001
F	8	2324-	2339	2331.08	582.77	1.27	9.20E+001	21.30	3.60E+001
F	9	2427-	2441	2435.16	608.79	1.28	1.11E+002	23.12	2.95E+001
F	10	2638-	2651	2643.99	661.00	0.76	2.69E+001	14.29	4.39E+001
F	11	3432-	3444	3438.81	859.73	1.13	1.85E+001	12.81	2.58E+001
F	12	3635-	3652	3643.45	910.89	1.57	7.30E+001	18.86	2.62E+001
F	13	3867-	3880	3873.53	968.41	1.67	3.81E+001	14.85	1.54E+001
F	14	4471-	4484	4477.10	1119.32	0.83	2.45E+001	12.66	2.63E+001
F	15	5829-	5855	5841.27	1460.39	1.95	4.33E+002	40.36	6.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-12-106-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/GM)	Activity Uncertainty
K-40	0.995	1460.81*		10.67	6.57801E+006	7.31642E+005
Cs-137	0.988	661.65*		85.12	3.96898E+004	2.13207E+004
TL-208	0.613	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.25528E+005	3.11136E+004
		860.37*		12.46	1.99110E+005	1.38415E+005
Pb-212	0.497	74.81*	@	10.70	2.31142E+006	5.59556E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.64704E+005	6.69546E+004
Bi-214	0.704	609.31*		46.30	2.80631E+005	6.27991E+004
		1120.29*		15.10	2.39669E+005	1.25499E+005
		1764.49		15.80		
PB-214	0.563	74.82*	@	6.21	3.98550E+006	1.00727E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.25336E+005	1.06928E+005
		351.92*		37.20	2.32203E+005	6.43448E+004
Ac-228	0.995	338.32*		11.40	4.19985E+005	1.70046E+005
		911.07*		27.70	3.60808E+005	9.57994E+004
		969.11*		16.60	3.21806E+005	1.26650E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-12-106-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/GM)	Wt mean Activity Uncertainty
K-40		0.995	6.578009E+006	7.316416E+005
Cs-137		0.988	3.968978E+004	2.132071E+004
TL-208		0.613	1.290674E+005	3.035610E+004
Pb-212	@	0.497	2.647044E+005	6.695465E+004
Bi-214		0.704	2.724286E+005	5.616037E+004
PB-214	@	0.563	2.569621E+005	5.513240E+004
Ac-228		0.995	3.589383E+005	6.969218E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.2741E-001	33.52
F 3	84.71	7.7720E-002	46.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-12-106-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/GM)	Nuclide MDA (dpm/GM)	Activity (dpm/GM)
	Co-60	1173.22	100.00	8.5653E+004	7.02E+004	3.5947E+003
		1332.49	100.00	7.0204E+004		4.2857E+004
	Nb-94	702.63	100.00	5.7694E+004	5.77E+004	1.9437E+004
		871.10	100.00	6.2050E+004		8.3656E+004
	Ag-108m	79.20	7.10	2.1687E+006	7.16E+004	-4.4442E+006
		433.93	89.90	7.1573E+004		-3.2585E+003
		614.37	90.40	9.1017E+004		-6.8100E+004
		722.95	90.50	7.2516E+004		2.4280E+004
	Sb-125	176.33	6.89	1.7336E+006	3.22E+005	-1.6084E+006
		427.89	29.33	3.2239E+005		1.2452E+005
		463.38	10.35	9.8794E+005		2.0838E+005
		600.56	17.80	4.9132E+005		-4.5194E+005
		606.64	5.02	2.5844E+006		4.3895E+006
		635.90	11.32	7.6446E+005		-1.6561E+005
	Cs-134	563.23	8.38	1.2510E+006	1.25E+005	3.7153E+005
		569.32	15.43	6.6556E+005		-2.4911E+005
		604.70	97.60	1.4917E+005		2.5080E+004
		795.84	85.40	1.2506E+005		-2.0720E+004
		801.93	8.73	1.1750E+006		-1.6286E+005
+	Cs-137	661.65*	85.12	5.7486E+004	5.75E+004	3.9690E+004
	Eu-152	121.78	28.40	3.9389E+005	2.67E+005	-1.1110E+005
		244.69	7.49	1.1748E+006		-3.2995E+005
		344.27	26.50	2.7966E+005		3.9985E+004
		778.89	12.74	5.2375E+005		-5.2017E+005
		867.32	4.16	1.4728E+006		-1.9835E+006
		964.01	14.40	5.5341E+005		7.6162E+005
		1085.78	10.00	6.3468E+005		3.6162E+005
		1112.02	13.30	5.1517E+005		-3.6516E+005
		1407.95	20.70	2.6737E+005		8.7361E+004
	Eu-154	123.07	40.50	2.8935E+005	1.97E+005	4.0694E+004
		247.94	6.60	1.2973E+006		-5.2269E+005
		591.81	4.83	1.4576E+006		7.1032E+005
		723.30	19.70	3.7938E+005		2.3328E+005
		756.87	4.33	1.6436E+006		1.6720E+005
		873.19	11.50	6.1523E+005		5.5602E+004
		996.32	10.30	6.6478E+005		4.0504E+005
		1004.76	17.90	3.5286E+005		-1.4959E+005
		1274.45	35.50	1.9681E+005		1.3417E+005
	Eu-155	86.54	30.90	5.6572E+005	5.66E+005	3.6275E+005
		105.31	20.70	6.8971E+005		3.9913E+005
	Am-241	59.54	35.90	4.7966E+005	4.80E+005	-3.5617E+005
	Cm-243	228.19	10.56	7.1202E+005	5.25E+005	-1.0194E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/GM)	Nuclide MDA (dpm/GM)	Activity (dpm/GM)
Cm-243	277.60	14.00	5.2466E+005	5.25E+005	1.9310E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 12:59:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-12-107-F-G.CNF
Sample ID:
Sample Title: TBN-01-12-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 3:25:04 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-12-107-F-G.CNF
Log Number:
Title: TBN-01-12-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	291.88	72.93	0.80	1.37E+002	38.41	4.01E+002
m	2	287-	305	300.42	75.06	0.80	2.39E+002	47.01	4.96E+002
F	3	947-	962	954.50	238.60	1.00	1.31E+002	30.70	1.99E+002
F	4	1177-	1192	1181.85	295.44	1.17	6.23E+001	20.60	7.07E+001
F	5	1349-	1359	1353.37	338.32	0.76	3.30E+001	17.96	6.91E+001
F	6	1401-	1415	1408.03	351.99	1.29	7.85E+001	22.78	8.42E+001
F	7	2031-	2054	2043.31	510.82	2.26	1.27E+002	22.07	4.48E+001
F	8	2325-	2342	2333.18	583.30	1.39	1.02E+002	21.67	3.40E+001
F	9	2429-	2445	2437.36	609.34	1.48	9.48E+001	21.72	4.21E+001
F	10	2643-	2654	2648.10	662.03	1.16	2.46E+001	13.74	2.40E+001
F	11	3069-	3081	3074.67	768.68	0.85	1.58E+001	11.31	2.46E+001
F	12	3637-	3653	3645.07	911.29	1.63	7.32E+001	17.92	1.28E+001
F	13	3872-	3884	3877.06	969.30	1.35	2.98E+001	14.19	2.12E+001
F	14	4477-	4490	4483.35	1120.88	0.68	2.06E+001	10.96	1.93E+001
F	15	5834-	5858	5846.46	1461.69	1.83	4.00E+002	39.11	6.25E+000
F	16	7059-	7073	7065.76	1766.54	1.95	3.05E+001	12.60	8.08E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-12-107-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.38402E+005	2.66439E+004
K-40	0.977	1460.81*		10.67	6.07694E+006	6.99523E+005
Cs-137	0.996	661.65*		85.12	3.49583E+004	1.97269E+004
TL-208	0.752	277.35		6.80		
		510.84*		21.60	6.40752E+005	1.33992E+005
		583.14*		84.20	1.39607E+005	3.20528E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.05675E+006	5.16740E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.36632E+005	6.46097E+004
Bi-214	0.973	609.31*		46.30	2.39486E+005	5.82922E+004
		1120.29*		15.10	2.01427E+005	1.08584E+005
		1764.49*		15.80	3.32949E+005	1.40850E+005
PB-214	0.563	74.82*	@	6.21	3.54384E+006	9.26778E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.82727E+005	1.01507E+005
		351.92*		37.20	1.97094E+005	6.20024E+004
Ac-228	0.999	338.32*		11.40	2.66155E+005	1.47824E+005
		911.07*		27.70	3.61707E+005	9.13040E+004
		969.11*		16.60	2.51618E+005	1.20643E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-12-107-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	1.082473E+005	2.751114E+004
K-40		0.977	6.076943E+006	6.995234E+005
Cs-137		0.996	3.495827E+004	1.972688E+004
TL-208		0.752	1.396066E+005	3.172830E+004
Pb-212	@	0.497	2.366322E+005	6.460966E+004
Bi-214		0.973	2.429390E+005	4.825159E+004
PB-214	@	0.563	2.203622E+005	5.291244E+004
Ac-228		0.999	3.107883E+005	6.531279E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.5252E-001	27.98
F 11	768.68	1.7587E-002	71.46

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-12-107-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.6979E+004	4.56E+004	-7.0989E+004
		1332.49	100.00	4.5611E+004		-5.7700E+003
	Nb-94	702.63	100.00	5.8298E+004	5.83E+004	-6.1900E+002
		871.10	100.00	6.2046E+004		-1.9804E+004
	Ag-108m	79.20	7.10	2.1271E+006	6.89E+004	-1.7983E+006
		433.93	89.90	6.8853E+004		3.0844E+004
		614.37	90.40	9.0198E+004		-4.3748E+004
		722.95	90.50	7.5708E+004		1.1435E+004
	Sb-125	176.33	6.89	1.1421E+006	2.03E+005	-8.8308E+005
		427.89	29.33	2.0330E+005		2.9674E+004
		463.38	10.35	6.3302E+005		8.8621E+004
		600.56	17.80	3.4643E+005		3.4960E+005
		606.64	5.02	1.6348E+006		1.7336E+006
		635.90	11.32	5.4600E+005		1.9750E+005
	Cs-134	563.23	8.38	7.1405E+005	7.35E+004	5.5475E+004
		569.32	15.43	4.0202E+005		1.7059E+005
		604.70	97.60	8.2040E+004		2.7939E+004
		795.84	85.40	7.3504E+004		-1.9766E+004
		801.93	8.73	7.1764E+005		-8.6709E+005
+	Cs-137	661.65*	85.12	4.0234E+004	4.02E+004	3.4958E+004
	Eu-152	121.78	28.40	3.5515E+005	2.43E+005	-1.8670E+005
		244.69	7.49	9.8420E+005		-6.7908E+004
		344.27	26.50	2.4330E+005		-6.0947E+004
		778.89	12.74	4.8622E+005		1.2344E+005
		867.32	4.16	1.4890E+006		-2.5913E+006
		964.01	14.40	5.2933E+005		-3.8611E+005
		1085.78	10.00	5.8331E+005		1.3844E+005
		1112.02	13.30	4.0531E+005		-3.2687E+005
		1407.95	20.70	2.4283E+005		-9.3651E+003
	Eu-154	123.07	40.50	2.4615E+005	1.64E+005	1.9318E+005
		247.94	6.60	1.0095E+006		-2.0364E+006
		591.81	4.83	1.2431E+006		1.1335E+006
		723.30	19.70	3.4388E+005		-1.1584E+005
		756.87	4.33	1.4077E+006		1.0559E+006
		873.19	11.50	5.1912E+005		-1.7422E+004
		996.32	10.30	5.7594E+005		-1.0607E+005
		1004.76	17.90	3.2129E+005		-1.4422E+005
		1274.45	35.50	1.6354E+005		-2.5293E+003
	Eu-155	86.54	30.90	4.5006E+005	4.50E+005	4.3467E+005
		105.31	20.70	5.3517E+005		2.6310E+005
	Am-241	59.54	35.90	4.8662E+005	4.87E+005	1.4519E+005
	Cm-243	228.19	10.56	6.7273E+005	4.81E+005	-8.3034E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8126E+005	4.81E+005	-2.2331E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 3:19:06 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 3:04:05 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	314	291.99	72.96	0.96	1.56E+002	39.24	4.00E+002
m	2	287-	314	300.58	75.10	0.97	3.56E+002	48.70	4.84E+002
m	3	287-	314	308.67	77.13	0.97	9.21E+001	34.70	4.58E+002
F	4	337-	345	340.22	85.01	0.73	9.84E+001	37.85	3.39E+002
F	5	364-	373	369.48	92.33	0.84	6.17E+001	34.99	3.24E+002
F	6	948-	961	954.83	238.68	1.00	1.47E+002	31.15	1.62E+002
F	7	1176-	1191	1181.34	295.31	0.76	3.99E+001	19.24	1.07E+002
F	8	1402-	1415	1407.99	351.98	1.07	8.81E+001	23.51	7.81E+001
F	9	2033-	2052	2043.19	510.79	2.16	1.06E+002	22.38	6.51E+001
F	10	2326-	2341	2333.65	583.41	1.35	7.47E+001	20.41	4.66E+001
F	11	2430-	2448	2437.87	609.47	1.42	1.10E+002	22.80	4.40E+001
F	12	3636-	3654	3645.47	911.39	1.41	7.34E+001	18.74	2.38E+001
F	13	3868-	3885	3876.76	969.22	1.88	4.87E+001	15.16	1.35E+001
F	14	4477-	4490	4483.32	1120.88	1.46	3.49E+001	13.37	1.00E+001
F	15	5834-	5860	5846.90	1461.80	2.13	4.17E+002	39.53	1.35E+001
F	16	7057-	7071	7063.83	1766.06	1.50	2.55E+001	11.96	9.49E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.15061E+005	2.92373E+004
K-40	0.971	1460.81*	10.67	6.33785E+006	7.89717E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	5.32688E+005	1.42177E+005
		583.14*	84.20	1.02159E+005	3.10271E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.20469E+006	7.65781E+005
		77.11* @	18.00	4.79151E+005	2.03498E+005
		87.30 @	8.00		
		238.63*	44.60	2.72877E+005	7.19310E+004
Bi-214	0.983	609.31*	46.30	2.78760E+005	6.74185E+004
		1120.29*	15.10	3.41368E+005	1.35818E+005
		1764.49*	15.80	2.78643E+005	1.33365E+005
PB-214	0.760	74.82* @	6.21	5.52177E+006	1.37900E+006
		77.11* @	10.50	8.21402E+005	3.54203E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.85018E+005	9.44317E+004
		351.92*	37.20	2.23604E+005	7.04010E+004
Ac-228	0.618	338.32	11.40		
		911.07*	27.70	3.58818E+005	1.00469E+005
		969.11*	16.60	4.07731E+005	1.33884E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	9.299438E+004	2.998700E+004
K-40		0.971	6.337845E+006	7.897171E+005
TL-208		0.751	1.021586E+005	3.084792E+004
Pb-212	@	0.838	2.728767E+005	7.193097E+004
Bi-214		0.983	2.890115E+005	5.501124E+004
PB-214	@	0.760	2.098191E+005	5.644185E+004
Ac-228		0.618	3.764391E+005	8.035882E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	1.7367E-001	25.10
F 4	85.01	1.0935E-001	38.46
F 5	92.33	6.8556E-002	56.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2753E+004	4.93E+004	-8.9337E+004
	1332.49	100.00	4.9336E+004		-4.5128E+004
Nb-94	702.63	100.00	5.4628E+004	5.24E+004	-3.8333E+004
	871.10	100.00	5.2401E+004		-2.5242E+004
Ag-108m	79.20	7.10	2.1748E+006	7.15E+004	-8.2339E+005
	433.93	89.90	7.1457E+004		-4.3552E+004
	614.37	90.40	8.9462E+004		-8.1370E+003
	722.95	90.50	7.6831E+004		4.4298E+004
Sb-125	176.33	6.89	1.0953E+006	2.10E+005	-3.3144E+005
	427.89	29.33	2.1034E+005		-5.0237E+003
	463.38	10.35	6.3816E+005		2.8965E+005
	600.56	17.80	3.5725E+005		-6.7974E+004
	606.64	5.02	1.6514E+006		1.9521E+006
	635.90	11.32	5.1727E+005		-4.9791E+005
Cs-134	563.23	8.38	7.0368E+005	7.62E+004	-3.1157E+005
	569.32	15.43	4.0904E+005		1.5657E+005
	604.70	97.60	8.4634E+004		-3.8055E+004
	795.84	85.40	7.6247E+004		2.3061E+003
	801.93	8.73	6.8056E+005		-4.2023E+005
Cs-137	661.65	85.12	8.3298E+004	8.33E+004	1.9309E+004
Eu-152	121.78	28.40	3.5427E+005	2.39E+005	-8.8786E+004
	244.69	7.49	1.0344E+006		-2.4689E+005
	344.27	26.50	2.3868E+005		-4.9849E+005
	778.89	12.74	4.7918E+005		-4.6975E+005
	867.32	4.16	1.4003E+006		-2.6110E+005
	964.01	14.40	5.2898E+005		2.2320E+005
	1085.78	10.00	6.0316E+005		2.0419E+005
	1112.02	13.30	4.3908E+005		-2.1602E+005
	1407.95	20.70	2.4843E+005		1.9135E+005
Eu-154	123.07	40.50	2.4640E+005	1.43E+005	-7.1926E+004
	247.94	6.60	1.1001E+006		-8.2347E+005
	591.81	4.83	1.3576E+006		2.7403E+005
	723.30	19.70	3.5040E+005		2.2001E+005
	756.87	4.33	1.4519E+006		-2.6250E+005
	873.19	11.50	4.6618E+005		2.4123E+005
	996.32	10.30	5.9071E+005		4.1631E+004
	1004.76	17.90	3.3901E+005		6.8985E+004
	1274.45	35.50	1.4337E+005		-2.6974E+005
Eu-155	86.54	30.90	4.3940E+005	4.39E+005	5.9021E+005
	105.31	20.70	5.2904E+005		-1.1912E+005
Am-241	59.54	35.90	4.8230E+005	4.82E+005	1.0922E+005
Cm-243	228.19	10.56	7.0633E+005	4.92E+005	-8.2392E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9171E+005	4.92E+005	-4.4960E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/21/2005 2:58:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 2:43:26 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.74	72.89	0.98	1.59E+002	39.50	5.10E+002
m	2	282-	306	300.48	75.08	0.98	3.60E+002	52.07	5.98E+002
F	3	330-	344	339.80	84.91	0.97	1.24E+002	40.01	5.34E+002
F	4	948-	961	954.54	238.61	1.26	1.83E+002	31.03	1.13E+002
F	5	1402-	1417	1408.71	352.16	1.22	9.91E+001	23.85	8.11E+001
F	6	2035-	2056	2044.23	511.05	2.08	1.14E+002	22.89	6.64E+001
F	7	2324-	2341	2332.85	583.21	1.57	9.24E+001	20.58	3.35E+001
F	8	2429-	2447	2438.05	609.52	1.42	1.13E+002	22.05	2.82E+001
F	9	2904-	2916	2910.24	727.57	0.68	1.92E+001	10.85	2.03E+001
F	10	3636-	3655	3645.77	911.47	1.79	7.07E+001	18.05	2.27E+001
F	11	3870-	3884	3875.97	969.02	1.14	4.36E+001	15.21	1.80E+001
F	12	4476-	4491	4483.61	1120.95	1.42	4.87E+001	15.31	1.12E+001
F	13	5834-	5858	5846.48	1461.69	1.90	3.69E+002	37.66	9.40E+000
F	14	7057-	7070	7063.94	1766.08	1.25	2.84E+001	11.47	5.08E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.24153E+005	3.04152E+004
K-40	0.977	1460.81*		10.67	5.60970E+006	7.30186E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.74784E+005	1.48429E+005
		583.14*		84.20	1.26414E+005	3.27501E+004
		860.37		12.46		
Bi-212	0.995	727.17*		11.80	2.04011E+005	1.17807E+005
Pb-212	0.497	74.81*	@	10.70	3.23497E+006	7.88369E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.40008E+005	7.84753E+004
Bi-214	0.981	609.31*		46.30	2.85264E+005	6.62187E+004
		1120.29*		15.10	4.76780E+005	1.58248E+005
		1764.49*		15.80	3.09378E+005	1.28898E+005
Ac-228	0.617	338.32		11.40		
		911.07*		27.70	3.45378E+005	9.67741E+004
		969.11*		16.60	3.65055E+005	1.32946E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	9.684786E+004	3.121431E+004
K-40		0.977	5.609696E+006	7.301857E+005
TL-208		0.753	1.264144E+005	3.248998E+004
Bi-212		0.995	2.040108E+005	1.178068E+005
Pb-212	@	0.497	3.400078E+005	7.847535E+004
Bi-214		0.981	3.129900E+005	5.520112E+004
Ac-228		0.617	3.521934E+005	7.824053E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	1.7671E-001	24.84
F 3	84.91	1.3762E-001	32.30
F 5	352.16	1.1007E-001	24.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8851E+004	4.93E+004	-3.6928E+004
	1332.49	100.00	4.9336E+004		1.7125E+004
Nb-94	702.63	100.00	6.0752E+004	5.73E+004	4.7189E+004
	871.10	100.00	5.7273E+004		5.0711E+004
Ag-108m	79.20	7.10	2.2589E+006	6.81E+004	-6.0379E+005
	433.93	89.90	6.9818E+004		2.2835E+004
	614.37	90.40	8.8386E+004		1.6058E+004
	722.95	90.50	6.8093E+004		-3.2034E+004
Sb-125	176.33	6.89	1.1625E+006	1.91E+005	-2.5813E+005
	427.89	29.33	1.9083E+005		9.6301E+002
	463.38	10.35	6.2537E+005		-7.1782E+004
	600.56	17.80	3.6537E+005		3.8416E+005
	606.64	5.02	1.6953E+006		3.1659E+006
	635.90	11.32	5.1727E+005		6.1340E+004
Cs-134	563.23	8.38	6.9770E+005	7.27E+004	-5.5583E+005
	569.32	15.43	3.8875E+005		-6.4667E+004
	604.70	97.60	8.6895E+004		3.2426E+004
	795.84	85.40	7.2725E+004		1.0434E+004
	801.93	8.73	7.0252E+005		-7.1612E+005
Cs-137	661.65	85.12	7.6021E+004	7.60E+004	1.8517E+004
Eu-152	121.78	28.40	3.5386E+005	2.01E+005	3.5885E+005
	244.69	7.49	1.0004E+006		-1.2241E+006
	344.27	26.50	2.3026E+005		-3.9149E+005
	778.89	12.74	4.6935E+005		-4.5372E+005
	867.32	4.16	1.4417E+006		-4.5838E+005
	964.01	14.40	5.0233E+005		-4.2361E+005
	1085.78	10.00	6.5770E+005		-3.0510E+005
	1112.02	13.30	4.2588E+005		-3.3755E+005
	1407.95	20.70	2.0078E+005		-9.5172E+004
Eu-154	123.07	40.50	2.4481E+005	1.61E+005	-1.1088E+005
	247.94	6.60	1.1034E+006		-7.3039E+005
	591.81	4.83	1.2308E+006		2.0686E+005
	723.30	19.70	3.0989E+005		-3.9684E+004
	756.87	4.33	1.3750E+006		-9.3528E+005
	873.19	11.50	4.5258E+005		-3.2745E+005
	996.32	10.30	5.5299E+005		-4.1050E+005
	1004.76	17.90	3.2604E+005		-3.5221E+004
	1274.45	35.50	1.6099E+005		4.9086E+004
Eu-155	86.54	30.90	4.4570E+005	4.46E+005	-1.2025E+005
	105.31	20.70	5.4453E+005		-7.0364E+004
Am-241	59.54	35.90	4.9460E+005	4.95E+005	-1.1320E+005
Cm-243	228.19	10.56	6.7846E+005	4.78E+005	-3.4664E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7828E+005	4.78E+005	-3.7887E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 8:56:33 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 8:41:32 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.55	72.85	1.05	1.80E+002	40.62	4.61E+002
m	2	285-	309	300.20	75.01	1.06	3.63E+002	49.74	5.42E+002
F	3	946-	959	953.82	238.43	1.05	1.35E+002	31.30	1.79E+002
F	4	1400-	1413	1407.66	351.90	1.09	7.02E+001	21.85	7.70E+001
F	5	2028-	2049	2040.29	510.07	2.05	8.16E+001	21.39	8.14E+001
F	6	2323-	2339	2330.61	582.65	1.43	9.41E+001	21.68	4.30E+001
F	7	2427-	2445	2435.99	609.00	1.38	1.19E+002	23.69	4.60E+001
F	8	3635-	3650	3642.86	910.74	1.47	6.09E+001	17.29	1.98E+001
F	9	3869-	3880	3874.50	968.66	1.46	3.83E+001	15.20	1.76E+001
F	10	4471-	4484	4476.88	1119.27	0.71	1.70E+001	11.30	2.82E+001
F	11	5828-	5854	5841.35	1460.41	2.03	4.13E+002	39.52	1.01E+001
F	12	7051-	7064	7057.10	1764.37	1.82	3.11E+001	13.59	1.43E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.974	511.00*	100.00	8.87821E+004	2.64135E+004
K-40	0.995	1460.81*	10.67	6.26522E+006	7.85596E+005
TL-208	0.745	277.35	6.80		
		510.84*	21.60	4.11028E+005	1.26808E+005
		583.14*	84.20	1.28679E+005	3.41962E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	3.26600E+006	7.81363E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.51270E+005	7.01826E+004
Bi-214	0.992	609.31*	46.30	3.02177E+005	7.08969E+004
		1120.29*	15.10	1.66413E+005	1.12033E+005
		1764.49*	15.80	3.39810E+005	1.52090E+005
Ac-228	0.616	338.32	11.40		
		911.07*	27.70	2.97701E+005	9.11685E+004
		969.11*	16.60	3.20456E+005	1.31581E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.974	6.098744E+004	2.741183E+004
K-40		0.995	6.265221E+006	7.855958E+005
TL-208		0.745	1.286791E+005	3.393810E+004
Pb-212	@	0.497	2.512701E+005	7.018261E+004
Bi-214		0.992	2.736243E+005	5.574039E+004
Ac-228		0.616	3.050818E+005	7.493832E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.85	2.0024E-001	22.54
F 4	351.90	7.8039E-002	31.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	8.6865E+004	7.09E+004	1.6152E+004
	1332.49	100.00	7.0857E+004		-3.4049E+004
Nb-94	702.63	100.00	6.2187E+004	5.47E+004	2.9871E+004
	871.10	100.00	5.4710E+004		-3.5856E+004
Ag-108m	79.20	7.10	2.2262E+006	7.09E+004	-1.9697E+006
	433.93	89.90	7.0869E+004		3.1433E+004
	614.37	90.40	9.2194E+004		9.2102E+003
	722.95	90.50	7.1571E+004		-3.5937E+004
Sb-125	176.33	6.89	1.7594E+006	3.04E+005	5.2963E+005
	427.89	29.33	3.0447E+005		2.0775E+005
	463.38	10.35	9.0941E+005		1.2956E+005
	600.56	17.80	5.4068E+005		2.9993E+005
	606.64	5.02	2.6359E+006		2.5899E+006
	635.90	11.32	7.6778E+005		-7.0593E+004
Cs-134	563.23	8.38	1.2330E+006	1.20E+005	1.3889E+005
	569.32	15.43	6.8667E+005		-2.1469E+005
	604.70	97.60	1.5921E+005		8.2787E+004
	795.84	85.40	1.2042E+005		1.2052E+005
	801.93	8.73	1.1136E+006		-1.3320E+006
Cs-137	661.65	85.12	8.0541E+004	8.05E+004	7.7893E+004
Eu-152	121.78	28.40	3.7874E+005	2.44E+005	-6.0386E+004
	244.69	7.49	1.1400E+006		-1.4305E+006
	344.27	26.50	2.8941E+005		-1.2583E+005
	778.89	12.74	5.1069E+005		-7.7947E+005
	867.32	4.16	1.4958E+006		-3.4016E+006
	964.01	14.40	5.6901E+005		4.5577E+005
	1085.78	10.00	5.9549E+005		-9.4380E+005
	1112.02	13.30	5.5270E+005		3.7366E+005
	1407.95	20.70	2.4417E+005		1.4090E+005
Eu-154	123.07	40.50	2.7642E+005	1.93E+005	-1.1463E+005
	247.94	6.60	1.2884E+006		-1.8996E+005
	591.81	4.83	1.4383E+006		4.4791E+005
	723.30	19.70	3.7610E+005		9.7903E+004
	756.87	4.33	1.5250E+006		-6.4307E+005
	873.19	11.50	5.3493E+005		-1.3136E+005
	996.32	10.30	6.6466E+005		4.8303E+005
	1004.76	17.90	3.7894E+005		-1.0823E+004
	1274.45	35.50	1.9261E+005		1.5659E+005
Eu-155	86.54	30.90	5.7205E+005	5.72E+005	9.7670E+005
	105.31	20.70	6.8423E+005		4.4821E+005
Am-241	59.54	35.90	4.9876E+005	4.99E+005	1.6366E+005
Cm-243	228.19	10.56	7.4025E+005	5.22E+005	3.3549E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2192E+005	5.22E+005	1.2865E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 8:47:18 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-12-111-F-G.CNF
Sample ID:
Sample Title: TBN-01-12-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/21/2005 3:44:32 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-12-111-F-G.CNF
Log Number:
Title: TBN-01-12-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.87	72.93	0.90	1.50E+002	38.89	4.81E+002
m	2	282-	306	300.48	75.08	0.90	2.68E+002	48.01	5.14E+002
F	3	334-	345	339.30	84.78	0.93	1.23E+002	41.31	4.73E+002
F	4	948-	962	954.93	238.71	0.97	1.33E+002	30.11	1.73E+002
F	5	1177-	1186	1181.54	295.36	0.79	2.82E+001	17.83	6.62E+001
F	6	1400-	1414	1407.77	351.92	1.21	9.96E+001	23.46	6.76E+001
F	7	2035-	2051	2043.19	510.79	1.30	6.31E+001	20.81	7.43E+001
F	8	2327-	2340	2332.94	583.23	1.24	6.87E+001	19.62	3.61E+001
F	9	2429-	2447	2437.79	609.45	1.29	1.16E+002	22.67	3.28E+001
F	10	2639-	2654	2647.11	661.78	1.43	5.19E+001	16.98	2.80E+001
F	11	3638-	3654	3645.49	911.40	1.22	6.42E+001	17.44	1.89E+001
F	12	3871-	3884	3877.32	969.36	0.96	4.13E+001	15.29	2.45E+001
F	13	5832-	5859	5846.82	1461.78	2.11	4.38E+002	40.40	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-12-111-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	6.87325E+004	2.33600E+004
K-40	0.973	1460.81*	10.67	6.65136E+006	7.34809E+005
Cs-137	0.999	661.65*	85.12	7.37147E+004	2.48436E+004
TL-208	0.753	277.35	6.80		
		510.84*	21.60	3.18206E+005	1.11226E+005
		583.14*	84.20	9.38004E+004	2.80344E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.30522E+006	5.48265E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.39897E+005	6.39413E+004
Bi-214	0.418	609.31*	46.30	2.93121E+005	6.21213E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.563	74.82* @	6.21	3.97195E+006	9.87699E+005
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.28057E+005	8.28722E+004
		351.92*	37.20	2.50014E+005	6.62520E+004
Ac-228	0.614	338.32	11.40		
		911.07*	27.70	3.17253E+005	8.83663E+004
		969.11*	16.60	3.48854E+005	1.30622E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-12-111-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	4.847157E+004	2.412304E+004
K-40		0.973	6.651363E+006	7.348086E+005
Cs-137		0.999	7.371469E+004	2.484363E+004
TL-208		0.753	9.380035E+004	2.786721E+004
Pb-212	@	0.497	2.398971E+005	6.394127E+004
Bi-214		0.418	2.931206E+005	6.212129E+004
PB-214	@	0.563	2.024608E+005	5.174806E+004
Ac-228		0.614	3.271748E+005	7.319113E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.6665E-001	25.93
F 3	84.78	1.3620E-001	33.70

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-12-111-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.7750E+004	5.38E+004	-3.3849E+003
		1332.49	100.00	5.3840E+004		-1.6107E+004
	Nb-94	702.63	100.00	6.3763E+004	6.14E+004	4.5187E+004
		871.10	100.00	6.1371E+004		5.6610E+004
	Ag-108m	79.20	7.10	2.0993E+006	6.74E+004	-2.0477E+006
		433.93	89.90	6.7360E+004		-4.1967E+004
		614.37	90.40	9.0198E+004		-3.4286E+004
		722.95	90.50	7.7415E+004		3.1536E+004
	Sb-125	176.33	6.89	1.1077E+006	1.97E+005	-1.7227E+005
		427.89	29.33	1.9654E+005		-2.1867E+004
		463.38	10.35	6.4208E+005		4.4536E+004
		600.56	17.80	3.2463E+005		1.6800E+005
		606.64	5.02	1.6422E+006		3.3141E+006
		635.90	11.32	5.0761E+005		3.3047E+005
	Cs-134	563.23	8.38	7.3702E+005	7.09E+004	2.3817E+005
		569.32	15.43	3.7817E+005		-2.6510E+005
		604.70	97.60	8.3400E+004		-2.0596E+004
		795.84	85.40	7.0926E+004		-1.9786E+004
		801.93	8.73	7.4558E+005		-5.1539E+005
+	Cs-137	661.65*	85.12	4.6843E+004	4.68E+004	7.3715E+004
	Eu-152	121.78	28.40	3.4939E+005	2.47E+005	4.2731E+004
		244.69	7.49	9.9219E+005		-6.6382E+005
		344.27	26.50	2.4667E+005		-1.5700E+005
		778.89	12.74	5.0282E+005		-1.1809E+005
		867.32	4.16	1.4728E+006		-1.0962E+005
		964.01	14.40	5.4334E+005		-1.2622E+005
		1085.78	10.00	6.0415E+005		2.9784E+005
		1112.02	13.30	4.7646E+005		5.9280E+004
		1407.95	20.70	2.4859E+005		1.2973E+005
	Eu-154	123.07	40.50	2.4456E+005	1.65E+005	3.5601E+004
		247.94	6.60	1.0752E+006		-3.3973E+005
		591.81	4.83	1.2378E+006		1.8956E+005
		723.30	19.70	3.5829E+005		4.0782E+005
		756.87	4.33	1.3935E+006		8.0962E+004
		873.19	11.50	5.0364E+005		-6.1491E+005
		996.32	10.30	6.0188E+005		-4.2636E+004
		1004.76	17.90	3.4949E+005		3.2205E+004
		1274.45	35.50	1.6489E+005		0.0000E+000
	Eu-155	86.54	30.90	4.5557E+005	4.56E+005	7.9345E+005
		105.31	20.70	5.2863E+005		2.3241E+005
	Am-241	59.54	35.90	4.9056E+005	4.91E+005	2.2898E+005
	Cm-243	228.19	10.56	7.0573E+005	4.71E+005	1.2815E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7082E+005	4.71E+005	-3.7447E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 9:41:35 AM

Y A N K E E - R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 9:26:34 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	314	291.49	72.83	1.03	2.01E+002	42.29	5.30E+002
m	2	284-	314	300.31	75.03	1.03	3.62E+002	49.53	5.58E+002
m	3	284-	314	308.82	77.16	1.04	8.79E+001	36.66	5.12E+002
F	4	333-	345	339.15	84.75	0.96	8.12E+001	41.29	5.73E+002
M	5	949-	971	953.98	238.47	0.96	1.15E+002	28.33	1.18E+002
m	6	949-	971	965.94	241.46	0.96	3.38E+001	19.55	1.21E+002
F	7	1402-	1414	1406.85	351.69	1.01	9.66E+001	24.24	7.28E+001
F	8	2323-	2340	2331.44	582.86	1.35	9.29E+001	21.50	4.46E+001
F	9	2427-	2444	2435.59	608.90	1.41	1.27E+002	23.86	3.88E+001
F	10	2902-	2913	2907.42	726.87	0.75	1.44E+001	10.58	2.11E+001
F	11	3635-	3652	3642.86	910.74	2.04	6.26E+001	17.91	2.70E+001
F	12	3867-	3881	3873.97	968.52	1.33	3.98E+001	15.29	2.25E+001
F	13	4945-	4958	4951.57	1237.95	1.11	1.94E+001	11.10	1.21E+001
F	14	5830-	5854	5841.73	1460.50	1.94	3.96E+002	39.11	1.74E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.997	1460.81*		10.67	6.01203E+006	7.67686E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.27091E+005	3.38743E+004
		860.37		12.46		
Bi-212	0.997	727.17*		11.80	1.53508E+005	1.13832E+005
Pb-212	0.838	74.81*	@	10.70	3.26052E+006	7.79294E+005
		77.11*	@	18.00	4.56997E+005	2.10653E+005
		87.30	@	8.00		
		238.63*		44.60	2.13448E+005	6.23269E+004
Bi-214	0.415	609.31*		46.30	3.21697E+005	7.25384E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.541	74.82*	@	6.21	5.61797E+006	1.40331E+006
		77.11*	@	10.50	7.83423E+005	3.65827E+005
		87.30	@	4.67		
		241.98*		7.49	3.75401E+005	2.25754E+005
		295.21		19.20		
		351.92*		37.20	2.45140E+005	7.38907E+004
Ac-228	0.615	338.32		11.40		
		911.07*		27.70	3.05782E+005	9.43253E+004
		969.11*		16.60	3.32845E+005	1.32615E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.997	6.012034E+006	7.676859E+005
TL-208		0.469	1.270909E+005	3.387435E+004
Bi-212		0.997	1.535084E+005	1.138323E+005
Pb-212	@	0.838	2.134484E+005	6.232689E+004
Bi-214		0.415	3.216975E+005	7.253839E+004
PB-214	@	0.541	2.577446E+005	7.022486E+004
Ac-228		0.615	3.148738E+005	7.686508E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	2.2345E-001	21.03
F 4	84.75	9.0267E-002	50.83
F 13	1237.95	2.1542E-002	57.23

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9114E+004	5.60E+004	6.3173E+004
	1332.49	100.00	5.5966E+004		6.3502E+003
Nb-94	702.63	100.00	6.5752E+004	5.83E+004	8.4271E+004
	871.10	100.00	5.8336E+004		1.9356E+004
Ag-108m	79.20	7.10	2.2485E+006	6.84E+004	2.5742E+005
	433.93	89.90	6.8351E+004		1.5354E+004
	614.37	90.40	9.0735E+004		-5.3075E+004
	722.95	90.50	6.9996E+004		1.9777E+004
Sb-125	176.33	6.89	1.1363E+006	1.90E+005	1.6961E+005
	427.89	29.33	1.9012E+005		-1.4697E+005
	463.38	10.35	6.3816E+005		-5.1958E+004
	600.56	17.80	3.7067E+005		6.8305E+004
	606.64	5.02	1.8071E+006		3.4736E+006
	635.90	11.32	5.3186E+005		-5.9569E+003
Cs-134	563.23	8.38	6.6378E+005	7.83E+004	5.2872E+005
	569.32	15.43	3.8714E+005		-3.3047E+005
	604.70	97.60	9.1772E+004		-2.2713E+004
	795.84	85.40	7.8280E+004		3.3856E+004
	801.93	8.73	7.3072E+005		9.7585E+004
Cs-137	661.65	85.12	6.6530E+004	6.65E+004	1.7994E+004
Eu-152	121.78	28.40	3.5406E+005	2.56E+005	9.4729E+004
	244.69	7.49	1.0223E+006		3.5630E+004
	344.27	26.50	2.5630E+005		-3.5527E+005
	778.89	12.74	4.8160E+005		-2.7698E+005
	867.32	4.16	1.3132E+006		-2.9725E+006
	964.01	14.40	5.3295E+005		-2.0079E+005
	1085.78	10.00	6.1926E+005		-6.3964E+005
	1112.02	13.30	4.5187E+005		-8.3630E+005
	1407.95	20.70	2.8032E+005		1.0095E+005
Eu-154	123.07	40.50	2.4597E+005	1.69E+005	5.9459E+004
	247.94	6.60	1.0819E+006		-3.3073E+005
	591.81	4.83	1.3528E+006		8.8061E+004
	723.30	19.70	3.1727E+005		-1.1152E+004
	756.87	4.33	1.4987E+006		1.9731E+005
	873.19	11.50	5.1974E+005		4.4202E+005
	996.32	10.30	5.6459E+005		-1.3652E+005
	1004.76	17.90	2.9828E+005		-1.2331E+005
	1274.45	35.50	1.6906E+005		6.7411E+004
Eu-155	86.54	30.90	4.6565E+005	4.66E+005	5.9151E+005
	105.31	20.70	5.4453E+005		2.5314E+005
Am-241	59.54	35.90	5.0458E+005	5.05E+005	2.6150E+005
Cm-243	228.19	10.56	6.8530E+005	4.96E+005	-5.4402E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9610E+005	4.96E+005	-6.4683E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 10:02:45 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 9:47:43 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	313	291.80	72.91	1.09	2.01E+002	42.24	5.17E+002
m	2	285-	313	300.32	75.04	1.09	3.92E+002	50.99	5.57E+002
m	3	285-	313	308.46	77.07	1.10	1.11E+002	38.62	5.23E+002
F	4	332-	344	340.07	84.98	0.67	7.86E+001	37.48	5.24E+002
F	5	947-	960	953.67	238.39	1.12	1.58E+002	31.80	1.57E+002
F	6	1173-	1189	1181.02	295.23	1.47	9.15E+001	24.05	1.09E+002
F	7	1347-	1357	1352.87	338.20	0.75	2.83E+001	16.73	6.07E+001
F	8	1397-	1415	1406.91	351.71	1.31	1.21E+002	25.74	1.02E+002
F	9	2033-	2051	2041.49	510.37	1.79	7.53E+001	21.22	7.60E+001
F	10	2322-	2340	2331.44	582.86	1.40	9.19E+001	21.33	4.75E+001
F	11	2427-	2444	2436.13	609.03	1.37	1.28E+002	25.04	5.80E+001
F	12	2902-	2913	2908.04	727.02	0.99	1.79E+001	12.09	2.25E+001
F	13	3634-	3651	3642.41	910.63	1.71	6.96E+001	18.74	2.72E+001
F	14	4472-	4487	4479.93	1120.03	2.04	4.37E+001	14.42	1.01E+001
F	15	5830-	5854	5841.66	1460.49	1.92	4.10E+002	39.77	1.54E+001
F	16	7050-	7064	7057.39	1764.44	2.11	3.83E+001	13.30	3.81E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.988	511.00*	100.00	8.19682E+004	2.58068E+004
K-40	0.997	1460.81*	10.67	6.22702E+006	7.86475E+005
TL-208	0.750	277.35	6.80		
		510.84*	21.60	3.79482E+005	1.23430E+005
		583.14*	84.20	1.25642E+005	3.35743E+004
		860.37	12.46		
Bi-212	0.999	727.17*	11.80	1.89715E+005	1.30374E+005
Pb-212	0.837	74.81* @	10.70	3.52971E+006	8.30313E+005
		77.11* @	18.00	5.78852E+005	2.30868E+005
		87.30 @	8.00		
		238.63*	44.60	2.92644E+005	7.47471E+004
Bi-214	0.998	609.31*	46.30	3.25150E+005	7.52879E+004
		1120.29*	15.10	4.27354E+005	1.48284E+005
		1764.49*	15.80	4.17391E+005	1.50918E+005
PB-214	0.760	74.82* @	6.21	6.08179E+006	1.49722E+006
		77.11* @	10.50	9.92318E+005	4.02650E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	4.23888E+005	1.32312E+005
		351.92*	37.20	3.07911E+005	8.31505E+004
Ac-228	0.544	338.32*	11.40	2.30800E+005	1.41370E+005
		911.07*	27.70	3.40080E+005	9.95902E+004
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.988	5.482945E+004	2.679179E+004
K-40		0.997	6.227023E+006	7.864753E+005
TL-208		0.750	1.256423E+005	3.332373E+004
Bi-212		0.999	1.897152E+005	1.303739E+005
Pb-212	@	0.837	2.926437E+005	7.474707E+004
Bi-214		0.998	3.578730E+005	6.133636E+004
PB-214	@	0.760	3.407468E+005	7.040242E+004
Ac-228		0.544	3.038347E+005	8.141634E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.91	2.2354E-001	21.00
F	4	84.98	8.7361E-002	47.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3585E+004	4.93E+004	-3.0423E+004
	1332.49	100.00	4.9336E+004		-1.0941E+004
Nb-94	702.63	100.00	6.1615E+004	6.14E+004	1.7850E+004
	871.10	100.00	6.1407E+004		3.3344E+004
Ag-108m	79.20	7.10	2.2829E+006	6.58E+004	-1.0614E+006
	433.93	89.90	6.5755E+004		-4.4403E+004
	614.37	90.40	9.1155E+004		-8.7268E+003
	722.95	90.50	7.3645E+004		5.3374E+004
Sb-125	176.33	6.89	1.1546E+006	2.04E+005	1.3774E+005
	427.89	29.33	2.0450E+005		3.1311E+004
	463.38	10.35	6.4176E+005		1.8280E+005
	600.56	17.80	3.4893E+005		-3.1973E+004
	606.64	5.02	1.7935E+006		3.6157E+006
	635.90	11.32	5.3900E+005		-1.1378E+005
Cs-134	563.23	8.38	7.5804E+005	7.38E+004	6.2409E+005
	569.32	15.43	3.9825E+005		-6.5400E+004
	604.70	97.60	9.1420E+004		-3.3592E+004
	795.84	85.40	7.3801E+004		-6.0534E+003
	801.93	8.73	6.5782E+005		-7.7512E+005
Cs-137	661.65	85.12	7.5407E+004	7.54E+004	-1.0944E+004
Eu-152	121.78	28.40	3.5406E+005	2.51E+005	8.0808E+004
	244.69	7.49	1.0464E+006		-1.6905E+005
	344.27	26.50	2.5132E+005		-1.1584E+005
	778.89	12.74	4.7429E+005		-3.7496E+005
	867.32	4.16	1.5055E+006		-3.0764E+006
	964.01	14.40	5.2296E+005		1.0307E+005
	1085.78	10.00	6.5770E+005		2.3586E+005
	1112.02	13.30	4.9386E+005		-1.8345E+005
	1407.95	20.70	2.5405E+005		3.2214E+004
Eu-154	123.07	40.50	2.4364E+005	1.62E+005	5.4871E+004
	247.94	6.60	1.0583E+006		-1.5335E+006
	591.81	4.83	1.2882E+006		-4.8930E+005
	723.30	19.70	3.4377E+005		3.8498E+005
	756.87	4.33	1.3236E+006		5.6530E+005
	873.19	11.50	5.0768E+005		2.8075E+005
	996.32	10.30	6.4952E+005		2.0181E+005
	1004.76	17.90	3.6934E+005		1.2325E+005
	1274.45	35.50	1.6236E+005		-1.0259E+005
Eu-155	86.54	30.90	4.6308E+005	4.63E+005	8.4131E+005
	105.31	20.70	5.6335E+005		-2.7665E+004
Am-241	59.54	35.90	4.9923E+005	4.99E+005	-4.1557E+005
Cm-243	228.19	10.56	7.2583E+005	4.69E+005	-2.1101E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6910E+005	4.69E+005	-1.3736E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 10:59:31 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 10:44:29 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	315	291.43	72.82	1.05	1.75E+002	40.52	5.06E+002
m	2	284-	315	300.25	75.02	1.05	3.82E+002	50.24	5.46E+002
m	3	284-	315	309.10	77.23	1.05	1.10E+002	37.95	5.49E+002
F	4	329-	345	338.64	84.62	1.13	1.19E+002	42.75	6.92E+002
F	5	947-	960	954.58	238.62	1.01	1.20E+002	30.27	1.82E+002
F	6	1348-	1359	1354.15	338.52	0.91	3.22E+001	17.36	5.97E+001
F	7	1398-	1412	1406.51	351.61	0.93	8.06E+001	23.31	8.95E+001
F	8	2034-	2051	2042.51	510.62	1.84	7.89E+001	20.68	6.06E+001
F	9	2323-	2339	2331.28	582.82	1.20	9.08E+001	21.62	4.47E+001
F	10	2427-	2444	2436.20	609.05	1.23	1.05E+002	22.79	4.49E+001
F	11	3636-	3651	3643.23	910.84	1.39	6.88E+001	18.66	2.26E+001
F	12	3868-	3880	3874.13	968.56	1.33	3.21E+001	13.57	1.44E+001
F	13	4473-	4489	4479.86	1120.01	1.82	5.78E+001	15.71	6.12E+000
F	14	5831-	5854	5842.11	1460.60	1.89	4.01E+002	39.24	8.76E+000
F	15	6344-	6357	6350.37	1587.67	0.73	1.10E+001	7.15	1.83E+000
F	16	7052-	7066	7058.77	1764.79	1.81	4.24E+001	13.57	3.23E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*		100.00	8.58733E+004	2.55402E+004
K-40	0.999	1460.81*		10.67	6.09157E+006	7.73373E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	3.97561E+005	1.22618E+005
		583.14*		84.20	1.24256E+005	3.38306E+004
		860.37		12.46		
Pb-212	0.838	74.81*	@	10.70	3.44300E+006	8.12491E+005
		77.11*	@	18.00	5.73519E+005	2.26968E+005
		87.30	@	8.00		
		238.63*		44.60	2.22386E+005	6.61260E+004
Bi-214	0.998	609.31*		46.30	2.65669E+005	6.65538E+004
		1120.29*		15.10	5.65848E+005	1.65096E+005
		1764.49*		15.80	4.62197E+005	1.55015E+005
PB-214	0.394	74.82*	@	6.21	5.93238E+006	1.46468E+006
		77.11*	@	10.50	9.83176E+005	3.95953E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	2.04404E+005	6.82812E+004
Ac-228	0.996	338.32*		11.40	2.63089E+005	1.47720E+005
		911.07*		27.70	3.36245E+005	9.90594E+004
		969.11*		16.60	2.68405E+005	1.16978E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	5.903396E+004	2.655065E+004
K-40		0.999	6.091574E+006	7.733728E+005
TL-208		0.751	1.242560E+005	3.358737E+004
Pb-212	@	0.838	2.223855E+005	6.612597E+004
Bi-214		0.998	3.287853E+005	5.734762E+004
PB-214	@	0.394	2.044035E+005	6.729128E+004
Ac-228		0.996	2.986105E+005	6.729558E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	1.9461E-001	23.13
F 4	84.62	1.3171E-001	36.06
F 15	1587.67	1.2178E-002	65.26

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2332E+004	4.81E+004	6.5260E+003
	1332.49	100.00	4.8133E+004		-3.3052E+004
Nb-94	702.63	100.00	6.2747E+004	6.11E+004	-2.0083E+004
	871.10	100.00	6.1074E+004		-6.3968E+004
Ag-108m	79.20	7.10	2.2789E+006	7.03E+004	-6.9886E+005
	433.93	89.90	7.0437E+004		-3.0490E+004
	614.37	90.40	8.8602E+004		3.6585E+003
	722.95	90.50	7.0307E+004		5.8299E+004
Sb-125	176.33	6.89	1.1178E+006	2.03E+005	4.7892E+005
	427.89	29.33	2.0251E+005		-1.5335E+005
	463.38	10.35	6.0280E+005		3.8001E+005
	600.56	17.80	3.4040E+005		1.5075E+005
	606.64	5.02	1.6881E+006		2.5349E+006
	635.90	11.32	5.3900E+005		6.4820E+005
Cs-134	563.23	8.38	7.7168E+005	7.79E+004	3.1645E+005
	569.32	15.43	4.3120E+005		1.0427E+005
	604.70	97.60	8.6148E+004		1.1686E+004
	795.84	85.40	7.7945E+004		-6.6086E+004
	801.93	8.73	7.5448E+005		5.7814E+005
Cs-137	661.65	85.12	6.9957E+004	7.00E+004	-3.1593E+004
Eu-152	121.78	28.40	3.6414E+005	2.48E+005	-9.3340E+004
	244.69	7.49	1.0438E+006		-3.5222E+005
	344.27	26.50	2.5355E+005		-2.4000E+004
	778.89	12.74	5.0745E+005		-3.8477E+005
	867.32	4.16	1.5211E+006		-2.8774E+005
	964.01	14.40	5.4856E+005		6.3215E+005
	1085.78	10.00	6.3879E+005		-1.7278E+005
	1112.02	13.30	4.7336E+005		-5.7929E+005
	1407.95	20.70	2.4843E+005		1.3544E+005
Eu-154	123.07	40.50	2.5379E+005	1.61E+005	1.1122E+005
	247.94	6.60	1.0902E+006		-1.8341E+006
	591.81	4.83	1.1927E+006		-4.8095E+005
	723.30	19.70	3.1581E+005		-8.3452E+004
	756.87	4.33	1.4314E+006		-6.7772E+005
	873.19	11.50	5.2859E+005		3.1044E+005
	996.32	10.30	5.0803E+005		2.0820E+005
	1004.76	17.90	3.3689E+005		2.7029E+005
	1274.45	35.50	1.6099E+005		1.4403E+004
Eu-155	86.54	30.90	4.6770E+005	4.68E+005	4.1257E+003
	105.31	20.70	5.3047E+005		-6.6422E+005
Am-241	59.54	35.90	5.1037E+005	5.10E+005	-3.8284E+005
Cm-243	228.19	10.56	7.1382E+005	5.31E+005	5.4916E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3071E+005	5.31E+005	2.6268E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 11:18:35 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 11:03:33 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	291.65	72.87	1.03	1.62E+002	40.85	5.52E+002
m	2	283-	305	300.33	75.04	1.03	2.97E+002	49.32	5.89E+002
M	3	336-	379	340.15	85.00	0.77	1.10E+002	37.33	3.34E+002
m	4	336-	379	349.57	87.35	0.78	5.60E+001	31.16	3.84E+002
m	5	336-	379	371.00	92.71	0.78	7.60E+001	32.07	3.09E+002
F	6	949-	964	954.07	238.49	1.14	1.56E+002	31.74	1.88E+002
F	7	1176-	1185	1180.81	295.18	0.36	2.63E+001	14.76	7.40E+001
F	8	1400-	1415	1407.22	351.79	1.37	1.02E+002	23.39	7.16E+001
F	9	2034-	2051	2042.37	510.59	1.50	9.58E+001	22.20	5.79E+001
F	10	2324-	2340	2331.71	582.93	1.26	9.22E+001	20.90	3.17E+001
F	11	2429-	2445	2436.41	609.10	1.39	1.07E+002	22.31	3.35E+001
F	12	2903-	2915	2908.38	727.11	1.18	2.98E+001	14.27	2.46E+001
F	13	3636-	3650	3642.53	910.66	1.14	5.88E+001	18.26	3.16E+001
F	14	3868-	3879	3873.76	968.47	1.00	1.95E+001	12.93	2.47E+001
F	15	4474-	4488	4480.28	1120.11	1.69	3.76E+001	14.30	1.08E+001
F	16	4944-	4957	4950.79	1237.75	1.44	2.43E+001	11.37	6.88E+000
F	17	5829-	5855	5842.28	1460.64	1.99	4.30E+002	40.69	2.33E+001
F	18	7052-	7067	7058.43	1764.70	1.56	3.41E+001	12.31	1.68E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*		100.00	1.04307E+005	2.82660E+004
K-40	0.999	1460.81*		10.67	6.52177E+006	8.12659E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	4.82904E+005	1.36674E+005
		583.14*		84.20	1.26086E+005	3.30987E+004
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	3.16855E+005	1.56214E+005
Pb-212	0.659	74.81*	@	10.70	2.67073E+006	6.86434E+005
		77.11	@	18.00		
		87.30*	@	8.00	5.77138E+005	3.40276E+005
		238.63*		44.60	2.89730E+005	7.43784E+004
Bi-214	0.999	609.31*		46.30	2.71741E+005	6.58892E+004
		1120.29*		15.10	3.68453E+005	1.45319E+005
		1764.49*		15.80	3.72130E+005	1.39313E+005
PB-214	0.658	74.82*	@	6.21	4.60174E+006	1.22901E+006
		77.11	@	10.50		
		87.30*	@	4.67	9.88673E+005	5.87680E+005
		241.98		7.49		
		295.21*		19.20	1.21905E+005	7.14047E+004
		351.92*		37.20	2.57660E+005	7.33197E+004
Ac-228	0.614	338.32		11.40		
		911.07*		27.70	2.87395E+005	9.51770E+004
		969.11*		16.60	1.62863E+005	1.09598E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		0.995	7.707260E+004	2.914258E+004
	K-40		0.999	6.521773E+006	8.126590E+005
X	Eu-155		0.331		
	TL-208		0.752	1.260863E+005	3.284262E+004
	Bi-212		1.000	3.168545E+005	1.562138E+005
	Pb-212	@	0.659	2.897303E+005	7.437841E+004
	Bi-214		0.999	3.013630E+005	5.511333E+004
	PB-214	@	0.658	1.879861E+005	5.115437E+004
	Ac-228		0.614	2.338558E+005	7.186190E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	1.8033E-001	25.17
M 3	85.00	1.2247E-001	33.87
m 5	92.71	8.4419E-002	42.21
F 16	1237.75	2.7013E-002	46.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3585E+004	4.87E+004	-3.2453E+004
	1332.49	100.00	4.8739E+004		1.3361E+004
Nb-94	702.63	100.00	6.0169E+004	5.80E+004	-1.9083E+004
	871.10	100.00	5.7984E+004		7.4813E+003
Ag-108m	79.20	7.10	2.2152E+006	7.27E+004	-3.1451E+006
	433.93	89.90	7.2660E+004		-1.7698E+004
	614.37	90.40	9.1155E+004		1.4638E+004
	722.95	90.50	7.6262E+004		-6.6387E+004
Sb-125	176.33	6.89	1.1602E+006	2.09E+005	-2.3039E+005
	427.89	29.33	2.0906E+005		-2.8567E+005
	463.38	10.35	6.4713E+005		4.9971E+004
	600.56	17.80	3.3312E+005		2.3724E+005
	606.64	5.02	1.6402E+006		3.4403E+006
	635.90	11.32	5.5529E+005		1.3689E+005
Cs-134	563.23	8.38	7.6079E+005	6.86E+004	4.6696E+005
	569.32	15.43	3.9981E+005		-5.2097E+004
	604.70	97.60	8.3479E+004		-4.8879E+004
	795.84	85.40	6.8630E+004		-7.6749E+003
	801.93	8.73	6.9891E+005		-3.5249E+005
Cs-137	661.65	85.12	7.3215E+004	7.32E+004	4.6400E+003
Eu-152	121.78	28.40	3.5283E+005	2.48E+005	-1.0077E+005
	244.69	7.49	1.0713E+006		7.9225E+005
	344.27	26.50	2.4794E+005		-2.6648E+005
	778.89	12.74	4.8879E+005		-3.2137E+005
	867.32	4.16	1.3399E+006		-2.2557E+006
	964.01	14.40	4.8734E+005		4.9372E+005
	1085.78	10.00	5.9493E+005		-3.2919E+005
	1112.02	13.30	4.4871E+005		-7.3953E+005
	1407.95	20.70	2.7528E+005		-1.6274E+004
Eu-154	123.07	40.50	2.4884E+005	1.77E+005	1.8649E+005
	247.94	6.60	1.1638E+006		-6.9592E+005
	591.81	4.83	1.2308E+006		-3.9639E+005
	723.30	19.70	3.4776E+005		-7.2621E+004
	756.87	4.33	1.3678E+006		2.1132E+005
	873.19	11.50	4.9530E+005		-4.4720E+004
	996.32	10.30	5.3306E+005		-2.5296E+005
	1004.76	17.90	3.1708E+005		9.7974E+004
	1274.45	35.50	1.7673E+005		7.8339E+003
Eu-155	86.54*	30.90	2.5046E+005	2.50E+005	1.4942E+005
	105.31	20.70	5.4730E+005		3.5642E+005
Am-241	59.54	35.90	4.8941E+005	4.89E+005	-9.7063E+004
Cm-243	228.19	10.56	6.8724E+005	5.01E+005	6.8427E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0132E+005	5.01E+005	-3.2426E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 11:46:31 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 11:31:29 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	247-	261	253.12	63.24	0.80	5.76E+001	32.37	4.24E+002
M	2	286-	306	291.38	72.80	0.85	1.19E+002	38.70	4.61E+002
m	3	286-	306	300.14	74.99	0.86	2.13E+002	47.26	5.70E+002
F	4	335-	344	339.04	84.72	0.91	7.27E+001	41.05	4.51E+002
F	5	945-	971	954.35	238.56	0.91	1.48E+002	29.80	2.59E+002
F	6	1176-	1186	1180.17	295.02	0.55	3.92E+001	17.82	7.95E+001
F	7	1349-	1358	1353.38	338.32	0.76	4.22E+001	17.68	4.77E+001
F	8	1400-	1415	1407.33	351.81	1.36	8.26E+001	22.50	8.22E+001
F	9	2033-	2049	2042.25	510.56	1.65	8.57E+001	21.83	6.16E+001
F	10	2322-	2339	2331.40	582.85	1.39	9.38E+001	20.78	3.34E+001
F	11	2426-	2444	2435.68	608.92	1.60	1.26E+002	23.01	3.12E+001
F	12	3632-	3650	3642.25	910.59	1.95	6.58E+001	17.31	1.83E+001
F	13	3729-	3740	3734.89	933.75	1.21	1.91E+001	10.51	8.79E+000
F	14	3867-	3884	3875.15	968.82	1.66	4.77E+001	15.67	1.76E+001
F	15	5828-	5854	5842.37	1460.66	2.00	4.63E+002	41.86	9.91E+000
F	16	7052-	7065	7057.85	1764.56	1.95	3.09E+001	12.33	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*		100.00	9.33408E+004	2.71402E+004
K-40	0.999	1460.81*		10.67	7.03339E+006	8.53231E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	4.32134E+005	1.30511E+005
		583.14*		84.20	1.28257E+005	3.31096E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	1.92149E+006	5.68439E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.75253E+005	7.01546E+004
Bi-214	0.701	609.31*		46.30	3.18662E+005	7.05388E+004
		1120.29		15.10		
		1764.49*		15.80	3.36701E+005	1.38643E+005
PB-214	0.565	74.82*	@	6.21	3.31078E+006	1.00849E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.81509E+005	8.80162E+004
		351.92*		37.20	2.09464E+005	6.69705E+004
Ac-228	0.996	338.32*		11.40	3.44971E+005	1.54268E+005
		911.07*		27.70	3.21440E+005	9.23279E+004
		969.11*		16.60	3.99509E+005	1.37676E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.994	6.563734E+004	2.805211E+004
K-40		0.999	7.033386E+006	8.532310E+005
TL-208		0.751	1.282570E+005	3.284470E+004
Pb-212	@	0.498	2.752526E+005	7.015463E+004
Bi-214		0.701	3.223713E+005	6.286952E+004
PB-214	@	0.565	1.992141E+005	5.329656E+004
Ac-228		0.996	3.455224E+005	6.866624E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 1	63.24	6.4050E-002	56.16
M 2	72.80	1.3248E-001	32.45
F 4	84.72	8.0729E-002	56.50
F 13	933.75	2.1246E-002	54.95

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1052E+004	5.33E+004	-5.0870E+004
	1332.49	100.00	5.3313E+004		4.9425E+004
Nb-94	702.63	100.00	6.1041E+004	6.10E+004	4.3813E+004
	871.10	100.00	6.2068E+004		2.4465E+004
Ag-108m	79.20	7.10	2.2111E+006	6.46E+004	-1.3982E+006
	433.93	89.90	6.4642E+004		-4.5260E+004
	614.37	90.40	9.0524E+004		-2.9041E+003
	722.95	90.50	7.3645E+004		5.5967E+004
Sb-125	176.33	6.89	1.1781E+006	2.10E+005	7.5894E+004
	427.89	29.33	2.0970E+005		1.8107E+005
	463.38	10.35	6.6986E+005		3.6235E+005
	600.56	17.80	3.6537E+005		-9.2725E+004
	606.64	5.02	1.7346E+006		3.1793E+006
	635.90	11.32	5.1727E+005		-2.9038E+005
Cs-134	563.23	8.38	7.2709E+005	7.16E+004	-1.2595E+005
	569.32	15.43	3.8875E+005		-1.1153E+005
	604.70	97.60	8.9278E+004		-4.0941E+004
	795.84	85.40	7.1633E+004		9.1706E+004
	801.93	8.73	6.5005E+005		-8.2439E+004
Cs-137	661.65	85.12	8.0757E+004	8.08E+004	1.5513E+004
Eu-152	121.78	28.40	3.4850E+005	2.24E+005	-4.5311E+004
	244.69	7.49	1.0004E+006		3.6712E+005
	344.27	26.50	2.5957E+005		-9.4571E+004
	778.89	12.74	4.4902E+005		-8.5440E+005
	867.32	4.16	1.5591E+006		8.8239E+005
	964.01	14.40	5.3295E+005		2.4074E+005
	1085.78	10.00	5.6511E+005		-2.0674E+005
	1112.02	13.30	4.4553E+005		-9.4000E+005
	1407.95	20.70	2.2441E+005		-8.2870E+004
Eu-154	123.07	40.50	2.4423E+005	1.70E+005	4.7974E+004
	247.94	6.60	1.0886E+006		8.4989E+005
	591.81	4.83	1.3034E+006		8.6006E+005
	723.30	19.70	3.3701E+005		3.1829E+005
	756.87	4.33	1.5053E+006		3.8824E+005
	873.19	11.50	5.2566E+005		1.1978E+005
	996.32	10.30	5.5299E+005		-3.8268E+003
	1004.76	17.90	3.2824E+005		1.3943E+005
	1274.45	35.50	1.7036E+005		1.4180E+005
Eu-155	86.54	30.90	4.7430E+005	4.74E+005	9.3991E+005
	105.31	20.70	5.4091E+005		-3.1014E+005
Am-241	59.54	35.90	4.8150E+005	4.82E+005	1.3277E+005
Cm-243	228.19	10.56	7.4122E+005	5.23E+005	3.8422E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2331E+005	5.23E+005	-4.1872E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 12:06:38 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 11:51:36 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	249-	257	252.72	63.14	0.72	5.75E+001	33.75	2.99E+002
M	2	283-	306	291.47	72.82	0.93	1.63E+002	41.10	5.36E+002
m	3	283-	306	300.28	75.03	0.93	2.77E+002	49.52	5.94E+002
F	4	332-	345	339.22	84.77	1.28	8.57E+001	40.69	5.62E+002
F	5	948-	961	954.43	238.58	1.16	1.46E+002	29.78	1.30E+002
F	6	1307-	1321	1313.65	328.39	1.14	3.60E+001	18.26	7.45E+001
F	7	1348-	1358	1352.89	338.20	0.85	3.21E+001	18.10	6.66E+001
F	8	1399-	1414	1407.49	351.85	1.21	8.33E+001	22.12	7.16E+001
F	9	2032-	2051	2041.77	510.44	1.56	7.49E+001	20.36	6.25E+001
F	10	2324-	2339	2331.61	582.90	1.33	7.90E+001	20.64	4.34E+001
F	11	2429-	2444	2436.30	609.08	1.20	1.11E+002	23.25	4.18E+001
F	12	2639-	2651	2645.33	661.34	1.03	3.17E+001	14.19	2.33E+001
F	13	3635-	3650	3642.23	910.58	1.11	4.02E+001	17.46	4.99E+001
F	14	3868-	3881	3874.64	968.69	1.51	3.90E+001	15.35	2.01E+001
F	15	4471-	4484	4477.63	1119.45	1.28	2.59E+001	12.43	1.40E+001
F	16	5829-	5855	5842.37	1460.66	2.02	4.11E+002	39.75	1.68E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.991	511.00*	100.00	8.15418E+004	2.49510E+004
K-40	0.999	1460.81*	10.67	6.24243E+006	7.87117E+005
Cs-137	0.997	661.65*	85.12	4.52040E+004	2.09490E+004
TL-208	0.751	277.35	6.80		
		510.84*	21.60	3.77508E+005	1.19557E+005
		583.14*	84.20	1.08013E+005	3.16486E+004
		860.37	12.46		
Pb-212	0.498	74.81* @	10.70	2.49732E+006	6.62137E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.70842E+005	6.97029E+004
Bi-214	0.708	609.31*	46.30	2.81693E+005	6.85865E+004
		1120.29*	15.10	2.53021E+005	1.24604E+005
		1764.49	15.80		
Ac-228	0.995	338.32*	11.40	2.62536E+005	1.53492E+005
		911.07*	27.70	1.96651E+005	8.82513E+004
		969.11*	16.60	3.26353E+005	1.32935E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.991	5.821095E+004	2.585934E+004
K-40		0.999	6.242432E+006	7.871170E+005
Cs-137		0.997	4.520402E+004	2.094902E+004
TL-208		0.751	1.080133E+005	3.145222E+004
Pb-212	@	0.498	2.708420E+005	6.970294E+004
Bi-214		0.708	2.750257E+005	6.008554E+004
Ac-228		0.995	2.412188E+005	6.630942E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	63.14	6.3869E-002	58.72
M	2	72.82	1.8154E-001	25.16
F	4	84.77	9.5213E-002	47.48
F	6	328.39	4.0003E-002	50.73
F	8	351.85	9.2570E-002	26.56

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.9866E+004	5.75E+004	4.7830E+004
		1332.49	100.00	5.7495E+004		1.8966E+004
	Nb-94	702.63	100.00	5.8986E+004	5.73E+004	-2.4433E+004
		871.10	100.00	5.7273E+004		-5.0050E+004
	Ag-108m	79.20	7.10	2.2749E+006	7.12E+004	-8.7061E+005
		433.93	89.90	7.3451E+004		-2.6559E+004
		614.37	90.40	9.0313E+004		3.1943E+003
		722.95	90.50	7.1234E+004		7.5452E+004
	Sb-125	176.33	6.89	1.1681E+006	2.28E+005	-1.3571E+005
		427.89	29.33	2.2753E+005		3.7066E+004
		463.38	10.35	6.4534E+005		6.1176E+005
		600.56	17.80	3.5312E+005		-2.8309E+005
		606.64	5.02	1.7169E+006		2.6719E+006
		635.90	11.32	5.4371E+005		1.6890E+005
	Cs-134	563.23	8.38	7.3567E+005	6.82E+004	-7.2861E+005
		569.32	15.43	4.1206E+005		-1.2035E+005
		604.70	97.60	8.8915E+004		-1.2061E+004
		795.84	85.40	6.8244E+004		1.9318E+004
		801.93	8.73	6.9528E+005		-3.8647E+005
+	Cs-137	661.65*	85.12	4.1204E+004	4.12E+004	4.5204E+004
	Eu-152	121.78	28.40	3.7432E+005	2.18E+005	2.5405E+005
		244.69	7.49	1.0059E+006		6.5346E+004
		344.27	26.50	2.4161E+005		2.6701E+004
		778.89	12.74	4.8641E+005		-1.9824E+005
		867.32	4.16	1.4417E+006		6.1545E+005
		964.01	14.40	5.4856E+005		2.4010E+005
		1085.78	10.00	5.7809E+005		1.8995E+005
		1112.02	13.30	4.6121E+005		1.1493E+005
		1407.95	20.70	2.1795E+005		1.7234E+005
	Eu-154	123.07	40.50	2.5878E+005	1.54E+005	7.5870E+004
		247.94	6.60	1.1083E+006		-7.9614E+005
		591.81	4.83	1.3430E+006		1.1669E+006
		723.30	19.70	3.2161E+005		1.2868E+005
		756.87	4.33	1.4987E+006		9.2460E+005
		873.19	11.50	4.9216E+005		-1.9800E+005
		996.32	10.30	5.2071E+005		2.8717E+005
		1004.76	17.90	3.5148E+005		1.7184E+005
		1274.45	35.50	1.5391E+005		-4.1606E+004
	Eu-155	86.54	30.90	4.6066E+005	4.61E+005	7.4289E+005
		105.31	20.70	5.4592E+005		1.7673E+005
	Am-241	59.54	35.90	5.1012E+005	5.10E+005	-2.8285E+005
	Cm-243	228.19	10.56	7.2583E+005	5.03E+005	5.3983E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0305E+005	5.03E+005	-1.8900E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 2:11:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:56:46 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.93	72.94	0.88	1.49E+002	40.90	5.35E+002
m	2	286-	306	300.29	75.03	0.89	3.12E+002	51.95	5.88E+002
F	3	333-	344	339.83	84.92	0.93	1.07E+002	42.02	5.15E+002
M	4	947-	972	954.30	238.55	1.10	1.45E+002	31.09	1.71E+002
m	5	947-	972	967.74	241.91	1.10	4.83E+001	21.87	1.26E+002
F	6	1347-	1359	1352.77	338.17	1.06	4.76E+001	20.28	7.89E+001
F	7	1401-	1413	1407.26	351.80	1.10	1.43E+002	27.44	7.13E+001
F	8	2324-	2340	2332.20	583.05	1.34	8.88E+001	20.82	3.75E+001
F	9	2425-	2446	2435.90	608.98	1.34	1.70E+002	27.36	5.24E+001
F	10	3635-	3652	3643.34	910.86	1.79	8.08E+001	18.88	1.80E+001
F	11	3868-	3882	3874.42	968.64	1.34	4.52E+001	16.81	2.88E+001
F	12	4472-	4489	4480.50	1120.17	1.72	5.03E+001	16.55	2.48E+001
F	13	5830-	5855	5842.78	1460.77	1.95	4.86E+002	42.86	9.67E+000
F	14	7051-	7065	7059.38	1764.94	2.30	3.67E+001	13.57	7.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	7.37874E+006	8.83289E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.21543E+005	3.27065E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.80994E+006	7.22619E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.69337E+005	7.15063E+004
Bi-214	0.997	609.31*		46.30	4.30860E+005	8.76800E+004
		1120.29*		15.10	4.92721E+005	1.70197E+005
		1764.49*		15.80	4.00147E+005	1.53250E+005
PB-214	0.347	74.82*	@	6.21	4.84160E+006	1.29375E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	5.36232E+005	2.58648E+005
		295.21		19.20		
		351.92*		37.20	3.63039E+005	9.23462E+004
Ac-228	0.997	338.32*		11.40	3.88527E+005	1.76514E+005
		911.07*		27.70	3.95045E+005	1.02842E+005
		969.11*		16.60	3.78546E+005	1.46233E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		1.000	7.378743E+006	8.832891E+005
TL-208		0.470	1.215435E+005	3.270648E+004
Pb-212	@	0.497	2.693371E+005	7.150628E+004
Bi-214		0.997	4.348557E+005	6.947496E+004
PB-214	@	0.347	3.826204E+005	8.696929E+004
Ac-228		0.997	3.893892E+005	7.593888E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	1.6591E-001	27.39
F 3	84.92	1.1922E-001	39.16

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2332E+004	6.23E+004	-1.3893E+004
	1332.49	100.00	6.4116E+004		2.8310E+004
Nb-94	702.63	100.00	6.4947E+004	6.49E+004	8.9888E+003
	871.10	100.00	6.7408E+004		-2.9403E+003
Ag-108m	79.20	7.10	2.3370E+006	7.11E+004	-4.2567E+005
	433.93	89.90	7.1051E+004		-8.5137E+004
	614.37	90.40	1.0404E+005		-3.8553E+003
	722.95	90.50	7.7676E+004		5.7130E+003
Sb-125	176.33	6.89	1.1836E+006	2.23E+005	-4.2849E+005
	427.89	29.33	2.2276E+005		1.2023E+005
	463.38	10.35	6.6814E+005		-1.0433E+005
	600.56	17.80	3.6537E+005		5.2767E+004
	606.64	5.02	1.9499E+006		3.3542E+006
	635.90	11.32	5.5985E+005		6.1492E+005
Cs-134	563.23	8.38	7.7974E+005	7.76E+004	-3.8463E+005
	569.32	15.43	4.1805E+005		-1.8617E+005
	604.70	97.60	1.0032E+005		-7.1916E+003
	795.84	85.40	7.7609E+004		7.7101E+004
	801.93	8.73	7.0968E+005		-9.7692E+005
Cs-137	661.65	85.12	8.0181E+004	8.02E+004	3.7368E+004
Eu-152	121.78	28.40	3.7567E+005	2.58E+005	1.0514E+005
	244.69	7.49	1.0556E+006		-7.7004E+005
	344.27	26.50	2.5849E+005		-2.2669E+005
	778.89	12.74	4.9588E+005		-4.7346E+005
	867.32	4.16	1.6108E+006		-5.1862E+005
	964.01	14.40	5.4276E+005		-1.0377E+005
	1085.78	10.00	6.8325E+005		5.0002E+005
	1112.02	13.30	4.8226E+005		1.7350E+005
	1407.95	20.70	2.6223E+005		4.5400E+004
Eu-154	123.07	40.50	2.6394E+005	1.72E+005	9.4070E+004
	247.94	6.60	1.1115E+006		-1.3354E+006
	591.81	4.83	1.2467E+006		-2.7397E+005
	723.30	19.70	3.6073E+005		2.3650E+005
	756.87	4.33	1.4921E+006		4.1992E+005
	873.19	11.50	5.8662E+005		3.4194E+005
	996.32	10.30	5.6459E+005		-7.7255E+005
	1004.76	17.90	3.1479E+005		7.1449E+004
	1274.45	35.50	1.7166E+005		-7.2028E+004
Eu-155	86.54	30.90	4.7430E+005	4.74E+005	7.3898E+005
	105.31	20.70	5.6549E+005		6.4856E+004
Am-241	59.54	35.90	5.3648E+005	5.36E+005	1.2022E+005
Cm-243	228.19	10.56	7.3402E+005	5.14E+005	-1.1263E+006

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1413E+005	5.14E+005	3.7408E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 1:53:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:37:59 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	313	292.05	72.97	1.07	2.00E+002	42.63	5.90E+002
m	2	282-	313	300.26	75.02	1.07	4.28E+002	53.83	6.29E+002
m	3	282-	313	308.66	77.12	1.08	7.41E+001	39.73	6.20E+002
F	4	330-	343	339.23	84.77	0.45	8.35E+001	33.63	5.63E+002
F	5	365-	377	371.62	92.87	0.85	7.26E+001	37.20	4.74E+002
M	6	949-	971	954.48	238.59	0.92	1.78E+002	31.98	1.25E+002
m	7	949-	971	966.55	241.61	0.92	4.05E+001	20.02	1.12E+002
F	8	1401-	1415	1407.11	351.76	1.28	1.19E+002	25.83	7.75E+001
F	9	1633-	1643	1637.05	409.25	0.37	1.72E+001	6.95	4.46E+001
F	10	2326-	2339	2331.85	582.96	1.08	8.79E+001	21.26	3.70E+001
F	11	2428-	2442	2436.25	609.06	1.11	1.15E+002	24.81	5.59E+001
F	12	3634-	3651	3644.62	911.18	1.06	6.44E+001	18.00	2.92E+001
F	13	5830-	5856	5842.86	1460.79	2.03	5.32E+002	44.72	9.94E+000
F	14	7054-	7067	7060.67	1765.26	1.51	3.21E+001	12.81	9.26E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	8.07495E+006	9.42491E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.20300E+005	3.31537E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.85416E+006	8.97591E+005
		77.11* @	18.00	3.85338E+005	2.20080E+005
		87.30 @	8.00		
		238.63*	44.60	3.29791E+005	7.87211E+004
Bi-214	0.699	609.31*	46.30	2.91142E+005	7.25913E+004
		1120.29	15.10		
		1764.49*	15.80	3.49899E+005	1.44066E+005
PB-214	0.542	74.82* @	6.21	6.64082E+006	1.61996E+006
		77.11* @	10.50	6.60580E+005	3.80490E+005
		87.30 @	4.67		
		241.98*	7.49	4.49764E+005	2.34378E+005
		295.21	19.20		
		351.92*	37.20	3.01943E+005	8.27103E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		1.000	8.074946E+006	9.424912E+005
TL-208		0.470	1.203003E+005	3.315369E+004
Pb-212	@	0.838	3.297914E+005	7.872114E+004
Bi-214		0.699	3.030389E+005	6.482689E+004
PB-214	@	0.542	3.183135E+005	7.799624E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.97	2.2271E-001	21.27
F	4	84.77	9.2770E-002	40.28
F	5	92.87	8.0666E-002	51.24
F	9	409.25	1.9083E-002	40.49
F	12	911.18	7.1542E-002	27.95

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.3856E+004	5.39E+004	8.1624E+004
	1332.49	100.00	5.3855E+004		5.1084E+003
Nb-94	702.63	100.00	6.5485E+004	6.27E+004	1.9773E+002
	871.10	100.00	6.2721E+004		-2.3752E+004
Ag-108m	79.20	7.10	2.3585E+006	7.19E+004	-3.9997E+005
	433.93	89.90	7.1860E+004		-3.0273E+004
	614.37	90.40	1.0089E+005		-6.1132E+004
	722.95	90.50	7.6262E+004		-2.9306E+004
Sb-125	176.33	6.89	1.2120E+006	2.26E+005	5.0589E+005
	427.89	29.33	2.2635E+005		1.9019E+005
	463.38	10.35	7.1308E+005		-1.7666E+005
	600.56	17.80	3.6670E+005		-4.4032E+004
	606.64	5.02	1.7969E+006		3.1370E+006
	635.90	11.32	6.0136E+005		-2.1823E+005
Cs-134	563.23	8.38	8.1627E+005	7.79E+004	3.6907E+005
	569.32	15.43	4.1805E+005		-1.2921E+005
	604.70	97.60	9.1772E+004		-4.0840E+004
	795.84	85.40	7.7945E+004		-3.7473E+004
	801.93	8.73	7.3416E+005		-4.7850E+005
Cs-137	661.65	85.12	7.2896E+004	7.29E+004	-3.8977E+004
Eu-152	121.78	28.40	3.7413E+005	2.70E+005	1.0732E+005
	244.69	7.49	1.0764E+006		-5.9182E+005
	344.27	26.50	2.6965E+005		-1.0962E+005
	778.89	12.74	5.0745E+005		-1.6367E+005
	867.32	4.16	1.5364E+006		-1.3824E+006
	964.01	14.40	5.5807E+005		5.4724E+005
	1085.78	10.00	6.3494E+005		-4.6610E+005
	1112.02	13.30	4.6428E+005		-1.3499E+006
	1407.95	20.70	2.7272E+005		1.4303E+005
Eu-154	123.07	40.50	2.5727E+005	1.75E+005	-1.2192E+005
	247.94	6.60	1.1868E+006		-1.1182E+006
	591.81	4.83	1.4188E+006		-3.0135E+005
	723.30	19.70	3.4776E+005		-8.0336E+004
	756.87	4.33	1.6124E+006		9.1126E+005
	873.19	11.50	5.3729E+005		-3.7882E+005
	996.32	10.30	6.2943E+005		-8.7564E+004
	1004.76	17.90	3.5953E+005		2.5792E+005
	1274.45	35.50	1.7548E+005		1.9329E+005
Eu-155	86.54	30.90	4.7998E+005	4.80E+005	2.9107E+004
	105.31	20.70	5.6469E+005		-1.5980E+005
Am-241	59.54	35.90	5.0962E+005	5.10E+005	-7.9701E+004
Cm-243	228.19	10.56	7.4747E+005	5.22E+005	-3.4988E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2249E+005	5.22E+005	8.4839E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 1:35:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:20:15 PM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.77	72.90	0.86	1.47E+002	40.74	4.47E+002
m	2	287-	306	300.14	74.99	0.86	3.13E+002	52.86	6.38E+002
F	3	331-	345	338.71	84.64	1.01	1.29E+002	42.87	6.32E+002
F	4	948-	959	954.11	238.50	1.13	1.71E+002	32.73	1.43E+002
F	5	1176-	1189	1180.34	295.06	1.03	6.95E+001	22.11	8.47E+001
F	6	1347-	1359	1353.31	338.31	0.82	3.20E+001	17.91	7.93E+001
F	7	1401-	1414	1408.07	352.00	0.82	7.13E+001	22.87	1.05E+002
F	8	2323-	2339	2332.43	583.11	1.31	1.05E+002	22.50	4.63E+001
F	9	2427-	2443	2436.21	609.06	1.21	1.28E+002	25.21	5.54E+001
F	10	3636-	3653	3643.92	911.01	1.51	7.64E+001	18.85	1.93E+001
F	11	3867-	3882	3873.58	968.43	1.50	4.74E+001	17.41	3.20E+001
F	12	4475-	4488	4481.15	1120.33	1.40	3.07E+001	13.92	1.70E+001
M	13	5827-	5877	5842.95	1460.81	2.15	5.68E+002	45.74	4.01E+000
m	14	5827-	5877	5870.95	1467.81	2.16	1.04E+001	7.98	6.78E-002
F	15	7054-	7067	7060.37	1765.19	1.30	2.90E+001	12.33	8.55E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	8.61533E+006	9.84161E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.44080E+005	3.62044E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.81922E+006	7.29469E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.18038E+005	7.85901E+004
Bi-214	0.996	609.31*	46.30	3.25163E+005	7.56323E+004
		1120.29*	15.10	3.00331E+005	1.39955E+005
		1764.49*	15.80	3.15915E+005	1.38119E+005
PB-214	0.565	74.82* @	6.21	4.85760E+006	1.30542E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.22065E+005	1.15882E+005
		351.92*	37.20	1.80805E+005	6.54193E+004
Ac-228	0.996	338.32*	11.40	2.61497E+005	1.51995E+005
		911.07*	27.70	3.73356E+005	1.01648E+005
		969.11*	16.60	3.96468E+005	1.51517E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		1.000	8.615325E+006	9.841614E+005
TL-208		0.470	1.440803E+005	3.620442E+004
Pb-212	@	0.497	3.180377E+005	7.859008E+004
Bi-214		0.996	3.188657E+005	5.994472E+004
PB-214	@	0.565	2.149442E+005	5.696821E+004
Ac-228		0.996	3.524709E+005	7.379535E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.6338E-001	27.71
F 3	84.64	1.4303E-001	33.30
m 14	1467.81	1.1608E-002	76.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.2791E+004	5.70E+004	-7.8896E+003
	1332.49	100.00	5.6991E+004		2.5671E+004
Nb-94	702.63	100.00	6.4131E+004	6.21E+004	5.2944E+003
	871.10	100.00	6.2068E+004		8.3096E+003
Ag-108m	79.20	7.10	2.3716E+006	7.38E+004	-1.3552E+006
	433.93	89.90	7.3843E+004		-2.4046E+004
	614.37	90.40	9.5452E+004		-6.5761E+003
	722.95	90.50	8.0425E+004		4.9924E+004
Sb-125	176.33	6.89	1.2259E+006	2.34E+005	-2.1739E+005
	427.89	29.33	2.3393E+005		2.4672E+005
	463.38	10.35	6.6295E+005		-1.6891E+005
	600.56	17.80	3.7849E+005		9.1648E+004
	606.64	5.02	1.8104E+006		2.3134E+006
	635.90	11.32	5.3425E+005		1.6970E+005
Cs-134	563.23	8.38	8.1627E+005	8.03E+004	-7.8091E+004
	569.32	15.43	4.3691E+005		2.6371E+005
	604.70	97.60	9.3339E+004		-4.8691E+004
	795.84	85.40	8.0258E+004		-5.2146E+004
	801.93	8.73	7.9663E+005		2.6715E+005
Cs-137	661.65	85.12	8.2740E+004	8.27E+004	3.9238E+004
Eu-152	121.78	28.40	3.7950E+005	2.46E+005	2.5735E+004
	244.69	7.49	1.0867E+006		-1.9168E+006
	344.27	26.50	2.6965E+005		-4.6096E+004
	778.89	12.74	4.8879E+005		-5.1193E+005
	867.32	4.16	1.4977E+006		-8.2184E+005
	964.01	14.40	5.9632E+005		-5.2962E+004
	1085.78	10.00	6.3106E+005		2.0213E+005
	1112.02	13.30	5.1895E+005		-3.5505E+005
	1407.95	20.70	2.4557E+005		-1.1116E+005
Eu-154	123.07	40.50	2.6461E+005	1.93E+005	-6.8648E+004
	247.94	6.60	1.1988E+006		-6.8146E+004
	591.81	4.83	1.4730E+006		5.8797E+005
	723.30	19.70	3.6453E+005		-5.1828E+004
	756.87	4.33	1.6245E+006		9.7602E+005
	873.19	11.50	5.4584E+005		8.0566E+004
	996.32	10.30	6.1913E+005		-3.9689E+005
	1004.76	17.90	3.3689E+005		1.2915E+005
	1274.45	35.50	1.9338E+005		1.0870E+005
Eu-155	86.54	30.90	4.8951E+005	4.90E+005	1.2605E+005
	105.31	20.70	5.7107E+005		3.1966E+005
Am-241	59.54	35.90	5.3409E+005	5.34E+005	2.0226E+005
Cm-243	228.19	10.56	7.5101E+005	5.44E+005	2.3082E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.4360E+005	5.44E+005	6.0507E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 1:16:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 1:01:07 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	292.34	73.04	0.98	1.56E+002	41.71	6.12E+002
m	2	285-	309	300.24	75.02	0.98	2.80E+002	49.55	6.46E+002
M	3	336-	355	339.79	84.91	0.40	7.33E+001	28.20	2.41E+002
m	4	336-	355	348.95	87.20	0.40	6.42E+001	27.41	2.37E+002
F	5	947-	961	954.04	238.48	1.24	1.67E+002	30.73	1.35E+002
F	6	1348-	1359	1352.42	338.08	0.90	3.21E+001	18.12	6.80E+001
F	7	1400-	1415	1406.81	351.68	1.42	1.12E+002	25.10	8.80E+001
F	8	2034-	2051	2042.72	510.67	1.94	9.35E+001	22.64	7.67E+001
F	9	2322-	2340	2332.08	583.02	1.35	1.00E+002	21.50	3.80E+001
F	10	2426-	2444	2435.81	608.96	1.51	1.19E+002	23.38	4.24E+001
F	11	2823-	2834	2829.07	707.28	0.67	1.55E+001	10.52	2.10E+001
F	12	3634-	3651	3643.11	910.80	1.19	7.48E+001	19.70	3.38E+001
F	13	3867-	3883	3874.57	968.67	1.71	5.64E+001	16.37	1.55E+001
F	14	4473-	4486	4479.61	1119.95	1.71	4.35E+001	15.26	1.34E+001
F	15	5830-	5855	5842.87	1460.79	1.89	4.68E+002	42.40	1.61E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.01823E+005	2.84999E+004
K-40	1.000	1460.81*		10.67	7.11087E+006	8.63560E+005
Eu-155	0.335	86.54*		30.90	1.71424E+005	8.05582E+004
		105.31		20.70		
TL-208	0.753	277.35		6.80		
		510.84*		21.60	4.71403E+005	1.37446E+005
		583.14*		84.20	1.37136E+005	3.45580E+004
		860.37		12.46		
Pb-212	0.659	74.81*	@	10.70	2.52574E+006	6.66491E+005
		77.11	@	18.00		
		87.30*	@	8.00	6.62125E+005	3.11156E+005
		238.63*		44.60	3.10198E+005	7.49508E+004
Bi-214	0.710	609.31*		46.30	3.02483E+005	7.02130E+004
		1120.29*		15.10	4.25563E+005	1.55999E+005
		1764.49		15.80		
Ac-228	0.997	338.32*		11.40	2.62489E+005	1.53586E+005
		911.07*		27.70	3.65307E+005	1.05032E+005
		969.11*		16.60	4.72217E+005	1.45664E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	7.220157E+004	2.944542E+004
K-40		1.000	7.110873E+006	8.635600E+005
Eu-155		0.335	9.111371E+004	8.286237E+004
TL-208		0.753	1.371362E+005	3.426782E+004
Pb-212	@	0.659	3.101981E+005	7.495076E+004
Bi-214		0.710	3.232160E+005	6.402666E+004
Ac-228		0.997	3.690803E+005	7.450032E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.04	1.7355E-001	26.70
M 3	84.91	8.1396E-002	38.50
F 7	351.68	1.2404E-001	22.48
F 11	707.28	1.7168E-002	68.06

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.2753E+004	5.70E+004	-5.0299E+004
		1332.49	100.00	5.6991E+004		-1.8990E+004
	Nb-94	702.63	100.00	6.7072E+004	5.87E+004	3.0214E+004
		871.10	100.00	5.8686E+004		1.2067E+004
	Ag-108m	79.20	7.10	2.3081E+006	7.40E+004	-7.9368E+005
		433.93	89.90	7.4039E+004		3.3677E+004
		614.37	90.40	9.3636E+004		-6.1356E+003
		722.95	90.50	8.1498E+004		4.1513E+004
	Sb-125	176.33	6.89	1.1625E+006	2.16E+005	-3.3601E+005
		427.89	29.33	2.1603E+005		-6.0163E+004
		463.38	10.35	6.3453E+005		-1.8692E+005
		600.56	17.80	3.5450E+005		-4.7509E+004
		606.64	5.02	1.7486E+006		3.5430E+006
		635.90	11.32	5.8426E+005		2.8377E+005
	Cs-134	563.23	8.38	7.8507E+005	7.56E+004	4.7422E+005
		569.32	15.43	3.9035E+005		-5.5614E+005
		604.70	97.60	8.8734E+004		-4.2066E+003
		795.84	85.40	7.5557E+004		-6.5864E+004
		801.93	8.73	7.2028E+005		-7.0992E+005
	Cs-137	661.65	85.12	7.4476E+004	7.45E+004	-2.2094E+004
	Eu-152	121.78	28.40	3.7063E+005	2.24E+005	-3.4087E+004
		244.69	7.49	1.0583E+006		2.4378E+005
		344.27	26.50	2.5020E+005		9.9154E+004
		778.89	12.74	5.0285E+005		-6.9183E+003
		867.32	4.16	1.4660E+006		-2.0268E+006
		964.01	14.40	5.4856E+005		-1.2495E+005
		1085.78	10.00	5.6511E+005		-2.1258E+005
		1112.02	13.30	4.9386E+005		-5.8110E+005
		1407.95	20.70	2.2441E+005		-5.2247E+004
	Eu-154	123.07	40.50	2.5754E+005	1.84E+005	-3.3046E+004
		247.94	6.60	1.1244E+006		-6.6612E+005
		591.81	4.83	1.2572E+006		-2.2690E+005
		723.30	19.70	3.8052E+005		2.9386E+005
		756.87	4.33	1.4245E+006		-5.3757E+005
		873.19	11.50	5.1675E+005		-9.0011E+004
		996.32	10.30	5.6840E+005		1.4033E+005
		1004.76	17.90	3.3260E+005		-9.6087E+003
		1274.45	35.50	1.8407E+005		1.2084E+005
+	Eu-155	86.54*	30.90	1.9846E+005	1.98E+005	1.7142E+005
		105.31	20.70	5.4564E+005		-4.0044E+005
	Am-241	59.54	35.90	4.9460E+005	4.95E+005	-2.3125E+005
	Cm-243	228.19	10.56	6.9206E+005	5.19E+005	-4.8956E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1916E+005	5.19E+005	3.5807E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 2:54:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 2:39:18 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	309	291.77	72.90	1.07	1.81E+002	41.99	5.56E+002
m	2	285-	309	300.26	75.02	1.07	3.51E+002	50.11	5.86E+002
M	3	331-	354	339.29	84.78	0.94	1.02E+002	38.12	4.74E+002
m	4	331-	354	349.87	87.43	0.94	6.21E+001	35.23	4.46E+002
F	5	740-	749	745.14	186.25	0.77	3.35E+001	23.18	1.34E+002
F	6	946-	961	954.67	238.64	0.85	9.96E+001	26.19	1.48E+002
F	7	1176-	1186	1180.25	295.04	1.16	3.72E+001	19.33	6.41E+001
F	8	1348-	1357	1352.53	338.11	0.87	3.05E+001	17.84	5.73E+001
F	9	1402-	1412	1406.94	351.72	0.74	6.15E+001	20.25	6.12E+001
F	10	2325-	2341	2332.72	583.18	1.36	7.13E+001	18.96	3.35E+001
F	11	2426-	2445	2435.81	608.95	1.33	8.66E+001	20.75	4.51E+001
F	12	2641-	2653	2646.02	661.51	1.27	2.73E+001	14.11	2.50E+001
F	13	3635-	3650	3642.89	910.75	1.57	4.67E+001	16.19	2.20E+001
F	14	3869-	3882	3875.64	968.94	1.49	2.30E+001	13.19	1.93E+001
F	15	4473-	4486	4478.84	1119.76	0.95	2.62E+001	11.30	8.81E+000
F	16	5831-	5855	5842.94	1460.81	1.89	3.90E+002	39.17	2.20E+001
F	17	7051-	7066	7057.33	1764.43	1.50	3.78E+001	13.20	6.38E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	5.87570E+006	7.58020E+005
Cs-137	0.999	661.65*	85.12	3.84352E+004	2.03931E+004
Eu-155	0.329	86.54*	30.90	1.62065E+005	9.72929E+004
		105.31	20.70		
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.64027E+004	2.86437E+004
		860.37	12.46		
Pb-212	0.658	74.81* @	10.70	3.09408E+006	7.50019E+005
		77.11 @	18.00		
		87.30* @	8.00	6.25977E+005	3.75794E+005
		238.63*	44.60	1.82761E+005	5.59333E+004
Bi-214	0.996	609.31*	46.30	2.16949E+005	5.85794E+004
		1120.29*	15.10	2.54148E+005	1.13021E+005
		1764.49*	15.80	4.09882E+005	1.49002E+005
PB-214	0.656	74.82* @	6.21	5.33119E+006	1.34901E+006
		77.11 @	10.50		
		87.30* @	4.67	1.07234E+006	6.48835E+005
		241.98	7.49		
		295.21*	19.20	1.70684E+005	9.31434E+004
		351.92*	37.20	1.54501E+005	5.70563E+004
Ac-228	0.998	338.32*	11.40	2.46793E+005	1.49388E+005
		911.07*	27.70	2.25726E+005	8.23807E+004
		969.11*	16.60	1.90353E+005	1.11101E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		1.000	5.875701E+006	7.580200E+005
Cs-137		0.999	3.843521E+004	2.039309E+004
Eu-155		0.329	9.073664E+004	9.863330E+004
TL-208		0.471	9.640271E+004	2.864372E+004
Pb-212	@	0.658	1.827615E+005	5.593328E+004
Bi-214		0.996	2.449238E+005	4.910338E+004
PB-214	@	0.656	1.588776E+005	4.813081E+004
Ac-228		0.998	2.186908E+005	6.050350E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	2.0121E-001	23.19
M 3	84.78	1.1307E-001	37.46
F 5	186.25	3.7219E-002	69.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.1094E+004	4.59E+004	7.0026E+004
		1332.49	100.00	4.5850E+004		4.1752E+004
	Nb-94	702.63	100.00	6.0547E+004	5.59E+004	3.2085E+003
		871.10	100.00	5.5866E+004		3.3930E+003
	Ag-108m	79.20	7.10	2.1550E+006	6.17E+004	-8.5758E+005
		433.93	89.90	6.1670E+004		-1.7448E+004
		614.37	90.40	8.5166E+004		2.2408E+004
		722.95	90.50	7.1533E+004		-1.0538E+004
	Sb-125	176.33	6.89	1.1312E+006	1.85E+005	6.8839E+005
		427.89	29.33	1.8514E+005		-1.3905E+005
		463.38	10.35	6.0171E+005		-1.7161E+005
		600.56	17.80	3.0970E+005		-1.5824E+005
		606.64	5.02	1.5218E+006		2.4238E+006
		635.90	11.32	5.1087E+005		6.8163E+004
	Cs-134	563.23	8.38	6.9906E+005	6.39E+004	2.4086E+005
		569.32	15.43	3.7488E+005		2.2586E+005
		604.70	97.60	7.8776E+004		2.5413E+004
		795.84	85.40	6.3865E+004		-4.7463E+004
		801.93	8.73	6.3423E+005		-4.6482E+004
+	Cs-137	661.65*	85.12	4.2087E+004	4.21E+004	3.8435E+004
	Eu-152	121.78	28.40	3.5596E+005	2.49E+005	8.4629E+004
		244.69	7.49	1.0158E+006		-1.9831E+005
		344.27	26.50	2.5220E+005		-1.6942E+005
		778.89	12.74	4.4598E+005		-1.3704E+005
		867.32	4.16	1.3149E+006		-1.0158E+006
		964.01	14.40	4.7351E+005		-2.5600E+005
		1085.78	10.00	5.6922E+005		-5.9910E+005
		1112.02	13.30	4.6082E+005		1.1455E+005
		1407.95	20.70	2.4922E+005		1.2995E+005
	Eu-154	123.07	40.50	2.5072E+005	1.65E+005	1.2825E+005
		247.94	6.60	1.0891E+006		-1.0611E+006
		591.81	4.83	1.2061E+006		-5.1000E+003
		723.30	19.70	3.2454E+005		2.2186E+004
		756.87	4.33	1.3719E+006		-7.3941E+005
		873.19	11.50	4.9849E+005		9.6289E+003
		996.32	10.30	5.5524E+005		-2.4974E+005
		1004.76	17.90	3.2070E+005		-1.1012E+005
		1274.45	35.50	1.6508E+005		-6.2720E+004
+	Eu-155	86.54*	30.90	2.6351E+005	2.64E+005	1.6207E+005
		105.31	20.70	5.4295E+005		4.8947E+003
	Am-241	59.54	35.90	4.9563E+005	4.96E+005	6.1743E+004
	Cm-243	228.19	10.56	7.3851E+005	4.70E+005	4.6203E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7038E+005	4.70E+005	1.3477E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/22/2005 2:32:43 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/22/2005 2:17:41 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.82	72.91	1.09	1.62E+002	40.02	4.61E+002
m	2	286-	309	300.54	75.09	1.09	3.46E+002	48.81	5.77E+002
F	3	331-	344	339.74	84.90	1.05	1.27E+002	40.30	4.86E+002
F	4	948-	960	954.27	238.54	1.07	7.84E+001	26.28	1.41E+002
F	5	1347-	1358	1352.54	338.12	1.16	3.35E+001	16.92	4.82E+001
F	6	1399-	1413	1407.07	351.75	1.13	1.17E+002	25.19	7.30E+001
F	7	2032-	2050	2041.28	510.31	1.88	7.96E+001	20.76	6.42E+001
F	8	2325-	2340	2331.98	582.99	1.32	6.67E+001	19.83	5.07E+001
F	9	2427-	2445	2435.66	608.92	1.42	1.37E+002	24.75	4.28E+001
F	10	3635-	3651	3642.75	910.72	1.70	4.97E+001	15.40	1.32E+001
F	11	4472-	4487	4480.42	1120.15	1.30	4.40E+001	16.00	2.21E+001
F	12	5830-	5855	5842.90	1460.80	1.93	3.80E+002	38.01	6.50E+000
F	13	7052-	7067	7058.26	1764.66	1.66	3.47E+001	13.04	7.22E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*		100.00	8.58809E+004	2.54327E+004
K-40	1.000	1460.81*		10.67	5.72133E+006	7.36534E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	3.97597E+005	1.22139E+005
		583.14*		84.20	9.02421E+004	2.93592E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	3.04260E+006	7.34898E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.43846E+005	5.32193E+004
Bi-214	0.997	609.31*		46.30	3.42358E+005	7.52266E+004
		1120.29*		15.10	4.27700E+005	1.61931E+005
		1764.49*		15.80	3.76983E+005	1.46501E+005
Ac-228	0.545	338.32*		11.40	2.71080E+005	1.43280E+005
		911.07*		27.70	2.40152E+005	7.93281E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	6.638863E+004	2.620367E+004
K-40		1.000	5.721333E+006	7.365341E+005
TL-208		0.751	9.024210E+004	2.921155E+004
Pb-212	@	0.496	1.438463E+005	5.321934E+004
Bi-214		0.997	3.609778E+005	6.184663E+004
Ac-228		0.545	2.474080E+005	6.940106E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	1.8023E-001	24.67
F 3	84.90	1.4137E-001	31.67
F 6	351.75	1.3028E-001	21.49

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.6665E+004	4.65E+004	-8.7987E+004
	1332.49	100.00	4.6476E+004		1.0217E+004
Nb-94	702.63	100.00	6.1111E+004	5.51E+004	3.7413E+004
	871.10	100.00	5.5144E+004		9.4419E+003
Ag-108m	79.20	7.10	2.1429E+006	6.59E+004	-6.3423E+005
	433.93	89.90	6.5935E+004		2.6614E+003
	614.37	90.40	9.1914E+004		1.1803E+004
	722.95	90.50	6.7231E+004		3.3258E+004
Sb-125	176.33	6.89	1.1688E+006	1.97E+005	2.5025E+005
	427.89	29.33	1.9699E+005		-1.5273E+005
	463.38	10.35	5.7856E+005		6.6695E+005
	600.56	17.80	3.0182E+005		-1.8459E+005
	606.64	5.02	1.7384E+006		3.6247E+006
	635.90	11.32	4.9601E+005		-1.9237E+005
Cs-134	563.23	8.38	7.2495E+005	6.59E+004	2.9630E+005
	569.32	15.43	3.5820E+005		-3.9689E+003
	604.70	97.60	8.7875E+004		1.6221E+004
	795.84	85.40	6.5853E+004		4.8456E+004
	801.93	8.73	6.4585E+005		-4.0964E+005
Cs-137	661.65	85.12	7.3514E+004	7.35E+004	3.4208E+004
Eu-152	121.78	28.40	3.5360E+005	2.26E+005	-9.4073E+004
	244.69	7.49	1.0499E+006		5.6343E+005
	344.27	26.50	2.2560E+005		-1.1876E+005
	778.89	12.74	4.3036E+005		-7.8717E+005
	867.32	4.16	1.3749E+006		-5.1947E+005
	964.01	14.40	4.7570E+005		3.8163E+005
	1085.78	10.00	6.0639E+005		-1.7464E+005
	1112.02	13.30	3.8419E+005		-1.6212E+005
	1407.95	20.70	2.7805E+005		1.6023E+005
Eu-154	123.07	40.50	2.4811E+005	1.51E+005	3.2090E+003
	247.94	6.60	1.0761E+006		-1.8331E+006
	591.81	4.83	1.2167E+006		2.9936E+005
	723.30	19.70	3.0744E+005		3.0950E+005
	756.87	4.33	1.3929E+006		7.5336E+005
	873.19	11.50	4.9544E+005		4.3226E+005
	996.32	10.30	4.9878E+005		-3.7551E+003
	1004.76	17.90	2.7543E+005		-2.2735E+005
	1274.45	35.50	1.5123E+005		-3.8953E+004
Eu-155	86.54	30.90	4.4011E+005	4.40E+005	5.2201E+004
	105.31	20.70	5.3240E+005		-5.5021E+004
Am-241	59.54	35.90	4.9514E+005	4.95E+005	-3.2712E+005
Cm-243	228.19	10.56	6.5957E+005	5.07E+005	4.6887E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0687E+005	5.07E+005	1.9326E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 7:52:25 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 7:37:23 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	314	291.99	72.96	1.00	1.22E+002	38.88	3.88E+002
m	2	288-	314	300.25	75.02	1.00	3.43E+002	49.16	5.22E+002
m	3	288-	314	310.24	77.52	1.01	7.34E+001	35.03	4.26E+002
F	4	332-	344	338.86	84.67	1.05	9.32E+001	41.39	5.32E+002
F	5	946-	960	953.96	238.46	1.08	1.19E+002	28.45	1.50E+002
M	6	1172-	1209	1179.18	294.77	1.18	5.05E+001	20.22	8.63E+001
m	7	1172-	1209	1201.49	300.35	1.18	2.75E+001	17.42	9.20E+001
F	8	1397-	1414	1405.56	351.37	1.16	7.35E+001	22.16	9.83E+001
F	9	2034-	2053	2042.19	510.54	2.09	8.91E+001	21.04	5.70E+001
F	10	2324-	2340	2331.28	582.82	1.45	7.99E+001	21.04	5.00E+001
F	11	2425-	2444	2434.72	608.68	1.32	8.48E+001	21.37	5.75E+001
F	12	3633-	3651	3641.56	910.42	1.60	6.97E+001	18.49	2.55E+001
F	13	3866-	3881	3872.83	968.24	1.46	5.18E+001	16.06	1.60E+001
F	14	4473-	4486	4479.15	1119.83	1.29	2.57E+001	12.88	1.66E+001
F	15	5826-	5853	5839.83	1460.03	2.11	4.31E+002	40.22	1.05E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*		100.00	9.70481E+004	2.66515E+004
K-40	0.982	1460.81*		10.67	6.53962E+006	8.08069E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	4.49297E+005	1.28727E+005
		583.14*		84.20	1.09302E+005	3.22078E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	3.08622E+006	7.49620E+005
		77.11*	@	18.00	3.80032E+005	1.96028E+005
		87.30	@	8.00		
		238.63*		44.60	2.20391E+005	6.31023E+004
Bi-214	0.705	609.31*		46.30	2.14939E+005	6.04003E+004
		1120.29*		15.10	2.51211E+005	1.28869E+005
		1764.49		15.80		
PB-214	0.754	74.82*	@	6.21	5.31764E+006	1.34807E+006
		77.11*	@	10.50	6.51484E+005	3.39551E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.33719E+005	1.01543E+005
		351.92*		37.20	1.86290E+005	6.42441E+004
Ac-228	0.607	338.32		11.40		
		911.07*		27.70	3.40546E+005	9.84695E+004
		969.11*		16.60	4.33340E+005	1.41907E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.994	7.343894E+004	2.753379E+004
K-40		0.982	6.539616E+006	8.080692E+005
TL-208		0.750	1.093019E+005	3.201020E+004
Pb-212	@	0.837	2.203905E+005	6.310229E+004
Bi-214		0.705	2.214722E+005	5.469108E+004
PB-214	@	0.754	1.998477E+005	5.429069E+004
Ac-228		0.607	3.707050E+005	8.090047E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	1.3602E-001	31.76
F 4	84.67	1.0361E-001	44.39
m 7	300.35	3.0526E-002	63.39

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9114E+004	5.80E+004	1.1616E+004
	1332.49	100.00	5.7995E+004		6.2480E+004
Nb-94	702.63	100.00	6.3857E+004	5.43E+004	-2.8108E+004
	871.10	100.00	5.4330E+004		-6.0782E+003
Ag-108m	79.20	7.10	2.1897E+006	6.62E+004	-1.0920E+006
	433.93	89.90	6.6195E+004		1.8040E+004
	614.37	90.40	8.8602E+004		5.5271E+003
	722.95	90.50	7.3050E+004		7.3839E+004
Sb-125	176.33	6.89	1.1714E+006	1.95E+005	4.8484E+005
	427.89	29.33	1.9504E+005		7.3244E+004
	463.38	10.35	6.3271E+005		5.2212E+005
	600.56	17.80	3.5861E+005		1.2786E+005
	606.64	5.02	1.6917E+006		2.6678E+006
	635.90	11.32	4.9968E+005		-2.2169E+005
Cs-134	563.23	8.38	7.0368E+005	7.01E+004	3.0630E+005
	569.32	15.43	3.6558E+005		-8.4991E+004
	604.70	97.60	8.4825E+004		-1.5618E+004
	795.84	85.40	7.0148E+004		-9.5789E+003
	801.93	8.73	6.8056E+005		2.4623E+005
Cs-137	661.65	85.12	6.9286E+004	6.93E+004	3.7307E+004
Eu-152	121.78	28.40	3.4599E+005	2.37E+005	-8.7576E+004
	244.69	7.49	9.9762E+005		-5.3450E+005
	344.27	26.50	2.5355E+005		-3.6557E+005
	778.89	12.74	4.5930E+005		-1.0741E+005
	867.32	4.16	1.3833E+006		-9.8501E+005
	964.01	14.40	5.0443E+005		-1.7157E+005
	1085.78	10.00	5.9906E+005		-4.4355E+005
	1112.02	13.30	4.7932E+005		-4.3196E+005
	1407.95	20.70	2.3675E+005		9.9487E+004
Eu-154	123.07	40.50	2.4130E+005	1.73E+005	1.3576E+004
	247.94	6.60	1.0668E+006		-9.7005E+005
	591.81	4.83	1.1647E+006		-1.2620E+006
	723.30	19.70	3.3010E+005		-3.6880E+004
	756.87	4.33	1.5312E+006		6.9030E+005
	873.19	11.50	4.8259E+005		-8.1553E+003
	996.32	10.30	5.9071E+005		7.3427E+004
	1004.76	17.90	3.5351E+005		1.3605E+005
	1274.45	35.50	1.7294E+005		8.8354E+004
Eu-155	86.54	30.90	4.6170E+005	4.62E+005	6.2511E+005
	105.31	20.70	5.2618E+005		1.0748E+005
Am-241	59.54	35.90	5.1187E+005	5.12E+005	4.8209E+004
Cm-243	228.19	10.56	7.1475E+005	5.09E+005	6.3295E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0904E+005	5.09E+005	2.2260E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 8:10:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 7:55:25 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	315	291.69	72.88	1.04	1.48E+002	40.71	4.36E+002
m	2	287-	315	300.01	74.96	1.05	3.41E+002	48.97	5.59E+002
m	3	287-	315	309.14	77.24	1.05	1.12E+002	37.05	5.17E+002
F	4	738-	751	741.95	185.46	0.86	4.35E+001	23.83	1.75E+002
F	5	944-	960	953.73	238.40	0.93	1.63E+002	30.80	1.53E+002
F	6	1172-	1185	1179.54	294.86	0.96	3.99E+001	19.76	8.96E+001
F	7	1346-	1358	1351.46	337.85	1.07	3.89E+001	17.62	5.62E+001
F	8	1401-	1415	1406.54	351.62	1.19	1.05E+002	24.29	7.08E+001
F	9	2324-	2337	2330.28	582.57	1.24	9.90E+001	22.33	3.69E+001
F	10	2426-	2443	2434.40	608.60	1.35	1.38E+002	24.59	3.57E+001
F	11	3634-	3651	3641.88	910.50	1.65	6.23E+001	17.81	2.14E+001
F	12	3867-	3878	3873.01	968.29	0.64	1.76E+001	11.70	3.00E+001
F	13	4312-	4323	4317.48	1079.41	1.13	1.37E+001	9.50	8.80E+000
F	14	5827-	5852	5839.46	1459.94	1.95	3.94E+002	39.13	1.99E+001
F	15	7048-	7061	7053.83	1763.55	1.49	2.20E+001	10.59	5.68E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.977	1460.81*		10.67	5.97362E+006	7.65966E+005
TL-208	0.464	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.35354E+005	3.54076E+004
		860.37		12.46		
Pb-212	0.838	74.81*	@	10.70	3.07160E+006	7.46515E+005
		77.11*	@	18.00	5.82684E+005	2.23817E+005
		87.30	@	8.00		
		238.63*		44.60	3.01606E+005	7.41832E+004
Bi-214	0.690	609.31*		46.30	3.49333E+005	7.59925E+004
		1120.29		15.10		
		1764.49*		15.80	2.39771E+005	1.17901E+005
PB-214	0.758	74.82*	@	6.21	5.29245E+006	1.34242E+006
		77.11*	@	10.50	9.98887E+005	3.90868E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.84628E+005	9.66246E+004
		351.92*		37.20	2.66708E+005	7.60589E+004
Ac-228	0.988	338.32*		11.40	3.17327E+005	1.52224E+005
		911.07*		27.70	3.04564E+005	9.38078E+004
		969.11*		16.60	1.47394E+005	9.90979E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.977	5.973620E+006	7.659658E+005
TL-208		0.464	1.353544E+005	3.540765E+004
Pb-212	@	0.838	3.016057E+005	7.418322E+004
Bi-214		0.690	3.171755E+005	6.387416E+004
PB-214	@	0.758	2.353062E+005	5.976457E+004
Ac-228		0.988	2.448102E+005	6.218241E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	1.6443E-001	27.51
F 4	185.46	4.8310E-002	54.81
F 13	1079.41	1.5271E-002	69.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4406E+004	4.81E+004	-2.8821E+004
	1332.49	100.00	4.8133E+004		-4.5157E+004
Nb-94	702.63	100.00	5.8081E+004	5.81E+004	-3.6244E+004
	871.10	100.00	5.9033E+004		-1.2853E+004
Ag-108m	79.20	7.10	2.1988E+006	6.64E+004	-7.2592E+005
	433.93	89.90	6.6414E+004		-2.5345E+004
	614.37	90.40	8.7734E+004		-2.9638E+004
	722.95	90.50	7.4235E+004		3.9495E+004
Sb-125	176.33	6.89	1.1201E+006	2.09E+005	1.2924E+005
	427.89	29.33	2.0906E+005		9.1616E+004
	463.38	10.35	5.7528E+005		1.7227E+004
	600.56	17.80	3.3896E+005		-1.2436E+005
	606.64	5.02	1.7240E+006		2.6735E+006
	635.90	11.32	5.0981E+005		-2.7686E+005
Cs-134	563.23	8.38	7.2131E+005	7.34E+004	3.0473E+005
	569.32	15.43	4.0445E+005		-1.9975E+005
	604.70	97.60	9.0177E+004		-4.1482E+004
	795.84	85.40	7.3444E+004		4.9925E+004
	801.93	8.73	7.0252E+005		-2.3513E+005
Cs-137	661.65	85.12	7.8427E+004	7.84E+004	3.2559E+004
Eu-152	121.78	28.40	3.4808E+005	2.18E+005	1.7388E+005
	244.69	7.49	9.8220E+005		-3.6365E+005
	344.27	26.50	2.5410E+005		3.9584E+004
	778.89	12.74	4.6935E+005		-4.0919E+005
	867.32	4.16	1.3487E+006		-2.8921E+006
	964.01	14.40	5.2296E+005		-8.8681E+004
	1085.78	10.00	6.4643E+005		-4.4119E+004
	1112.02	13.30	4.6121E+005		-6.9585E+005
	1407.95	20.70	2.1795E+005		-1.4161E+005
Eu-154	123.07	40.50	2.4306E+005	1.62E+005	-1.4338E+004
	247.94	6.60	1.0634E+006		-1.6004E+006
	591.81	4.83	1.3134E+006		-5.9761E+005
	723.30	19.70	3.4108E+005		2.5014E+005
	756.87	4.33	1.4314E+006		1.9992E+005
	873.19	11.50	5.3729E+005		2.9347E+005
	996.32	10.30	5.9795E+005		3.4131E+005
	1004.76	17.90	3.1479E+005		-3.3218E+005
	1274.45	35.50	1.6236E+005		2.3819E+004
Eu-155	86.54	30.90	4.5701E+005	4.57E+005	4.5245E+005
	105.31	20.70	5.3246E+005		-2.7102E+005
Am-241	59.54	35.90	5.0610E+005	5.06E+005	1.1764E+004
Cm-243	228.19	10.56	6.9398E+005	4.93E+005	-7.0567E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9259E+005	4.93E+005	-4.1650E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/24/2005 8:29:54 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-12-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/24/2005 8:14:52 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff. Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-12-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	315	291.69	72.88	1.09	1.87E+002	42.40	4.58E+002
m	2	287-	315	300.43	75.07	1.09	4.00E+002	50.09	5.48E+002
m	3	287-	315	308.37	77.05	1.10	1.28E+002	36.53	4.58E+002
F	4	945-	959	953.86	238.44	1.03	1.23E+002	28.91	1.54E+002
F	5	1402-	1412	1406.72	351.66	1.10	7.98E+001	22.57	5.66E+001
F	6	2322-	2340	2330.19	582.55	1.47	8.10E+001	20.43	5.01E+001
F	7	2427-	2443	2434.75	608.69	1.31	7.31E+001	20.04	4.71E+001
F	8	3634-	3649	3641.08	910.30	1.35	6.37E+001	18.84	3.20E+001
M	9	3850-	3880	3855.39	963.88	1.36	2.04E+001	11.18	1.39E+001
m	10	3850-	3880	3871.71	967.96	1.36	3.44E+001	14.83	2.64E+001
F	11	4470-	4484	4477.46	1119.41	1.46	3.37E+001	14.92	2.43E+001
F	12	4943-	4956	4949.47	1237.42	0.67	2.18E+001	10.37	1.11E+001
F	13	5828-	5852	5839.90	1460.05	2.04	4.16E+002	39.81	1.51E+001
F	14	7048-	7061	7055.28	1763.92	1.85	1.90E+001	9.20	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.983	1460.81*	10.67	6.32055E+006	7.91812E+005
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.10760E+005	3.15545E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.59601E+006	8.36653E+005
		77.11* @	18.00	6.68235E+005	2.30994E+005
		87.30 @	8.00		
		238.63*	44.60	2.28782E+005	6.45401E+004
Bi-214	0.986	609.31*	46.30	1.85312E+005	5.57886E+004
		1120.29*	15.10	3.29626E+005	1.50102E+005
		1764.49*	15.80	2.07437E+005	1.02480E+005
PB-214	0.394	74.82* @	6.21	6.19603E+006	1.51012E+006
		77.11* @	10.50	1.14555E+006	4.05122E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.02424E+005	6.65101E+004
Ac-228	0.599	338.32	11.40		
		911.07*	27.70	3.11213E+005	9.87654E+004
		969.11*	16.60	2.88064E+005	1.27708E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.983	6.320546E+006	7.918119E+005
TL-208		0.463	1.107597E+005	3.155451E+004
Pb-212	@	0.838	2.287824E+005	6.454008E+004
Bi-214		0.986	2.037805E+005	4.657958E+004
PB-214	@	0.394	2.024236E+005	6.551317E+004
Ac-228		0.599	3.025494E+005	7.812736E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	2.0739E-001	22.71
M 9	963.88	2.2699E-002	54.73
F 12	1237.42	2.4223E-002	47.56

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0978E+004	5.60E+004	2.9706E+004
	1332.49	100.00	5.5966E+004		-1.1003E+004
Nb-94	702.63	100.00	5.8081E+004	5.69E+004	-1.5105E+004
	871.10	100.00	5.6914E+004		-3.3298E+003
Ag-108m	79.20	7.10	2.2283E+006	7.31E+004	4.0945E+005
	433.93	89.90	7.3057E+004		3.1863E+003
	614.37	90.40	7.9476E+004		-4.1997E+003
	722.95	90.50	7.4528E+004		1.3253E+004
Sb-125	176.33	6.89	1.1814E+006	2.19E+005	9.1978E+005
	427.89	29.33	2.1912E+005		1.6394E+005
	463.38	10.35	6.0662E+005		5.9729E+004
	600.56	17.80	3.4184E+005		-2.2211E+005
	606.64	5.02	1.5870E+006		1.3068E+006
	635.90	11.32	5.0730E+005		-5.7283E+005
Cs-134	563.23	8.38	7.5528E+005	7.52E+004	1.6933E+004
	569.32	15.43	4.1055E+005		-1.7683E+005
	604.70	97.60	8.0718E+004		-3.7526E+004
	795.84	85.40	7.5209E+004		9.5675E+004
	801.93	8.73	7.4100E+005		-9.3533E+005
Cs-137	661.65	85.12	8.1329E+004	8.13E+004	8.3614E+004
Eu-152	121.78	28.40	3.5792E+005	2.31E+005	-1.5367E+005
	244.69	7.49	9.9762E+005		-6.2905E+005
	344.27	26.50	2.3749E+005		-3.2074E+005
	778.89	12.74	4.9588E+005		-1.5521E+005
	867.32	4.16	1.4335E+006		6.5950E+005
	964.01	14.40	5.2898E+005		3.5457E+005
	1085.78	10.00	6.7242E+005		4.0720E+005
	1112.02	13.30	5.1074E+005		5.5717E+004
	1407.95	20.70	2.3067E+005		1.4496E+005
Eu-154	123.07	40.50	2.5069E+005	1.73E+005	-1.1121E+005
	247.94	6.60	1.0600E+006		-3.0097E+004
	591.81	4.83	1.2831E+006		1.5015E+005
	723.30	19.70	3.4243E+005		3.2496E+004
	756.87	4.33	1.3086E+006		1.3209E+005
	873.19	11.50	4.9530E+005		-1.6925E+005
	996.32	10.30	5.2071E+005		-7.4229E+005
	1004.76	17.90	3.2159E+005		2.5961E+005
	1274.45	35.50	1.7294E+005		-1.9219E+003
Eu-155	86.54	30.90	4.6804E+005	4.68E+005	8.1994E+005
	105.31	20.70	5.4175E+005		-3.0337E+005
Am-241	59.54	35.90	5.0836E+005	5.08E+005	-4.8177E+004
Cm-243	228.19	10.56	6.7748E+005	4.68E+005	-1.7258E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6818E+005	4.68E+005	-4.2205E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

This page intentionally left blank.

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-13-101-F-G	TBN-01-13-101-F-G	0.00	27-Oct-05	7:30:09	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	47900			61100			61900			5170759
TBN-01-13-102-F-G	TBN-01-13-102-F-G	0.00	27-Oct-05	7:48:21	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	43200			67400			64500			5370603
TBN-01-13-103-F-G	TBN-01-13-103-F-G	0.00	27-Oct-05	8:10:07	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	46200			71900			56300			5766542
TBN-01-13-104-F-G	TBN-01-13-104-F-G	0.00	27-Oct-05	8:27:53	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	43200			58600			64900			4764187
TBN-01-13-105-F-G	TBN-01-13-105-F-G	0.00	27-Oct-05	9:47:01	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	50100			71300			59400			5843590
TBN-01-13-106-F-G	TBN-01-13-106-F-G	0.00	27-Oct-05	11:33:12	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	42500			69200			64100			5499165
TBN-01-13-107-F-G	TBN-01-13-107-F-G	0.10	27-Oct-05	11:13:10	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	43800			25700	38965.02	17528.65	64900			5930638
TBN-01-13-108-F-G	TBN-01-13-108-F-G	0.14	27-Oct-05	10:53:10	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	45000			41100	56552.05	22032.6	64600			5696629
TBN-01-13-109-F-G	TBN-01-13-109-F-G	0.00	27-Oct-05	10:06:41	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	50700			68900			63800			6681250
TBN-01-13-110-F-G	TBN-01-13-110-F-G	0.00	27-Oct-05	10:32:36	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	46200			73100			69000			6655090
TBN-01-13-111-F-G	TBN-01-13-111-F-G	0.00	27-Oct-05	13:55:32	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	51200			73700			67800			6931666
TBN-01-13-112-F-G	TBN-01-13-112-F-G	0.00	27-Oct-05	14:13:57	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49600			63500			57000			5870882
TBN-01-13-113-F-G	TBN-01-13-113-F-G	0.00	27-Oct-05	12:50:00	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	53200			75400			65500			6117864
TBN-01-13-114-F-G	TBN-01-13-114-F-G	0.00	27-Oct-05	13:13:13	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49600			72200			61700			6413147
TBN-01-13-115-F-G	TBN-01-13-115-F-G	0.00	27-Oct-05	13:35:50	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	50100			64500			62800			6913412
TBN-01-13-116-F-G	TBN-01-13-116-F-G	0.15	27-Oct-05	15:00:18	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	42100			43600	58481.92	22548.79	62700			5438533
TBN-01-13-117-F-G	TBN-01-13-117-F-G	0.08	27-Oct-05	15:20:18	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	45600			41600	30807.79	17919.52	64700			5787315
TBN-01-13-118-F-G	TBN-01-13-118-F-G	0.00	27-Oct-05	14:36:10	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	49000			68600			64900			5553576
TBN-01-13-119-F-G	TBN-01-13-119-F-G	0.00	28-Oct-05	9:47:07	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	54000			67400			64000			5600853
TBN-01-13-120-F-G	TBN-01-13-120-F-G	0.00	28-Oct-05	10:17:32	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	46500			63800			59800			5141968
TBN-01-13-121-F-G	TBN-01-13-121-F-G	0.00	28-Oct-05	10:41:47	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	44000			62400			52700			4993491
TBN-01-13-122-F-G	TBN-01-13-122-F-G	0.00	28-Oct-05	11:01:37	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	44000			55100			57200			4250401
TBN-01-13-123-F-G	TBN-01-13-123-F-G	0.00	28-Oct-05	11:26:33	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	41500			68400			59500			5280897

Report Generated On 10/27/2005 7:45:11 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 7:30:09 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	291.47	72.72	0.81	1.01E+002	35.40	4.03E+002
m	2	286-	305	300.07	74.88	0.82	2.49E+002	47.28	4.44E+002
F	3	330-	343	339.09	84.66	0.84	9.40E+001	38.53	4.94E+002
F	4	946-	960	953.77	238.76	0.87	1.33E+002	29.35	1.48E+002
F	5	1345-	1357	1352.70	338.68	1.05	4.68E+001	17.03	3.88E+001
F	6	1397-	1414	1405.54	351.91	1.70	1.04E+002	22.56	6.11E+001
F	7	2323-	2336	2329.98	583.18	1.13	9.59E+001	20.90	2.08E+001
F	8	2429-	2443	2434.79	609.39	1.24	9.15E+001	21.10	2.67E+001
F	9	3633-	3650	3642.53	911.09	1.55	6.98E+001	18.29	2.26E+001
F	10	3867-	3881	3872.96	968.61	1.30	3.81E+001	14.94	2.09E+001
F	11	4471-	4484	4477.51	1119.49	1.04	3.16E+001	13.81	2.10E+001
F	12	5828-	5852	5840.17	1459.42	1.99	3.55E+002	36.46	9.00E+000
F	13	7048-	7063	7055.44	1762.57	1.53	3.02E+001	13.30	1.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.943	1460.81*	10.67	5.17076E+006	6.76676E+005
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.25856E+005	3.20790E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.18312E+006	5.95193E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.40032E+005	6.49497E+004
Bi-214	0.973	609.31*	46.30	2.21993E+005	5.81765E+004
		1120.29*	15.10	2.96159E+005	1.33085E+005
		1764.49*	15.80	3.17181E+005	1.43034E+005
Ac-228	0.997	338.32*	11.40	3.71561E+005	1.47177E+005
		911.07*	27.70	3.24581E+005	9.29072E+004
		969.11*	16.60	3.03805E+005	1.23353E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.943	5.170759E+006	6.766757E+005
TL-208		0.471	1.258558E+005	3.207899E+004
Pb-212	@	0.497	2.400318E+005	6.494974E+004
Bi-214		0.973	2.440489E+005	4.994989E+004
Ac-228		0.997	3.281086E+005	6.626482E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.72	1.1225E-001	35.04
F 3	84.66	1.0439E-001	41.01
F 6	351.91	1.1553E-001	21.69

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3622E+004	4.79E+004	4.2953E+003
	1332.49	100.00	4.7936E+004		-3.9423E+004
Nb-94	702.63	100.00	5.8198E+004	4.64E+004	2.7740E+004
	871.10	100.00	4.6351E+004		1.5481E+003
Ag-108m	79.20	7.10	1.9768E+006	6.19E+004	-1.0445E+006
	433.93	89.90	6.1882E+004		-2.1910E+004
	614.37	90.40	8.4787E+004		-3.6301E+004
	722.95	90.50	6.5208E+004		1.3026E+004
Sb-125	176.33	6.89	1.0315E+006	1.85E+005	-5.3046E+005
	427.89	29.33	1.8459E+005		-9.0380E+004
	463.38	10.35	5.4118E+005		-4.9368E+004
	600.56	17.80	3.0756E+005		-1.2534E+005
	606.64	5.02	1.5158E+006		2.0164E+006
	635.90	11.32	4.9898E+005		3.1703E+005
Cs-134	563.23	8.38	6.7582E+005	5.50E+004	2.8622E+005
	569.32	15.43	3.4765E+005		-2.2305E+004
	604.70	97.60	7.7485E+004		-6.1694E+004
	795.84	85.40	5.4963E+004		-2.4374E+004
	801.93	8.73	5.2142E+005		-8.1749E+005
Cs-137	661.65	85.12	6.1069E+004	6.11E+004	-2.3473E+004
Eu-152	121.78	28.40	3.1826E+005	2.22E+005	-1.2601E+005
	244.69	7.49	9.2777E+005		6.7152E+005
	344.27	26.50	2.2477E+005		-8.3879E+004
	778.89	12.74	4.4227E+005		-3.5132E+005
	867.32	4.16	1.1126E+006		-1.6480E+006
	964.01	14.40	4.7868E+005		4.9815E+005
	1085.78	10.00	5.8051E+005		1.7429E+004
	1112.02	13.30	4.9121E+005		-9.5684E+004
	1407.95	20.70	2.2157E+005		2.0963E+005
Eu-154	123.07	40.50	2.2258E+005	1.66E+005	3.4900E+004
	247.94	6.60	9.8925E+005		-9.1011E+005
	591.81	4.83	1.0776E+006		-2.5354E+005
	723.30	19.70	3.0240E+005		1.6211E+005
	756.87	4.33	1.2394E+006		3.5305E+005
	873.19	11.50	3.8531E+005		-1.6782E+005
	996.32	10.30	4.7630E+005		9.2070E+004
	1004.76	17.90	2.7988E+005		-7.8666E+004
	1274.45	35.50	1.6592E+005		5.7044E+004
Eu-155	86.54	30.90	4.1905E+005	4.19E+005	-2.3384E+004
	105.31	20.70	5.0107E+005		-6.2314E+004
Am-241	59.54	35.90	4.5342E+005	4.53E+005	-1.9118E+005
Cm-243	228.19	10.56	6.0752E+005	4.78E+005	-5.4332E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7761E+005	4.78E+005	1.5530E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 8:03:22 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 7:48:21 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	306	291.20	72.65	0.90	1.15E+002	37.22	4.39E+002
m	2	281-	306	300.11	74.89	0.90	2.49E+002	48.35	5.02E+002
F	3	947-	959	954.22	238.87	1.07	9.58E+001	27.40	1.26E+002
F	4	1173-	1185	1179.64	295.34	1.04	4.83E+001	19.85	7.01E+001
F	5	1345-	1356	1351.78	338.45	0.88	3.87E+001	17.91	6.00E+001
F	6	1398-	1413	1406.58	352.17	1.20	9.95E+001	23.85	7.39E+001
F	7	2322-	2339	2331.05	583.45	1.65	8.94E+001	19.72	2.47E+001
F	8	2427-	2443	2434.27	609.25	1.38	9.15E+001	21.14	3.40E+001
F	9	3634-	3650	3641.31	910.79	1.42	6.41E+001	18.52	2.84E+001
F	10	3866-	3880	3873.54	968.76	1.83	4.04E+001	14.04	1.24E+001
F	11	4471-	4483	4477.23	1119.42	1.07	2.23E+001	12.15	1.63E+001
F	12	5826-	5852	5840.13	1459.41	2.04	3.68E+002	37.41	1.70E+001
F	13	7050-	7064	7056.35	1762.80	1.55	3.05E+001	11.94	5.34E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.942	1460.81*		10.67	5.37060E+006	6.97517E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.17265E+005	3.01705E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.17837E+006	6.01090E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.72794E+005	5.63658E+004
Bi-214	0.978	609.31*		46.30	2.22080E+005	5.82623E+004
		1120.29*		15.10	2.08942E+005	1.15853E+005
		1764.49*		15.80	3.19470E+005	1.29247E+005
PB-214	0.565	74.82*	@	6.21	3.75339E+006	1.07093E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.17576E+005	9.65317E+004
		351.92*		37.20	2.45120E+005	7.16415E+004
Ac-228	0.998	338.32*		11.40	3.06851E+005	1.50016E+005
		911.07*		27.70	2.98179E+005	9.26760E+004
		969.11*		16.60	3.22573E+005	1.16973E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.942	5.370603E+006	6.975166E+005
TL-208		0.469	1.172653E+005	3.017053E+004
Pb-212	@	0.497	1.727937E+005	5.636580E+004
Bi-214		0.978	2.333895E+005	4.828249E+004
PB-214	@	0.565	2.353376E+005	5.752910E+004
Ac-228		0.998	3.074467E+005	6.537906E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.65	1.2809E-001	32.29

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.5513E+004	4.32E+004	4.6237E+004
	1332.49	100.00	4.3181E+004		3.7730E+003
Nb-94	702.63	100.00	5.1772E+004	5.18E+004	-5.4307E+004
	871.10	100.00	5.5165E+004		-4.6490E+002
Ag-108m	79.20	7.10	1.9551E+006	6.45E+004	-1.7517E+006
	433.93	89.90	6.4482E+004		5.2057E+004
	614.37	90.40	8.2055E+004		-1.4116E+004
	722.95	90.50	6.6117E+004		-9.0155E+003
Sb-125	176.33	6.89	1.0158E+006	1.84E+005	1.9242E+005
	427.89	29.33	1.8390E+005		-1.4450E+005
	463.38	10.35	5.6477E+005		-1.7967E+004
	600.56	17.80	3.0609E+005		-2.3057E+004
	606.64	5.02	1.5269E+006		2.4101E+006
	635.90	11.32	4.9898E+005		2.2607E+005
Cs-134	563.23	8.38	6.6136E+005	6.82E+004	-3.5984E+005
	569.32	15.43	3.4765E+005		-1.6072E+005
	604.70	97.60	7.8248E+004		-1.6397E+002
	795.84	85.40	6.8211E+004		3.8737E+004
	801.93	8.73	6.3727E+005		-1.7358E+005
Cs-137	661.65	85.12	6.7371E+004	6.74E+004	4.2811E+004
Eu-152	121.78	28.40	3.2296E+005	2.27E+005	-1.1030E+005
	244.69	7.49	9.5559E+005		-5.9074E+005
	344.27	26.50	2.3061E+005		-1.8713E+005
	778.89	12.74	3.6879E+005		-3.1778E+005
	867.32	4.16	1.2832E+006		2.3194E+005
	964.01	14.40	4.9252E+005		8.5690E+005
	1085.78	10.00	5.3604E+005		2.4997E+005
	1112.02	13.30	4.4414E+005		-4.3184E+005
	1407.95	20.70	2.2741E+005		4.9921E+004
Eu-154	123.07	40.50	2.2692E+005	1.65E+005	3.6443E+004
	247.94	6.60	9.9441E+005		-1.1790E+006
	591.81	4.83	1.0431E+006		5.1126E+005
	723.30	19.70	3.0653E+005		5.8883E+004
	756.87	4.33	1.2682E+006		1.4798E+005
	873.19	11.50	4.8588E+005		3.7451E+005
	996.32	10.30	4.8861E+005		-2.1933E+005
	1004.76	17.90	3.0680E+005		-9.4016E+004
	1274.45	35.50	1.6469E+005		8.0582E+004
Eu-155	86.54	30.90	4.1179E+005	4.12E+005	4.2926E+005
	105.31	20.70	4.9850E+005		7.1348E+004
Am-241	59.54	35.90	4.5892E+005	4.59E+005	-1.9963E+005
Cm-243	228.19	10.56	6.7428E+005	4.61E+005	-3.7725E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6103E+005	4.61E+005	6.1351E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 8:25:08 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 8:10:07 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

YANKEE ROWE PORTABLE ISOCS
(BLUE ROVER SYSTEM)

PEAK ANALYSIS REPORT

Filename: BLUE6279
Log Number:
Title: TBN-01-13-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.70	72.78	0.93	1.44E+002	37.82	4.18E+002
m	2	285-	306	300.10	74.88	0.93	2.46E+002	46.34	4.60E+002
F	3	944-	960	953.95	238.81	1.01	1.41E+002	29.32	1.42E+002
F	4	1348-	1360	1353.06	338.77	1.18	4.06E+001	18.94	6.18E+001
F	5	1401-	1416	1406.36	352.11	1.03	8.74E+001	23.41	8.54E+001
F	6	2324-	2338	2330.36	583.28	1.09	4.60E+001	17.73	4.60E+001
F	7	2427-	2443	2435.08	609.46	1.37	9.62E+001	21.31	3.18E+001
F	8	3634-	3651	3641.99	910.95	1.65	6.86E+001	18.25	2.29E+001
F	9	3867-	3878	3872.59	968.52	1.38	2.87E+001	14.17	1.98E+001
F	10	5827-	5853	5840.12	1459.41	2.07	3.95E+002	38.17	3.26E+000
F	11	6345-	6358	6350.14	1586.62	0.52	9.91E+000	2.05	6.04E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.942	1460.81*	10.67	5.76654E+006	7.26401E+005
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	6.03951E+004	2.45933E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.15168E+006	5.85077E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.53631E+005	6.61704E+004
Bi-214	0.418	609.31*	46.30	2.33370E+005	5.93056E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.995	338.32*	11.40	3.21905E+005	1.58603E+005
		911.07*	27.70	3.18923E+005	9.24473E+004
		969.11*	16.60	2.28785E+005	1.15528E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.942	5.766542E+006	7.264014E+005
TL-208		0.471	6.039505E+004	2.459326E+004
Pb-212	@	0.497	2.536312E+005	6.617040E+004
Bi-214		0.418	2.333701E+005	5.930565E+004
Ac-228		0.995	2.902850E+005	6.569773E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	1.5960E-001	26.33
F 5	352.11	9.7154E-002	26.77
F 11	1586.62	1.1008E-002	20.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8073E+004	4.62E+004	-5.6926E+003
	1332.49	100.00	4.6216E+004		-3.5173E+004
Nb-94	702.63	100.00	5.0190E+004	5.02E+004	-4.5020E+004
	871.10	100.00	5.4828E+004		-1.6407E+004
Ag-108m	79.20	7.10	1.9786E+006	5.63E+004	-1.9182E+006
	433.93	89.90	5.6302E+004		-1.8712E+004
	614.37	90.40	8.2481E+004		-2.3943E+004
	722.95	90.50	6.9627E+004		2.4865E+004
Sb-125	176.33	6.89	1.0411E+006	1.81E+005	3.5972E+005
	427.89	29.33	1.8110E+005		-1.1799E+003
	463.38	10.35	5.6860E+005		2.3385E+005
	600.56	17.80	3.2743E+005		3.3633E+004
	606.64	5.02	1.5524E+006		2.2398E+006
	635.90	11.32	4.9192E+005		1.5846E+005
Cs-134	563.23	8.38	6.9831E+005	6.75E+004	2.2442E+005
	569.32	15.43	3.6698E+005		1.4408E+005
	604.70	97.60	8.0676E+004		2.8693E+004
	795.84	85.40	6.7508E+004		-1.9246E+004
	801.93	8.73	6.4445E+005		1.1272E+005
Cs-137	661.65	85.12	7.1937E+004	7.19E+004	5.2809E+004
Eu-152	121.78	28.40	3.1458E+005	2.27E+005	1.3533E+005
	244.69	7.49	9.2777E+005		1.9010E+005
	344.27	26.50	2.3291E+005		-5.3259E+004
	778.89	12.74	4.0991E+005		-1.1635E+005
	867.32	4.16	1.1967E+006		-1.7530E+006
	964.01	14.40	4.7868E+005		4.5976E+005
	1085.78	10.00	5.4024E+005		3.8448E+005
	1112.02	13.30	4.9644E+005		2.8230E+005
	1407.95	20.70	2.2741E+005		-1.1016E+005
Eu-154	123.07	40.50	2.1877E+005	1.62E+005	4.0017E+004
	247.94	6.60	1.0298E+006		4.6597E+005
	591.81	4.83	1.1163E+006		-2.0287E+005
	723.30	19.70	3.1463E+005		-1.1161E+005
	756.87	4.33	1.2099E+006		-2.1635E+005
	873.19	11.50	4.8007E+005		1.4572E+005
	996.32	10.30	4.8455E+005		2.8375E+005
	1004.76	17.90	2.8687E+005		-1.1451E+005
	1274.45	35.50	1.6219E+005		7.9256E+004
Eu-155	86.54	30.90	4.1198E+005	4.12E+005	2.9103E+005
	105.31	20.70	5.0221E+005		5.5282E+005
Am-241	59.54	35.90	4.4944E+005	4.49E+005	-4.6749E+005
Cm-243	228.19	10.56	6.5345E+005	4.65E+005	2.6559E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6457E+005	4.65E+005	2.7018E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 8:42:54 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 8:27:53 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	290.87	72.57	0.91	1.36E+002	36.47	3.61E+002
m	2	285-	305	300.07	74.87	0.92	2.81E+002	48.17	4.41E+002
F	3	947-	960	954.21	238.87	1.14	1.37E+002	29.15	1.19E+002
F	4	1174-	1184	1179.89	295.40	0.83	4.70E+001	20.39	7.40E+001
F	5	1400-	1414	1406.51	352.15	1.22	6.41E+001	21.05	7.33E+001
F	6	2030-	2050	2041.17	510.96	1.73	8.64E+001	21.03	6.04E+001
F	7	2324-	2337	2329.85	583.15	1.43	4.58E+001	18.18	4.45E+001
F	8	2426-	2444	2435.18	609.48	1.78	8.81E+001	20.12	3.54E+001
F	9	3634-	3650	3642.15	911.00	1.95	6.34E+001	16.86	1.62E+001
F	10	5825-	5853	5840.16	1459.42	2.01	3.27E+002	34.83	7.25E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	9.07866E+004	2.55007E+004
K-40	0.943	1460.81*		10.67	4.76419E+006	6.37734E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	4.20308E+005	1.22947E+005
		583.14*		84.20	6.00351E+004	2.51397E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.45678E+006	6.40012E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.46733E+005	6.52769E+004
Bi-214	0.418	609.31*		46.30	2.13698E+005	5.56022E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	4.23310E+006	1.14477E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.11596E+005	9.84343E+004
		351.92*		37.20	1.57969E+005	5.81993E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	7.781901E+004	2.606901E+004
K-40		0.943	4.764187E+006	6.377336E+005
TL-208		0.753	6.003508E+004	2.506342E+004
Pb-212	@	0.497	2.467335E+005	6.527691E+004
Bi-214		0.418	2.136978E+005	5.560223E+004
PB-214	@	0.565	1.718602E+005	5.009784E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.57	1.5148E-001	26.75
F 9	911.00	7.0448E-002	26.60

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.5513E+004	4.32E+004	1.0218E+003
	1332.49	100.00	4.3181E+004		-1.7770E+004
Nb-94	702.63	100.00	5.5952E+004	5.48E+004	5.6482E+004
	871.10	100.00	5.4828E+004		8.4367E+003
Ag-108m	79.20	7.10	1.9586E+006	6.49E+004	-1.9616E+006
	433.93	89.90	6.5742E+004		8.1495E+004
	614.37	90.40	8.0761E+004		-1.0649E+003
	722.95	90.50	6.4903E+004		2.3531E+004
Sb-125	176.33	6.89	1.0446E+006	1.84E+005	-4.7221E+005
	427.89	29.33	1.8390E+005		-2.5865E+005
	463.38	10.35	5.6477E+005		1.0182E+005
	600.56	17.80	3.0313E+005		3.7660E+004
	606.64	5.02	1.4858E+006		1.4048E+006
	635.90	11.32	4.6758E+005		-2.9763E+005
Cs-134	563.23	8.38	6.2830E+005	6.54E+004	-4.6511E+005
	569.32	15.43	3.3924E+005		-9.5855E+003
	604.70	97.60	7.5740E+004		9.1819E+003
	795.84	85.40	6.5351E+004		7.6896E+004
	801.93	8.73	5.4755E+005		-6.5925E+005
Cs-137	661.65	85.12	5.8565E+004	5.86E+004	-5.2708E+004
Eu-152	121.78	28.40	3.1239E+005	2.25E+005	2.2187E+005
	244.69	7.49	9.4595E+005		-7.9108E+005
	344.27	26.50	2.2477E+005		-4.0743E+005
	778.89	12.74	4.4227E+005		-1.1156E+005
	867.32	4.16	1.3871E+006		-7.2985E+005
	964.01	14.40	4.2534E+005		4.5651E+005
	1085.78	10.00	5.1885E+005		0.0000E+000
	1112.02	13.30	4.7244E+005		-1.5834E+005
	1407.95	20.70	2.3309E+005		1.0905E+005
Eu-154	123.07	40.50	2.1753E+005	1.56E+005	1.4906E+004
	247.94	6.60	1.0232E+006		-5.5498E+005
	591.81	4.83	1.0548E+006		-9.8510E+005
	723.30	19.70	3.0240E+005		2.5898E+005
	756.87	4.33	1.3505E+006		1.2823E+006
	873.19	11.50	4.5604E+005		-2.1711E+005
	996.32	10.30	4.8044E+005		1.0574E+005
	1004.76	17.90	2.7751E+005		1.9082E+004
	1274.45	35.50	1.5577E+005		1.4461E+004
Eu-155	86.54	30.90	3.9991E+005	4.00E+005	2.2201E+005
	105.31	20.70	4.8923E+005		-2.4587E+005
Am-241	59.54	35.90	4.3674E+005	4.37E+005	-7.7719E+004
Cm-243	228.19	10.56	6.5345E+005	4.84E+005	2.8334E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8442E+005	4.84E+005	2.4438E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 10:02:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 9:47:01 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.54	72.73	0.89	1.40E+002	37.26	3.86E+002
m	2	284-	305	299.97	74.85	0.89	2.62E+002	47.83	4.74E+002
F	3	336-	345	339.61	84.79	0.79	7.38E+001	36.82	3.53E+002
F	4	948-	974	954.09	238.84	0.90	1.06E+002	27.68	2.47E+002
F	5	1175-	1186	1179.93	295.41	0.71	3.22E+001	18.06	8.40E+001
F	6	1306-	1315	1309.84	327.95	1.03	2.93E+001	15.75	3.57E+001
F	7	1346-	1358	1350.94	338.24	1.23	4.46E+001	19.33	6.16E+001
F	8	1399-	1414	1406.52	352.15	1.13	5.69E+001	20.91	8.77E+001
F	9	2031-	2052	2041.72	511.10	2.10	1.08E+002	21.51	4.95E+001
F	10	2322-	2337	2330.21	583.24	1.40	7.97E+001	20.53	3.80E+001
F	11	2423-	2442	2434.41	609.29	1.60	8.80E+001	20.18	3.50E+001
F	12	3632-	3650	3641.69	910.88	1.66	7.00E+001	18.31	2.38E+001
F	13	5829-	5853	5840.47	1459.49	1.99	4.01E+002	38.88	1.19E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.12980E+005	2.76009E+004
K-40	0.949	1460.81*		10.67	5.84359E+006	7.38421E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	5.23056E+005	1.34733E+005
		583.14*		84.20	1.04633E+005	3.02897E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.29331E+006	6.14305E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.91424E+005	5.82555E+004
Bi-214	0.418	609.31*		46.30	2.13556E+005	5.57254E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	3.95143E+006	1.09664E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.44967E+005	8.48758E+004
		351.92*		37.20	1.40239E+005	5.66141E+004
Ac-228	0.545	338.32*		11.40	3.53902E+005	1.63075E+005
		911.07*		27.70	3.25286E+005	9.29837E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	9.037948E+004	2.835620E+004
K-40		0.949	5.843590E+006	7.384211E+005
TL-208		0.752	1.046327E+005	3.009711E+004
Pb-212	@	0.497	1.914237E+005	5.825549E+004
Bi-214		0.418	2.135558E+005	5.572539E+004
PB-214	@	0.565	1.416945E+005	4.709807E+004
Ac-228		0.545	3.323067E+005	8.077558E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.73	1.5601E-001	26.54
F	3	84.79	8.1960E-002	49.91
F	6	327.95	3.2608E-002	53.68

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7655E+004	5.01E+004	-5.0764E+003
	1332.49	100.00	5.0130E+004		-1.4390E+003
Nb-94	702.63	100.00	5.7086E+004	5.71E+004	2.3848E+004
	871.10	100.00	5.7143E+004		2.4393E+004
Ag-108m	79.20	7.10	1.9411E+006	5.94E+004	-2.7130E+006
	433.93	89.90	5.9393E+004		-9.7955E+003
	614.37	90.40	7.6515E+004		-1.9803E+003
	722.95	90.50	7.1591E+004		1.6639E+004
Sb-125	176.33	6.89	1.0458E+006	1.93E+005	-2.5722E+005
	427.89	29.33	1.9335E+005		1.0611E+004
	463.38	10.35	5.7430E+005		-2.8159E+005
	600.56	17.80	3.2743E+005		2.6097E+005
	606.64	5.02	1.4512E+006		4.8182E+005
	635.90	11.32	5.0593E+005		-1.0839E+005
Cs-134	563.23	8.38	6.5843E+005	6.79E+004	2.8128E+005
	569.32	15.43	3.5745E+005		6.7856E+004
	604.70	97.60	7.6908E+004		1.4211E+004
	795.84	85.40	6.7861E+004		6.0406E+004
	801.93	8.73	6.1145E+005		-6.3905E+005
Cs-137	661.65	85.12	7.1346E+004	7.13E+004	2.2813E+004
Eu-152	121.78	28.40	3.3196E+005	2.09E+005	-6.2041E+004
	244.69	7.49	9.1639E+005		1.8673E+005
	344.27	26.50	2.3743E+005		3.1755E+004
	778.89	12.74	4.4703E+005		-2.8859E+004
	867.32	4.16	1.4024E+006		-1.1819E+006
	964.01	14.40	4.9447E+005		4.9735E+005
	1085.78	10.00	5.3180E+005		-4.3693E+005
	1112.02	13.30	4.4995E+005		5.8503E+004
	1407.95	20.70	2.0935E+005		2.2279E+005
Eu-154	123.07	40.50	2.3104E+005	1.73E+005	4.4871E+004
	247.94	6.60	1.0047E+006		5.1411E+005
	591.81	4.83	1.1847E+006		-5.4934E+005
	723.30	19.70	3.2638E+005		6.1232E+004
	756.87	4.33	1.3236E+006		-2.9613E+005
	873.19	11.50	4.8875E+005		2.5449E+005
	996.32	10.30	5.5287E+005		1.7409E+005
	1004.76	17.90	2.9367E+005		-2.3880E+005
	1274.45	35.50	1.7311E+005		2.6208E+004
Eu-155	86.54	30.90	4.1761E+005	4.18E+005	5.0489E+005
	105.31	20.70	4.9446E+005		-3.8450E+005
Am-241	59.54	35.90	4.5209E+005	4.52E+005	1.7314E+004
Cm-243	228.19	10.56	6.3191E+005	4.58E+005	3.5899E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5835E+005	4.58E+005	-1.4093E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 11:48:15 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 11:33:12 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	305	292.26	72.92	0.82	1.08E+002	37.83	4.72E+002
m	2	286-	305	300.17	74.90	0.82	2.34E+002	47.65	4.80E+002
M	3	333-	353	339.85	84.85	1.11	1.34E+002	40.50	4.69E+002
m	4	333-	353	349.16	87.19	1.12	5.54E+001	34.35	4.22E+002
F	5	946-	961	954.15	238.86	1.24	1.45E+002	31.27	1.72E+002
F	6	1172-	1187	1179.66	295.35	1.20	5.45E+001	21.46	9.65E+001
F	7	1345-	1357	1351.34	338.34	1.06	4.30E+001	19.02	6.47E+001
F	8	1399-	1413	1406.38	352.12	1.30	8.01E+001	21.98	6.35E+001
F	9	2032-	2051	2040.86	510.88	1.96	9.66E+001	21.18	4.73E+001
F	10	2326-	2339	2331.46	583.55	1.06	5.58E+001	18.38	3.84E+001
F	11	2426-	2443	2434.95	609.42	1.47	1.03E+002	22.23	4.05E+001
F	12	3633-	3650	3642.07	910.97	1.53	5.86E+001	17.81	2.91E+001
F	13	3868-	3879	3873.55	968.76	1.06	2.03E+001	12.74	1.97E+001
F	14	5828-	5853	5840.82	1459.58	1.96	3.77E+002	37.96	1.60E+001
F	15	7049-	7063	7055.24	1762.52	1.42	2.74E+001	11.68	6.85E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.01434E+005	2.64086E+004
K-40	0.955	1460.81*		10.67	5.49916E+006	7.10322E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	4.69601E+005	1.28136E+005
		583.14*		84.20	7.32345E+004	2.59895E+004
		860.37		12.46		
Pb-212	0.658	74.81*	@	10.70	2.05074E+006	5.79091E+005
		77.11	@	18.00		
		87.30*	@	8.00	5.55047E+005	3.61229E+005
		238.63*		44.60	2.61645E+005	6.97429E+004
Bi-214	0.680	609.31*		46.30	2.49303E+005	6.22265E+004
		1120.29		15.10		
		1764.49*		15.80	2.87755E+005	1.25813E+005
PB-214	0.657	74.82*	@	6.21	3.53349E+006	1.03023E+006
		77.11	@	10.50		
		87.30*	@	4.67	9.50831E+005	6.22962E+005
		241.98		7.49		
		295.21*		19.20	2.45466E+005	1.05041E+005
		351.92*		37.20	1.97376E+005	6.34206E+004
Ac-228	0.999	338.32*		11.40	3.41354E+005	1.60086E+005
		911.07*		27.70	2.72670E+005	8.85558E+004
		969.11*		16.60	1.62241E+005	1.03040E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		1.000	8.561518E+004	2.699377E+004
	K-40		0.955	5.499165E+006	7.103215E+005
X	Eu-155		0.335		
	TL-208		0.749	7.323453E+004	2.587973E+004
	Pb-212	@	0.658	2.616448E+005	6.974287E+004
	Bi-214		0.680	2.568604E+005	5.577713E+004
	PB-214	@	0.657	2.102231E+005	5.429217E+004
	Ac-228		0.999	2.430569E+005	6.193130E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	1.2004E-001	35.02
M 3	84.85	1.4882E-001	30.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4630E+004	4.25E+004	-1.6967E+004
	1332.49	100.00	4.2545E+004		1.5193E+004
Nb-94	702.63	100.00	5.4498E+004	5.45E+004	-8.2745E+003
	871.10	100.00	5.4828E+004		1.3597E+004
Ag-108m	79.20	7.10	1.9690E+006	6.41E+004	-2.2981E+006
	433.93	89.90	6.4056E+004		-1.7722E+004
	614.37	90.40	8.5609E+004		-2.7447E+004
	722.95	90.50	6.4595E+004		5.5909E+004
Sb-125	176.33	6.89	1.0761E+006	1.96E+005	-1.5368E+005
	427.89	29.33	1.9597E+005		-5.1714E+004
	463.38	10.35	5.6860E+005		-9.8006E+004
	600.56	17.80	3.0013E+005		1.2986E+005
	606.64	5.02	1.5704E+006		3.3513E+006
	635.90	11.32	4.7255E+005		-2.7550E+005
Cs-134	563.23	8.38	5.9329E+005	6.46E+004	-4.9186E+005
	569.32	15.43	3.4431E+005		8.7404E+003
	604.70	97.60	7.9751E+004		-3.9484E+003
	795.84	85.40	6.4615E+004		-2.3180E+004
	801.93	8.73	5.6013E+005		-4.5362E+005
Cs-137	661.65	85.12	6.9235E+004	6.92E+004	-1.4301E+004
Eu-152	121.78	28.40	3.3134E+005	1.78E+005	-3.4461E+005
	244.69	7.49	9.5833E+005		-6.0819E+004
	344.27	26.50	2.3061E+005		1.0052E+004
	778.89	12.74	4.1506E+005		-2.1565E+005
	867.32	4.16	1.3561E+006		-5.2387E+004
	964.01	14.40	4.8466E+005		7.1345E+005
	1085.78	10.00	5.4024E+005		3.7995E+005
	1112.02	13.30	4.6414E+005		-2.2642E+005
	1407.95	20.70	1.7843E+005		-1.1546E+005
Eu-154	123.07	40.50	2.3508E+005	1.42E+005	1.8255E+005
	247.94	6.60	1.0013E+006		-2.0063E+005
	591.81	4.83	1.1109E+006		2.5878E+005
	723.30	19.70	2.9537E+005		5.5037E+004
	756.87	4.33	1.3371E+006		-1.0680E+005
	873.19	11.50	4.6520E+005		-6.3523E+005
	996.32	10.30	5.3114E+005		1.7613E+005
	1004.76	17.90	3.0031E+005		-9.6954E+003
	1274.45	35.50	1.4198E+005		9.4187E+003
Eu-155	86.54*	30.90	2.5515E+005	2.55E+005	1.4370E+005
	105.31	20.70	4.9069E+005		4.8524E+004
Am-241	59.54	35.90	4.7051E+005	4.71E+005	5.6806E+004
Cm-243	228.19	10.56	6.3092E+005	4.84E+005	-5.2581E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8442E+005	4.84E+005	-1.9584E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 11:28:12 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 11:13:10 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.51	72.73	0.97	1.26E+002	38.39	4.75E+002
m	2	283-	306	300.00	74.86	0.97	2.60E+002	49.31	5.66E+002
F	3	948-	959	953.60	238.72	1.00	1.31E+002	29.31	1.14E+002
F	4	1174-	1185	1180.62	295.59	1.03	4.78E+001	21.55	8.84E+001
F	5	1306-	1317	1311.35	328.33	0.94	2.20E+001	15.00	4.53E+001
F	6	1400-	1413	1406.18	352.07	1.14	9.02E+001	23.46	6.96E+001
F	7	2033-	2052	2041.97	511.16	2.35	8.95E+001	21.71	6.75E+001
F	8	2321-	2339	2330.47	583.30	1.35	6.75E+001	18.71	3.80E+001
F	9	2427-	2443	2435.51	609.56	1.48	7.59E+001	19.31	3.35E+001
F	10	2640-	2651	2645.04	661.94	1.32	2.86E+001	12.42	9.58E+000
F	11	3636-	3650	3642.19	911.00	1.32	5.52E+001	17.32	2.41E+001
F	12	3867-	3880	3873.63	968.78	0.93	2.25E+001	12.33	2.34E+001
F	13	5828-	5853	5840.84	1459.59	2.08	4.07E+002	38.64	3.19E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf.	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	9.40242E+004	2.63500E+004
K-40	0.956	1460.81*		10.67	5.93064E+006	7.40280E+005
Cs-137	0.998	661.65*		85.12	3.89650E+004	1.75287E+004
TL-208	0.752	277.35		6.80		
		510.84*		21.60	4.35297E+005	1.27065E+005
		583.14*		84.20	8.86150E+004	2.72040E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.27978E+006	6.21253E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.36893E+005	6.46026E+004
Bi-214	0.417	609.31*		46.30	1.84230E+005	5.21702E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	3.92812E+006	1.10777E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.15373E+005	1.03578E+005
		351.92*		37.20	2.22351E+005	6.87314E+004
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	2.56759E+005	8.57948E+004
		969.11*		16.60	1.79331E+005	1.00135E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	7.488341E+004	2.699005E+004
K-40		0.956	5.930638E+006	7.402797E+005
Cs-137		0.998	3.896502E+004	1.752865E+004
TL-208		0.752	8.861498E+004	2.705032E+004
Pb-212	@	0.497	2.368928E+005	6.460259E+004
Bi-214		0.417	1.842300E+005	5.217022E+004
PB-214	@	0.564	2.202176E+005	5.726963E+004
Ac-228		0.622	2.239818E+005	6.515165E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	1.3959E-001	30.56
F 5	328.33	2.4393E-002	68.31

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	5.7655E+004	4.38E+004	-2.3566E+004
		1332.49	100.00	4.3806E+004		-9.7627E+003
	Nb-94	702.63	100.00	5.9556E+004	5.13E+004	1.9997E+004
		871.10	100.00	5.1327E+004		-2.1215E+004
	Ag-108m	79.20	7.10	2.0581E+006	6.49E+004	-1.5764E+006
		433.93	89.90	6.4905E+004		-1.6580E+003
		614.37	90.40	7.7882E+004		-4.3633E+004
		722.95	90.50	6.9911E+004		-4.2356E+004
	Sb-125	176.33	6.89	1.1056E+006	1.89E+005	9.0115E+005
		427.89	29.33	1.8936E+005		-1.1509E+005
		463.38	10.35	6.3003E+005		7.0892E+004
		600.56	17.80	2.8781E+005		-2.3695E+005
		606.64	5.02	1.4395E+006		1.9847E+006
		635.90	11.32	5.0593E+005		-2.0951E+004
	Cs-134	563.23	8.38	7.6411E+005	6.75E+004	2.4360E+005
		569.32	15.43	3.7165E+005		-3.6563E+004
		604.70	97.60	7.3344E+004		2.8414E+004
		795.84	85.40	6.7508E+004		-5.4440E+004
		801.93	8.73	6.4087E+005		-6.8640E+004
+	Cs-137	661.65*	85.12	2.5672E+004	2.57E+004	3.8965E+004
	Eu-152	121.78	28.40	3.2402E+005	2.26E+005	-1.3203E+005
		244.69	7.49	9.4871E+005		-6.4291E+005
		344.27	26.50	2.2595E+005		-4.2141E+005
		778.89	12.74	4.2766E+005		-2.8260E+005
		867.32	4.16	1.2145E+006		-1.1681E+006
		964.01	14.40	4.8466E+005		4.0533E+005
		1085.78	10.00	5.1885E+005		4.5182E+005
		1112.02	13.30	5.0926E+005		2.0191E+004
		1407.95	20.70	2.4929E+005		2.1165E+005
	Eu-154	123.07	40.50	2.2603E+005	1.49E+005	6.0706E+003
		247.94	6.60	1.0232E+006		-1.1802E+006
		591.81	4.83	1.1693E+006		1.6043E+006
		723.30	19.70	3.1860E+005		-1.4651E+005
		756.87	4.33	1.3703E+006		-9.8552E+005
		873.19	11.50	4.3384E+005		-2.6088E+005
		996.32	10.30	6.1635E+005		7.6599E+005
		1004.76	17.90	3.1729E+005		-7.8033E+004
		1274.45	35.50	1.4905E+005		5.6658E+004
	Eu-155	86.54	30.90	4.3039E+005	4.30E+005	5.0766E+005
		105.31	20.70	4.9936E+005		-2.8368E+005
	Am-241	59.54	35.90	4.7203E+005	4.72E+005	2.9764E+005
	Cm-243	228.19	10.56	6.5056E+005	4.70E+005	6.9154E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6983E+005	4.70E+005	2.1609E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 11:08:13 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 10:53:10 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	313	291.57	72.74	1.02	1.26E+002	37.40	4.65E+002
m	2	283-	313	300.08	74.88	1.02	3.24E+002	47.71	4.49E+002
m	3	283-	313	309.06	77.13	1.03	8.88E+001	34.95	3.72E+002
F	4	331-	344	338.72	84.57	1.00	8.72E+001	39.59	4.95E+002
F	5	946-	962	954.46	238.93	0.99	1.35E+002	30.22	1.83E+002
F	6	988-	997	992.26	248.40	0.93	3.56E+001	19.45	6.67E+001
F	7	1175-	1187	1180.31	295.51	0.78	4.21E+001	18.37	7.05E+001
F	8	1398-	1414	1406.79	352.22	0.87	7.82E+001	21.22	7.02E+001
F	9	2037-	2049	2041.50	511.04	1.22	6.14E+001	19.92	4.44E+001
F	10	2322-	2339	2330.09	583.21	1.49	9.69E+001	21.98	4.38E+001
F	11	2426-	2443	2434.76	609.38	1.31	1.02E+002	21.94	3.61E+001
F	12	2636-	2650	2644.21	661.73	1.28	4.15E+001	15.42	2.41E+001
F	13	2901-	2912	2906.25	727.21	0.90	1.92E+001	11.42	1.75E+001
F	14	3634-	3649	3641.77	910.90	1.32	6.50E+001	18.38	2.61E+001
M	15	3852-	3880	3857.29	964.70	1.33	2.17E+001	12.61	2.45E+001
m	16	3852-	3880	3873.21	968.68	1.34	4.08E+001	15.60	2.98E+001
F	17	4474-	4486	4479.01	1119.86	1.99	3.33E+001	13.80	1.43E+001
F	18	5829-	5853	5840.65	1459.54	1.90	3.91E+002	39.24	2.83E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	6.44962E+004	2.27958E+004
K-40	0.952	1460.81*	10.67	5.69663E+006	7.34930E+005
Cs-137	1.000	661.65*	85.12	5.65520E+004	2.20326E+004
TL-208	0.753	277.35	6.80		
		510.84*	21.60	2.98593E+005	1.08317E+005
		583.14*	84.20	1.27126E+005	3.33806E+004
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	1.94152E+005	1.17941E+005
Pb-212	0.837	74.81* @	10.70	2.83773E+006	6.95442E+005
		77.11* @	18.00	4.48432E+005	1.97101E+005
		87.30 @	8.00		
		238.63*	44.60	2.43399E+005	6.65504E+004
Bi-214	0.713	609.31*	46.30	2.46796E+005	6.14764E+004
		1120.29*	15.10	3.11681E+005	1.33387E+005
		1764.49	15.80		
PB-214	0.759	74.82* @	6.21	4.88949E+006	1.24973E+006
		77.11* @	10.50	7.68741E+005	3.42729E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.89568E+005	8.86232E+004
		351.92*	37.20	1.92664E+005	6.14090E+004
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	3.02019E+005	9.22618E+004
		969.11*	16.60	3.25352E+005	1.29007E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	3.703704E+004	2.389213E+004
K-40		0.952	5.696629E+006	7.349297E+005
Cs-137		1.000	5.655205E+004	2.203260E+004
TL-208		0.753	1.271256E+005	3.312256E+004
Bi-212		1.000	1.941521E+005	1.179410E+005
Pb-212	@	0.837	2.433987E+005	6.655043E+004
Bi-214		0.713	2.581642E+005	5.583191E+004
PB-214	@	0.759	1.916599E+005	5.047546E+004
Ac-228		0.620	3.099148E+005	7.504519E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	1.3950E-001	29.79
F 4	84.57	9.6840E-002	45.42
F 6	248.40	3.9574E-002	54.61
M 15	964.70	2.4086E-002	58.16

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.1310E+004	4.50E+004	2.4196E+004
		1332.49	100.00	4.5029E+004		-1.3206E+004
	Nb-94	702.63	100.00	5.9823E+004	5.65E+004	2.1311E+004
		871.10	100.00	5.6492E+004		1.2636E+004
	Ag-108m	79.20	7.10	2.0170E+006	6.46E+004	-6.4514E+005
		433.93	89.90	6.5534E+004		-3.6779E+003
		614.37	90.40	8.5199E+004		2.4032E+004
		722.95	90.50	6.4595E+004		5.8339E+004
	Sb-125	176.33	6.89	1.0599E+006	1.95E+005	3.7111E+005
		427.89	29.33	1.9532E+005		-1.9185E+004
		463.38	10.35	6.3854E+005		5.5411E+005
		600.56	17.80	3.2188E+005		1.7477E+005
		606.64	5.02	1.5415E+006		6.7584E+005
		635.90	11.32	4.7007E+005		-1.6426E+005
	Cs-134	563.23	8.38	6.5252E+005	7.16E+004	-1.3948E+005
		569.32	15.43	3.6066E+005		1.1996E+005
		604.70	97.60	7.9751E+004		-7.5481E+000
		795.84	85.40	7.1616E+004		6.5597E+004
		801.93	8.73	6.3727E+005		4.0182E+004
+	Cs-137	661.65*	85.12	4.1054E+004	4.11E+004	5.6552E+004
	Eu-152	121.78	28.40	3.4412E+005	2.25E+005	6.5457E+004
		244.69	7.49	9.7860E+005		-4.9638E+005
		344.27	26.50	2.3574E+005		-3.0253E+005
		778.89	12.74	4.0991E+005		-1.5235E+005
		867.32	4.16	1.4024E+006		-3.0759E+005
		964.01	14.40	5.3000E+005		6.0684E+005
		1085.78	10.00	5.0555E+005		-8.0870E+005
		1112.02	13.30	4.9644E+005		-7.0746E+005
		1407.95	20.70	2.2451E+005		-9.7602E+003
	Eu-154	123.07	40.50	2.4074E+005	1.61E+005	8.6196E+004
		247.94	6.60	1.0719E+006		1.3852E+005
		591.81	4.83	1.1537E+006		-7.1109E+004
		723.30	19.70	2.9820E+005		2.7070E+005
		756.87	4.33	1.2248E+006		-7.2778E+005
		873.19	11.50	4.9728E+005		1.6046E+005
		996.32	10.30	4.9664E+005		-1.8842E+005
		1004.76	17.90	2.7988E+005		4.8718E+004
		1274.45	35.50	1.6093E+005		1.0160E+005
	Eu-155	86.54	30.90	4.2776E+005	4.28E+005	1.2667E+005
		105.31	20.70	5.1818E+005		-2.1013E+004
	Am-241	59.54	35.90	4.6873E+005	4.69E+005	-8.7727E+003
	Cm-243	228.19	10.56	6.5920E+005	4.64E+005	-1.6785E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6369E+005	4.64E+005	2.1375E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 10:21:44 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 10:06:41 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.76	72.79	0.75	1.03E+002	35.46	3.92E+002
m	2	282-	304	300.36	74.95	0.75	2.14E+002	45.98	4.43E+002
F	3	332-	344	338.93	84.62	1.11	1.41E+002	42.13	4.41E+002
F	4	949-	959	953.51	238.70	0.84	1.08E+002	28.18	1.24E+002
F	5	1174-	1183	1178.84	295.14	0.80	2.46E+001	18.65	7.80E+001
F	6	1348-	1357	1352.61	338.66	0.83	3.20E+001	17.45	5.34E+001
F	7	1400-	1412	1406.05	352.04	1.18	8.13E+001	22.30	5.85E+001
F	8	2033-	2046	2041.18	510.96	1.16	4.50E+001	18.70	5.50E+001
F	9	2322-	2339	2330.70	583.36	1.14	8.89E+001	21.00	4.19E+001
F	10	2425-	2443	2434.60	609.34	1.80	1.06E+002	21.30	3.08E+001
F	11	3634-	3650	3642.05	910.97	1.54	7.97E+001	19.37	2.10E+001
F	12	3867-	3882	3874.28	968.94	1.46	3.98E+001	14.81	1.55E+001
F	13	5826-	5853	5840.04	1459.39	1.94	4.58E+002	41.76	1.75E+001
F	14	7049-	7062	7055.37	1762.55	0.60	1.96E+001	9.93	1.22E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	4.73234E+004	2.07373E+004
K-40	0.940	1460.81*		10.67	6.68125E+006	8.14445E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	2.19090E+005	9.76589E+004
		583.14*		84.20	1.16617E+005	3.15819E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.86827E+006	5.43736E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.94878E+005	5.92925E+004
Bi-214	0.681	609.31*		46.30	2.57736E+005	6.08451E+004
		1120.29		15.10		
		1764.49*		15.80	2.05579E+005	1.06181E+005
PB-214	0.565	74.82*	@	6.21	3.21907E+006	9.65576E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.10471E+005	8.59516E+004
		351.92*		37.20	2.00283E+005	6.43322E+004
Ac-228	0.999	338.32*		11.40	2.53729E+005	1.44120E+005
		911.07*		27.70	3.70636E+005	9.96463E+004
		969.11*		16.60	3.17474E+005	1.22745E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	2.213418E+004	2.181504E+004
K-40		0.940	6.681250E+006	8.144448E+005
TL-208		0.752	1.166167E+005	3.135240E+004
Pb-212	@	0.497	1.948779E+005	5.929250E+004
Bi-214		0.681	2.448430E+005	5.279189E+004
PB-214	@	0.565	1.680348E+005	5.150355E+004
Ac-228		0.999	3.280903E+005	6.816316E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.1466E-001	34.36
F 3	84.62	1.5656E-001	29.90

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8488E+004	5.07E+004	8.0074E+003
	1332.49	100.00	5.0662E+004		-4.5653E+004
Nb-94	702.63	100.00	5.7366E+004	5.55E+004	3.7857E+004
	871.10	100.00	5.5500E+004		-3.0412E+004
Ag-108m	79.20	7.10	2.0094E+006	6.38E+004	-3.6163E+006
	433.93	89.90	6.3842E+004		-2.4200E+004
	614.37	90.40	8.3537E+004		-2.4687E+004
	722.95	90.50	6.7896E+004		-1.6424E+004
Sb-125	176.33	6.89	1.0599E+006	2.02E+005	-2.0628E+005
	427.89	29.33	2.0235E+005		5.7253E+004
	463.38	10.35	6.0194E+005		-4.6935E+005
	600.56	17.80	3.4087E+005		2.1490E+005
	606.64	5.02	1.5306E+006		2.0129E+006
	635.90	11.32	5.0823E+005		-7.5655E+003
Cs-134	563.23	8.38	6.8716E+005	6.46E+004	-4.6746E+005
	569.32	15.43	3.8530E+005		-1.1161E+004
	604.70	97.60	7.9565E+004		-3.7921E+004
	795.84	85.40	6.4615E+004		1.4569E+004
	801.93	8.73	6.1521E+005		-8.1304E+005
Cs-137	661.65	85.12	6.8928E+004	6.89E+004	6.1160E+003
Eu-152	121.78	28.40	3.3010E+005	2.33E+005	-2.9032E+005
	244.69	7.49	9.9319E+005		-8.4971E+004
	344.27	26.50	2.4404E+005		-4.1487E+004
	778.89	12.74	5.0251E+005		2.1515E+005
	867.32	4.16	1.3794E+006		-1.7895E+006
	964.01	14.40	4.9641E+005		7.0096E+005
	1085.78	10.00	5.1446E+005		2.5304E+004
	1112.02	13.30	4.6414E+005		-2.5868E+005
	1407.95	20.70	2.3309E+005		-2.0227E+005
Eu-154	123.07	40.50	2.3016E+005	1.57E+005	1.7383E+004
	247.94	6.60	1.0559E+006		-5.4625E+005
	591.81	4.83	1.2346E+006		-5.0936E+005
	723.30	19.70	3.1196E+005		-1.4815E+005
	756.87	4.33	1.2174E+006		-6.3273E+005
	873.19	11.50	5.1115E+005		4.8270E+005
	996.32	10.30	5.4932E+005		-9.7207E+004
	1004.76	17.90	3.2543E+005		2.8428E+004
	1274.45	35.50	1.5708E+005		-1.2297E+005
Eu-155	86.54	30.90	4.3004E+005	4.30E+005	3.9062E+005
	105.31	20.70	5.0759E+005		-4.2857E+005
Am-241	59.54	35.90	4.5605E+005	4.56E+005	-2.5879E+005
Cm-243	228.19	10.56	6.3390E+005	4.84E+005	-3.2415E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8442E+005	4.84E+005	3.7892E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 10:47:39 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 10:32:36 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	289-	304	292.15	72.89	0.78	1.14E+002	36.56	3.14E+002
m	2	289-	304	300.31	74.93	0.78	2.45E+002	46.93	4.13E+002
F	3	331-	343	338.95	84.63	1.09	1.03E+002	40.51	4.54E+002
F	4	946-	961	953.76	238.76	0.96	1.57E+002	30.65	1.50E+002
F	5	1176-	1185	1180.73	295.61	0.62	2.46E+001	17.61	8.62E+001
F	6	1399-	1410	1406.04	352.03	0.74	5.46E+001	19.97	7.36E+001
F	7	2035-	2049	2042.01	511.17	1.05	7.02E+001	21.61	7.15E+001
F	8	2322-	2339	2330.73	583.37	1.65	9.00E+001	20.54	3.56E+001
F	9	2429-	2444	2435.28	609.51	1.13	1.12E+002	22.42	2.32E+001
F	10	2568-	2579	2574.00	644.18	0.85	1.35E+001	10.39	1.80E+001
F	11	3633-	3651	3641.40	910.81	1.71	6.81E+001	18.42	2.52E+001
F	12	3866-	3880	3872.76	968.56	1.91	5.03E+001	17.18	2.53E+001
F	13	5827-	5853	5840.50	1459.50	1.92	4.56E+002	41.68	1.69E+001
F	14	6341-	6354	6347.40	1585.94	1.01	8.33E+000	7.99	8.60E+000
F	15	7050-	7065	7056.28	1762.78	1.90	2.98E+001	11.52	1.56E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	7.37415E+004	2.49479E+004
K-40	0.949	1460.81*		10.67	6.65509E+006	8.12200E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	3.41396E+005	1.18817E+005
		583.14*		84.20	1.18145E+005	3.11532E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.14640E+006	5.87694E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.83420E+005	7.09342E+004
Bi-214	0.685	609.31*		46.30	2.72892E+005	6.41484E+004
		1120.29		15.10		
		1764.49*		15.80	3.12783E+005	1.24792E+005
PB-214	0.564	74.82*	@	6.21	3.69831E+006	1.04760E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.10585E+005	8.14380E+004
		351.92*		37.20	1.34615E+005	5.41056E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	3.16687E+005	9.30784E+004
		969.11*		16.60	4.01099E+005	1.43355E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	4.822207E+004	2.582610E+004
K-40		0.949	6.655090E+006	8.121998E+005
TL-208		0.751	1.181455E+005	3.091434E+004
Pb-212	@	0.497	2.834204E+005	7.093420E+004
Bi-214		0.685	2.812297E+005	5.705200E+004
PB-214	@	0.564	1.272563E+005	4.506611E+004
Ac-228		0.619	3.417192E+005	7.806650E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	1.2714E-001	31.95
F 3	84.63	1.1479E-001	39.21
F 10	644.18	1.4996E-002	76.95
F 14	1585.94	9.2566E-003	95.92

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4373E+004	4.62E+004	3.2044E+003
	1332.49	100.00	4.6216E+004		1.9431E+004
Nb-94	702.63	100.00	6.1663E+004	5.65E+004	2.2433E+004
	871.10	100.00	5.6492E+004		-8.2249E+003
Ag-108m	79.20	7.10	2.0423E+006	6.90E+004	-4.2917E+006
	433.93	89.90	6.8984E+004		-3.0466E+004
	614.37	90.40	8.7829E+004		4.6960E+004
	722.95	90.50	7.1314E+004		-3.9196E+004
Sb-125	176.33	6.89	1.0989E+006	2.03E+005	3.3800E+005
	427.89	29.33	2.0298E+005		-2.3638E+005
	463.38	10.35	6.3345E+005		2.1051E+005
	600.56	17.80	3.4219E+005		-6.9044E+004
	606.64	5.02	1.5988E+006		1.9757E+006
	635.90	11.32	5.0823E+005		2.5653E+005
Cs-134	563.23	8.38	6.7582E+005	7.61E+004	1.4625E+005
	569.32	15.43	3.5422E+005		5.7378E+004
	604.70	97.60	8.3386E+004		-3.6225E+003
	795.84	85.40	7.6114E+004		-1.6933E+004
	801.93	8.73	7.2156E+005		-6.1107E+005
Cs-137	661.65	85.12	7.3103E+004	7.31E+004	6.0710E+004
Eu-152	121.78	28.40	3.3340E+005	2.16E+005	5.8340E+004
	244.69	7.49	9.9845E+005		2.0575E+005
	344.27	26.50	2.3965E+005		-3.4578E+005
	778.89	12.74	4.4703E+005		-3.2020E+005
	867.32	4.16	1.3561E+006		-8.2213E+005
	964.01	14.40	5.4773E+005		4.5936E+005
	1085.78	10.00	5.5672E+005		-1.5517E+005
	1112.02	13.30	4.4706E+005		-6.8253E+005
	1407.95	20.70	2.1555E+005		-7.9832E+004
Eu-154	123.07	40.50	2.3278E+005	1.66E+005	-1.6781E+005
	247.94	6.60	1.1231E+006		-8.2386E+005
	591.81	4.83	1.2346E+006		8.1443E+005
	723.30	19.70	3.2894E+005		-3.1466E+004
	756.87	4.33	1.2248E+006		-8.9288E+005
	873.19	11.50	4.8298E+005		-5.8283E+004
	996.32	10.30	5.6687E+005		1.0210E+005
	1004.76	17.90	2.7988E+005		-2.2923E+005
	1274.45	35.50	1.6592E+005		1.9871E+005
Eu-155	86.54	30.90	4.3004E+005	4.30E+005	-1.4450E+005
	105.31	20.70	5.2421E+005		-3.2919E+005
Am-241	59.54	35.90	4.6898E+005	4.69E+005	-3.8777E+005
Cm-243	228.19	10.56	6.5920E+005	4.86E+005	5.0098E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8611E+005	4.86E+005	2.1425E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 2:10:34 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G Â M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 1:55:32 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.54	72.73	0.93	1.17E+002	38.61	5.24E+002
m	2	282-	304	299.94	74.84	0.93	3.11E+002	51.41	5.16E+002
F	3	332-	343	338.60	84.54	1.04	1.10E+002	40.26	4.10E+002
F	4	949-	959	953.80	238.77	1.02	1.53E+002	31.71	1.17E+002
F	5	1175-	1187	1179.99	295.43	0.76	2.83E+001	18.12	9.25E+001
F	6	1345-	1358	1352.52	338.63	1.05	5.41E+001	21.66	9.10E+001
F	7	1399-	1413	1406.76	352.21	1.11	6.20E+001	22.56	1.01E+002
F	8	2035-	2050	2042.10	511.19	1.42	6.96E+001	22.20	7.96E+001
F	9	2321-	2338	2329.94	583.17	1.18	7.61E+001	20.81	5.46E+001
F	10	2428-	2443	2434.54	609.32	1.29	6.75E+001	19.36	3.62E+001
F	11	3173-	3185	3179.51	795.47	1.15	2.34E+001	12.06	1.56E+001
F	12	3634-	3652	3642.48	911.08	1.51	7.25E+001	19.32	2.98E+001
F	13	3866-	3881	3873.41	968.73	2.04	5.16E+001	15.78	1.42E+001
F	14	4473-	4486	4479.10	1119.89	0.98	2.49E+001	13.13	2.61E+001
F	15	5828-	5853	5840.17	1459.42	1.98	4.75E+002	42.28	1.25E+001
F	16	7050-	7063	7057.05	1762.97	0.80	1.80E+001	9.67	9.11E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	7.31463E+004	2.54833E+004
K-40	0.943	1460.81*		10.67	6.93167E+006	8.33640E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	3.38640E+005	1.21176E+005
		583.14*		84.20	9.98931E+004	3.03317E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.71970E+006	6.97659E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.76415E+005	7.17614E+004
Bi-214	0.985	609.31*		46.30	1.63883E+005	5.12122E+004
		1120.29*		15.10	2.32902E+005	1.25431E+005
		1764.49*		15.80	1.88536E+005	1.03128E+005
PB-214	0.564	74.82*	@	6.21	4.68612E+006	1.24929E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.27361E+005	8.43431E+004
		351.92*		37.20	1.52761E+005	6.11890E+004
Ac-228	0.998	338.32*		11.40	4.29440E+005	1.84602E+005
		911.07*		27.70	3.37150E+005	9.78660E+004
		969.11*		16.60	4.11519E+005	1.33069E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	5.156940E+004	2.630259E+004
K-40		0.943	6.931666E+006	8.336399E+005
TL-208		0.752	9.989315E+004	3.015649E+004
Pb-212	@	0.497	2.764146E+005	7.176144E+004
Bi-214		0.985	1.763252E+005	4.307802E+004
PB-214	@	0.564	1.440023E+005	4.952799E+004
Ac-228		0.998	3.734648E+005	7.250433E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.73	1.3028E-001	32.93
F 3	84.54	1.2201E-001	36.66
F 11	795.47	2.6048E-002	51.43

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8488E+004	5.12E+004	-5.4477E+004
	1332.49	100.00	5.1189E+004		-2.6889E+004
Nb-94	702.63	100.00	5.6805E+004	5.35E+004	-1.9999E+004
	871.10	100.00	5.3457E+004		-3.8015E+004
Ag-108m	79.20	7.10	2.0448E+006	6.78E+004	-4.7479E+006
	433.93	89.90	6.7787E+004		-3.3138E+004
	614.37	90.40	8.2268E+004		5.7022E+004
	722.95	90.50	7.3231E+004		-4.2664E+002
Sb-125	176.33	6.89	1.0784E+006	2.06E+005	3.2403E+004
	427.89	29.33	2.0608E+005		-1.2658E+004
	463.38	10.35	6.1790E+005		7.8688E+003
	600.56	17.80	3.2743E+005		4.1132E+004
	606.64	5.02	1.4590E+006		1.2440E+006
	635.90	11.32	5.0363E+005		-2.8108E+004
Cs-134	563.23	8.38	7.0106E+005	7.39E+004	4.7118E+005
	569.32	15.43	3.9702E+005		8.2226E+004
	604.70	97.60	7.7485E+004		-1.2171E+004
	795.84	85.40	7.3901E+004		1.4672E+004
	801.93	8.73	6.7911E+005		3.9746E+003
Cs-137	661.65	85.12	7.3679E+004	7.37E+004	5.5344E+004
Eu-152	121.78	28.40	3.4827E+005	1.96E+005	7.4513E+004
	244.69	7.49	9.7189E+005		-1.7325E+006
	344.27	26.50	2.4458E+005		-2.2326E+005
	778.89	12.74	4.5173E+005		-1.1472E+005
	867.32	4.16	1.2998E+006		-8.3650E+005
	964.01	14.40	5.1162E+005		4.4335E+005
	1085.78	10.00	6.3231E+005		-4.5104E+005
	1112.02	13.30	5.4109E+005		-5.6213E+005
	1407.95	20.70	1.9628E+005		-1.8566E+004
Eu-154	123.07	40.50	2.4185E+005	1.54E+005	-6.0904E+004
	247.94	6.60	1.0462E+006		-1.0500E+006
	591.81	4.83	1.1796E+006		-5.9791E+005
	723.30	19.70	3.3771E+005		1.2601E+005
	756.87	4.33	1.3371E+006		-1.6424E+006
	873.19	11.50	4.7713E+005		6.4967E+004
	996.32	10.30	5.4932E+005		-2.7960E+005
	1004.76	17.90	3.1729E+005		-5.6410E+004
	1274.45	35.50	1.5445E+005		-2.2033E+005
Eu-155	86.54	30.90	4.3162E+005	4.32E+005	4.4885E+005
	105.31	20.70	5.1291E+005		-7.8244E+004
Am-241	59.54	35.90	4.7582E+005	4.76E+005	2.8154E+005
Cm-243	228.19	10.56	6.8444E+005	4.84E+005	-5.6028E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8358E+005	4.84E+005	-1.5860E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 2:28:59 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 2:13:57 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.58	72.74	0.92	1.04E+002	37.45	5.01E+002
m	2	285-	307	300.05	74.87	0.92	2.40E+002	48.17	5.15E+002
F	3	946-	959	953.53	238.70	1.09	1.48E+002	31.02	1.37E+002
F	4	1173-	1186	1179.96	295.42	1.00	3.67E+001	19.43	8.88E+001
F	5	1397-	1415	1406.43	352.13	1.47	1.17E+002	23.42	5.67E+001
F	6	2031-	2050	2041.75	511.11	1.69	8.17E+001	22.28	8.46E+001
F	7	2323-	2338	2329.96	583.18	0.97	6.84E+001	19.99	5.42E+001
F	8	2425-	2443	2434.10	609.21	1.29	1.05E+002	22.59	4.54E+001
F	9	3634-	3649	3641.66	910.87	1.61	6.87E+001	18.28	2.21E+001
F	10	4473-	4484	4478.12	1119.64	1.39	2.71E+001	12.39	1.14E+001
F	11	5826-	5853	5839.94	1459.36	2.09	4.03E+002	39.21	2.44E+001
F	12	7049-	7063	7056.60	1762.86	1.05	2.81E+001	11.63	7.53E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	8.58474E+004	2.63232E+004
K-40	0.938	1460.81*		10.67	5.87088E+006	7.43480E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	3.97442E+005	1.26115E+005
		583.14*		84.20	8.96983E+004	2.87928E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.10261E+006	5.89520E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.67442E+005	6.99213E+004
Bi-214	0.981	609.31*		46.30	2.55728E+005	6.33846E+004
		1120.29*		15.10	2.53524E+005	1.19083E+005
		1764.49*		15.80	2.95196E+005	1.25501E+005
PB-214	0.565	74.82*	@	6.21	3.62285E+006	1.04925E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.65190E+005	9.17485E+004
		351.92*		37.20	2.89101E+005	7.52745E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	6.647253E+004	2.704055E+004
K-40		0.938	5.870882E+006	7.434799E+005
TL-208		0.752	8.969828E+004	2.864407E+004
Pb-212	@	0.498	2.674423E+005	6.992135E+004
Bi-214		0.981	2.618660E+005	5.110353E+004
PB-214	@	0.565	2.392491E+005	5.819468E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	1.1503E-001	36.18
F 9	910.87	7.6292E-002	26.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3999E+004	4.96E+004	6.5231E+004
	1332.49	100.00	4.9592E+004		-1.1319E+003
Nb-94	702.63	100.00	5.4792E+004	4.99E+004	2.7278E+004
	871.10	100.00	4.9853E+004		-2.2686E+003
Ag-108m	79.20	7.10	2.0548E+006	5.70E+004	8.3306E+004
	433.93	89.90	5.7031E+004		-3.9512E+004
	614.37	90.40	8.7829E+004		1.1169E+004
	722.95	90.50	6.3975E+004		-1.0967E+004
Sb-125	176.33	6.89	1.0351E+006	1.79E+005	2.4425E+004
	427.89	29.33	1.7897E+005		-4.1023E+004
	463.38	10.35	6.3003E+005		4.7351E+005
	600.56	17.80	3.1766E+005		2.8364E+004
	606.64	5.02	1.6023E+006		1.4485E+006
	635.90	11.32	5.0363E+005		2.7273E+005
Cs-134	563.23	8.38	7.6912E+005	6.35E+004	4.5619E+005
	569.32	15.43	3.9989E+005		-4.8156E+004
	604.70	97.60	8.1408E+004		6.2604E+003
	795.84	85.40	6.3494E+004		-4.2817E+004
	801.93	8.73	6.1521E+005		-9.7794E+005
Cs-137	661.65	85.12	6.3468E+004	6.35E+004	-4.8614E+004
Eu-152	121.78	28.40	3.3381E+005	2.43E+005	1.7609E+004
	244.69	7.49	9.7189E+005		-1.6312E+006
	344.27	26.50	2.4295E+005		-3.2655E+005
	778.89	12.74	4.5639E+005		-1.6958E+005
	867.32	4.16	1.2145E+006		-1.7342E+006
	964.01	14.40	4.9447E+005		5.0916E+005
	1085.78	10.00	5.0555E+005		1.5512E+005
	1112.02	13.30	5.1679E+005		-3.6456E+005
	1407.95	20.70	2.5948E+005		7.8439E+004
Eu-154	123.07	40.50	2.3278E+005	1.49E+005	-8.4777E+004
	247.94	6.60	1.0511E+006		-1.3629E+006
	591.81	4.83	1.1378E+006		-5.5491E+005
	723.30	19.70	2.9107E+005		5.4066E+004
	756.87	4.33	1.3833E+006		-5.8801E+005
	873.19	11.50	4.5604E+005		1.9849E+005
	996.32	10.30	5.0452E+005		-1.5598E+005
	1004.76	17.90	3.0465E+005		5.3019E+004
	1274.45	35.50	1.4905E+005		3.0349E+004
Eu-155	86.54	30.90	4.2600E+005	4.26E+005	5.1087E+005
	105.31	20.70	4.9792E+005		-8.6435E+004
Am-241	59.54	35.90	4.5657E+005	4.57E+005	1.6197E+005
Cm-243	228.19	10.56	6.5824E+005	4.84E+005	1.4707E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8358E+005	4.84E+005	2.7638E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 1:05:02 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 12:50:00 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

YANKEE ROWE PORTABLE ISOCS
(BLUE ROVER SYSTEM)

PEAK ANALYSIS REPORT

Filename: BLUE6279
Log Number:
Title: TBN-01-13-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	318	291.67	72.77	0.98	1.30E+002	38.31	4.24E+002
m	2	286-	318	300.52	74.99	0.98	3.45E+002	49.21	4.43E+002
m	3	286-	318	309.36	77.20	0.98	1.06E+002	36.04	4.60E+002
F	4	738-	750	742.26	185.76	0.79	3.42E+001	22.37	1.46E+002
F	5	948-	962	953.93	238.80	1.04	1.16E+002	29.39	1.67E+002
F	6	1397-	1413	1406.53	352.16	1.23	9.00E+001	22.44	6.37E+001
F	7	2322-	2341	2330.56	583.33	1.58	7.89E+001	20.35	5.18E+001
F	8	2427-	2443	2435.17	609.48	1.37	9.82E+001	22.03	4.05E+001
F	9	3634-	3649	3642.29	911.03	1.64	4.85E+001	16.59	2.80E+001
F	10	3866-	3882	3873.67	968.79	1.97	4.88E+001	15.47	1.55E+001
F	11	4473-	4484	4478.19	1119.66	1.38	2.56E+001	13.47	1.99E+001
F	12	5829-	5854	5840.87	1459.59	1.90	4.20E+002	40.13	1.65E+001
F	13	7050-	7063	7057.15	1763.00	1.66	3.26E+001	13.64	1.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.956	1460.81*	10.67	6.11786E+006	7.66685E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.03530E+005	3.00144E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.01313E+006	7.30509E+005
		77.11* @	18.00	5.35795E+005	2.09913E+005
		87.30 @	8.00		
		238.63*	44.60	2.08404E+005	6.22776E+004
Bi-214	0.983	609.31*	46.30	2.38192E+005	6.11298E+004
		1120.29*	15.10	2.39436E+005	1.28683E+005
		1764.49*	15.80	3.42158E+005	1.47074E+005
PB-214	0.394	74.82* @	6.21	5.19170E+006	1.31390E+006
		77.11* @	10.50	9.18506E+005	3.66328E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.21816E+005	6.65683E+004
Ac-228	0.622	338.32	11.40		
		911.07*	27.70	2.25368E+005	8.13995E+004
		969.11*	16.60	3.89166E+005	1.29963E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.956	6.117864E+006	7.666854E+005
TL-208		0.470	1.035297E+005	3.001444E+004
Pb-212	@	0.838	2.084041E+005	6.227761E+004
Bi-214		0.983	2.512367E+005	5.169328E+004
PB-214	@	0.394	2.218155E+005	6.537048E+004
Ac-228		0.622	2.715190E+005	6.898533E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.77	1.4415E-001	29.53
F 4	185.76	3.7956E-002	65.49

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1702E+004	5.32E+004	3.7704E+004
	1332.49	100.00	5.3238E+004		3.0238E+004
Nb-94	702.63	100.00	5.6805E+004	5.55E+004	-4.7323E+004
	871.10	100.00	5.5500E+004		1.7350E+004
Ag-108m	79.20	7.10	2.0589E+006	6.55E+004	-6.9503E+005
	433.93	89.90	6.5534E+004		5.0481E+004
	614.37	90.40	8.4165E+004		9.0170E+003
	722.95	90.50	6.9911E+004		3.8091E+004
Sb-125	176.33	6.89	1.0784E+006	2.09E+005	-2.0198E+005
	427.89	29.33	2.0853E+005		-8.6085E+004
	463.38	10.35	5.8921E+005		-3.3393E+003
	600.56	17.80	3.4219E+005		1.4280E+005
	606.64	5.02	1.6197E+006		2.6244E+006
	635.90	11.32	4.8475E+005		1.0087E+004
Cs-134	563.23	8.38	7.1737E+005	7.36E+004	-3.6751E+004
	569.32	15.43	3.5095E+005		9.8519E+004
	604.70	97.60	8.2851E+004		2.8495E+004
	795.84	85.40	7.3579E+004		5.6242E+003
	801.93	8.73	6.6202E+005		-3.3799E+005
Cs-137	661.65	85.12	7.5380E+004	7.54E+004	5.5040E+004
Eu-152	121.78	28.40	3.4531E+005	2.36E+005	4.9561E+002
	244.69	7.49	9.7323E+005		8.4778E+005
	344.27	26.50	2.3574E+005		-1.6956E+005
	778.89	12.74	3.9401E+005		-6.3771E+005
	867.32	4.16	1.2057E+006		-1.1863E+006
	964.01	14.40	5.0597E+005		7.1420E+005
	1085.78	10.00	5.9580E+005		6.4836E+005
	1112.02	13.30	5.0672E+005		-5.3516E+005
	1407.95	20.70	2.4134E+005		1.3698E+005
Eu-154	123.07	40.50	2.3976E+005	1.56E+005	-4.7647E+004
	247.94	6.60	1.0413E+006		-6.7625E+005
	591.81	4.83	1.1054E+006		-1.6350E+005
	723.30	19.70	3.2381E+005		2.7559E+005
	756.87	4.33	1.3703E+006		-4.3945E+005
	873.19	11.50	4.7121E+005		-3.6361E+004
	996.32	10.30	5.7712E+005		9.5828E+004
	1004.76	17.90	3.1729E+005		-1.5011E+005
	1274.45	35.50	1.5577E+005		5.1279E+004
Eu-155	86.54	30.90	4.3162E+005	4.32E+005	7.7902E+005
	105.31	20.70	5.0928E+005		4.6699E+005
Am-241	59.54	35.90	4.6668E+005	4.67E+005	3.4011E+005
Cm-243	228.19	10.56	6.7054E+005	4.68E+005	4.4214E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6808E+005	4.68E+005	2.7200E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 1:28:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 1:13:13 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	318	292.19	72.90	0.99	1.54E+002	37.51	4.20E+002
m	2	283-	318	300.52	74.99	0.99	3.42E+002	48.29	4.46E+002
m	3	283-	318	308.69	77.04	1.00	9.00E+001	35.79	4.39E+002
F	4	945-	958	953.64	238.73	1.19	1.79E+002	31.63	1.23E+002
F	5	1346-	1360	1352.23	338.56	0.65	4.34E+001	17.14	7.09E+001
F	6	1398-	1412	1405.87	351.99	1.31	9.90E+001	23.75	6.94E+001
F	7	2033-	2050	2041.50	511.04	1.62	7.32E+001	20.51	5.85E+001
F	8	2324-	2338	2331.23	583.50	1.14	6.19E+001	18.74	3.75E+001
F	9	2426-	2444	2435.30	609.51	1.80	8.80E+001	20.37	4.02E+001
F	10	3633-	3648	3640.81	910.66	1.61	5.08E+001	16.96	2.59E+001
F	11	3850-	3878	3872.27	968.44	1.27	3.98E+001	15.46	4.62E+001
F	12	5827-	5853	5840.53	1459.51	2.03	4.40E+002	40.44	6.75E+000
F	13	7049-	7062	7055.23	1762.52	1.40	3.03E+001	12.32	7.32E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	7.69192E+004	2.41013E+004
K-40	0.950	1460.81*	10.67	6.41315E+006	7.85670E+005
TL-208	0.750	277.35	6.80		
		510.84*	21.60	3.56107E+005	1.15308E+005
		583.14*	84.20	8.12413E+004	2.68394E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	2.98832E+006	7.21891E+005
		77.11* @	18.00	4.54770E+005	2.01650E+005
		87.30 @	8.00		
		238.63*	44.60	3.22275E+005	7.62028E+004
Bi-214	0.679	609.31*	46.30	2.13627E+005	5.61383E+004
		1120.29	15.10		
		1764.49*	15.80	3.17541E+005	1.33045E+005
PB-214	0.395	74.82* @	6.21	5.14896E+006	1.29878E+006
		77.11* @	10.50	7.79606E+005	3.50553E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.43907E+005	7.13211E+004
Ac-228	0.993	338.32*	11.40	3.44296E+005	1.46353E+005
		911.07*	27.70	2.36405E+005	8.34121E+004
		969.11*	16.60	3.17250E+005	1.27743E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	5.937108E+004	2.478211E+004
K-40		0.950	6.413147E+006	7.856696E+005
TL-208		0.750	8.124128E+004	2.670846E+004
Pb-212	@	0.838	3.222750E+005	7.620279E+004
Bi-214		0.679	2.293319E+005	5.172247E+004
PB-214	@	0.395	2.439072E+005	6.996858E+004
Ac-228		0.993	2.761008E+005	6.303207E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.7105E-001	24.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.5073E+004	4.96E+004	-2.9446E+004
	1332.49	100.00	4.9592E+004		-1.2388E+004
Nb-94	702.63	100.00	5.4792E+004	5.48E+004	2.0364E+004
	871.10	100.00	5.5500E+004		-4.5935E+003
Ag-108m	79.20	7.10	2.0381E+006	6.17E+004	-4.6299E+005
	433.93	89.90	6.1660E+004		-5.9178E+003
	614.37	90.40	8.3327E+004		1.2358E+004
	722.95	90.50	6.4903E+004		-1.4204E+004
Sb-125	176.33	6.89	1.0588E+006	1.95E+005	-4.1746E+005
	427.89	29.33	1.9467E+005		1.0457E+005
	463.38	10.35	5.9470E+005		-1.4667E+004
	600.56	17.80	3.3823E+005		1.9458E+005
	606.64	5.02	1.5488E+006		2.5485E+006
	635.90	11.32	4.5489E+005		-5.4630E+005
Cs-134	563.23	8.38	6.9276E+005	6.61E+004	1.4085E+004
	569.32	15.43	3.3582E+005		-1.7355E+005
	604.70	97.60	7.8627E+004		-2.0524E+004
	795.84	85.40	6.6079E+004		-2.3057E+004
	801.93	8.73	6.6202E+005		-3.5565E+004
Cs-137	661.65	85.12	7.2230E+004	7.22E+004	6.3734E+002
Eu-152	121.78	28.40	3.2655E+005	2.25E+005	-2.7641E+005
	244.69	7.49	9.4178E+005		-2.2618E+006
	344.27	26.50	2.4020E+005		-4.7864E+004
	778.89	12.74	4.4227E+005		-3.2227E+005
	867.32	4.16	1.3639E+006		-2.8841E+005
	964.01	14.40	4.8466E+005		4.5465E+005
	1085.78	10.00	5.9956E+005		9.0631E+004
	1112.02	13.30	5.0417E+005		-1.6990E+005
	1407.95	20.70	2.2451E+005		2.0327E+005
Eu-154	123.07	40.50	2.3408E+005	1.36E+005	7.0214E+004
	247.94	6.60	1.0030E+006		-5.3265E+005
	591.81	4.83	1.1484E+006		-1.2351E+006
	723.30	19.70	3.0101E+005		1.3779E+005
	756.87	4.33	1.3571E+006		8.3993E+005
	873.19	11.50	4.6520E+005		-5.9885E+004
	996.32	10.30	5.1611E+005		4.7528E+005
	1004.76	17.90	3.0031E+005		4.2866E+004
	1274.45	35.50	1.3604E+005		1.9144E+003
Eu-155	86.54	30.90	4.3266E+005	4.33E+005	7.9493E+005
	105.31	20.70	5.1208E+005		-1.7724E+005
Am-241	59.54	35.90	4.6617E+005	4.66E+005	-2.1463E+004
Cm-243	228.19	10.56	6.6960E+005	4.61E+005	-7.2822E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6103E+005	4.61E+005	1.6501E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 1:50:52 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 1:35:50 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	313	292.22	72.90	1.05	1.49E+002	38.73	4.65E+002
m	2	283-	313	300.52	74.99	1.06	3.54E+002	49.11	4.64E+002
m	3	283-	313	308.41	76.97	1.06	9.86E+001	36.64	4.30E+002
F	4	334-	346	339.87	84.86	0.62	7.83E+001	35.02	4.92E+002
F	5	735-	750	742.52	185.82	1.01	5.34E+001	25.37	1.94E+002
F	6	946-	959	954.02	238.82	1.15	1.62E+002	32.24	1.46E+002
F	7	1173-	1185	1179.47	295.30	1.08	5.60E+001	20.35	6.67E+001
F	8	1396-	1413	1405.92	352.00	1.26	9.01E+001	22.54	7.41E+001
F	9	2322-	2339	2330.00	583.19	1.69	9.98E+001	21.13	2.98E+001
F	10	2427-	2444	2435.15	609.47	1.23	9.17E+001	21.21	3.82E+001
F	11	3001-	3012	3006.29	752.20	0.43	1.44E+001	1.78	1.93E+001
F	12	3635-	3650	3642.09	910.98	1.41	7.62E+001	19.58	2.61E+001
F	13	3866-	3877	3871.84	968.33	1.30	3.39E+001	15.05	2.09E+001
F	14	5826-	5854	5840.36	1459.47	2.13	4.74E+002	41.66	7.25E+000
F	15	7050-	7063	7056.73	1762.89	1.35	2.28E+001	12.24	1.40E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.947	1460.81*	10.67	6.91341E+006	8.25996E+005
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.30933E+005	3.26895E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.09734E+006	7.43447E+005
		77.11* @	18.00	4.98990E+005	2.09570E+005
		87.30 @	8.00		
		238.63*	44.60	2.92580E+005	7.40748E+004
Bi-214	0.688	609.31*	46.30	2.22592E+005	5.84497E+004
		1120.29	15.10		
		1764.49*	15.80	2.38620E+005	1.30593E+005
PB-214	0.760	74.82* @	6.21	5.33680E+006	1.33828E+006
		77.11* @	10.50	8.55411E+005	3.64896E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.52086E+005	1.00944E+005
		351.92*	37.20	2.21976E+005	6.67864E+004
Ac-228	0.617	338.32	11.40		
		911.07*	27.70	3.54301E+005	9.97439E+004
		969.11*	16.60	2.70180E+005	1.23338E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.947	6.913412E+006	8.259961E+005
TL-208		0.471	1.309327E+005	3.268955E+004
Pb-212	@	0.838	2.925796E+005	7.407483E+004
Bi-214		0.688	2.252666E+005	5.334990E+004
PB-214	@	0.760	2.311436E+005	5.569908E+004
Ac-228		0.617	3.210395E+005	7.755666E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.6544E-001	26.01
F 4	84.86	8.6970E-002	44.74
F 5	185.82	5.9293E-002	47.54
F 11	752.20	1.5961E-002	12.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.3733E+004	5.01E+004	-9.8846E+003
	1332.49	100.00	5.0130E+004		3.0939E+004
Nb-94	702.63	100.00	5.7922E+004	5.20E+004	-2.9552E+002
	871.10	100.00	5.2047E+004		-7.8080E+003
Ag-108m	79.20	7.10	2.0456E+006	6.28E+004	-4.9151E+005
	433.93	89.90	6.2761E+004		-1.7983E+004
	614.37	90.40	8.3327E+004		-3.8761E+004
	722.95	90.50	7.2960E+004		2.1803E+004
Sb-125	176.33	6.89	1.0622E+006	1.96E+005	7.0049E+004
	427.89	29.33	1.9597E+005		9.1171E+004
	463.38	10.35	5.7618E+005		-2.8183E+005
	600.56	17.80	3.1766E+005		1.6849E+005
	606.64	5.02	1.5488E+006		2.5364E+006
	635.90	11.32	4.9898E+005		3.0854E+005
Cs-134	563.23	8.38	6.8716E+005	6.96E+004	2.5885E+005
	569.32	15.43	3.5906E+005		6.2598E+004
	604.70	97.60	7.8248E+004		3.5909E+004
	795.84	85.40	6.9594E+004		2.5264E+004
	801.93	8.73	6.3365E+005		-3.6609E+005
Cs-137	661.65	85.12	6.4467E+004	6.45E+004	-1.9497E+004
Eu-152	121.78	28.40	3.4412E+005	2.19E+005	3.7582E+004
	244.69	7.49	9.5009E+005		-1.4005E+006
	344.27	26.50	2.2888E+005		-1.4363E+005
	778.89	12.74	4.3503E+005		1.0073E+005
	867.32	4.16	1.4100E+006		9.4192E+004
	964.01	14.40	5.1535E+005		6.5046E+005
	1085.78	10.00	5.4855E+005		3.8276E+005
	1112.02	13.30	5.2908E+005		-3.8130E+005
	1407.95	20.70	2.1858E+005		3.3418E+004
Eu-154	123.07	40.50	2.3835E+005	1.39E+005	1.2881E+005
	247.94	6.60	1.0248E+006		-1.2920E+006
	591.81	4.83	1.1589E+006		5.9062E+005
	723.30	19.70	3.3771E+005		2.2862E+005
	756.87	4.33	1.4025E+006		6.7519E+005
	873.19	11.50	4.4350E+005		-1.5519E+005
	996.32	10.30	5.0452E+005		1.5300E+004
	1004.76	17.90	2.7512E+005		-1.0313E+005
	1274.45	35.50	1.3905E+005		1.0465E+003
Eu-155	86.54	30.90	4.2882E+005	4.29E+005	5.3949E+005
	105.31	20.70	5.0193E+005		1.6496E+005
Am-241	59.54	35.90	4.6540E+005	4.65E+005	-2.4871E+005
Cm-243	228.19	10.56	6.7614E+005	4.58E+005	-2.3689E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5835E+005	4.58E+005	-1.4951E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 3:15:20 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 3:00:18 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	315	291.80	72.80	0.90	1.51E+002	38.04	4.03E+002
m	2	282-	315	300.45	74.97	0.90	3.11E+002	47.41	3.94E+002
m	3	282-	315	310.07	77.38	0.91	7.00E+001	33.03	3.85E+002
F	4	334-	347	339.03	84.65	0.96	6.24E+001	38.13	4.84E+002
F	5	363-	377	372.94	93.15	1.16	9.16E+001	35.37	4.06E+002
F	6	737-	748	742.18	185.74	0.56	3.26E+001	19.63	1.36E+002
F	7	948-	964	953.75	238.76	0.95	1.48E+002	30.46	1.71E+002
F	8	1398-	1413	1406.64	352.18	1.26	9.24E+001	22.52	6.55E+001
F	9	2031-	2052	2040.46	510.78	2.09	8.95E+001	20.87	5.92E+001
F	10	2322-	2338	2330.06	583.20	1.35	7.43E+001	19.47	3.56E+001
F	11	2425-	2444	2434.84	609.40	1.58	1.08E+002	21.95	3.50E+001
F	12	2637-	2652	2644.99	661.92	1.22	4.27E+001	15.68	2.59E+001
F	13	3633-	3650	3641.68	910.88	1.64	5.74E+001	17.67	2.89E+001
F	14	3866-	3878	3872.26	968.44	1.01	3.67E+001	13.88	1.46E+001
F	15	4472-	4485	4477.92	1119.59	1.51	3.44E+001	13.34	9.95E+000
F	16	5827-	5854	5840.18	1459.42	2.00	3.71E+002	37.49	1.40E+001
F	17	7050-	7063	7056.29	1762.78	0.53	1.38E+001	5.85	9.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	9.41002E+004	2.56183E+004
K-40	0.943	1460.81*		10.67	5.43853E+006	7.04686E+005
Cs-137	0.998	661.65*		85.12	5.84819E+004	2.25488E+004
TL-208	0.753	277.35		6.80		
		510.84*		21.60	4.35649E+005	1.23824E+005
		583.14*		84.20	9.77749E+004	2.87150E+004
		860.37		12.46		
Pb-212	0.837	74.81*	@	10.70	2.66918E+006	6.62867E+005
		77.11*	@	18.00	3.46008E+005	1.76870E+005
		87.30	@	8.00		
		238.63*		44.60	2.65114E+005	6.86281E+004
Bi-214	0.979	609.31*		46.30	2.63502E+005	6.27366E+004
		1120.29*		15.10	3.23450E+005	1.30173E+005
		1764.49*		15.80	1.46370E+005	6.35515E+004
PB-214	0.394	74.82*	@	6.21	4.59907E+006	1.18993E+006
		77.11*	@	10.50	5.93157E+005	3.06423E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	2.26950E+005	6.70999E+004
Ac-228	0.617	338.32		11.40		
		911.07*		27.70	2.68322E+005	8.81620E+004
		969.11*		16.60	2.93934E+005	1.15489E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	7.298077E+004	2.634943E+004
K-40		0.943	5.438533E+006	7.046864E+005
Cs-137		0.998	5.848192E+004	2.254879E+004
TL-208		0.753	9.777492E+004	2.853769E+004
Pb-212	@	0.837	2.651137E+005	6.862812E+004
Bi-214		0.979	2.180867E+005	4.223184E+004
PB-214	@	0.394	2.269502E+005	6.585548E+004
Ac-228		0.617	2.777517E+005	7.007707E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.6797E-001	25.17
F	4	84.65	6.9322E-002	61.11
F	5	93.15	1.0175E-001	38.63
F	6	185.74	3.6237E-002	60.19

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.0431E+004	4.21E+004	2.1482E+004
		1332.49	100.00	4.2125E+004		7.5868E+002
	Nb-94	702.63	100.00	5.5676E+004	5.23E+004	2.7616E+004
		871.10	100.00	5.2320E+004		2.9518E+004
	Ag-108m	79.20	7.10	1.9442E+006	6.27E+004	-2.4854E+005
		433.93	89.90	6.2677E+004		2.5630E+003
		614.37	90.40	8.0449E+004		-4.4251E+004
		722.95	90.50	6.4321E+004		1.7298E+004
	Sb-125	176.33	6.89	1.0120E+006	1.89E+005	-2.7510E+005
		427.89	29.33	1.8909E+005		-4.1468E+004
		463.38	10.35	5.9271E+005		-1.5679E+005
		600.56	17.80	3.1170E+005		-2.6422E+004
		606.64	5.02	1.5405E+006		3.0884E+006
		635.90	11.32	4.6984E+005		9.9173E+004
	Cs-134	563.23	8.38	7.2480E+005	6.61E+004	-1.5434E+005
		569.32	15.43	3.9092E+005		4.3065E+005
		604.70	97.60	7.8372E+004		1.0194E+004
		795.84	85.40	6.6066E+004		2.9571E+004
		801.93	8.73	6.2224E+005		6.4068E+004
+	Cs-137	661.65*	85.12	4.3566E+004	4.36E+004	5.8482E+004
	Eu-152	121.78	28.40	3.3127E+005	2.14E+005	2.3548E+005
		244.69	7.49	9.6226E+005		-2.7084E+004
		344.27	26.50	2.3335E+005		-1.9424E+005
		778.89	12.74	4.1470E+005		-3.8833E+005
		867.32	4.16	1.2298E+006		-7.3986E+005
		964.01	14.40	4.8719E+005		8.6900E+005
		1085.78	10.00	5.1714E+005		-3.1789E+005
		1112.02	13.30	4.7490E+005		-1.4576E+005
		1407.95	20.70	2.1376E+005		1.8678E+004
	Eu-154	123.07	40.50	2.2818E+005	1.48E+005	5.8024E+003
		247.94	6.60	9.9049E+005		-5.3393E+005
		591.81	4.83	1.1632E+006		1.3044E+005
		723.30	19.70	2.9553E+005		3.6710E+004
		756.87	4.33	1.2387E+006		-6.6727E+003
		873.19	11.50	4.6152E+005		-7.0965E+005
		996.32	10.30	5.0716E+005		9.8823E+004
		1004.76	17.90	2.7896E+005		2.2052E+004
		1274.45	35.50	1.4845E+005		-6.2783E+004
	Eu-155	86.54	30.90	4.0206E+005	4.02E+005	3.6747E+005
		105.31	20.70	4.9902E+005		-1.3459E+005
	Am-241	59.54	35.90	4.5065E+005	4.51E+005	1.8864E+005
	Cm-243	228.19	10.56	6.3577E+005	4.67E+005	-2.3888E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6674E+005	4.67E+005	-1.6660E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 3:35:21 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 3:20:18 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	307	291.63	72.76	0.99	8.96E+001	38.21	4.08E+002
m	2	288-	307	300.27	74.92	0.99	2.44E+002	49.31	6.24E+002
F	3	945-	959	953.87	238.79	0.97	9.84E+001	28.09	1.67E+002
F	4	1171-	1184	1179.17	295.22	0.90	4.68E+001	20.29	9.28E+001
F	5	1308-	1317	1312.06	328.50	0.66	2.12E+001	14.89	5.30E+001
F	6	1400-	1414	1406.59	352.17	1.22	1.07E+002	23.40	5.20E+001
F	7	2322-	2338	2330.09	583.21	1.20	6.99E+001	20.08	4.99E+001
F	8	2428-	2442	2434.77	609.38	1.15	9.55E+001	22.42	4.50E+001
F	9	2637-	2648	2641.95	661.16	0.80	2.26E+001	12.89	2.85E+001
F	10	3172-	3183	3177.54	794.97	0.92	1.67E+001	11.16	1.78E+001
F	11	3633-	3651	3641.80	910.91	1.98	7.62E+001	18.48	2.16E+001
F	12	3867-	3880	3872.71	968.55	1.48	3.79E+001	15.94	2.39E+001
F	13	5827-	5853	5840.71	1459.55	2.09	3.97E+002	38.90	2.03E+001
F	14	7050-	7063	7057.07	1762.98	0.78	1.70E+001	9.36	8.65E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.953	1460.81*		10.67	5.78732E+006	7.35704E+005
Cs-137	0.993	661.65*		85.12	3.08078E+004	1.79195E+004
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	9.16688E+004	2.89989E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.12960E+006	6.00157E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.77481E+005	5.78018E+004
Bi-214	0.690	609.31*		46.30	2.31760E+005	6.15866E+004
		1120.29		15.10		
		1764.49*		15.80	1.78161E+005	9.97618E+004
PB-214	0.565	74.82*	@	6.21	3.66935E+006	1.06784E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.10637E+005	9.79475E+004
		351.92*		37.20	2.63859E+005	7.26051E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	3.54372E+005	9.50967E+004
		969.11*		16.60	3.02412E+005	1.31046E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.953	5.787315E+006	7.357040E+005
Cs-137		0.993	3.080779E+004	1.791952E+004
TL-208		0.471	9.166884E+004	2.899895E+004
Pb-212	@	0.497	1.774812E+005	5.780175E+004
Bi-214		0.690	2.169695E+005	5.240502E+004
PB-214	@	0.565	2.449855E+005	5.832771E+004
Ac-228		0.619	3.364485E+005	7.696662E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	9.9607E-002	42.63
F 5	328.50	2.3514E-002	70.35
F 10	794.97	1.8599E-002	66.64

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.0915E+004	4.56E+004	7.7212E+003
		1332.49	100.00	4.5627E+004		-2.0590E+004
	Nb-94	702.63	100.00	5.4498E+004	5.28E+004	-9.7385E+003
		871.10	100.00	5.2757E+004		3.2630E+004
	Ag-108m	79.20	7.10	2.0984E+006	6.47E+004	-1.9724E+006
		433.93	89.90	6.4694E+004		2.4797E+004
		614.37	90.40	8.5609E+004		-8.9760E+002
		722.95	90.50	6.7896E+004		4.0195E+004
	Sb-125	176.33	6.89	1.1033E+006	1.93E+005	-9.9508E+004
		427.89	29.33	1.9335E+005		1.2554E+005
		463.38	10.35	5.9287E+005		-1.9012E+005
		600.56	17.80	3.0163E+005		-1.4161E+005
		606.64	5.02	1.5988E+006		2.5837E+006
		635.90	11.32	4.7747E+005		-3.1575E+005
	Cs-134	563.23	8.38	6.7296E+005	6.82E+004	1.2395E+005
		569.32	15.43	3.7626E+005		-1.2771E+005
		604.70	97.60	8.0492E+004		-2.6292E+004
		795.84	85.40	6.8211E+004		3.1982E+004
		801.93	8.73	5.8045E+005		-1.8154E+004
+	Cs-137	661.65*	85.12	4.1556E+004	4.16E+004	3.0808E+004
	Eu-152	121.78	28.40	3.5159E+005	2.09E+005	3.8172E+005
		244.69	7.49	9.7458E+005		2.6132E+005
		344.27	26.50	2.3854E+005		-3.5338E+005
		778.89	12.74	4.2015E+005		8.5598E+004
		867.32	4.16	1.2664E+006		-3.3568E+005
		964.01	14.40	4.8664E+005		4.6004E+005
		1085.78	10.00	5.6076E+005		2.0003E+004
		1112.02	13.30	4.8058E+005		-2.4330E+005
		1407.95	20.70	2.0935E+005		2.3393E+004
	Eu-154	123.07	40.50	2.4157E+005	1.68E+005	-1.2198E+004
		247.94	6.60	1.0543E+006		-2.7984E+005
		591.81	4.83	1.1163E+006		-9.7761E+004
		723.30	19.70	3.1463E+005		3.0674E+005
		756.87	4.33	1.3031E+006		8.7883E+005
		873.19	11.50	4.3384E+005		1.3571E+005
		996.32	10.30	4.8455E+005		-1.5134E+005
		1004.76	17.90	2.8456E+005		-2.6918E+004
		1274.45	35.50	1.6835E+005		1.5279E+005
	Eu-155	86.54	30.90	4.3004E+005	4.30E+005	5.7094E+005
		105.31	20.70	5.1624E+005		3.5516E+005
	Am-241	59.54	35.90	4.5500E+005	4.55E+005	-2.0319E+004
	Cm-243	228.19	10.56	6.6205E+005	4.88E+005	-3.3679E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8779E+005	4.88E+005	-4.1698E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 2:51:12 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 2:36:10 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	313	291.72	72.78	1.09	1.98E+002	41.09	4.12E+002
m	2	286-	313	300.22	74.91	1.09	3.21E+002	47.35	4.85E+002
m	3	286-	313	308.83	77.07	1.09	8.72E+001	36.30	4.28E+002
F	4	334-	344	338.90	84.62	0.90	6.83E+001	39.26	4.24E+002
F	5	948-	960	954.00	238.82	1.14	1.30E+002	29.66	1.28E+002
F	6	1176-	1185	1180.60	295.58	0.39	2.73E+001	14.85	6.61E+001
F	7	1401-	1412	1406.19	352.07	1.20	9.05E+001	22.89	5.06E+001
F	8	2031-	2051	2041.95	511.16	1.99	9.96E+001	22.34	7.09E+001
F	9	2322-	2339	2330.83	583.40	1.62	9.30E+001	20.59	3.31E+001
F	10	2427-	2443	2435.01	609.44	1.32	8.65E+001	21.07	4.07E+001
F	11	3633-	3649	3641.94	910.94	1.41	5.22E+001	17.87	3.61E+001
F	12	3867-	3880	3872.78	968.57	1.72	3.65E+001	15.09	1.90E+001
F	13	5828-	5853	5840.40	1459.48	1.74	3.81E+002	38.86	2.79E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.04615E+005	2.76810E+004
K-40	0.948	1460.81*	10.67	5.55358E+006	7.23340E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.84327E+005	1.34118E+005
		583.14*	84.20	1.22078E+005	3.14772E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	2.80517E+006	6.88332E+005
		77.11* @	18.00	4.40387E+005	2.02672E+005
		87.30 @	8.00		
		238.63*	44.60	2.33773E+005	6.48484E+004
Bi-214	0.418	609.31*	46.30	2.09833E+005	5.74071E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.759	74.82* @	6.21	4.83339E+006	1.23683E+006
		77.11* @	10.50	7.54950E+005	3.51981E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.23092E+005	6.99787E+004
		351.92*	37.20	2.23088E+005	6.76152E+004
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	2.42635E+005	8.76420E+004
		969.11*	16.60	2.91138E+005	1.24221E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	7.824581E+004	2.849079E+004
K-40		0.948	5.553576E+006	7.233399E+005
TL-208		0.751	1.220779E+005	3.122481E+004
Pb-212	@	0.838	2.337728E+005	6.484840E+004
Bi-214		0.418	2.098328E+005	5.740714E+004
PB-214	@	0.759	1.748072E+005	4.862527E+004
Ac-228		0.620	2.587546E+005	7.161248E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.78	2.1974E-001	20.78
F	4	84.62	7.5892E-002	57.48

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7655E+004	4.90E+004	2.8879E+003
	1332.49	100.00	4.9047E+004		3.9497E+004
Nb-94	702.63	100.00	5.7366E+004	5.52E+004	1.7658E+004
	871.10	100.00	5.5165E+004		1.6790E+004
Ag-108m	79.20	7.10	1.9863E+006	6.49E+004	-1.4831E+006
	433.93	89.90	6.4905E+004		-6.8170E+003
	614.37	90.40	8.4787E+004		6.5037E+003
	722.95	90.50	6.7896E+004		2.5089E+004
Sb-125	176.33	6.89	1.0761E+006	1.97E+005	3.3729E+005
	427.89	29.33	1.9662E+005		-6.0731E+004
	463.38	10.35	6.0731E+005		3.3300E+005
	600.56	17.80	3.2188E+005		5.3323E+004
	606.64	5.02	1.5379E+006		1.8879E+006
	635.90	11.32	5.2400E+005		2.4176E+005
Cs-134	563.23	8.38	7.1468E+005	6.46E+004	3.7745E+005
	569.32	15.43	3.8081E+005		-3.0803E+005
	604.70	97.60	7.8627E+004		-8.5136E+003
	795.84	85.40	6.4615E+004		7.2370E+004
	801.93	8.73	5.9228E+005		-8.9906E+005
Cs-137	661.65	85.12	6.8620E+004	6.86E+004	-6.7580E+003
Eu-152	121.78	28.40	3.2989E+005	2.09E+005	-2.5532E+004
	244.69	7.49	9.6919E+005		-4.1632E+004
	344.27	26.50	2.5047E+005		-1.8192E+005
	778.89	12.74	4.4466E+005		-9.5929E+004
	867.32	4.16	1.3482E+006		-3.6806E+005
	964.01	14.40	4.9834E+005		4.9396E+005
	1085.78	10.00	5.4024E+005		-1.1201E+005
	1112.02	13.30	4.9644E+005		1.8027E+005
	1407.95	20.70	2.0935E+005		-9.4684E+004
Eu-154	123.07	40.50	2.2943E+005	1.50E+005	-3.7987E+004
	247.94	6.60	1.0446E+006		1.2043E+005
	591.81	4.83	1.1431E+006		5.5420E+005
	723.30	19.70	3.1196E+005		1.9410E+005
	756.87	4.33	1.3505E+006		2.7309E+005
	873.19	11.50	4.8875E+005		-3.4736E+004
	996.32	10.30	4.9664E+005		-3.7447E+005
	1004.76	17.90	3.1935E+005		9.5536E+004
	1274.45	35.50	1.5042E+005		6.2463E+004
Eu-155	86.54	30.90	4.3405E+005	4.34E+005	6.7412E+005
	105.31	20.70	5.0872E+005		1.1222E+005
Am-241	59.54	35.90	4.4970E+005	4.50E+005	1.7957E+004
Cm-243	228.19	10.56	6.3983E+005	4.57E+005	-2.3990E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5745E+005	4.57E+005	-1.6757E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 10:02:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 9:47:07 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	313	292.45	72.96	1.04	1.64E+002	42.59	4.55E+002
m	2	288-	313	300.53	74.99	1.05	3.48E+002	51.77	5.83E+002
m	3	288-	313	309.26	77.18	1.05	7.61E+001	38.59	5.03E+002
F	4	330-	344	338.91	84.62	1.30	1.63E+002	45.50	5.97E+002
F	5	949-	964	954.28	238.89	0.94	1.14E+002	28.55	1.70E+002
F	6	1401-	1413	1407.58	352.42	1.19	4.96E+001	19.71	6.33E+001
F	7	2323-	2339	2331.64	583.60	1.29	8.05E+001	20.47	3.79E+001
F	8	2429-	2444	2436.53	609.82	1.02	8.07E+001	20.65	4.21E+001
F	9	2901-	2912	2906.49	727.27	0.49	1.34E+001	9.28	1.96E+001
F	10	3336-	3347	3341.20	835.85	0.71	1.45E+001	9.60	1.32E+001
F	11	3637-	3652	3643.08	911.23	1.33	6.37E+001	17.62	1.77E+001
F	12	3870-	3881	3875.88	969.34	0.74	1.92E+001	12.33	2.95E+001
F	13	5831-	5857	5843.67	1460.29	1.88	3.82E+002	38.27	1.35E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.992	1460.81*	10.67	5.60085E+006	7.21940E+005
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.06077E+005	3.03824E+004
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	1.36395E+005	9.58921E+004
Pb-212	0.837	74.81* @	10.70	2.99152E+006	7.35702E+005
		77.11* @	18.00	3.77543E+005	2.05166E+005
		87.30 @	8.00		
		238.63*	44.60	2.04157E+005	6.03764E+004
Bi-214	0.414	609.31*	46.30	1.96599E+005	5.59609E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.392	74.82* @	6.21	5.15447E+006	1.32171E+006
		77.11* @	10.50	6.47216E+005	3.55017E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	1.21896E+005	5.25677E+004
Ac-228	0.621	338.32	11.40		
		911.07*	27.70	2.97798E+005	8.92144E+004
		969.11*	16.60	1.53905E+005	1.00171E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.992	5.600853E+006	7.219397E+005
TL-208		0.466	1.060771E+005	3.038245E+004
Bi-212		1.000	1.363955E+005	9.589206E+004
Pb-212	@	0.837	2.041569E+005	6.037640E+004
Bi-214		0.414	1.965994E+005	5.596091E+004
PB-214	@	0.392	1.218963E+005	5.211172E+004
Ac-228		0.621	2.341487E+005	6.662246E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	1.8200E-001	26.00
F 4	84.62	1.8058E-001	28.00
F 10	835.85	1.6134E-002	66.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7104E+004	5.40E+004	6.0471E+004
	1332.49	100.00	5.4027E+004		-2.0272E+004
Nb-94	702.63	100.00	5.7113E+004	5.23E+004	-5.1949E+003
	871.10	100.00	5.2320E+004		-7.3993E+002
Ag-108m	79.20	7.10	2.1977E+006	6.40E+004	-6.7023E+005
	433.93	89.90	6.6887E+004		1.6789E+004
	614.37	90.40	8.1759E+004		1.0870E+004
	722.95	90.50	6.4007E+004		4.7368E+004
Sb-125	176.33	6.89	1.1825E+006	2.15E+005	4.1393E+005
	427.89	29.33	2.1480E+005		3.6772E+004
	463.38	10.35	5.9088E+005		-2.0117E+005
	600.56	17.80	2.9364E+005		-7.7190E+004
	606.64	5.02	1.4994E+006		2.1535E+006
	635.90	11.32	4.6223E+005		3.2471E+005
Cs-134	563.23	8.38	6.8913E+005	6.72E+004	-1.0354E+005
	569.32	15.43	4.0111E+005		1.8634E+005
	604.70	97.60	7.4450E+004		3.4360E+004
	795.84	85.40	6.7153E+004		9.1287E+003
	801.93	8.73	6.0707E+005		-9.5878E+005
Cs-137	661.65	85.12	6.7422E+004	6.74E+004	-2.3965E+004
Eu-152	121.78	28.40	3.6358E+005	1.91E+005	-9.4094E+003
	244.69	7.49	1.0422E+006		-1.6574E+005
	344.27	26.50	2.3672E+005		-2.8603E+005
	778.89	12.74	4.2239E+005		1.5208E+004
	867.32	4.16	1.2645E+006		-3.1685E+005
	964.01	14.40	4.6890E+005		1.4330E+005
	1085.78	10.00	5.7568E+005		2.7254E+005
	1112.02	13.30	4.6936E+005		-5.2423E+005
	1407.95	20.70	1.9051E+005		-3.3620E+004
Eu-154	123.07	40.50	2.5249E+005	1.47E+005	-5.1951E+004
	247.94	6.60	1.1212E+006		7.7572E+004
	591.81	4.83	1.1526E+006		2.0885E+005
	723.30	19.70	2.9264E+005		1.0187E+005
	756.87	4.33	1.2239E+006		1.2962E+005
	873.19	11.50	4.5531E+005		-3.0892E+004
	996.32	10.30	4.9923E+005		-2.6291E+004
	1004.76	17.90	2.8370E+005		7.2669E+004
	1274.45	35.50	1.4705E+005		5.5652E+004
Eu-155	86.54	30.90	4.5922E+005	4.59E+005	-2.0554E+004
	105.31	20.70	5.5196E+005		-3.3373E+005
Am-241	59.54	35.90	5.2122E+005	5.21E+005	8.5095E+004
Cm-243	228.19	10.56	6.9631E+005	4.99E+005	-4.4335E+003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9946E+005	4.99E+005	3.2636E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 10:32:35 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 10:17:32 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.86	72.81	1.00	1.83E+002	43.52	4.68E+002
m	2	287-	307	300.67	75.02	1.00	3.65E+002	54.62	6.54E+002
F	3	944-	960	954.58	238.96	1.16	1.24E+002	29.28	1.61E+002
F	4	1399-	1414	1407.01	352.28	1.29	7.34E+001	21.92	8.00E+001
F	5	2031-	2051	2042.52	511.30	2.33	1.09E+002	20.64	3.34E+001
F	6	2325-	2338	2331.51	583.56	1.09	5.54E+001	17.58	3.00E+001
F	7	2428-	2444	2436.52	609.82	0.99	8.22E+001	19.91	3.39E+001
F	8	3636-	3653	3643.99	911.45	1.67	5.32E+001	16.31	2.01E+001
F	9	3869-	3881	3874.49	969.00	0.68	1.86E+001	10.76	1.95E+001
F	10	5832-	5855	5844.15	1460.41	1.82	3.50E+002	36.66	1.20E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S·O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.14941E+005	2.70442E+004
K-40	0.995	1460.81*		10.67	5.14197E+006	6.80389E+005
TL-208	0.748	277.35		6.80		
		510.84*		21.60	5.32135E+005	1.32532E+005
		583.14*		84.20	7.29465E+004	2.50804E+004
		860.37		12.46		
Pb-212	0.494	74.81*	@	10.70	3.12822E+006	7.71728E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.22142E+005	6.30065E+004
Bi-214	0.414	609.31*		46.30	2.00456E+005	5.45679E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	2.48665E+005	8.14572E+004
		969.11*		16.60	1.49331E+005	8.76698E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

YANKEE ROWE PORTABLE ISOCS
(BLUE ROVER SYSTEM)

INTERFERENCE CORRECTED REPORT

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	9.918465E+004	2.757668E+004
K-40		0.995	5.141968E+006	6.803894E+005
TL-208		0.748	7.294650E+004	2.496745E+004
Pb-212	@	0.494	2.221424E+005	6.300649E+004
Bi-214		0.414	2.004556E+005	5.456788E+004
Ac-228		0.619	2.026420E+005	5.967452E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

UNIDENTIFIED PEAKS

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	2.0331E-001	23.78
F 4	352.28	8.1534E-002	29.88

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.5360E+004	4.65E+004	-5.5520E+004
	1332.49	100.00	4.6466E+004		1.1380E+004
Nb-94	702.63	100.00	5.3897E+004	5.01E+004	9.7519E+003
	871.10	100.00	5.0114E+004		-6.3177E+003
Ag-108m	79.20	7.10	2.1962E+006	5.98E+004	-2.5678E+006
	433.93	89.90	5.9774E+004		5.2642E+004
	614.37	90.40	8.2620E+004		-2.7294E+003
	722.95	90.50	6.5253E+004		5.8396E+004
Sb-125	176.33	6.89	1.1279E+006	1.85E+005	6.3100E+005
	427.89	29.33	1.8502E+005		-3.2907E+004
	463.38	10.35	6.1948E+005		4.6034E+005
	600.56	17.80	3.0876E+005		-1.2275E+005
	606.64	5.02	1.4493E+006		1.8016E+006
	635.90	11.32	4.5709E+005		2.5762E+005
Cs-134	563.23	8.38	6.6618E+005	6.96E+004	-7.5385E+004
	569.32	15.43	3.6494E+005		3.3981E+005
	604.70	97.60	7.5052E+004		-3.7336E+003
	795.84	85.40	6.9620E+004		1.7934E+004
	801.93	8.73	6.6204E+005		-1.2631E+006
Cs-137	661.65	85.12	6.3816E+004	6.38E+004	1.4579E+003
Eu-152	121.78	28.40	3.5049E+005	1.94E+005	1.1338E+004
	244.69	7.49	9.8353E+005		-5.1294E+005
	344.27	26.50	2.2704E+005		-1.0296E+005
	778.89	12.74	4.3490E+005		-8.5548E+004
	867.32	4.16	1.2473E+006		1.5916E+005
	964.01	14.40	4.7097E+005		4.5702E+005
	1085.78	10.00	4.9905E+005		-7.6526E+004
	1112.02	13.30	4.0302E+005		-3.5924E+005
	1407.95	20.70	1.9402E+005		2.7344E+004
Eu-154	123.07	40.50	2.4524E+005	1.34E+005	9.8223E+004
	247.94	6.60	1.0877E+006		5.5249E+004
	591.81	4.83	1.1259E+006		-1.8864E+005
	723.30	19.70	2.9697E+005		1.4920E+005
	756.87	4.33	1.0723E+006		-2.7157E+005
	873.19	11.50	4.4261E+005		-1.1085E+004
	996.32	10.30	5.1881E+005		3.0432E+005
	1004.76	17.90	2.8604E+005		-2.1833E+005
	1274.45	35.50	1.3367E+005		-1.6294E+004
Eu-155	86.54	30.90	4.5120E+005	4.51E+005	6.3706E+005
	105.31	20.70	5.5170E+005		6.2811E+005
Am-241	59.54	35.90	5.4056E+005	5.41E+005	3.3896E+005
Cm-243	228.19	10.56	7.0427E+005	4.83E+005	4.2273E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8297E+005	4.83E+005	3.5591E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 10:56:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 10:41:47 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.93	72.83	0.81	9.09E+001	35.05	4.14E+002
m	2	285-	307	300.28	74.93	0.81	2.19E+002	44.85	4.32E+002
F	3	947-	960	955.20	239.12	0.94	1.03E+002	25.74	1.02E+002
F	4	1174-	1188	1181.25	295.75	1.25	5.31E+001	18.94	5.84E+001
F	5	1397-	1414	1406.53	352.16	0.94	5.38E+001	18.45	6.27E+001
F	6	2324-	2340	2332.11	583.71	1.08	6.64E+001	18.08	2.91E+001
F	7	2429-	2444	2436.43	609.79	1.10	6.61E+001	18.01	2.43E+001
F	8	3639-	3651	3644.29	911.53	1.12	2.60E+001	13.12	1.95E+001
F	9	4476-	4487	4481.39	1120.46	0.80	2.04E+001	10.71	1.20E+001
F	10	5831-	5856	5844.32	1460.46	2.03	3.40E+002	35.71	6.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.996	1460.81*		10.67	4.99349E+006	6.61946E+005
TL-208	0.464	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	8.74415E+004	2.64747E+004
		860.37		12.46		
Pb-212	0.492	74.81*	@	10.70	1.88014E+006	5.33166E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.85393E+005	5.45579E+004
Bi-214	0.710	609.31*		46.30	1.61208E+005	4.82720E+004
		1120.29*		15.10	1.91921E+005	1.02890E+005
		1764.49		15.80		
PB-214	0.562	74.82*	@	6.21	3.23954E+006	9.48282E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.37932E+005	9.38898E+004
		351.92*		37.20	1.32262E+005	5.04381E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.996	4.993491E+006	6.619458E+005
TL-208		0.464	8.744150E+004	2.647473E+004
Pb-212	@	0.492	1.853934E+005	5.455794E+004
Bi-214		0.710	1.667486E+005	4.370141E+004
PB-214	@	0.562	1.559275E+005	4.443259E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.0095E-001	38.57
F 8	911.53	2.8942E-002	50.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4466E+004	4.40E+004	-5.8150E+004
	1332.49	100.00	4.4043E+004		1.6833E+004
Nb-94	702.63	100.00	5.3594E+004	4.70E+004	-5.6882E+003
	871.10	100.00	4.6999E+004		-2.8897E+004
Ag-108m	79.20	7.10	1.9408E+006	5.27E+004	-1.2416E+006
	433.93	89.90	5.2689E+004		-2.0365E+004
	614.37	90.40	7.2313E+004		-1.1681E+004
	722.95	90.50	5.5180E+004		1.1597E+004
Sb-125	176.33	6.89	1.0299E+006	1.57E+005	2.0996E+004
	427.89	29.33	1.5742E+005		2.7561E+004
	463.38	10.35	4.9251E+005		5.3213E+005
	600.56	17.80	2.9673E+005		1.2083E+004
	606.64	5.02	1.3475E+006		1.3471E+006
	635.90	11.32	4.4660E+005		-1.0066E+005
Cs-134	563.23	8.38	6.1122E+005	6.72E+004	-4.3643E+005
	569.32	15.43	3.4198E+005		-2.8486E+005
	604.70	97.60	6.9654E+004		-1.0384E+004
	795.84	85.40	6.7153E+004		1.5739E+004
	801.93	8.73	6.1090E+005		2.4720E+004
Cs-137	661.65	85.12	6.2449E+004	6.24E+004	4.4060E+004
Eu-152	121.78	28.40	3.2081E+005	2.01E+005	7.3481E+004
	244.69	7.49	8.7479E+005		-4.7847E+005
	344.27	26.50	2.1133E+005		-2.1453E+005
	778.89	12.74	3.9064E+005		-3.5245E+005
	867.32	4.16	1.1185E+006		-1.3014E+006
	964.01	14.40	4.1830E+005		1.4791E+005
	1085.78	10.00	5.3883E+005		4.4150E+005
	1112.02	13.30	3.7929E+005		-1.1478E+005
	1407.95	20.70	2.0084E+005		-1.1207E+004
Eu-154	123.07	40.50	2.2382E+005	1.43E+005	-3.0168E+004
	247.94	6.60	9.6634E+005		4.7945E+004
	591.81	4.83	1.0586E+006		1.6738E+005
	723.30	19.70	2.5856E+005		1.4615E+005
	756.87	4.33	1.1307E+006		-9.7858E+004
	873.19	11.50	4.1596E+005		-4.3643E+005
	996.32	10.30	4.3010E+005		-7.9470E+004
	1004.76	17.90	2.6417E+005		6.7415E+004
	1274.45	35.50	1.4274E+005		-6.3828E+003
Eu-155	86.54	30.90	4.0730E+005	4.07E+005	6.2657E+005
	105.31	20.70	4.9114E+005		1.2679E+004
Am-241	59.54	35.90	4.6906E+005	4.69E+005	-4.4198E+005
Cm-243	228.19	10.56	6.4354E+005	4.13E+005	6.8397E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.1311E+005	4.13E+005	1.8821E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 11:16:39 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 11:01:37 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	307	291.91	72.83	1.07	1.53E+002	38.96	4.57E+002
m	2	285-	307	300.32	74.94	1.07	3.06E+002	48.58	5.24E+002
F	3	335-	346	340.34	84.98	0.90	1.05E+002	39.44	4.17E+002
F	4	947-	963	954.25	238.88	1.31	1.06E+002	26.28	1.27E+002
F	5	1402-	1416	1406.58	352.17	0.83	3.86E+001	17.21	6.52E+001
F	6	2326-	2338	2332.14	583.72	1.23	4.73E+001	16.87	2.81E+001
F	7	2430-	2445	2436.89	609.91	1.18	6.99E+001	19.22	3.55E+001
F	8	3637-	3653	3644.21	911.51	1.83	5.15E+001	16.04	1.94E+001
F	9	3869-	3883	3875.95	969.36	1.29	2.81E+001	12.57	1.29E+001
F	10	5832-	5857	5844.79	1460.57	2.03	2.90E+002	33.02	9.67E+000
F	11	7055-	7068	7061.99	1764.20	1.40	2.10E+001	10.75	5.15E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.998	1460.81*		10.67	4.25040E+006	5.94425E+005
TL-208	0.464	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	6.22546E+004	2.36999E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.63180E+006	6.63484E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.90034E+005	5.57515E+004
Bi-214	0.697	609.31*		46.30	1.70437E+005	5.14165E+004
		1120.29		15.10		
		1764.49*		15.80	2.22150E+005	1.15880E+005
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	2.40612E+005	7.99106E+004
		969.11*		16.60	2.25643E+005	1.03528E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.998	4.250401E+006	5.944254E+005
TL-208		0.464	6.225461E+004	2.369994E+004
Pb-212	@	0.495	1.900344E+005	5.575153E+004
Bi-214		0.697	1.789436E+005	4.699791E+004
Ac-228		0.618	2.350231E+005	6.325821E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.83	1.6955E-001	25.53
F	3	84.98	1.1671E-001	37.55
F	5	352.17	4.2928E-002	44.54

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8376E+004	4.40E+004	6.4720E+004
	1332.49	100.00	4.4043E+004		-5.7660E+004
Nb-94	702.63	100.00	5.4198E+004	5.30E+004	8.5361E+003
	871.10	100.00	5.3034E+004		-3.5344E+004
Ag-108m	79.20	7.10	1.9365E+006	5.72E+004	-1.0056E+006
	433.93	89.90	5.7196E+004		1.2817E+004
	614.37	90.40	7.9116E+004		-6.3357E+004
	722.95	90.50	6.0440E+004		4.0190E+003
Sb-125	176.33	6.89	1.0346E+006	1.82E+005	-4.9290E+005
	427.89	29.33	1.8225E+005		1.0967E+005
	463.38	10.35	5.2883E+005		1.5132E+005
	600.56	17.80	2.9519E+005		1.6217E+005
	606.64	5.02	1.4095E+006		1.8623E+006
	635.90	11.32	4.6478E+005		2.7621E+005
Cs-134	563.23	8.38	6.4237E+005	6.19E+004	4.2404E+005
	569.32	15.43	3.5036E+005		-2.7608E+005
	604.70	97.60	7.0938E+004		-5.1490E+004
	795.84	85.40	6.1905E+004		-7.3014E+004
	801.93	8.73	5.4618E+005		-5.8032E+005
Cs-137	661.65	85.12	5.5076E+004	5.51E+004	-4.3643E+004
Eu-152	121.78	28.40	3.2413E+005	2.15E+005	1.7047E+005
	244.69	7.49	8.9965E+005		7.5134E+004
	344.27	26.50	2.1506E+005		-2.3189E+005
	778.89	12.74	4.3490E+005		-4.9908E+005
	867.32	4.16	1.3230E+006		7.2823E+005
	964.01	14.40	4.1830E+005		-2.2113E+005
	1085.78	10.00	5.6369E+005		1.6382E+005
	1112.02	13.30	4.1593E+005		-6.2064E+005
	1407.95	20.70	2.1990E+005		1.4008E+005
Eu-154	123.07	40.50	2.2659E+005	1.29E+005	9.3337E+003
	247.94	6.60	9.3975E+005		-1.5125E+006
	591.81	4.83	1.0112E+006		-9.2666E+005
	723.30	19.70	2.7770E+005		6.0895E+002
	756.87	4.33	1.2164E+006		-8.6377E+004
	873.19	11.50	4.6152E+005		3.6130E+005
	996.32	10.30	3.8527E+005		1.0719E+005
	1004.76	17.90	2.7413E+005		1.4496E+005
	1274.45	35.50	1.2887E+005		1.3736E+003
Eu-155	86.54	30.90	4.0891E+005	4.09E+005	7.1379E+005
	105.31	20.70	4.9481E+005		-1.5627E+004
Am-241	59.54	35.90	4.6416E+005	4.64E+005	-3.3434E+005
Cm-243	228.19	10.56	6.1490E+005	4.35E+005	-2.5793E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.3520E+005	4.35E+005	1.4341E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 11:41:27 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-13-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 11:26:33 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-13-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.58	72.74	1.05	1.29E+002	39.18	5.08E+002
m	2	284-	305	300.59	75.00	1.06	2.78E+002	49.18	5.19E+002
F	3	333-	345	339.87	84.86	0.64	6.24E+001	35.01	4.83E+002
F	4	944-	960	954.18	238.86	1.18	9.46E+001	26.17	1.40E+002
F	5	1040-	1049	1044.41	261.47	0.59	2.18E+001	14.22	4.95E+001
F	6	1175-	1187	1181.04	295.69	0.79	3.04E+001	16.96	7.02E+001
F	7	1400-	1415	1407.51	352.40	1.09	6.94E+001	20.55	6.40E+001
F	8	2036-	2054	2043.55	511.56	1.54	8.17E+001	20.77	4.95E+001
F	9	2325-	2341	2332.92	583.92	1.39	6.28E+001	18.24	3.46E+001
F	10	2429-	2444	2436.80	609.89	1.21	6.26E+001	19.48	4.76E+001
F	11	3637-	3654	3644.85	911.67	1.97	6.16E+001	16.40	1.18E+001
F	12	3867-	3880	3873.89	968.85	1.45	3.12E+001	13.91	2.03E+001
F	13	5833-	5857	5844.87	1460.59	1.94	3.60E+002	36.89	1.21E+001
F	14	7056-	7069	7062.45	1764.32	0.97	1.87E+001	9.30	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.991	511.00*		100.00	8.59920E+004	2.49619E+004
K-40	0.999	1460.81*		10.67	5.28090E+006	6.90001E+005
TL-208	0.738	277.35		6.80		
		510.84*		21.60	3.98111E+005	1.20051E+005
		583.14*		84.20	8.27355E+004	2.63995E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.38246E+006	6.29426E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.69650E+005	5.39330E+004
Bi-214	0.698	609.31*		46.30	1.52464E+005	5.11256E+004
		1120.29		15.10		
		1764.49*		15.80	1.98349E+005	1.00391E+005
PB-214	0.560	74.82*	@	6.21	4.10505E+006	1.12471E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.36183E+005	7.94328E+004
		351.92*		37.20	1.70510E+005	5.80059E+004
Ac-228	0.615	338.32		11.40		
		911.07*		27.70	2.88161E+005	8.35127E+004
		969.11*		16.60	2.50463E+005	1.14580E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.991	6.812118E+004	2.559831E+004
K-40		0.999	5.280897E+006	6.900008E+005
TL-208		0.738	8.273550E+004	2.626147E+004
Pb-212	@	0.495	1.696504E+005	5.393302E+004
Bi-214		0.698	1.619133E+005	4.555812E+004
PB-214	@	0.560	1.585716E+005	4.684498E+004
Ac-228		0.615	2.750823E+005	6.748867E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.74	1.4351E-001	30.33
F 3	84.86	6.9386E-002	56.06
F 5	261.47	2.4265E-002	65.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4466E+004	4.15E+004	-1.7029E+004
	1332.49	100.00	4.1464E+004		2.0864E+004
Nb-94	702.63	100.00	5.3594E+004	5.12E+004	-5.5809E+003
	871.10	100.00	5.1230E+004		1.0553E+004
Ag-108m	79.20	7.10	1.9812E+006	5.95E+004	-4.6267E+006
	433.93	89.90	5.9544E+004		-4.5016E+002
	614.37	90.40	7.8441E+004		1.8739E+004
	722.95	90.50	6.1763E+004		-5.8603E+004
Sb-125	176.33	6.89	1.0636E+006	1.83E+005	5.2842E+005
	427.89	29.33	1.8294E+005		4.5724E+004
	463.38	10.35	5.7035E+005		4.0812E+005
	600.56	17.80	2.9051E+005		-2.6818E+005
	606.64	5.02	1.4727E+006		3.0033E+006
	635.90	11.32	4.6984E+005		1.1783E+005
Cs-134	563.23	8.38	6.6910E+005	6.19E+004	1.1449E+005
	569.32	15.43	3.5036E+005		-1.6901E+005
	604.70	97.60	7.3843E+004		-6.5484E+003
	795.84	85.40	6.1905E+004		6.0196E+004
	801.93	8.73	5.7951E+005		-4.8314E+005
Cs-137	661.65	85.12	6.8371E+004	6.84E+004	6.8139E+004
Eu-152	121.78	28.40	3.2905E+005	2.00E+005	1.4087E+005
	244.69	7.49	8.8218E+005		1.4421E+005
	344.27	26.50	2.0036E+005		-4.1546E+005
	778.89	12.74	3.7942E+005		7.2330E+003
	867.32	4.16	1.3230E+006		-6.6144E+005
	964.01	14.40	4.8319E+005		3.4590E+005
	1085.78	10.00	5.5963E+005		4.1352E+005
	1112.02	13.30	4.6091E+005		-7.5254E+005
	1407.95	20.70	2.1685E+005		-5.4398E+004
Eu-154	123.07	40.50	2.2470E+005	1.51E+005	-1.5562E+005
	247.94	6.60	9.3795E+005		-6.7861E+005
	591.81	4.83	1.0872E+006		4.2248E+005
	723.30	19.70	2.9118E+005		6.4621E+004
	756.87	4.33	1.2089E+006		-5.9742E+005
	873.19	11.50	4.3611E+005		-3.2111E+005
	996.32	10.30	5.0321E+005		1.6445E+005
	1004.76	17.90	2.8836E+005		1.4417E+005
	1274.45	35.50	1.5122E+005		5.8175E+003
Eu-155	86.54	30.90	4.1229E+005	4.12E+005	5.8302E+005
	105.31	20.70	4.8284E+005		-4.1246E+005
Am-241	59.54	35.90	4.6686E+005	4.67E+005	-1.0868E+005
Cm-243	228.19	10.56	6.3087E+005	4.53E+005	-5.3086E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5350E+005	4.53E+005	2.3326E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

This page intentionally left blank.

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-14-103-F-G.RPT	TBN-01-14-103-F-G	0.19	31-Oct-05	16:01:32	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	29700	56589.07	15811	80000			70400			8069291
TBN-01-14-102-F-G.RPT	TBN-01-14-102-F-G	0.00	31-Oct-05	16:20:15	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	66500			79700			68600			6649155
TBN-01-14-105-F-G.RPT	TBN-01-14-105-F-G	0.11	31-Oct-05	15:01:23	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	72900			46600	43483.79	21221.34	68000			6927534
TBN-01-14-101-F-G.RPT	TBN-01-14-101-F-G	0.00	31-Oct-05	16:42:24	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	59800			78400			65300			7670720
TBN-01-14-104-F-G.RPT	TBN-01-14-104-F-G	0.23	31-Oct-05	15:38:23	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	39700	65647.92	17404	84100			70500			7648493
TBN-01-14-106-F-G.RPT	TBN-01-14-106-F-G	0.00	01-Nov-05	8:06:50	900.7	BLUE6279	BLUE_CONC_2M90	dpm/m2	66700			81400			71500			7290278
TBN-01-14-117-F-G.RPT	TBN-01-14-117-F-G	0.00	01-Nov-05	8:34:27	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	53700			86600			70200			6774846
TBN-01-14-114-F-G.RPT	TBN-01-14-114-F-G	0.00	01-Nov-05	9:44:12	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	60700			73400			68200			7221676
TBN-01-14-109-F-G.RPT	TBN-01-14-109-F-G	0.00	01-Nov-05	10:27:02	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	55700			79200			69400			7057759
TBN-01-14-112-F-G.RPT	TBN-01-14-112-F-G	0.00	01-Nov-05	10:07:47	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	52700			69500			69000			6502265
TBN-01-14-107-F-G.RPT	TBN-01-14-107-F-G	0.00	01-Nov-05	10:47:32	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	68800			71900			72100			7381622
TBN-01-14-108-F-G.RPT	TBN-01-14-108-F-G	0.12	01-Nov-05	11:19:59	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	38500	34299.53	13010	82300			69400			7360780
TBN-01-14-110-F-G.RPT	TBN-01-14-110-F-G	0.00	01-Nov-05	11:43:03	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	61100			76200			66200			5789896
TBN-01-14-111-F-G.RPT	TBN-01-14-111-F-G	0.00	01-Nov-05	12:52:43	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	52200			71600			65700			6493358
TBN-01-14-113-F-G.RPT	TBN-01-14-113-F-G	0.00	01-Nov-05	13:16:35	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	56600			74500			66200			6903609
TBN-01-14-115-F-G.RPT	TBN-01-14-115-F-G	0.00	01-Nov-05	13:37:38	900.5	BLUE6279	BLUE_CONC_2M90	dpm/m2	53700			77900			64300			6340010
TBN-01-14-116-F-G.RPT	TBN-01-14-116-F-G	0.00	01-Nov-05	14:00:43	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	49000			78400			70400			7523000
TBN-01-14-127-F-G.RPT	TBN-01-14-127-F-G	0.00	01-Nov-05	15:43:24	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	55500			76100			68300			6717344
TBN-01-14-128-F-G.RPT	TBN-01-14-128-F-G	0.00	01-Nov-05	15:19:43	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	55500			77200			71200			7522259
TBN-01-14-129-F-G.RPT	TBN-01-14-129-F-G	0.00	01-Nov-05	14:29:24	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	52500			76900			72000			7300557
TBN-01-14-130-F-G.RPT	TBN-01-14-130-F-G	0.00	01-Nov-05	14:48:57	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	50900			72300			72500			7651548
TBN-01-14-107-F-G.RPT	TBN-01-14-107-F-G	0.00	01-Nov-05	10:47:32	900.6	BLUE6279	BLUE_CONC_2M90	dpm/m2	68800			71900			72100			7381622
TBN-01-14-126-F-G.RPT	TBN-01-14-126-F-G	0.00	02-Nov-05	7:04:49	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	57900			73500			68100			7179118
TBN-01-14-125-F-G.RPT	TBN-01-14-125-F-G	0.00	02-Nov-05	7:42:57	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	49300			63500			60800			5518087
TBN-01-14-124-F-G.RPT	TBN-01-14-124-F-G	0.00	02-Nov-05	8:12:58	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	52000			63100			62400			5308475
TBN-01-14-123-F-G.RPT	TBN-01-14-123-F-G	0.00	02-Nov-05	8:40:35	900.7	BLUE6279	BLUE_CONC_1M90	dpm/m2	56900			78800			71600			7184895
TBN-01-14-118-F-G.RPT	TBN-01-14-118-F-G	0.00	02-Nov-05	10:06:17	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	55000			67700			63100			6848704
TBN-01-14-122-F-G.RPT	TBN-01-14-122-F-G	0.00	02-Nov-05	10:33:19	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	48200			74400			62900			6129704
TBN-01-14-119-F-G.RPT	TBN-01-14-119-F-G	0.00	02-Nov-05	11:37:49	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	62000			74700			64600			6250911
TBN-01-14-120-F-G.RPT	TBN-01-14-120-F-G	0.00	02-Nov-05	13:25:39	900.5	BLUE6279	BLUE_CONC_1M90	dpm/m2	57400			61400			60000			6052602
TBN-01-14-121-F-G.RPT	TBN-01-14-121-F-G	0.00	02-Nov-05	13:00:14	900.6	BLUE6279	BLUE_CONC_1M90	dpm/m2	56900			69000			57200			6031616
TBN-01-14-005-F-I-G-001	TBN-01-14-005-F-I-G	0.83	04-Nov-05	15:15:33	900.7	BLUE6279	BLUE_CONC_1M90	dpm/m2	41300	239869.6	30452	86000			68700			7650264
TBN-01-14-005-F-I-G-001	TBN-01-14-005-F-I-G	0.68	04-Nov-05	15:15:33	900.7	BLUE6279	BLUE_SOIL_1M90D	pCi/g	0.113	0.6560382	0.079	0.255			0.214			20.70673943

Report Generated On 10/31/2005 4:57:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 4:42:24 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	315	291.76	72.79	1.03	1.61E+002	41.42	4.22E+002
m	2	287-	315	300.60	75.01	1.04	3.59E+002	51.57	5.50E+002
m	3	287-	315	309.20	77.16	1.04	6.00E+001	37.25	5.64E+002
M	4	334-	355	339.64	84.80	1.00	9.76E+001	39.31	4.56E+002
m	5	334-	355	350.87	87.62	1.01	9.28E+001	39.00	4.56E+002
F	6	950-	960	954.97	239.06	0.88	1.86E+002	34.20	1.41E+002
F	7	1178-	1189	1182.38	296.03	1.12	3.85E+001	21.48	8.78E+001
F	8	1399-	1414	1407.74	352.46	1.18	9.41E+001	23.60	8.00E+001
F	9	2325-	2344	2333.67	584.11	1.59	9.08E+001	21.82	5.77E+001
F	10	2432-	2447	2438.85	610.40	1.34	7.99E+001	21.21	4.93E+001
F	11	3435-	3448	3441.66	860.94	1.02	2.96E+001	13.37	2.11E+001
F	12	3640-	3655	3646.53	912.09	1.36	5.91E+001	19.02	3.94E+001
F	13	3871-	3886	3876.99	969.62	1.54	3.54E+001	15.54	2.70E+001
F	14	4477-	4488	4483.99	1121.10	1.97	3.20E+001	13.28	1.21E+001
F	15	4689-	4702	4695.81	1173.96	0.97	2.42E+001	13.23	2.62E+001
F	16	5093-	5108	5100.34	1274.88	1.36	4.20E+001	16.57	2.97E+001
F	17	5834-	5860	5846.93	1461.11	2.00	5.26E+002	44.40	1.67E+001
F	18	6352-	6365	6358.34	1588.67	0.56	9.63E+000	6.70	3.50E+000
F	19	7057-	7071	7063.56	1764.59	1.61	3.61E+001	12.26	2.08E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	7.67072E+006	8.97234E+005
Eu-155	0.322	86.54*	30.90	2.39639E+005	1.11140E+005
		105.31	20.70		
TL-208	0.599	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.19209E+005	3.26910E+004
		860.37*	12.46	2.99418E+005	1.40317E+005
Pb-212	0.996	74.81* @	10.70	3.13405E+006	7.61784E+005
		77.11* @	18.00	3.02747E+005	1.97087E+005
		87.30* @	8.00	9.25608E+005	4.29278E+005
		238.63*	44.60	3.35066E+005	8.10407E+004
Bi-214	0.975	609.31*	46.30	1.93917E+005	5.68559E+004
		1120.29*	15.10	2.99434E+005	1.28368E+005
		1764.49*	15.80	3.78915E+005	1.34063E+005
PB-214	0.844	74.82* @	6.21	5.40006E+006	1.36986E+006
		77.11* @	10.50	5.18996E+005	3.40078E+005
		87.30* @	4.67	1.58562E+006	7.45072E+005
		241.98	7.49		
		295.21*	19.20	1.73576E+005	1.01067E+005
		351.92*	37.20	2.32057E+005	6.99134E+004
Ac-228	0.605	338.32	11.40		
		911.07*	27.70	2.74938E+005	9.39516E+004
		969.11*	16.60	2.82254E+005	1.27510E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.997	7.670720E+006	8.972337E+005
Eu-155		0.322	1.206291E+005	1.134267E+005
TL-208		0.599	1.284869E+005	3.183837E+004
Pb-212	@	0.996	3.350657E+005	8.104074E+004
Bi-214		0.975	2.331409E+005	4.846867E+004
PB-214	@	0.844	2.134678E+005	5.666427E+004
Ac-228		0.605	2.775120E+005	7.563715E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.7916E-001	25.69
M 4	84.80	1.0843E-001	40.29
F 15	1173.96	2.6870E-002	54.70
F 16	1274.88	4.6650E-002	39.46
F 18	1588.67	1.0695E-002	69.58

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	7.6888E+004	5.98E+004	6.3865E+004
		1332.49	100.00	5.9819E+004		4.6666E+004
	Nb-94	702.63	100.00	6.3195E+004	5.68E+004	6.3814E+004
		871.10	100.00	5.6818E+004		-1.8308E+004
	Ag-108m	79.20	7.10	2.1852E+006	6.53E+004	1.1445E+006
		433.93	89.90	6.5325E+004		-7.4631E+004
		614.37	90.40	8.7829E+004		-2.0192E+004
		722.95	90.50	7.7425E+004		3.4220E+004
	Sb-125	176.33	6.89	1.1654E+006	2.06E+005	-2.6165E+005
		427.89	29.33	2.0608E+005		-2.2367E+005
		463.38	10.35	6.1086E+005		1.7453E+004
		600.56	17.80	3.2188E+005		1.1926E+005
		606.64	5.02	1.5524E+006		-7.1735E+005
		635.90	11.32	5.5830E+005		9.3190E+003
	Cs-134	563.23	8.38	7.2272E+005	7.25E+004	1.4515E+005
		569.32	15.43	3.9412E+005		-1.6081E+005
		604.70	97.60	7.2528E+004		-3.6250E+004
		795.84	85.40	7.3256E+004		3.4986E+004
		801.93	8.73	7.0230E+005		-5.4304E+005
	Cs-137	661.65	85.12	7.8397E+004	7.84E+004	3.0017E+004
	Eu-152	121.78	28.40	3.5295E+005	2.09E+005	5.5733E+003
		244.69	7.49	1.0470E+006		-1.6730E+006
		344.27	26.50	2.6285E+005		-6.6371E+004
		778.89	12.74	4.7894E+005		4.6497E+004
		867.32	4.16	1.4024E+006		-4.9926E+005
		964.01	14.40	5.1721E+005		-1.7514E+005
		1085.78	10.00	5.9580E+005		-2.1537E+005
		1112.02	13.30	4.8593E+005		-2.0568E+005
		1407.95	20.70	2.0935E+005		-5.0746E+004
	Eu-154	123.07	40.50	2.4571E+005	2.33E+005	-5.6894E+004
		247.94	6.60	1.1001E+006		-7.8405E+005
		591.81	4.83	1.2588E+006		6.9725E+005
		723.30	19.70	3.5339E+005		4.9969E+004
		756.87	4.33	1.3961E+006		-1.4457E+004
		873.19	11.50	5.0288E+005		1.9136E+004
		996.32	10.30	5.8386E+005		3.7555E+005
		1004.76	17.90	3.3336E+005		9.5568E+004
		1274.45	35.50	2.3254E+005		3.9384E+005
+	Eu-155	86.54*	30.90	2.6363E+005	2.64E+005	2.3964E+005
		105.31	20.70	5.5567E+005		-1.1995E+005
	Am-241	59.54	35.90	5.0600E+005	5.06E+005	7.3129E+004
	Cm-243	228.19	10.56	6.9446E+005	5.19E+005	9.8028E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1865E+005	5.19E+005	3.1016E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 4:35:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 4:20:15 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

YANKEE ROWE PORTABLE ISOCS
(BLUE ROVER SYSTEM)

PEAK ANALYSIS REPORT

Filename: BLUE6279
Log Number:
Title: TBN-01-14-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	314	291.82	72.80	0.80	1.17E+002	38.46	3.91E+002
m	2	288-	314	300.33	74.94	0.81	2.98E+002	50.02	4.70E+002
m	3	288-	314	309.73	77.30	0.81	6.52E+001	34.93	4.62E+002
F	4	332-	356	340.06	84.91	1.23	2.02E+002	46.82	9.88E+002
F	5	949-	960	955.47	239.19	0.98	1.46E+002	30.50	1.19E+002
F	6	1175-	1190	1181.48	295.80	1.26	7.07E+001	24.13	1.24E+002
F	7	1345-	1360	1353.26	338.82	1.30	6.22E+001	21.24	8.40E+001
F	8	1403-	1414	1407.55	352.41	1.16	7.98E+001	23.51	6.60E+001
F	9	2325-	2339	2333.17	583.98	1.33	7.19E+001	21.18	5.42E+001
F	10	2430-	2445	2437.86	610.15	1.05	7.69E+001	20.49	4.39E+001
F	11	3176-	3189	3181.91	796.07	1.09	2.08E+001	11.05	2.31E+001
F	12	3639-	3658	3647.44	912.32	1.89	7.71E+001	18.66	2.08E+001
F	13	3870-	3884	3877.14	969.66	1.40	4.67E+001	16.64	2.60E+001
F	14	4687-	4700	4693.65	1173.42	1.61	3.48E+001	15.03	2.25E+001
F	15	5093-	5108	5102.04	1275.30	2.61	4.65E+001	15.01	1.21E+001
F	16	5834-	5859	5847.04	1461.13	1.84	4.56E+002	41.92	1.95E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.997	1460.81*	10.67	6.64916E+006	8.14690E+005
TL-208	0.457	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.44137E+004	3.04708E+004
		860.37	12.46		
Pb-212	0.833	74.81* @	10.70	2.60809E+006	6.72743E+005
		77.11* @	18.00	3.28579E+005	1.87331E+005
		87.30 @	8.00		
		238.63*	44.60	2.62608E+005	6.87419E+004
Bi-214	0.405	609.31*	46.30	1.86790E+005	5.49005E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.755	74.82* @	6.21	4.49380E+006	1.20418E+006
		77.11* @	10.50	5.63278E+005	3.23882E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	3.18288E+005	1.21125E+005
		351.92*	37.20	1.96634E+005	6.66167E+004
Ac-228	0.973	338.32*	11.40	4.93862E+005	1.85558E+005
		911.07*	27.70	3.58586E+005	9.60817E+004
		969.11*	16.60	3.72585E+005	1.38427E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.997	6.649155E+006	8.146897E+005
TL-208		0.457	9.441370E+004	3.047080E+004
Pb-212	@	0.833	2.626078E+005	6.874188E+004
Bi-214		0.405	1.867899E+005	5.490048E+004
PB-214	@	0.755	2.248862E+005	5.837100E+004
Ac-228		0.973	3.831671E+005	7.263335E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.2963E-001	32.97
F	4	84.91	2.2417E-001	23.21
F	11	796.07	2.3145E-002	53.05
F	14	1173.42	3.8644E-002	43.21
F	15	1275.30	5.1637E-002	32.29

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.9918E+004	6.65E+004	4.3629E+004
	1332.49	100.00	6.6497E+004		6.1462E+004
Nb-94	702.63	100.00	5.9016E+004	5.90E+004	2.4296E+004
	871.10	100.00	6.2092E+004		1.3545E+004
Ag-108m	79.20	7.10	2.1727E+006	6.86E+004	7.1018E+004
	433.93	89.90	6.8587E+004		7.1030E+003
	614.37	90.40	9.1150E+004		1.1887E+004
	722.95	90.50	7.3500E+004		6.7746E+004
Sb-125	176.33	6.89	1.1211E+006	2.14E+005	-7.7291E+005
	427.89	29.33	2.1393E+005		-4.8541E+004
	463.38	10.35	6.6664E+005		6.6003E+004
	600.56	17.80	3.4868E+005		2.4500E+005
	606.64	5.02	1.5776E+006		1.6106E+006
	635.90	11.32	5.3061E+005		2.3420E+004
Cs-134	563.23	8.38	7.5144E+005	7.65E+004	3.5875E+005
	569.32	15.43	3.9412E+005		-1.2746E+005
	604.70	97.60	7.6521E+004		-1.0037E+004
	795.84	85.40	7.7654E+004		2.0628E+004
	801.93	8.73	7.1839E+005		3.3976E+005
Cs-137	661.65	85.12	7.9729E+004	7.97E+004	1.9011E+003
Eu-152	121.78	28.40	3.6024E+005	2.33E+005	4.7681E+004
	244.69	7.49	1.0357E+006		-1.7348E+006
	344.27	26.50	2.5205E+005		2.1544E+004
	778.89	12.74	4.7673E+005		-3.1078E+005
	867.32	4.16	1.5599E+006		-1.1105E+006
	964.01	14.40	5.5293E+005		-3.3917E+004
	1085.78	10.00	6.3231E+005		-2.7936E+005
	1112.02	13.30	4.6969E+005		-1.0226E+006
	1407.95	20.70	2.3309E+005		-4.5925E+004
Eu-154	123.07	40.50	2.5365E+005	2.08E+005	2.1717E+005
	247.94	6.60	1.1321E+006		2.4620E+005
	591.81	4.83	1.2298E+006		-8.5791E+005
	723.30	19.70	3.3647E+005		1.9102E+005
	756.87	4.33	1.4710E+006		-7.4354E+005
	873.19	11.50	5.6057E+005		3.4863E+005
	996.32	10.30	6.5605E+005		1.0091E+005
	1004.76	17.90	3.3531E+005		-2.2647E+005
	1274.45	35.50	2.0803E+005		3.3260E+005
Eu-155	86.54	30.90	4.6840E+005	4.68E+005	8.1657E+005
	105.31	20.70	5.4399E+005		1.6198E+005
Am-241	59.54	35.90	5.0126E+005	5.01E+005	-4.7323E+005
Cm-243	228.19	10.56	6.8444E+005	5.05E+005	-1.6081E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0509E+005	5.05E+005	7.9008E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 4:16:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 4:01:32 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	316	292.27	72.92	1.02	1.67E+002	40.88	4.80E+002
m	2	286-	316	300.52	74.99	1.02	3.93E+002	51.77	5.11E+002
m	3	286-	316	309.62	77.27	1.02	1.15E+002	38.06	5.04E+002
M	4	336-	359	339.86	84.86	1.06	1.41E+002	42.85	4.30E+002
m	5	336-	359	349.79	87.35	1.07	1.05E+002	39.74	5.87E+002
F	6	948-	961	955.14	239.11	1.03	1.52E+002	31.70	1.56E+002
F	7	1348-	1363	1353.75	338.94	0.91	4.50E+001	19.72	9.54E+001
F	8	1403-	1417	1408.48	352.64	1.36	1.07E+002	26.35	9.90E+001
F	9	2326-	2344	2333.53	584.07	1.21	9.35E+001	21.61	4.23E+001
F	10	2428-	2446	2437.44	610.05	1.37	1.09E+002	22.68	4.27E+001
F	11	3638-	3655	3645.89	911.93	1.59	7.83E+001	20.18	3.64E+001
F	12	3871-	3886	3877.51	969.75	1.40	4.94E+001	16.66	2.33E+001
F	13	4689-	4702	4695.38	1173.85	1.40	3.22E+001	15.39	2.66E+001
F	14	5094-	5109	5101.64	1275.20	1.67	5.19E+001	17.05	2.23E+001
F	15	5325-	5341	5333.07	1332.93	1.65	4.40E+001	14.30	8.50E+000
F	16	5835-	5860	5847.40	1461.22	1.93	5.53E+002	46.04	2.44E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	8.06929E+006	9.36878E+005
Co-60	0.991	1173.22*	100.00	4.64989E+004	2.25254E+004
		1332.49*	100.00	6.63886E+004	2.21985E+004
Eu-155	0.331	86.54*	30.90	2.72144E+005	1.15968E+005
		105.31	20.70		
TL-208	0.454	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.22733E+005	3.26768E+004
		860.37	12.46		
Pb-212	0.996	74.81* @	10.70	3.43437E+006	8.11025E+005
		77.11* @	18.00	5.77483E+005	2.22676E+005
		87.30* @	8.00	1.05116E+006	4.47925E+005
		238.63*	44.60	2.73755E+005	7.15141E+004
Bi-214	0.408	609.31*	46.30	2.63435E+005	6.40665E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.480	74.82* @	6.21	5.91751E+006	1.46195E+006
		77.11* @	10.50	9.89971E+005	3.88822E+005
		87.30* @	4.67	1.80070E+006	7.79289E+005
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.63082E+005	7.84441E+004
Ac-228	0.983	338.32*	11.40	3.56901E+005	1.66221E+005
		911.07*	27.70	3.64429E+005	1.02794E+005
		969.11*	16.60	3.93990E+005	1.39236E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.995	8.069291E+006	9.368779E+005
Co-60		0.991	5.658907E+004	1.581102E+004
Eu-155		0.331	1.615089E+005	1.180108E+005
TL-208		0.454	1.227331E+005	3.267685E+004
Pb-212	@	0.996	2.737546E+005	7.151409E+004
Bi-214		0.408	2.634353E+005	6.406647E+004
PB-214	@	0.480	2.630825E+005	7.694793E+004
Ac-228		0.983	3.712946E+005	7.404107E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	1.8517E-001	24.53
M 4	84.86	1.5618E-001	30.48
F 14	1275.20	5.7614E-002	32.88

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.4932E+004	2.97E+004	4.6499E+004
		1332.49*	100.00	2.9733E+004		6.6389E+004
	Nb-94	702.63	100.00	6.4195E+004	6.03E+004	2.0037E+004
		871.10	100.00	6.0286E+004		3.6836E+004
	Ag-108m	79.20	7.10	2.1656E+006	7.04E+004	-3.0598E+005
		433.93	89.90	7.0353E+004		-8.7965E+004
		614.37	90.40	9.3607E+004		1.0328E+004
		722.95	90.50	7.7170E+004		8.3153E+004
	Sb-125	176.33	6.89	1.1685E+006	2.25E+005	-1.5796E+005
		427.89	29.33	2.2545E+005		1.5017E+005
		463.38	10.35	6.7786E+005		-6.0224E+005
		600.56	17.80	3.5756E+005		4.0136E+005
		606.64	5.02	1.6472E+006		1.9670E+006
		635.90	11.32	5.6243E+005		1.8351E+004
	Cs-134	563.23	8.38	7.5907E+005	7.23E+004	-5.7612E+004
		569.32	15.43	4.1943E+005		-2.1523E+005
		604.70	97.60	8.0859E+004		1.2471E+004
		795.84	85.40	7.2277E+004		-3.4461E+004
		801.93	8.73	7.0230E+005		-5.4054E+005
	Cs-137	661.65	85.12	7.9993E+004	8.00E+004	3.1774E+004
	Eu-152	121.78	28.40	3.5853E+005	2.52E+005	-1.3101E+005
		244.69	7.49	1.0507E+006		-5.9101E+005
		344.27	26.50	2.7561E+005		5.9826E+004
		778.89	12.74	5.1285E+005		-3.8611E+005
		867.32	4.16	1.4472E+006		-1.3998E+006
		964.01	14.40	5.5120E+005		-1.0728E+005
		1085.78	10.00	5.9956E+005		7.4364E+004
		1112.02	13.30	4.8858E+005		-1.0507E+006
		1407.95	20.70	2.5188E+005		1.3037E+004
	Eu-154	123.07	40.50	2.5059E+005	2.31E+005	1.4080E+005
		247.94	6.60	1.1351E+006		-1.2212E+006
		591.81	4.83	1.2492E+006		3.8729E+005
		723.30	19.70	3.5221E+005		3.7660E+005
		756.87	4.33	1.4278E+006		4.5099E+005
		873.19	11.50	5.3776E+005		9.8459E+003
		996.32	10.30	6.5605E+005		2.4282E+005
		1004.76	17.90	3.5601E+005		7.7584E+004
		1274.45	35.50	2.3082E+005		2.2030E+005
+	Eu-155	86.54*	30.90	2.9919E+005	2.99E+005	2.7214E+005
		105.31	20.70	5.4242E+005		-1.4926E+005
	Am-241	59.54	35.90	5.0268E+005	5.03E+005	-3.1370E+005
	Cm-243	228.19	10.56	7.3140E+005	5.06E+005	-4.5737E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0590E+005	5.06E+005	-1.9860E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 3:53:25 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 3:38:23 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.78	72.79	0.90	1.62E+002	41.95	5.18E+002
m	2	285-	306	300.51	74.99	0.90	3.00E+002	52.77	6.00E+002
M	3	334-	356	339.98	84.89	0.98	1.13E+002	41.41	4.83E+002
m	4	334-	356	349.68	87.32	0.98	6.81E+001	37.34	5.19E+002
F	5	949-	961	954.93	239.05	1.01	1.68E+002	33.06	1.54E+002
F	6	1349-	1359	1353.45	338.87	0.95	3.86E+001	19.18	6.45E+001
F	7	1401-	1417	1408.17	352.57	0.89	8.24E+001	22.06	7.87E+001
F	8	2037-	2053	2044.18	511.71	1.72	8.85E+001	22.73	7.04E+001
F	9	2326-	2342	2333.60	584.09	1.15	9.03E+001	22.05	5.29E+001
F	10	2430-	2445	2437.66	610.10	1.16	8.80E+001	21.89	5.02E+001
F	11	3639-	3655	3647.03	912.21	1.25	6.98E+001	19.11	3.20E+001
F	12	3869-	3884	3876.55	969.51	1.45	4.21E+001	16.23	2.80E+001
F	13	4476-	4491	4484.83	1121.31	1.69	3.06E+001	14.38	2.40E+001
F	14	4690-	4704	4696.30	1174.08	1.47	4.02E+001	16.59	3.03E+001
F	15	5096-	5110	5102.48	1275.41	1.43	3.13E+001	14.38	1.98E+001
F	16	5326-	5342	5333.62	1333.07	1.79	4.87E+001	16.01	1.65E+001
F	17	5835-	5862	5847.98	1461.37	2.06	5.24E+002	43.94	6.44E+000
F	18	7059-	7072	7065.98	1765.20	1.74	2.47E+001	11.57	6.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.985	511.00*	100.00	9.30704E+004	2.72186E+004
K-40	0.991	1460.81*	10.67	7.64849E+006	8.91221E+005
Co-60	0.984	1173.22*	100.00	5.80940E+004	2.43884E+004
		1332.49*	100.00	7.34864E+004	2.48434E+004
Eu-155	0.332	86.54*	30.90	1.76499E+005	1.02784E+005
		105.31	20.70		
TL-208	0.731	277.35	6.80		
		510.84*	21.60	4.30881E+005	1.30833E+005
		583.14*	84.20	1.18594E+005	3.29160E+004
		860.37	12.46		
Pb-212	0.656	74.81* @	10.70	2.62018E+006	6.90205E+005
		77.11 @	18.00		
		87.30* @	8.00	6.81727E+005	3.97003E+005
		238.63*	44.60	3.03769E+005	7.63334E+004
Bi-214	0.980	609.31*	46.30	2.13743E+005	5.94144E+004
		1120.29*	15.10	2.86478E+005	1.38097E+005
		1764.49*	15.80	2.59218E+005	1.24107E+005
Ac-228	0.977	338.32*	11.40	3.06308E+005	1.59665E+005
		911.07*	27.70	3.24534E+005	9.64129E+004
		969.11*	16.60	3.35737E+005	1.34207E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.985	6.745408E+004	2.811946E+004
K-40		0.991	7.648493E+006	8.912215E+005
Co-60		0.984	6.564792E+004	1.740382E+004
Eu-155		0.332	9.785306E+004	1.046667E+005
TL-208		0.731	1.185940E+005	3.268836E+004
Pb-212	@	0.656	3.037694E+005	7.633341E+004
Bi-214		0.980	2.306323E+005	4.995995E+004
Ac-228		0.977	3.240745E+005	7.030303E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.8018E-001	25.87
M 3	84.89	1.2520E-001	36.75
F 7	352.57	9.1520E-002	26.78
F 15	1275.41	3.4729E-002	46.02

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.8371E+004	3.97E+004	5.8094E+004
		1332.49*	100.00	3.9674E+004		7.3486E+004
	Nb-94	702.63	100.00	6.8274E+004	5.94E+004	1.2868E+004
		871.10	100.00	5.9362E+004		1.4291E+003
	Ag-108m	79.20	7.10	2.2031E+006	7.05E+004	-8.5446E+005
		433.93	89.90	7.0546E+004		6.7630E+003
		614.37	90.40	8.9212E+004		-2.4579E+004
		722.95	90.50	7.7932E+004		3.6447E+004
	Sb-125	176.33	6.89	1.1780E+006	2.16E+005	-2.5072E+005
		427.89	29.33	2.1628E+005		-1.1700E+005
		463.38	10.35	6.1263E+005		-5.3119E+005
		600.56	17.80	3.6376E+005		-1.3542E+005
		606.64	5.02	1.6438E+006		2.2956E+006
		635.90	11.32	5.8658E+005		4.2712E+004
	Cs-134	563.23	8.38	7.9126E+005	7.80E+004	-4.6711E+005
		569.32	15.43	4.4960E+005		-1.4893E+005
		604.70	97.60	8.1408E+004		1.8613E+003
		795.84	85.40	7.7958E+004		9.5964E+004
		801.93	8.73	6.7233E+005		-1.8915E+006
	Cs-137	661.65	85.12	8.4092E+004	8.41E+004	6.7483E+004
	Eu-152	121.78	28.40	3.5353E+005	2.36E+005	-1.3963E+005
		244.69	7.49	1.0680E+006		-1.0103E+005
		344.27	26.50	2.7609E+005		1.4824E+005
		778.89	12.74	4.8549E+005		2.0955E+005
		867.32	4.16	1.4834E+006		-1.6274E+006
		964.01	14.40	5.2638E+005		-8.6600E+004
		1085.78	10.00	6.2519E+005		-9.0971E+004
		1112.02	13.30	4.8058E+005		3.0732E+005
		1407.95	20.70	2.3588E+005		1.3967E+005
	Eu-154	123.07	40.50	2.4775E+005	2.10E+005	-7.4866E+004
		247.94	6.60	1.1366E+006		-1.0548E+006
		591.81	4.83	1.3861E+006		1.1904E+006
		723.30	19.70	3.6383E+005		2.9322E+005
		756.87	4.33	1.5304E+006		4.1443E+005
		873.19	11.50	5.2464E+005		1.0476E+005
		996.32	10.30	6.5011E+005		5.2088E+005
		1004.76	17.90	3.5964E+005		1.0906E+005
		1274.45	35.50	2.0995E+005		7.1626E+004
+	Eu-155	86.54*	30.90	2.8186E+005	2.82E+005	1.7650E+005
		105.31	20.70	5.5361E+005		6.3090E+004
	Am-241	59.54	35.90	4.9454E+005	4.95E+005	-2.3970E+005
	Cm-243	228.19	10.56	7.2191E+005	5.13E+005	2.2052E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1311E+005	5.13E+005	-2.3618E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 4:49:10 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-14-105-F-G.CNF
Sample ID:
Sample Title: TBN-01-14-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 3:01:23 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-14-105-F-G.CNF
Log Number:
Title: TBN-01-14-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	347	291.85	72.81	0.94	1.51E+002	40.85	5.20E+002
m	2	285-	347	300.58	75.00	0.94	3.88E+002	53.63	5.39E+002
m	3	285-	347	339.52	84.77	0.96	8.41E+001	39.39	5.93E+002
F	4	949-	960	954.77	239.01	1.00	1.38E+002	30.73	1.30E+002
F	5	1400-	1414	1407.71	352.45	1.31	1.01E+002	24.31	7.50E+001
F	6	2034-	2054	2044.09	511.69	1.97	8.99E+001	22.37	8.40E+001
F	7	2323-	2342	2333.79	584.13	1.21	6.72E+001	20.25	6.34E+001
F	8	2429-	2445	2437.47	610.05	1.17	1.04E+002	23.33	5.17E+001
F	9	2640-	2654	2648.20	662.73	1.54	3.19E+001	15.11	3.19E+001
F	10	2905-	2917	2911.08	728.41	1.31	2.76E+001	13.65	2.03E+001
F	11	3070-	3081	3075.23	769.42	0.64	1.89E+001	12.21	3.47E+001
F	12	3640-	3653	3645.99	911.95	1.08	5.72E+001	17.83	2.91E+001
F	13	3870-	3884	3878.05	969.88	1.33	3.38E+001	15.87	3.33E+001
F	14	5326-	5342	5333.81	1333.12	1.88	5.97E+001	16.20	8.78E+000
F	15	5835-	5860	5848.11	1461.40	1.95	4.75E+002	42.17	9.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-14-105-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*	100.00	9.44948E+004	2.69853E+004
K-40	0.989	1460.81*	10.67	6.92753E+006	8.32471E+005
Cs-137	0.965	661.65*	85.12	4.34838E+004	2.12213E+004
TL-208	0.729	277.35	6.80		
		510.84*	21.60	4.37476E+005	1.29940E+005
		583.14*	84.20	8.82291E+004	2.90257E+004
		860.37	12.46		
Bi-212	0.954	727.17*	11.80	2.79432E+005	1.42214E+005
Pb-212	0.495	74.81* @	10.70	3.39356E+006	8.13587E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.48646E+005	6.77765E+004
Bi-214	0.408	609.31*	46.30	2.53316E+005	6.48018E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.606	338.32	11.40		
		911.07*	27.70	2.65966E+005	8.83807E+004
		969.11*	16.60	2.69554E+005	1.29770E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-14-105-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	7.543730E+004	2.769710E+004
K-40		0.989	6.927534E+006	8.324710E+005
Cs-137		0.965	4.348379E+004	2.122134E+004
TL-208		0.729	8.822908E+004	2.888297E+004
Bi-212		0.954	2.794324E+005	1.422144E+005
Pb-212	@	0.495	2.486460E+005	6.777652E+004
Bi-214		0.408	2.533162E+005	6.480175E+004
Ac-228		0.606	2.671028E+005	7.304833E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.6771E-001	27.06
m 3	84.77	9.3489E-002	46.81
F 5	352.45	1.1230E-001	24.06
F 11	769.42	2.0978E-002	64.67
F 14	1333.12	6.6328E-002	27.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-14-105-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	8.2545E+004	7.29E+004	7.4283E+004
		1332.49	100.00	7.2885E+004		9.8971E+004
	Nb-94	702.63	100.00	6.5423E+004	6.36E+004	4.0209E+004
		871.10	100.00	6.3555E+004		-2.0802E+004
	Ag-108m	79.20	7.10	2.2039E+006	6.80E+004	-1.0432E+007
		433.93	89.90	6.7988E+004		-4.0363E+004
		614.37	90.40	9.2482E+004		3.5135E+004
		722.95	90.50	7.2960E+004		-1.6313E+004
	Sb-125	176.33	6.89	1.1483E+006	2.21E+005	9.4303E+004
		427.89	29.33	2.2091E+005		-2.8487E+004
		463.38	10.35	6.5686E+005		6.2867E+005
		600.56	17.80	3.5631E+005		1.1141E+005
		606.64	5.02	1.7204E+006		2.8602E+006
		635.90	11.32	5.2178E+005		-1.0415E+005
	Cs-134	563.23	8.38	7.3592E+005	6.86E+004	-2.2843E+005
		569.32	15.43	4.3413E+005		-2.6227E+005
		604.70	97.60	8.5489E+004		1.3089E+004
		795.84	85.40	6.8560E+004		-1.5798E+004
		801.93	8.73	6.8582E+005		-8.8488E+005
+	Cs-137	661.65*	85.12	4.6630E+004	4.66E+004	4.3484E+004
	Eu-152	121.78	28.40	3.6005E+005	2.36E+005	7.0677E+004
		244.69	7.49	1.0357E+006		-5.5536E+005
		344.27	26.50	2.6635E+005		-1.5942E+005
		778.89	12.74	4.6099E+005		-4.9615E+005
		867.32	4.16	1.5667E+006		-6.8268E+005
		964.01	14.40	5.2638E+005		3.4181E+005
		1085.78	10.00	6.6335E+005		1.4749E+005
		1112.02	13.30	4.8326E+005		-5.9335E+005
		1407.95	20.70	2.3588E+005		-1.4648E+005
	Eu-154	123.07	40.50	2.5099E+005	2.01E+005	-6.2853E+004
		247.94	6.60	1.0527E+006		-1.7434E+006
		591.81	4.83	1.2778E+006		6.3832E+005
		723.30	19.70	3.3522E+005		-1.5041E+005
		756.87	4.33	1.3505E+006		2.6945E+005
		873.19	11.50	5.5809E+005		2.5030E+005
		996.32	10.30	5.5992E+005		-5.6469E+004
		1004.76	17.90	3.4299E+005		9.0499E+004
		1274.45	35.50	2.0116E+005		1.3600E+005
	Eu-155	86.54	30.90	4.6046E+005	4.60E+005	1.8287E+005
		105.31	20.70	5.3686E+005		1.6348E+005
	Am-241	59.54	35.90	4.8944E+005	4.89E+005	-1.6867E+005
	Cm-243	228.19	10.56	7.0877E+005	5.03E+005	3.2724E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0265E+005	5.03E+005	-1.6644E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 8:21:52 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 8:06:50 AM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	306	300.38	74.95	0.91	1.46E+002	48.80	6.31E+002
F	2	949-	962	955.06	289.08	1.18	1.50E+002	31.88	1.58E+002
F	3	1398-	1416	1407.85	352.49	1.52	1.05E+002	24.49	9.74E+001
F	4	2034-	2055	2043.85	511.63	2.56	1.05E+002	21.91	6.15E+001
F	5	2324-	2340	2332.82	583.89	1.63	5.78E+001	18.57	4.66E+001
F	6	2429-	2448	2437.29	610.01	1.68	8.99E+001	21.34	4.94E+001
F	7	3174-	3185	3179.36	795.43	0.93	1.97E+001	11.80	1.64E+001
F	8	3636-	3655	3645.06	911.72	2.26	8.73E+001	18.77	1.73E+001
F	9	3869-	3881	3875.65	969.28	1.40	2.81E+001	14.69	2.61E+001
F	10	4029-	4040	4034.20	1008.86	0.56	1.40E+001	9.10	1.50E+001
F	11	5092-	5109	5099.91	1274.77	1.87	8.83E+001	20.10	1.76E+001
F	12	5831-	5860	5845.44	1460.73	2.30	5.00E+002	42.20	3.58E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/GM)	Activity Uncertainty
ANN	0.988	511.00*		100.00	1.10418E+005	2.77435E+004
K-40	1.000	1460.81*		10.67	7.29028E+006	8.52739E+005
TL-208	0.738	277.35		6.80		
		510.84*		21.60	5.11195E+005	1.35057E+005
		583.14*		84.20	7.58931E+004	2.63629E+004
		860.37		12.46		
Pb-212	0.494	74.81*	@	10.70	1.27647E+006	4.94541E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.71242E+005	7.15341E+004
Bi-214	0.409	609.31*		46.30	2.18277E+005	5.85057E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.616	338.32		11.40		
		911.07*		27.70	4.06048E+005	9.90133E+004
		969.11*		16.60	2.24423E+005	1.19526E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/GM)	Wt mean Activity Uncertainty
ANN	0.988	9.402522E+004	2.831686E+004
K-40	1.000	7.290278E+006	8.527390E+005
TL-208	0.738	7.589315E+004	2.624664E+004
Pb-212	@ 0.494	2.712421E+005	7.153410E+004
Bi-214	0.409	2.182767E+005	5.850571E+004
Ac-228	0.616	3.321345E+005	7.624945E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	352.49	1.1671E-001	23.32
F	7	795.43	2.1931E-002	59.78
F	10	1008.86	1.5505E-002	65.22
F	11	1274.77	9.8077E-002	22.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/GM)	Nuclide MDA (dpm/GM)	Activity (dpm/GM)
Co-60	1173.22	100.00	7.5664E+004	6.67E+004	-4.7249E+004
	1332.49	100.00	6.6728E+004		1.1487E+004
Nb-94	702.63	100.00	5.9289E+004	5.91E+004	2.6939E+003
	871.10	100.00	5.9053E+004		-8.8905E+004
Ag-108m	79.20	7.10	2.1669E+006	7.15E+004	-1.7018E+006
	433.93	89.90	7.2541E+004		-1.8341E+004
	614.37	90.40	9.3272E+004		1.2281E+004
	722.95	90.50	7.1497E+004		-1.9743E+004
Sb-125	176.33	6.89	1.5476E+006	3.10E+005	-2.0275E+005
	427.89	29.33	3.0998E+005		4.4253E+005
	463.38	10.35	9.0757E+005		9.0407E+004
	600.56	17.80	4.7249E+005		1.7114E+005
	606.64	5.02	2.1648E+006		-5.3825E+005
	635.90	11.32	7.2255E+005		8.1136E+005
Cs-134	563.23	8.38	1.1749E+006	1.12E+005	-1.5924E+005
	569.32	15.43	6.1240E+005		-1.8325E+005
	604.70	97.60	1.1795E+005		-2.9134E+004
	795.84	85.40	1.1243E+005		1.6521E+004
	801.93	8.73	1.1162E+006		1.9590E+005
Cs-137	661.65	85.12	8.1385E+004	8.14E+004	1.2234E+004
Eu-152	121.78	28.40	3.7224E+005	2.16E+005	-1.9702E+005
	244.69	7.49	1.0731E+006		-4.2923E+005
	344.27	26.50	2.6324E+005		-2.0392E+005
	778.89	12.74	4.8234E+005		-5.4606E+005
	867.32	4.16	1.5605E+006		-1.9387E+006
	964.01	14.40	5.5722E+005		1.8801E+005
	1085.78	10.00	6.5646E+005		-2.4846E+005
	1112.02	13.30	5.1335E+005		-9.4050E+005
	1407.95	20.70	2.1556E+005		1.0847E+005
Eu-154	123.07	40.50	2.6960E+005	2.70E+005	9.0606E+003
	247.94	6.60	1.1941E+006		-1.7672E+005
	591.81	4.83	1.3977E+006		1.2306E+006
	723.30	19.70	3.5691E+005		-9.1043E+004
	756.87	4.33	1.5327E+006		2.5253E+005
	873.19	11.50	5.6713E+005		-3.0797E+005
	996.32	10.30	6.9712E+005		4.5439E+005
	1004.76	17.90	4.0845E+005		1.7089E+005
	1274.45	35.50	2.8710E+005		5.3199E+005
Eu-155	86.54	30.90	5.2576E+005	5.26E+005	5.8430E+005
	105.31	20.70	6.2915E+005		-3.6832E+004
Am-241	59.54	35.90	5.1073E+005	5.11E+005	-9.9330E+003
Cm-243	228.19	10.56	7.1104E+005	5.03E+005	-1.6655E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/GM)	Nuclide MDA (dpm/GM)	Activity (dpm/GM)
Cm-243	277.60	14.00	5.0292E+005	5.03E+005	1.7166E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 11:02:34 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 10:47:32 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.77	72.79	0.86	1.36E+002	39.79	4.69E+002
m	2	282-	306	300.83	75.07	0.86	3.08E+002	53.46	5.53E+002
F	3	335-	345	340.03	84.90	1.02	1.35E+002	43.60	4.35E+002
F	4	949-	961	955.30	239.14	1.17	1.54E+002	31.36	1.34E+002
F	5	1175-	1187	1181.74	295.87	1.48	6.81E+001	22.74	8.59E+001
F	6	1349-	1362	1354.50	339.13	0.88	4.47E+001	19.16	7.65E+001
F	7	1403-	1417	1409.05	352.79	1.09	7.07E+001	22.48	8.75E+001
F	8	1763-	1772	1767.19	442.42	0.54	1.77E+001	11.50	3.11E+001
F	9	2327-	2343	2334.20	584.24	1.18	7.88E+001	21.60	6.08E+001
F	10	2430-	2448	2438.42	610.29	1.42	9.47E+001	21.53	4.41E+001
F	11	3640-	3657	3647.50	912.33	1.61	5.81E+001	18.40	3.93E+001
F	12	3869-	3885	3879.04	970.13	0.72	2.77E+001	13.25	3.61E+001
F	13	5095-	5113	5103.27	1275.61	1.83	9.76E+001	21.17	2.23E+001
F	14	5836-	5862	5848.54	1461.51	1.96	5.06E+002	43.74	1.61E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.985	1460.81*		10.67	7.38162E+006	8.74255E+005
TL-208	0.447	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.03498E+005	3.14869E+004
		860.37		12.46		
Pb-212	0.493	74.81*	@	10.70	2.68816E+006	7.03837E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.78051E+005	7.14383E+004
Bi-214	0.401	609.31*		46.30	2.29951E+005	5.95895E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.553	74.82*	@	6.21	4.63177E+006	1.25848E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.06532E+005	1.14666E+005
		351.92*		37.20	1.74208E+005	6.26227E+004
Ac-228	0.963	338.32*		11.40	3.54738E+005	1.61945E+005
		911.07*		27.70	2.70516E+005	9.10780E+004
		969.11*		16.60	2.20732E+005	1.08236E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.985	7.381622E+006	8.742554E+005
TL-208		0.447	1.034981E+005	3.148692E+004
Pb-212	@	0.493	2.780508E+005	7.143826E+004
Bi-214		0.401	2.299515E+005	5.958950E+004
PB-214	@	0.553	2.046078E+005	5.496049E+004
Ac-228		0.963	2.662621E+005	6.401303E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.5159E-001	29.16
F 3	84.90	1.5005E-001	32.29
F 8	442.42	1.9671E-002	64.96
F 13	1275.61	1.0844E-001	21.70

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.3403E+004	6.88E+004	3.2169E+004
	1332.49	100.00	6.8823E+004		8.8471E+004
Nb-94	702.63	100.00	6.2689E+004	5.78E+004	-2.2376E+004
	871.10	100.00	5.7786E+004		-7.2117E+003
Ag-108m	79.20	7.10	2.2247E+006	7.21E+004	-9.9177E+005
	433.93	89.90	7.4120E+004		-1.7416E+004
	614.37	90.40	8.9798E+004		-2.3045E+004
	722.95	90.50	7.2142E+004		-3.2854E+004
Sb-125	176.33	6.89	1.2049E+006	2.23E+005	9.1126E+005
	427.89	29.33	2.2262E+005		-1.4668E+005
	463.38	10.35	6.1965E+005		-3.7031E+005
	600.56	17.80	3.5756E+005		-2.0030E+005
	606.64	5.02	1.6232E+006		4.9724E+004
	635.90	11.32	5.8461E+005		1.1128E+005
Cs-134	563.23	8.38	7.8639E+005	7.82E+004	1.0049E+005
	569.32	15.43	4.1394E+005		-6.7338E+004
	604.70	97.60	7.8248E+004		-3.1739E+004
	795.84	85.40	8.1804E+004		6.6017E+004
	801.93	8.73	7.7923E+005		-5.4761E+005
Cs-137	661.65	85.12	7.1937E+004	7.19E+004	3.7718E+003
Eu-152	121.78	28.40	3.6005E+005	2.03E+005	6.0504E+004
	244.69	7.49	1.0319E+006		-7.5747E+005
	344.27	26.50	2.6832E+005		-7.3809E+004
	778.89	12.74	5.1489E+005		2.7040E+005
	867.32	4.16	1.5463E+006		4.1974E+005
	964.01	14.40	5.3000E+005		2.1382E+005
	1085.78	10.00	6.2876E+005		6.9716E+003
	1112.02	13.30	4.9644E+005		-1.0168E+006
	1407.95	20.70	2.0293E+005		-4.9994E+004
Eu-154	123.07	40.50	2.5112E+005	2.51E+005	1.2189E+005
	247.94	6.60	1.1366E+006		-3.1427E+005
	591.81	4.83	1.3286E+006		-2.1269E+005
	723.30	19.70	3.3147E+005		6.8516E+004
	756.87	4.33	1.5187E+006		-7.0609E+005
	873.19	11.50	5.2729E+005		-1.5629E+005
	996.32	10.30	6.1318E+005		2.3521E+005
	1004.76	17.90	3.6678E+005		1.8005E+005
	1274.45	35.50	2.6972E+005		3.6885E+005
Eu-155	86.54	30.90	4.5866E+005	4.59E+005	3.6995E+005
	105.31	20.70	5.4110E+005		-3.4220E+005
Am-241	59.54	35.90	4.9430E+005	4.94E+005	-1.8576E+005
Cm-243	228.19	10.56	7.0522E+005	5.01E+005	3.7717E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0102E+005	5.01E+005	5.4110E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 11:35:01 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 11:19:59 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.98	72.85	0.97	1.67E+002	40.73	4.45E+002
m	2	286-	306	300.76	75.05	0.97	3.42E+002	52.33	5.43E+002
F	3	333-	345	339.67	84.81	1.02	1.12E+002	43.68	5.47E+002
F	4	947-	961	955.35	239.16	1.04	1.60E+002	31.79	1.56E+002
F	5	1346-	1360	1354.07	339.02	1.14	5.19E+001	20.30	8.07E+001
F	6	1402-	1416	1408.39	352.62	1.20	6.88E+001	22.45	8.48E+001
F	7	2036-	2053	2043.23	511.48	1.70	9.38E+001	22.96	7.15E+001
F	8	2326-	2344	2334.59	584.33	1.60	1.01E+002	21.98	4.53E+001
F	9	2429-	2446	2438.56	610.33	1.24	1.13E+002	23.61	5.20E+001
F	10	2904-	2916	2909.99	728.14	0.96	2.45E+001	13.40	2.77E+001
F	11	3638-	3656	3646.63	912.11	1.56	7.12E+001	19.55	3.83E+001
F	12	3874-	3885	3879.66	970.29	1.53	3.48E+001	14.57	1.52E+001
F	13	4690-	4703	4696.49	1174.13	0.81	2.15E+001	11.78	2.27E+001
F	14	5093-	5111	5102.74	1275.48	2.00	8.77E+001	20.08	2.12E+001
F	15	5328-	5342	5335.71	1333.59	1.32	2.55E+001	13.03	1.67E+001
F	16	5836-	5862	5849.16	1461.66	2.07	5.05E+002	43.62	2.00E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.993	511.00*		100.00	9.85326E+004	2.78051E+004
K-40	0.978	1460.81*		10.67	7.36078E+006	8.71779E+005
Co-60	0.969	1173.22*		100.00	3.11178E+004	1.71950E+004
		1332.49*		100.00	3.85600E+004	1.98977E+004
TL-208	0.722	277.35		6.80		
		510.84*		21.60	4.56169E+005	1.34010E+005
		583.14*		84.20	1.32290E+005	3.37448E+004
		860.37		12.46		
Bi-212	0.972	727.17*		11.80	2.48007E+005	1.38928E+005
Pb-212	0.493	74.81*	@	10.70	2.99004E+006	7.43103E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.88691E+005	7.30709E+004
Bi-214	0.399	609.31*		46.30	2.74393E+005	6.67213E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.969	338.32*		11.40	4.11992E+005	1.73595E+005
		911.07*		27.70	3.31390E+005	9.86135E+004
		969.11*		16.60	2.78194E+005	1.19874E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.993	6.995800E+004	2.872950E+004
K-40		0.978	7.360780E+006	8.717792E+005
Co-60		0.969	3.429953E+004	1.301015E+004
TL-208		0.722	1.322897E+005	3.346825E+004
Bi-212		0.972	2.480065E+005	1.389277E+005
Pb-212	@	0.493	2.886909E+005	7.307088E+004
Bi-214		0.399	2.743930E+005	6.672126E+004
Ac-228		0.969	3.263939E+005	6.974005E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.85	1.8560E-001	24.39
F	3	84.81	1.2417E-001	39.09
F	6	352.62	7.6432E-002	32.64
F	14	1275.48	9.7488E-002	22.88

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.1440E+004	3.85E+004	3.1118E+004
		1332.49*	100.00	3.8521E+004		3.8560E+004
	Nb-94	702.63	100.00	6.1144E+004	6.11E+004	1.0868E+004
		871.10	100.00	6.2974E+004		-1.2709E+004
	Ag-108m	79.20	7.10	2.1546E+006	6.94E+004	-2.1686E+006
		433.93	89.90	6.9378E+004		-6.6068E+003
		614.37	90.40	9.3421E+004		-1.5183E+004
		722.95	90.50	7.3769E+004		4.8022E+003
	Sb-125	176.33	6.89	1.1579E+006	2.04E+005	-7.2812E+005
		427.89	29.33	2.0360E+005		-5.9142E+004
		463.38	10.35	6.1439E+005		3.0093E+005
		600.56	17.80	3.8057E+005		-2.2991E+005
		606.64	5.02	1.7654E+006		3.5965E+006
		635.90	11.32	5.2400E+005		-1.7401E+005
	Cs-134	563.23	8.38	7.3067E+005	8.01E+004	1.9116E+005
		569.32	15.43	3.6384E+005		-2.0650E+004
		604.70	97.60	8.4269E+004		1.6021E+004
		795.84	85.40	8.0053E+004		6.7236E+004
		801.93	8.73	7.1520E+005		-3.7283E+005
	Cs-137	661.65	85.12	8.2325E+004	8.23E+004	5.0243E+004
	Eu-152	121.78	28.40	3.5508E+005	1.78E+005	-4.3448E+004
		244.69	7.49	9.9582E+005		-2.1342E+005
		344.27	26.50	2.4941E+005		-2.2822E+005
		778.89	12.74	5.3876E+005		4.9814E+005
		867.32	4.16	1.6327E+006		-3.5234E+005
		964.01	14.40	5.4071E+005		-1.0679E+005
		1085.78	10.00	5.9956E+005		7.8082E+004
		1112.02	13.30	5.0417E+005		-8.2568E+005
		1407.95	20.70	1.7843E+005		-7.2494E+003
	Eu-154	123.07	40.50	2.4857E+005	2.49E+005	8.3207E+004
		247.94	6.60	1.0688E+006		-9.0314E+005
		591.81	4.83	1.2965E+006		-2.7028E+005
		723.30	19.70	3.3771E+005		-7.2447E+004
		756.87	4.33	1.4710E+006		7.4926E+005
		873.19	11.50	5.3517E+005		-1.9574E+005
		996.32	10.30	6.1635E+005		2.2019E+005
		1004.76	17.90	3.4488E+005		-4.4909E+004
		1274.45	35.50	2.5381E+005		4.7331E+005
	Eu-155	86.54	30.90	4.5039E+005	4.50E+005	5.4610E+005
		105.31	20.70	5.4556E+005		4.7950E+005
	Am-241	59.54	35.90	4.9815E+005	4.98E+005	1.1801E+005
	Cm-243	228.19	10.56	6.8261E+005	4.94E+005	-1.3950E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9445E+005	4.94E+005	6.0052E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 10:42:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 10:27:02 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	250-	259	254.89	63.54	0.57	4.90E+001	31.68	3.57E+002
M	2	287-	315	292.01	72.85	0.91	2.05E+002	42.26	4.05E+002
m	3	287-	315	300.51	74.98	0.92	3.46E+002	49.73	4.47E+002
m	4	287-	315	309.65	77.28	0.92	8.82E+001	36.36	4.91E+002
M	5	334-	356	339.14	84.67	0.76	1.22E+002	38.55	3.79E+002
m	6	334-	356	350.53	87.53	0.76	8.39E+001	35.10	4.21E+002
F	7	950-	963	954.97	239.06	1.06	1.35E+002	29.86	1.45E+002
F	8	1176-	1187	1181.30	295.76	0.90	4.88E+001	20.99	8.48E+001
F	9	1345-	1358	1353.31	338.83	1.20	5.50E+001	20.67	7.53E+001
F	10	1402-	1414	1408.01	352.53	1.02	7.57E+001	22.12	6.56E+001
F	11	2035-	2050	2043.21	511.47	1.28	5.07E+001	20.72	8.02E+001
F	12	2326-	2341	2333.60	584.09	1.12	6.83E+001	19.80	4.43E+001
F	13	2430-	2447	2438.45	610.30	1.09	9.62E+001	21.79	4.41E+001
F	14	2906-	2917	2911.54	728.53	0.97	2.09E+001	13.75	3.24E+001
F	15	3638-	3652	3645.66	911.87	1.31	4.58E+001	16.93	2.96E+001
F	16	5093-	5109	5100.85	1275.01	1.61	9.28E+001	20.22	1.31E+001
F	17	5836-	5862	5848.23	1461.43	1.91	4.84E+002	43.03	1.88E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.993	511.00*	100.00	5.32925E+004	2.30233E+004
K-40	0.988	1460.81*	10.67	7.05776E+006	8.48859E+005
Eu-155	0.325	86.54*	30.90	2.16859E+005	1.00215E+005
		105.31	20.70		
TL-208	0.733	277.35	6.80		
		510.84*	21.60	2.46725E+005	1.08477E+005
		583.14*	84.20	8.97231E+004	2.85742E+004
		860.37	12.46		
Bi-212	0.946	727.17*	11.80	2.12210E+005	1.41619E+005
Pb-212	0.996	74.81* @	10.70	3.01918E+006	7.34201E+005
		77.11* @	18.00	4.44125E+005	2.02813E+005
		87.30* @	8.00	8.37618E+005	3.87080E+005
		238.63*	44.60	2.44295E+005	6.61056E+004
Bi-214	0.401	609.31*	46.30	2.33485E+005	6.03462E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.846	74.82* @	6.21	5.20214E+006	1.32021E+006
		77.11* @	10.50	7.61357E+005	3.52297E+005
		87.30* @	4.67	1.43489E+006	6.71894E+005
		241.98	7.49		
		295.21*	19.20	2.19602E+005	1.01485E+005
		351.92*	37.20	1.86694E+005	6.28173E+004
Ac-228	0.535	338.32*	11.40	4.36450E+005	1.77785E+005
		911.07*	27.70	2.12830E+005	8.24723E+004
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.993	3.391235E+004	2.382785E+004
K-40		0.988	7.057759E+006	8.488589E+005
Eu-155		0.325	1.240301E+005	1.019774E+005
TL-208		0.733	8.972309E+004	2.842422E+004
Bi-212		0.946	2.122098E+005	1.416191E+005
Pb-212	@	0.996	2.442954E+005	6.610560E+004
Bi-214		0.401	2.334845E+005	6.034615E+004
PB-214	@	0.846	1.957280E+005	5.270456E+004
Ac-228		0.535	2.524297E+005	7.481447E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 1	63.54	5.4486E-002	64.60
M 2	72.85	2.2767E-001	20.62
M 5	84.67	1.3590E-001	31.52
F 16	1275.01	1.0314E-001	21.78

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.9391E+004	5.57E+004	2.8423E+004
		1332.49	100.00	5.5685E+004		-1.6308E+004
	Nb-94	702.63	100.00	6.0882E+004	5.81E+004	1.8913E+004
		871.10	100.00	5.8105E+004		-2.5712E+004
	Ag-108m	79.20	7.10	2.1291E+006	6.94E+004	-4.1737E+005
		433.93	89.90	6.9378E+004		1.6213E+004
		614.37	90.40	9.3234E+004		2.2280E+004
		722.95	90.50	7.4036E+004		-8.8608E+003
	Sb-125	176.33	6.89	1.1178E+006	2.04E+005	-1.0504E+006
		427.89	29.33	2.0422E+005		-9.0552E+004
		463.38	10.35	6.1790E+005		3.8761E+005
		600.56	17.80	3.4219E+005		6.3020E+004
		606.64	5.02	1.6093E+006		-4.2040E+005
		635.90	11.32	5.0593E+005		-1.2978E+005
	Cs-134	563.23	8.38	7.7162E+005	7.55E+004	-1.3854E+005
		569.32	15.43	4.0557E+005		-8.9073E+003
		604.70	97.60	7.8627E+004		-9.8582E+003
		795.84	85.40	7.5489E+004		7.7679E+003
		801.93	8.73	7.2156E+005		1.0049E+005
	Cs-137	661.65	85.12	7.9199E+004	7.92E+004	6.5998E+004
	Eu-152	121.78	28.40	3.5140E+005	2.30E+005	4.1109E+004
		244.69	7.49	9.7458E+005		-2.3011E+004
		344.27	26.50	2.5725E+005		-2.8564E+005
		778.89	12.74	5.2497E+005		8.9578E+004
		867.32	4.16	1.3871E+006		-1.4270E+006
		964.01	14.40	5.0975E+005		2.9445E+005
		1085.78	10.00	6.8647E+005		-7.3536E+005
		1112.02	13.30	4.6414E+005		-1.1061E+006
		1407.95	20.70	2.3027E+005		-8.1237E+004
	Eu-154	123.07	40.50	2.4503E+005	2.45E+005	-2.8621E+004
		247.94	6.60	1.0131E+006		-1.5371E+006
		591.81	4.83	1.2248E+006		-1.3607E+005
		723.30	19.70	3.3647E+005		-1.6729E+005
		756.87	4.33	1.4089E+006		-2.9529E+005
		873.19	11.50	5.2464E+005		3.6835E+005
		996.32	10.30	6.2574E+005		7.9306E+005
		1004.76	17.90	3.4299E+005		7.0435E+004
		1274.45	35.50	2.4827E+005		2.8028E+005
+	Eu-155	86.54*	30.90	2.5395E+005	2.54E+005	2.1686E+005
		105.31	20.70	5.3178E+005		2.6212E+005
	Am-241	59.54	35.90	4.9863E+005	4.99E+005	2.3021E+005
	Cm-243	228.19	10.56	6.7892E+005	4.78E+005	3.4899E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7761E+005	4.78E+005	7.0331E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 11:58:05 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 11:43:03 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	2429-	2444	2436.99	609.93	1.26	6.23E+001	20.52	5.88E+001
F	2	5833-	5863	5848.25	1461.44	2.77	3.97E+002	37.36	2.34E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.988	1460.81*	10.67	5.78990E+006	7.18895E+005
Bi-214	0.411	609.31*	46.30	1.51155E+005	5.32524E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.988	5.789896E+006	7.188945E+005
Bi-214	0.411	1.511545E+005	5.325241E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6573E+004	6.11E+004	5.5750E+004
	1332.49	100.00	6.1131E+004		5.9842E+004
Nb-94	702.63	100.00	6.0090E+004	6.01E+004	8.4291E+003
	871.10	100.00	6.1795E+004		6.3358E+003
Ag-108m	79.20	7.10	2.1735E+006	6.62E+004	-3.8760E+006
	433.93	89.90	6.6156E+004		-6.8080E+003
	614.37	90.40	8.8227E+004		1.6452E+003
	722.95	90.50	6.9627E+004		-3.1953E+004
Sb-125	176.33	6.89	1.1494E+006	2.04E+005	1.6523E+004
	427.89	29.33	2.0360E+005		1.2865E+004
	463.38	10.35	6.2486E+005		2.6881E+005
	600.56	17.80	3.4480E+005		4.9217E+004
	606.64	5.02	1.6023E+006		2.8151E+006
	635.90	11.32	5.2178E+005		2.2971E+005
Cs-134	563.23	8.38	7.5399E+005	7.73E+004	2.6664E+005
	569.32	15.43	4.0698E+005		-1.0159E+005
	604.70	97.60	7.7293E+004		-2.2393E+004
	795.84	85.40	8.0934E+004		8.8345E+004
	801.93	8.73	7.6747E+005		8.5595E+003
Cs-137	661.65	85.12	7.6215E+004	7.62E+004	2.7253E+004
Eu-152	121.78	28.40	3.5334E+005	2.49E+005	2.5290E+005
	244.69	7.49	1.0482E+006		-9.2053E+005
	344.27	26.50	2.4888E+005		-3.1841E+005
	778.89	12.74	4.7005E+005		-1.6952E+005
	867.32	4.16	1.5531E+006		-4.7676E+005
	964.01	14.40	5.3894E+005		4.2761E+005
	1085.78	10.00	6.2876E+005		1.2633E+005
	1112.02	13.30	4.8593E+005		-2.7177E+005
	1407.95	20.70	2.5188E+005		7.6242E+004
Eu-154	123.07	40.50	2.4680E+005	2.47E+005	1.4583E+005
	247.94	6.60	1.0814E+006		-1.0954E+006
	591.81	4.83	1.2919E+006		-1.8380E+005
	723.30	19.70	3.2252E+005		-1.2533E+005
	756.87	4.33	1.3897E+006		-9.3145E+004
	873.19	11.50	5.1388E+005		-2.8396E+005
	996.32	10.30	6.0679E+005		-4.9525E+004
	1004.76	17.90	3.5234E+005		-1.9514E+004
	1274.45	35.50	2.5303E+005		4.0605E+005
Eu-155	86.54	30.90	4.3561E+005	4.36E+005	3.7402E+005
	105.31	20.70	5.2666E+005		-4.3281E+004
Am-241	59.54	35.90	4.9090E+005	4.91E+005	4.3104E+005
Cm-243	228.19	10.56	6.9896E+005	4.84E+005	2.9978E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8358E+005	4.84E+005	1.8133E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 1:07:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 12:52:43 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	318	292.14	72.88	0.95	1.52E+002	39.73	4.81E+002
m	2	285-	318	300.68	75.03	0.96	3.42E+002	49.73	4.74E+002
m	3	285-	318	309.30	77.19	0.96	7.85E+001	35.48	4.69E+002
F	4	337-	345	340.01	84.89	0.64	6.44E+001	34.62	3.53E+002
F	5	950-	962	955.34	239.15	0.83	1.16E+002	28.84	1.48E+002
F	6	1175-	1187	1181.10	295.71	1.13	5.77E+001	21.07	7.36E+001
F	7	1401-	1414	1408.34	352.61	1.01	8.57E+001	23.21	7.36E+001
F	8	2033-	2056	2045.21	511.97	2.35	1.10E+002	22.57	7.31E+001
F	9	2326-	2343	2334.30	584.26	1.38	8.86E+001	22.56	6.65E+001
F	10	2431-	2447	2438.20	610.24	1.35	9.12E+001	21.64	4.04E+001
F	11	3640-	3655	3646.77	912.15	1.45	6.36E+001	17.89	2.11E+001
F	12	3873-	3884	3878.92	970.10	0.85	2.30E+001	13.32	2.94E+001
F	13	5093-	5111	5102.23	1275.35	1.84	1.02E+002	21.20	1.91E+001
F	14	5835-	5860	5848.35	1461.46	1.93	4.45E+002	40.86	9.68E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.972	511.00*	100.00	1.15832E+005	2.87419E+004
K-40	0.987	1460.81*	10.67	6.49336E+006	7.94714E+005
TL-208	0.721	277.35	6.80		
		510.84*	21.60	5.36260E+005	1.40086E+005
		583.14*	84.20	1.16313E+005	3.33676E+004
		860.37	12.46		
Pb-212	0.834	74.81* @	10.70	2.98748E+006	7.29030E+005
		77.11* @	18.00	3.96166E+005	1.95050E+005
		87.30 @	8.00		
		238.63*	44.60	2.08664E+005	6.14810E+004
Bi-214	0.403	609.31*	46.30	2.21456E+005	5.93292E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.752	74.82* @	6.21	5.14751E+006	1.31054E+006
		77.11* @	10.50	6.79141E+005	3.38194E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.59566E+005	1.04447E+005
		351.92*	37.20	2.11375E+005	6.72574E+004
Ac-228	0.597	338.32	11.40		
		911.07*	27.70	2.95903E+005	8.98908E+004
		969.11*	16.60	1.83920E+005	1.08094E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.972	9.070868E+004	2.962046E+004
K-40		0.987	6.493358E+006	7.947142E+005
TL-208		0.721	1.163126E+005	3.315163E+004
Pb-212	@	0.834	2.086643E+005	6.148099E+004
Bi-214		0.403	2.214558E+005	5.932924E+004
PB-214	@	0.752	2.255001E+005	5.654761E+004
Ac-228		0.597	2.501208E+005	6.911491E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	1.6918E-001	26.09
F 4	84.89	7.1605E-002	53.73
F 13	1275.35	1.1365E-001	20.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0755E+004	5.22E+004	3.2796E+004
	1332.49	100.00	5.2224E+004		3.3684E+004
Nb-94	702.63	100.00	6.2943E+004	6.29E+004	7.8637E+002
	871.10	100.00	6.4416E+004		1.4460E+004
Ag-108m	79.20	7.10	2.1073E+006	6.57E+004	-1.7604E+005
	433.93	89.90	6.5742E+004		-4.7522E+004
	614.37	90.40	8.6828E+004		-2.9815E+004
	722.95	90.50	7.5096E+004		3.1367E+004
Sb-125	176.33	6.89	1.0977E+006	1.99E+005	4.6981E+004
	427.89	29.33	1.9855E+005		4.8835E+004
	463.38	10.35	6.2139E+005		1.8490E+005
	600.56	17.80	3.2328E+005		-1.9148E+005
	606.64	5.02	1.5953E+006		3.4388E+005
	635.90	11.32	4.9429E+005		-1.8417E+004
Cs-134	563.23	8.38	7.5653E+005	7.39E+004	-4.1999E+005
	569.32	15.43	4.0132E+005		-3.8465E+004
	604.70	97.60	7.7293E+004		2.6668E+003
	795.84	85.40	7.3901E+004		1.6771E+004
	801.93	8.73	6.9904E+005		-9.4690E+004
Cs-137	661.65	85.12	7.1642E+004	7.16E+004	3.6078E+004
Eu-152	121.78	28.40	3.4729E+005	2.12E+005	2.7023E+005
	244.69	7.49	9.6784E+005		2.0214E+004
	344.27	26.50	2.3687E+005		5.8834E+004
	778.89	12.74	5.0251E+005		1.5971E+005
	867.32	4.16	1.5531E+006		3.9649E+005
	964.01	14.40	5.1721E+005		-9.8320E+004
	1085.78	10.00	6.0700E+005		2.8552E+005
	1112.02	13.30	4.6692E+005		-2.4334E+005
	1407.95	20.70	2.1248E+005		-2.5573E+004
Eu-154	123.07	40.50	2.4199E+005	2.42E+005	-7.1971E+004
	247.94	6.60	1.0495E+006		-1.0582E+006
	591.81	4.83	1.2199E+006		-3.6484E+005
	723.30	19.70	3.4383E+005		1.8137E+005
	756.87	4.33	1.3438E+006		-6.3736E+005
	873.19	11.50	5.5308E+005		-3.9974E+005
	996.32	10.30	6.0357E+005		-5.0021E+005
	1004.76	17.90	3.4676E+005		1.1827E+005
	1274.45	35.50	2.6527E+005		6.3120E+005
Eu-155	86.54	30.90	4.2987E+005	4.30E+005	5.2256E+005
	105.31	20.70	5.1652E+005		-6.7282E+004
Am-241	59.54	35.90	4.7228E+005	4.72E+005	-9.8328E+004
Cm-243	228.19	10.56	6.8261E+005	4.73E+005	-2.1395E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7331E+005	4.73E+005	2.7334E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 10:22:48 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 10:07:47 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	316	292.30	72.93	0.81	1.54E+002	40.20	4.18E+002
m	2	288-	316	300.70	75.03	0.82	2.98E+002	47.74	4.25E+002
m	3	288-	316	309.44	77.22	0.82	5.93E+001	32.17	3.90E+002
F	4	949-	963	955.54	239.20	1.12	1.19E+002	28.67	1.42E+002
F	5	1176-	1188	1181.35	295.77	0.96	4.85E+001	21.10	9.03E+001
F	6	1403-	1416	1408.08	352.54	0.94	7.87E+001	22.70	7.99E+001
F	7	2035-	2053	2043.99	511.67	1.93	9.53E+001	21.96	5.98E+001
F	8	2328-	2339	2333.19	583.98	0.90	7.15E+001	19.27	2.90E+001
F	9	2430-	2447	2438.01	610.19	1.51	9.54E+001	21.77	4.35E+001
F	10	3639-	3657	3648.11	912.48	1.62	6.20E+001	18.29	3.27E+001
F	11	4478-	4490	4484.70	1121.28	0.47	1.65E+001	2.16	2.65E+001
F	12	5092-	5112	5101.42	1275.14	1.88	1.07E+002	21.50	2.04E+001
F	13	5835-	5861	5847.78	1461.32	1.96	4.46E+002	40.95	1.39E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.987	511.00*	100.00	1.00151E+005	2.70097E+004
K-40	0.992	1460.81*	10.67	6.50226E+006	7.96240E+005
TL-208	0.735	277.35	6.80		
		510.84*	21.60	4.63662E+005	1.30653E+005
		583.14*	84.20	9.38290E+004	2.81748E+004
		860.37	12.46		
Pb-212	0.833	74.81* @	10.70	2.60199E+006	6.58684E+005
		77.11* @	18.00	2.98758E+005	1.72416E+005
		87.30 @	8.00		
		238.63*	44.60	2.15482E+005	6.17991E+004
Bi-214	0.694	609.31*	46.30	2.31556E+005	6.01954E+004
		1120.29*	15.10	1.54597E+005	2.60442E+004
		1764.49	15.80		
PB-214	0.753	74.82* @	6.21	4.48330E+006	1.18067E+006
		77.11* @	10.50	5.12157E+005	2.98034E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.18544E+005	1.01854E+005
		351.92*	37.20	1.93963E+005	6.46803E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.987	7.988386E+004	2.767898E+004
K-40		0.992	6.502265E+006	7.962404E+005
TL-208		0.735	9.382902E+004	2.800841E+004
Pb-212	@	0.833	2.154822E+005	6.179912E+004
Bi-214		0.694	1.667317E+005	2.390289E+004
PB-214	@	0.753	2.010270E+005	5.460130E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.7063E-001	26.18
F 10	912.48	6.8879E-002	29.50
F 12	1275.14	1.1848E-001	20.16

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3622E+004	5.27E+004	-4.5649E+003
	1332.49	100.00	5.2734E+004		1.6318E+004
Nb-94	702.63	100.00	6.3947E+004	6.33E+004	4.6459E+004
	871.10	100.00	6.3265E+004		1.1970E+004
Ag-108m	79.20	7.10	2.0348E+006	6.90E+004	-7.2232E+005
	433.93	89.90	6.8984E+004		1.4281E+004
	614.37	90.40	9.1150E+004		3.4187E+004
	722.95	90.50	7.3231E+004		4.4356E+004
Sb-125	176.33	6.89	1.1255E+006	1.99E+005	-2.0616E+005
	427.89	29.33	1.9855E+005		-5.8177E+004
	463.38	10.35	6.7147E+005		2.0534E+005
	600.56	17.80	3.4610E+005		2.3776E+005
	606.64	5.02	1.5988E+006		-6.0167E+004
	635.90	11.32	5.1279E+005		7.6787E+004
Cs-134	563.23	8.38	7.2538E+005	7.71E+004	8.7318E+003
	569.32	15.43	3.9846E+005		5.8102E+004
	604.70	97.60	7.7101E+004		-2.5167E+003
	795.84	85.40	8.2092E+004		4.6771E+004
	801.93	8.73	7.5551E+005		-4.3435E+004
Cs-137	661.65	85.12	6.9541E+004	6.95E+004	-5.2739E+004
Eu-152	121.78	28.40	3.4847E+005	2.03E+005	1.8469E+005
	244.69	7.49	9.5285E+005		-1.2679E+005
	344.27	26.50	2.4020E+005		-3.7886E+005
	778.89	12.74	4.8113E+005		1.0172E+005
	867.32	4.16	1.5394E+006		-6.2486E+004
	964.01	14.40	5.2819E+005		5.9848E+005
	1085.78	10.00	6.2519E+005		-5.1972E+005
	1112.02	13.30	4.8858E+005		-1.0951E+005
	1407.95	20.70	2.0293E+005		4.4690E+004
Eu-154	123.07	40.50	2.4310E+005	2.43E+005	8.6041E+004
	247.94	6.60	1.0281E+006		-1.1177E+006
	591.81	4.83	1.2199E+006		7.7132E+005
	723.30	19.70	3.4261E+005		2.9224E+005
	756.87	4.33	1.3637E+006		-2.7914E+005
	873.19	11.50	5.2729E+005		-3.5264E+005
	996.32	10.30	5.7031E+005		1.6502E+005
	1004.76	17.90	3.2743E+005		2.5641E+004
	1274.45	35.50	2.6075E+005		5.2691E+005
Eu-155	86.54	30.90	4.3284E+005	4.33E+005	3.8383E+005
	105.31	20.70	5.0787E+005		-1.7753E+005
Am-241	59.54	35.90	4.8552E+005	4.86E+005	-8.5026E+004
Cm-243	228.19	10.56	6.7521E+005	4.68E+005	2.6343E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6808E+005	4.68E+005	-1.2452E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 1:31:36 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 1:16:35 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.49	72.72	0.96	1.45E+002	40.89	4.94E+002
m	2	286-	306	300.33	74.94	0.96	3.35E+002	53.51	6.54E+002
F	3	948-	962	955.55	239.21	1.07	1.56E+002	31.43	1.55E+002
F	4	1173-	1187	1181.81	295.89	1.33	6.23E+001	21.46	8.63E+001
F	5	1309-	1319	1313.16	328.78	0.85	2.75E+001	17.81	6.74E+001
F	6	1348-	1359	1353.63	338.91	1.01	4.11E+001	19.90	7.37E+001
F	7	1402-	1415	1408.60	352.67	1.03	7.77E+001	23.50	9.11E+001
F	8	2036-	2053	2044.66	511.83	1.64	9.74E+001	23.24	7.07E+001
F	9	2324-	2341	2333.17	583.98	1.49	1.12E+002	22.87	4.27E+001
F	10	2430-	2446	2438.65	610.35	1.56	1.12E+002	22.99	4.04E+001
F	11	2905-	2917	2911.45	728.51	1.47	3.30E+001	14.53	2.28E+001
F	12	3640-	3658	3648.30	912.53	1.67	5.33E+001	19.01	5.08E+001
F	13	3871-	3888	3878.92	970.10	1.65	5.50E+001	17.76	3.26E+001
F	14	5093-	5112	5103.15	1275.58	1.74	9.74E+001	22.04	3.46E+001
F	15	5837-	5860	5848.82	1461.58	1.84	4.73E+002	42.76	2.07E+001
F	16	7057-	7072	7065.78	1765.15	1.44	3.38E+001	13.01	7.85E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.979	511.00*		100.00	1.02347E+005	2.83289E+004
K-40	0.982	1460.81*		10.67	6.90361E+006	8.37534E+005
TL-208	0.733	277.35		6.80		
		510.84*		21.60	4.73830E+005	1.36742E+005
		583.14*		84.20	1.46967E+005	3.57564E+004
		860.37		12.46		
Bi-212	0.947	727.17*		11.80	3.34863E+005	1.52429E+005
Pb-212	0.492	74.81*	@	10.70	2.93079E+006	7.40872E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.80949E+005	7.18152E+004
Bi-214	0.682	609.31*		46.30	2.71497E+005	6.52378E+004
		1120.29		15.10		
		1764.49*		15.80	3.54435E+005	1.41038E+005
PB-214	0.555	74.82*	@	6.21	5.04983E+006	1.32814E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.80320E+005	1.07538E+005
		351.92*		37.20	1.91471E+005	6.61973E+004
Ac-228	0.958	338.32*		11.40	3.25893E+005	1.66043E+005
		911.07*		27.70	2.47955E+005	9.29123E+004
		969.11*		16.60	4.38974E+005	1.49010E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.979	7.060236E+004	2.934464E+004
K-40		0.982	6.903609E+006	8.375338E+005
TL-208		0.733	1.469671E+005	3.543421E+004
Bi-212		0.947	3.348627E+005	1.524294E+005
Pb-212	@	0.492	2.809493E+005	7.181515E+004
Bi-214		0.682	2.861143E+005	5.921038E+004
PB-214	@	0.555	2.158870E+005	5.637277E+004
Ac-228		0.958	3.059316E+005	7.122055E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.72	1.6150E-001	28.13
F	5	328.78	3.0535E-002	64.82
F	14	1275.58	1.0825E-001	22.62

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.5483E+004	5.66E+004	2.1659E+003
	1332.49	100.00	5.6632E+004		6.4141E+003
Nb-94	702.63	100.00	6.2943E+004	6.29E+004	2.0135E+004
	871.10	100.00	6.6655E+004		-5.5425E+003
Ag-108m	79.20	7.10	2.1883E+006	6.62E+004	-1.5306E+006
	433.93	89.90	6.6156E+004		-2.9110E+004
	614.37	90.40	9.5270E+004		-8.1978E+003
	722.95	90.50	7.6914E+004		-9.8869E+002
Sb-125	176.33	6.89	1.1200E+006	2.09E+005	2.7716E+005
	427.89	29.33	2.0853E+005		-1.0938E+005
	463.38	10.35	6.5522E+005		3.3028E+005
	600.56	17.80	3.6865E+005		1.2855E+005
	606.64	5.02	1.7074E+006		2.9311E+006
	635.90	11.32	5.6243E+005		1.9088E+004
Cs-134	563.23	8.38	7.8150E+005	7.61E+004	2.2117E+005
	569.32	15.43	4.0557E+005		-2.2532E+005
	604.70	97.60	8.1225E+004		3.8751E+004
	795.84	85.40	7.6114E+004		1.0746E+004
	801.93	8.73	7.3720E+005		-1.8634E+004
Cs-137	661.65	85.12	7.4535E+004	7.45E+004	1.8752E+004
Eu-152	121.78	28.40	3.5508E+005	2.16E+005	3.6980E+004
	244.69	7.49	9.7726E+005		-3.4579E+004
	344.27	26.50	2.6235E+005		-1.7534E+005
	778.89	12.74	4.3987E+005		-5.5215E+003
	867.32	4.16	1.7083E+006		-2.5095E+005
	964.01	14.40	5.5293E+005		-8.7173E+004
	1085.78	10.00	6.2160E+005		-7.8779E+005
	1112.02	13.30	4.9383E+005		-1.0362E+005
	1407.95	20.70	2.1555E+005		-1.7846E+005
Eu-154	123.07	40.50	2.4667E+005	2.47E+005	2.7980E+004
	247.94	6.60	9.9098E+005		-1.8679E+006
	591.81	4.83	1.2395E+006		-2.7517E+004
	723.30	19.70	3.5923E+005		5.4789E+004
	756.87	4.33	1.3897E+006		-4.0993E+005
	873.19	11.50	5.5056E+005		-3.5090E+005
	996.32	10.30	5.9708E+005		1.5595E+004
	1004.76	17.90	3.7205E+005		1.6046E+005
	1274.45	35.50	2.7552E+005		4.9872E+005
Eu-155	86.54	30.90	4.4653E+005	4.47E+005	3.1120E+005
	105.31	20.70	5.3606E+005		2.2126E+005
Am-241	59.54	35.90	4.8748E+005	4.87E+005	-6.7433E+004
Cm-243	228.19	10.56	6.9174E+005	4.99E+005	2.9441E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9939E+005	4.99E+005	-2.4717E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 9:59:13 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 9:44:12 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	292.01	72.85	1.05	1.94E+002	42.91	5.75E+002
m	2	284-	309	300.64	75.02	1.05	3.22E+002	50.05	5.48E+002
F	3	334-	345	340.21	84.94	0.82	1.03E+002	40.71	4.85E+002
F	4	948-	960	955.04	239.08	1.03	1.32E+002	30.10	1.40E+002
F	5	1076-	1086	1081.92	270.87	0.81	2.16E+001	17.27	7.18E+001
F	6	1177-	1187	1181.55	295.82	1.26	4.68E+001	22.16	7.57E+001
F	7	1349-	1359	1353.84	338.96	0.57	3.63E+001	17.38	7.70E+001
F	8	1400-	1417	1408.22	352.58	1.21	1.05E+002	24.86	9.70E+001
F	9	2036-	2056	2044.92	511.90	1.78	1.02E+002	22.60	6.70E+001
F	10	2326-	2341	2333.32	584.02	1.17	6.73E+001	20.23	5.31E+001
F	11	2431-	2448	2438.07	610.20	1.28	1.06E+002	22.88	4.23E+001
F	12	3638-	3655	3646.24	912.01	1.63	8.18E+001	20.33	3.44E+001
F	13	3872-	3884	3878.10	969.90	1.46	2.82E+001	15.25	2.95E+001
F	14	5093-	5111	5101.77	1275.23	1.64	8.65E+001	20.35	2.64E+001
F	15	5833-	5860	5847.93	1461.36	1.96	4.95E+002	43.25	1.77E+001
F	16	7058-	7071	7064.19	1764.75	1.37	2.00E+001	11.28	1.24E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.976	511.00*		100.00	1.06928E+005	2.80892E+004
K-40	0.991	1460.81*		10.67	7.22168E+006	8.60112E+005
TL-208	0.731	277.35		6.80		
		510.84*		21.60	4.95037E+005	1.36182E+005
		583.14*		84.20	8.84132E+004	2.90161E+004
		860.37		12.46		
Pb-212	0.494	74.81*	@	10.70	2.80872E+006	7.02981E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.37739E+005	6.58799E+004
Bi-214	0.689	609.31*		46.30	2.57138E+005	6.40981E+004
		1120.29		15.10		
		1764.49*		15.80	2.10009E+005	1.20236E+005
PB-214	0.557	74.82*	@	6.21	4.83949E+006	1.26117E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.10719E+005	1.05880E+005
		351.92*		37.20	2.59126E+005	7.50513E+004
Ac-228	0.979	338.32*		11.40	2.88104E+005	1.45147E+005
		911.07*		27.70	3.80456E+005	1.04177E+005
		969.11*		16.60	2.24934E+005	1.23946E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.976	8.783063E+004	2.877321E+004
K-40		0.991	7.221676E+006	8.601120E+005
TL-208		0.731	8.841323E+004	2.887267E+004
Pb-212	@	0.494	2.377389E+005	6.587986E+004
Bi-214		0.689	2.467079E+005	5.656251E+004
PB-214	@	0.557	2.429378E+005	6.122933E+004
Ac-228		0.979	3.095867E+005	6.989397E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.85	2.1570E-001	22.10
F	3	84.94	1.1453E-001	39.49
F	5	270.87	2.4010E-002	79.91
F	14	1275.23	9.6105E-002	23.53

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.1092E+004	6.07E+004	5.4495E+004
	1332.49	100.00	6.0697E+004		1.3333E+004
Nb-94	702.63	100.00	6.1663E+004	6.17E+004	1.1214E+004
	871.10	100.00	6.2092E+004		-3.6300E+004
Ag-108m	79.20	7.10	2.1766E+006	6.82E+004	5.0233E+005
	433.93	89.90	6.8188E+004		-3.4858E+004
	614.37	90.40	8.7430E+004		5.4190E+003
	722.95	90.50	7.5096E+004		4.0660E+004
Sb-125	176.33	6.89	1.1654E+006	2.10E+005	-3.5908E+005
	427.89	29.33	2.0974E+005		3.8871E+004
	463.38	10.35	6.5192E+005		-3.4998E+005
	600.56	17.80	3.5505E+005		-4.1033E+004
	606.64	5.02	1.6809E+006		-7.2717E+005
	635.90	11.32	5.7060E+005		-2.4637E+005
Cs-134	563.23	8.38	7.3853E+005	7.92E+004	4.3974E+005
	569.32	15.43	4.0838E+005		-5.1437E+004
	604.70	97.60	8.3386E+004		-2.2246E+004
	795.84	85.40	7.9162E+004		2.6737E+004
	801.93	8.73	7.3098E+005		-7.7372E+005
Cs-137	661.65	85.12	7.3392E+004	7.34E+004	-4.1737E+004
Eu-152	121.78	28.40	3.5643E+005	2.00E+005	1.0673E+004
	244.69	7.49	1.0395E+006		-1.0992E+006
	344.27	26.50	2.5828E+005		9.1438E+004
	778.89	12.74	4.8765E+005		-2.1129E+005
	867.32	4.16	1.5394E+006		-7.9216E+005
	964.01	14.40	5.3716E+005		-5.5637E+003
	1085.78	10.00	6.7005E+005		-1.0201E+005
	1112.02	13.30	4.6692E+005		-1.4565E+006
	1407.95	20.70	1.9964E+005		-1.0802E+005
Eu-154	123.07	40.50	2.4557E+005	2.46E+005	-2.0328E+005
	247.94	6.60	1.1048E+006		-1.2025E+006
	591.81	4.83	1.1796E+006		-1.0110E+006
	723.30	19.70	3.4261E+005		1.6903E+005
	756.87	4.33	1.4025E+006		-1.3776E+006
	873.19	11.50	5.4292E+005		-8.4249E+004
	996.32	10.30	5.9708E+005		-2.5831E+005
	1004.76	17.90	3.5601E+005		1.9367E+005
	1274.45	35.50	2.4987E+005		3.9412E+005
Eu-155	86.54	30.90	4.4939E+005	4.49E+005	1.6885E+005
	105.31	20.70	5.2747E+005		5.6785E+004
Am-241	59.54	35.90	4.8354E+005	4.84E+005	-7.4261E+005
Cm-243	228.19	10.56	7.2191E+005	4.81E+005	3.9655E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8103E+005	4.81E+005	4.4375E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 1:52:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 1:37:38 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.61	72.75	0.99	1.86E+002	42.04	4.73E+002
m	2	282-	304	300.57	75.00	0.99	2.49E+002	48.55	5.14E+002
M	3	333-	356	339.49	84.76	0.93	1.34E+002	41.58	4.91E+002
m	4	333-	356	349.86	87.37	0.94	5.56E+001	33.01	4.28E+002
F	5	698-	708	701.82	175.62	0.74	3.60E+001	22.56	1.39E+002
F	6	949-	959	954.87	239.04	0.82	1.27E+002	29.48	1.26E+002
F	7	1399-	1415	1408.81	352.73	1.34	1.05E+002	23.64	7.05E+001
F	8	2033-	2054	2045.12	511.95	1.80	9.62E+001	22.84	8.51E+001
F	9	2324-	2341	2333.94	584.17	1.05	8.70E+001	21.01	4.76E+001
F	10	2430-	2447	2438.94	610.42	1.62	1.01E+002	21.71	4.01E+001
F	11	3639-	3655	3647.50	912.33	1.46	5.91E+001	18.30	3.40E+001
F	12	3871-	3885	3877.56	969.76	1.65	4.26E+001	15.48	1.91E+001
F	13	4481-	4493	4486.04	1121.62	1.94	3.60E+001	14.07	1.30E+001
F	14	5093-	5113	5102.54	1275.42	1.84	1.19E+002	22.01	1.29E+001
F	15	5835-	5862	5848.54	1461.51	2.12	4.35E+002	39.73	3.62E+000
F	16	7058-	7071	7065.03	1764.96	1.33	1.62E+001	10.68	8.95E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.973	511.00*		100.00	1.01132E+005	2.78762E+004
K-40	0.985	1460.81*		10.67	6.34001E+006	7.74232E+005
Eu-155	0.330	86.54*		30.90	1.44004E+005	9.00503E+004
		105.31		20.70		
TL-208	0.725	277.35		6.80		
		510.84*		21.60	4.68203E+005	1.34602E+005
		583.14*		84.20	1.14286E+005	3.14470E+004
		860.37		12.46		
Pb-212	0.656	74.81*	@	10.70	2.17220E+006	6.01001E+005
		77.11	@	18.00		
		87.30*	@	8.00	5.56214E+005	3.47819E+005
		238.63*		44.60	2.28500E+005	6.41357E+004
Bi-214	0.966	609.31*		46.30	2.44843E+005	6.08854E+004
		1120.29*		15.10	3.36916E+005	1.36619E+005
		1764.49*		15.80	1.70312E+005	1.13376E+005
Ac-228	0.595	338.32		11.40		
		911.07*		27.70	2.75018E+005	9.08358E+004
		969.11*		16.60	3.40236E+005	1.28594E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.973	7.644587E+004	2.868056E+004
K-40		0.985	6.340010E+006	7.742317E+005
Eu-155		0.330	8.484498E+004	9.156842E+004
TL-208		0.725	1.142865E+005	3.122563E+004
Pb-212	@	0.656	2.285003E+005	6.413575E+004
Bi-214		0.966	2.426860E+005	4.992950E+004
Ac-228		0.595	2.967274E+005	7.419268E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	2.0674E-001	22.59
M 3	84.76	1.4929E-001	30.94
F 5	175.62	4.0018E-002	62.63
F 7	352.73	1.1640E-001	22.56
F 14	1275.42	1.3183E-001	18.55

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.3243E+004	5.37E+004	-2.4992E+002
		1332.49	100.00	5.3737E+004		-3.0758E+004
	Nb-94	702.63	100.00	6.5423E+004	5.71E+004	4.6387E+004
		871.10	100.00	5.7143E+004		-2.4076E+004
	Ag-108m	79.20	7.10	2.1347E+006	6.43E+004	-5.1337E+006
		433.93	89.90	6.4270E+004		-7.9445E+004
		614.37	90.40	8.8227E+004		-1.6646E+004
		722.95	90.50	7.4036E+004		-1.8860E+004
	Sb-125	176.33	6.89	1.1418E+006	2.02E+005	4.4231E+005
		427.89	29.33	2.0235E+005		6.8986E+004
		463.38	10.35	6.3685E+005		4.8755E+005
		600.56	17.80	3.2328E+005		-2.4307E+005
		606.64	5.02	1.6438E+006		2.7689E+005
		635.90	11.32	5.0363E+005		3.1707E+004
	Cs-134	563.23	8.38	7.0654E+005	7.57E+004	5.7569E+005
		569.32	15.43	3.8081E+005		-3.2547E+004
		604.70	97.60	7.5740E+004		-2.1216E+004
		795.84	85.40	7.7349E+004		7.1315E+004
		801.93	8.73	7.2156E+005		1.6418E+005
	Cs-137	661.65	85.12	7.7858E+004	7.79E+004	8.3694E+004
	Eu-152	121.78	28.40	3.3627E+005	2.03E+005	-1.0104E+005
		244.69	7.49	1.0179E+006		-1.6743E+006
		344.27	26.50	2.4728E+005		-1.8626E+005
		778.89	12.74	4.8980E+005		-1.4349E+005
		867.32	4.16	1.4618E+006		7.2939E+005
		964.01	14.40	5.3359E+005		3.4326E+004
		1085.78	10.00	5.8051E+005		-2.0028E+005
		1112.02	13.30	4.6969E+005		-9.9270E+005
		1407.95	20.70	2.0293E+005		-2.1814E+005
	Eu-154	123.07	40.50	2.3508E+005	2.35E+005	-1.6066E+005
		247.94	6.60	1.1170E+006		-1.6703E+006
		591.81	4.83	1.1589E+006		-6.6631E+005
		723.30	19.70	3.4139E+005		5.9396E+004
		756.87	4.33	1.4830E+006		1.7074E+006
		873.19	11.50	4.7418E+005		-3.7173E+005
		996.32	10.30	6.3193E+005		3.1724E+005
		1004.76	17.90	3.4299E+005		5.2140E+004
		1274.45	35.50	2.6602E+005		5.6330E+005
+	Eu-155	86.54*	30.90	2.5623E+005	2.56E+005	1.4400E+005
		105.31	20.70	5.2638E+005		-1.6302E+005
	Am-241	59.54	35.90	4.7506E+005	4.75E+005	-4.1557E+005
	Cm-243	228.19	10.56	6.6678E+005	5.06E+005	1.2587E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0590E+005	5.06E+005	3.3141E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 2:15:47 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 2:00:43 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	292.51	72.98	0.81	1.56E+002	40.90	4.92E+002
m	2	285-	305	300.59	75.00	0.82	3.10E+002	52.49	5.55E+002
F	3	739-	748	743.90	186.17	0.81	3.95E+001	24.86	1.46E+002
F	4	949-	961	955.40	239.17	1.12	1.56E+002	32.79	1.61E+002
F	5	1176-	1187	1182.11	295.96	0.77	3.66E+001	19.01	8.69E+001
F	6	1347-	1359	1354.34	339.09	0.84	5.80E+001	20.25	6.98E+001
F	7	1399-	1416	1408.56	352.66	1.10	9.95E+001	23.75	8.68E+001
F	8	2037-	2053	2045.39	512.02	1.54	9.71E+001	23.61	7.40E+001
F	9	2327-	2341	2333.82	584.14	1.24	1.26E+002	24.91	4.54E+001
F	10	2431-	2448	2439.04	610.45	1.15	8.96E+001	21.86	5.53E+001
F	11	2706-	2718	2712.41	678.77	0.90	1.90E+001	11.45	1.96E+001
F	12	3640-	3656	3647.07	912.22	1.44	6.90E+001	19.76	3.96E+001
F	13	3871-	3886	3878.92	970.10	1.80	4.26E+001	16.42	3.01E+001
F	14	5093-	5111	5102.27	1275.36	1.78	9.87E+001	20.90	1.87E+001
F	15	5835-	5862	5848.84	1461.58	2.00	5.16E+002	44.00	1.36E+001
F	16	7058-	7073	7064.81	1764.91	1.50	2.78E+001	12.37	8.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.969	511.00*		100.00	1.02033E+005	2.86391E+004
K-40	0.982	1460.81*		10.67	7.52300E+006	8.84903E+005
TL-208	0.725	277.35		6.80		
		510.84*		21.60	4.72377E+005	1.38086E+005
		583.14*		84.20	1.65336E+005	3.93267E+004
		860.37		12.46		
Pb-212	0.493	74.81*	@	10.70	2.71117E+006	7.01861E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.81483E+005	7.38168E+004
Bi-214	0.680	609.31*		46.30	2.17659E+005	5.95761E+004
		1120.29		15.10		
		1764.49*		15.80	2.91685E+005	1.32972E+005
PB-214	0.555	74.82*	@	6.21	4.67141E+006	1.25597E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.64774E+005	8.99984E+004
		351.92*		37.20	2.45296E+005	7.14840E+004
Ac-228	0.968	338.32*		11.40	4.60426E+005	1.76213E+005
		911.07*		27.70	3.21119E+005	9.90570E+004
		969.11*		16.60	3.40266E+005	1.35802E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.969	6.632086E+004	2.984962E+004
K-40		0.982	7.523000E+006	8.849031E+005
TL-208		0.725	1.653356E+005	3.895588E+004
Pb-212	@	0.493	2.814833E+005	7.381682E+004
Bi-214		0.680	2.300346E+005	5.436869E+004
PB-214	@	0.555	2.141470E+005	5.597545E+004
Ac-228		0.968	3.504518E+005	7.286641E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.98	1.7374E-001	26.16
F 3	186.17	4.3926E-002	62.89
F 11	678.77	2.1145E-002	60.18
F 14	1275.36	1.0964E-001	21.18

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0076E+004	4.90E+004	2.1574E+004
	1332.49	100.00	4.9047E+004		2.8252E+004
Nb-94	702.63	100.00	6.3195E+004	6.32E+004	-4.7906E+004
	871.10	100.00	6.5825E+004		3.6892E+004
Ag-108m	79.20	7.10	2.2193E+006	7.04E+004	-4.2632E+006
	433.93	89.90	7.0353E+004		2.2232E+004
	614.37	90.40	9.0574E+004		1.5520E+004
	722.95	90.50	7.5880E+004		1.0048E+004
Sb-125	176.33	6.89	1.1967E+006	2.04E+005	-1.4944E+005
	427.89	29.33	2.0360E+005		7.5322E+003
	463.38	10.35	6.7627E+005		5.0307E+005
	600.56	17.80	3.7466E+005		-8.2194E+004
	606.64	5.02	1.6975E+006		-1.4884E+005
	635.90	11.32	5.7865E+005		4.4384E+005
Cs-134	563.23	8.38	7.5399E+005	7.92E+004	-8.3688E+004
	569.32	15.43	3.9412E+005		-3.7084E+005
	604.70	97.60	8.0492E+004		-6.9813E+003
	795.84	85.40	7.9162E+004		-1.1992E+004
	801.93	8.73	7.7631E+005		-8.8074E+005
Cs-137	661.65	85.12	7.8397E+004	7.84E+004	4.0075E+004
Eu-152	121.78	28.40	3.5604E+005	2.33E+005	2.7969E+005
	244.69	7.49	1.0243E+006		-1.7483E+005
	344.27	26.50	2.6832E+005		-1.2598E+005
	778.89	12.74	5.0874E+005		1.8226E+005
	867.32	4.16	1.5868E+006		-2.0169E+005
	964.01	14.40	5.3180E+005		-2.7094E+004
	1085.78	10.00	6.1798E+005		-8.9811E+005
	1112.02	13.30	5.2420E+005		-7.4997E+005
	1407.95	20.70	2.3309E+005		-3.1659E+004
Eu-154	123.07	40.50	2.4789E+005	2.48E+005	-9.2123E+004
	247.94	6.60	1.0688E+006		-1.2056E+006
	591.81	4.83	1.3904E+006		1.4556E+005
	723.30	19.70	3.4624E+005		-1.6766E+005
	756.87	4.33	1.5986E+006		1.0906E+006
	873.19	11.50	5.8954E+005		7.4986E+005
	996.32	10.30	6.2574E+005		2.0183E+005
	1004.76	17.90	3.4676E+005		2.0450E+005
	1274.45	35.50	2.5769E+005		4.2881E+005
Eu-155	86.54	30.90	4.4972E+005	4.50E+005	1.7776E+005
	105.31	20.70	5.3898E+005		-3.7796E+004
Am-241	59.54	35.90	4.9887E+005	4.99E+005	1.2644E+005
Cm-243	228.19	10.56	6.9536E+005	5.18E+005	3.4104E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1787E+005	5.18E+005	3.3852E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 8:49:29 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 8:34:27 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

YANKEE ROWE PORTABLE ISOCS
(BLUE ROVER SYSTEM)

PEAK ANALYSIS REPORT

Filename: BLUE6279
Log Number:
Title: TBN-01-14-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	292-	310	301.30	75.18	2.01	3.41E+002	55.20	8.96E+002
F	2	948-	965	954.27	238.89	1.76	1.34E+002	31.44	2.19E+002
F	3	1349-	1358	1352.93	338.74	0.87	3.18E+001	18.80	6.70E+001
F	4	2426-	2444	2435.96	609.68	2.26	8.46E+001	21.98	7.46E+001
F	5	5092-	5110	5099.57	1274.68	2.08	9.33E+001	20.98	2.50E+001
F	6	5831-	5861	5846.34	1460.96	2.69	4.64E+002	40.64	3.10E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	6.77485E+006	8.07589E+005
Pb-212	0.496	74.81*	@	10.70	2.97602E+006	7.56086E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.41025E+005	6.81560E+004
Bi-214	0.416	609.31*		46.30	2.05338E+005	5.91503E+004
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	6.774846E+006	8.075886E+005
Pb-212	@	0.496	2.410255E+005	6.815598E+004
Bi-214		0.416	2.053378E+005	5.915027E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	338.74	3.5373E-002	59.07
F	5	1274.68	1.0369E-001	22.48

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7289E+004	5.37E+004	2.0418E+004
	1332.49	100.00	5.3737E+004		4.2046E+004
Nb-94	702.63	100.00	6.4443E+004	6.06E+004	1.4785E+004
	871.10	100.00	6.0591E+004		8.3444E+003
Ag-108m	79.20	7.10	2.1719E+006	7.02E+004	-2.1023E+006
	433.93	89.90	7.0159E+004		-1.7803E+004
	614.37	90.40	9.5818E+004		-6.2083E+004
	722.95	90.50	7.7425E+004		4.4012E+004
Sb-125	176.33	6.89	1.1832E+006	2.14E+005	-1.4086E+006
	427.89	29.33	2.1393E+005		-1.2928E+005
	463.38	10.35	6.5026E+005		-3.0250E+005
	600.56	17.80	3.3288E+005		-1.6361E+005
	606.64	5.02	1.6574E+006		2.1296E+006
	635.90	11.32	5.5830E+005		-3.0571E+005
Cs-134	563.23	8.38	7.8395E+005	7.36E+004	-1.8658E+005
	569.32	15.43	4.1394E+005		-1.9126E+004
	604.70	97.60	7.9003E+004		-3.7357E+004
	795.84	85.40	7.3579E+004		7.2674E+004
	801.93	8.73	6.9904E+005		-2.0463E+004
Cs-137	661.65	85.12	8.6552E+004	8.66E+004	5.8027E+004
Eu-152	121.78	28.40	3.5101E+005	2.36E+005	8.6925E+004
	244.69	7.49	1.0407E+006		-7.9934E+005
	344.27	26.50	2.5725E+005		-8.9724E+004
	778.89	12.74	4.7229E+005		-1.0497E+005
	867.32	4.16	1.5325E+006		-5.2993E+005
	964.01	14.40	5.5979E+005		6.4768E+005
	1085.78	10.00	6.3935E+005		1.4211E+005
	1112.02	13.30	5.0926E+005		-1.2324E+006
	1407.95	20.70	2.3588E+005		-3.2490E+005
Eu-154	123.07	40.50	2.4296E+005	2.43E+005	3.7106E+004
	247.94	6.60	1.0719E+006		-1.1180E+006
	591.81	4.83	1.2872E+006		-2.1343E+006
	723.30	19.70	3.6154E+005		3.0208E+005
	756.87	4.33	1.5362E+006		4.4976E+005
	873.19	11.50	4.9728E+005		-3.5387E+005
	996.32	10.30	6.6193E+005		7.3801E+005
	1004.76	17.90	3.4488E+005		4.8888E+004
	1274.45	35.50	2.6075E+005		4.8105E+005
Eu-155	86.54	30.90	4.5039E+005	4.50E+005	6.4669E+005
	105.31	20.70	5.4713E+005		1.4788E+005
Am-241	59.54	35.90	4.8502E+005	4.85E+005	7.9426E+004
Cm-243	228.19	10.56	7.0877E+005	5.04E+005	1.3334E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0428E+005	5.04E+005	-5.9197E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 10:21:17 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 10:06:17 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	292.17	72.89	0.89	1.61E+002	41.64	5.13E+002
m	2	282-	306	300.45	74.97	0.90	2.98E+002	52.17	5.75E+002
F	3	330-	345	339.00	84.64	1.34	1.44E+002	44.04	5.83E+002
F	4	950-	960	955.01	239.07	0.90	1.29E+002	30.08	1.26E+002
F	5	1398-	1413	1407.47	352.39	1.11	8.69E+001	23.41	7.94E+001
F	6	2032-	2052	2043.10	511.44	2.21	1.04E+002	22.98	7.82E+001
F	7	2324-	2342	2332.53	583.82	1.41	9.49E+001	21.97	5.05E+001
F	8	2429-	2444	2437.33	610.02	1.01	7.30E+001	20.10	4.60E+001
F	9	3638-	3653	3645.68	911.88	1.19	4.94E+001	19.01	5.14E+001
F	10	3869-	3882	3876.23	969.43	1.41	3.60E+001	14.92	2.11E+001
F	11	5094-	5110	5101.31	1275.12	1.78	4.45E+001	16.06	2.07E+001
F	12	5835-	5860	5846.86	1461.09	1.95	4.67E+002	41.98	1.35E+001
F	13	7058-	7071	7064.48	1764.82	1.88	2.74E+001	11.04	3.06E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*		100.00	1.09201E+005	2.86206E+004
K-40	0.998	1460.81*		10.67	6.84870E+006	8.29012E+005
TL-208	0.741	277.35		6.80		
		510.84*		21.60	5.05561E+005	1.38786E+005
		583.14*		84.20	1.24961E+005	3.33157E+004
		860.37		12.46		
Pb-212	0.493	74.81*	@	10.70	2.56068E+006	6.72705E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.31118E+005	6.49902E+004
Bi-214	0.694	609.31*		46.30	1.77880E+005	5.37663E+004
		1120.29		15.10		
		1764.49*		15.80	2.89897E+005	1.20343E+005
Ac-228	0.611	338.32		11.40		
		911.07*		27.70	2.31125E+005	9.27620E+004
		969.11*		16.60	2.89170E+005	1.23475E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.994	8.220969E+004	2.949832E+004
K-40		0.998	6.848704E+006	8.290116E+005
TL-208		0.741	1.249607E+005	3.306584E+004
Pb-212	@	0.493	2.311183E+005	6.499022E+004
Bi-214		0.694	1.965188E+005	4.908966E+004
Ac-228		0.611	2.520663E+005	7.416461E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.89	1.7929E-001	25.81
F	3	84.64	1.6043E-001	30.50
F	5	352.39	9.6564E-002	26.94
F	11	1275.12	4.9449E-002	36.09

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.8351E+004	5.50E+004	5.6345E+004
	1332.49	100.00	5.5016E+004		2.2987E+004
Nb-94	702.63	100.00	5.9879E+004	5.99E+004	3.2148E+004
	871.10	100.00	6.2714E+004		-4.1135E+004
Ag-108m	79.20	7.10	2.1127E+006	6.31E+004	-1.3668E+006
	433.93	89.90	6.3112E+004		-1.8367E+004
	614.37	90.40	8.2191E+004		-2.0188E+004
	722.95	90.50	7.1699E+004		1.5573E+004
Sb-125	176.33	6.89	1.1763E+006	2.03E+005	3.7978E+005
	427.89	29.33	2.0331E+005		-1.7917E+005
	463.38	10.35	6.1422E+005		-1.8367E+005
	600.56	17.80	3.3553E+005		3.4657E+004
	606.64	5.02	1.5219E+006		2.3938E+006
	635.90	11.32	5.4405E+005		5.0301E+005
Cs-134	563.23	8.38	7.0583E+005	7.20E+004	-3.0469E+005
	569.32	15.43	4.1382E+005		1.9212E+005
	604.70	97.60	7.6828E+004		-1.1101E+004
	795.84	85.40	7.1997E+004		3.9734E+004
	801.93	8.73	6.6204E+005		-8.3178E+005
Cs-137	661.65	85.12	6.7740E+004	6.77E+004	-5.3361E+004
Eu-152	121.78	28.40	3.4762E+005	2.50E+005	-1.9517E+005
	244.69	7.49	9.7295E+005		-1.3051E+006
	344.27	26.50	2.5025E+005		-2.1336E+005
	778.89	12.74	4.9025E+005		1.4225E+005
	867.32	4.16	1.4621E+006		-2.9568E+006
	964.01	14.40	5.0093E+005		5.2211E+005
	1085.78	10.00	5.4725E+005		-7.2555E+005
	1112.02	13.30	4.9377E+005		-7.4441E+005
	1407.95	20.70	2.5598E+005		1.3269E+005
Eu-154	123.07	40.50	2.4282E+005	2.27E+005	2.3005E+003
	247.94	6.60	1.0627E+006		-4.7269E+005
	591.81	4.83	1.3152E+006		8.0202E+005
	723.30	19.70	3.2686E+005		-3.0765E+004
	756.87	4.33	1.4849E+006		-2.4551E+005
	873.19	11.50	5.4834E+005		4.0214E+005
	996.32	10.30	5.5931E+005		-4.4220E+004
	1004.76	17.90	3.5232E+005		7.7134E+004
	1274.45	35.50	2.2678E+005		3.6135E+005
Eu-155	86.54	30.90	4.3873E+005	4.39E+005	9.6121E+004
	105.31	20.70	5.3378E+005		-1.6560E+005
Am-241	59.54	35.90	5.0587E+005	5.06E+005	-2.0501E+005
Cm-243	228.19	10.56	7.1127E+005	5.09E+005	-5.5911E+003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0909E+005	5.09E+005	-1.2014E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 11:52:52 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 11:37:49 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	292.02	72.85	0.88	1.92E+002	41.37	4.44E+002
m	2	282-	306	300.45	74.97	0.88	2.88E+002	48.84	4.88E+002
F	3	331-	345	339.20	84.69	1.06	1.13E+002	42.36	5.71E+002
M	4	947-	971	955.17	239.11	1.10	1.36E+002	29.26	1.36E+002
m	5	947-	971	966.97	242.07	1.10	2.63E+001	18.80	1.05E+002
F	6	1175-	1205	1181.42	295.79	1.31	5.29E+001	20.67	1.97E+002
F	7	1347-	1359	1353.10	338.78	1.11	4.78E+001	19.34	6.23E+001
F	8	1404-	1413	1408.46	352.64	0.94	5.89E+001	21.34	5.97E+001
F	9	2034-	2055	2044.06	511.68	2.20	1.04E+002	21.48	5.50E+001
F	10	2324-	2342	2333.00	583.94	1.30	8.07E+001	20.51	4.56E+001
F	11	2432-	2443	2437.29	610.01	0.72	5.73E+001	17.92	3.68E+001
F	12	3637-	3656	3645.92	911.94	1.86	9.24E+001	19.66	1.73E+001
F	13	3869-	3884	3876.74	969.56	1.11	4.91E+001	17.22	3.60E+001
F	14	5093-	5107	5100.24	1274.85	0.75	3.53E+001	13.98	2.47E+001
F	15	5834-	5860	5847.19	1461.17	1.99	4.26E+002	39.70	6.52E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*		100.00	1.09515E+005	2.73212E+004
K-40	0.996	1460.81*		10.67	6.25091E+006	7.71917E+005
TL-208	0.736	277.35		6.80		
		510.84*		21.60	5.07014E+005	1.33092E+005
		583.14*		84.20	1.06366E+005	3.04536E+004
		860.37		12.46		
Pb-212	0.492	74.81*	@	10.70	2.47319E+006	6.40973E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.43410E+005	6.48884E+004
Bi-214	0.410	609.31*		46.30	1.39564E+005	4.70006E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.703	74.82*	@	6.21	4.26137E+006	1.14692E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	2.81903E+005	2.07059E+005
		295.21*		19.20	2.37153E+005	1.00920E+005
		351.92*		37.20	1.44862E+005	5.77848E+004
Ac-228	0.986	338.32*		11.40	3.77867E+005	1.64074E+005
		911.07*		27.70	4.32148E+005	1.04481E+005
		969.11*		16.60	3.94027E+005	1.44150E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	8.653996E+004	2.809198E+004
K-40		0.996	6.250911E+006	7.719171E+005
TL-208		0.736	1.063659E+005	3.025569E+004
Pb-212	@	0.492	2.434103E+005	6.488843E+004
Bi-214		0.410	1.395636E+005	4.700063E+004
PB-214	@	0.703	1.739786E+005	4.873748E+004
Ac-228		0.986	4.103764E+005	7.519062E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.85	2.1369E-001	21.51
F 3	84.69	1.2544E-001	37.52
F 14	1274.85	3.9265E-002	39.55

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2023E+004	6.20E+004	5.7604E+004
	1332.49	100.00	6.2324E+004		4.2955E+003
Nb-94	702.63	100.00	6.3284E+004	5.61E+004	6.0658E+003
	871.10	100.00	5.6125E+004		-3.1527E+004
Ag-108m	79.20	7.10	1.9962E+006	6.46E+004	-9.6069E+005
	433.93	89.90	6.4607E+004		-2.5651E+004
	614.37	90.40	8.4315E+004		-5.7493E+003
	722.95	90.50	7.0003E+004		2.4319E+004
Sb-125	176.33	6.89	1.1247E+006	2.05E+005	9.4803E+004
	427.89	29.33	2.0455E+005		1.3290E+005
	463.38	10.35	5.9453E+005		1.1038E+005
	600.56	17.80	3.4221E+005		1.4046E+005
	606.64	5.02	1.5368E+006		1.7380E+006
	635.90	11.32	4.8467E+005		-9.2169E+004
Cs-134	563.23	8.38	7.3012E+005	7.43E+004	-5.5939E+005
	569.32	15.43	3.8647E+005		6.2789E+004
	604.70	97.60	7.8753E+004		7.9161E+003
	795.84	85.40	7.4294E+004		6.5555E+004
	801.93	8.73	6.8610E+005		-1.0611E+006
Cs-137	661.65	85.12	7.4657E+004	7.47E+004	5.7174E+004
Eu-152	121.78	28.40	3.3708E+005	2.37E+005	-1.3363E+005
	244.69	7.49	9.6091E+005		-3.9804E+005
	344.27	26.50	2.3728E+005		-9.5606E+002
	778.89	12.74	4.5649E+005		-1.0299E+004
	867.32	4.16	1.4983E+006		-1.8882E+006
	964.01	14.40	5.5233E+005		-2.2291E+005
	1085.78	10.00	5.6772E+005		-4.2366E+004
	1112.02	13.30	5.0422E+005		-8.1677E+005
	1407.95	20.70	2.4279E+005		1.5193E+005
Eu-154	123.07	40.50	2.3624E+005	2.19E+005	-1.7500E+005
	247.94	6.60	1.0387E+006		-6.1952E+005
	591.81	4.83	1.2144E+006		8.1206E+004
	723.30	19.70	3.2686E+005		2.8213E+005
	756.87	4.33	1.2891E+006		8.7284E+005
	873.19	11.50	4.9419E+005		1.4637E+005
	996.32	10.30	6.1638E+005		4.1490E+005
	1004.76	17.90	3.1895E+005		2.0272E+005
	1274.45	35.50	2.1861E+005		2.0416E+005
Eu-155	86.54	30.90	4.2948E+005	4.29E+005	8.1566E+004
	105.31	20.70	5.3090E+005		9.4325E+004
Am-241	59.54	35.90	4.8583E+005	4.86E+005	3.1965E+005
Cm-243	228.19	10.56	6.4739E+005	4.84E+005	4.2534E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8380E+005	4.84E+005	-1.2187E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 1:40:40 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 1:25:39 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	292.31	72.93	0.93	1.52E+002	38.42	3.98E+002
m	2	284-	305	300.50	74.98	0.93	2.52E+002	46.28	4.43E+002
F	3	950-	961	955.33	239.15	1.10	1.22E+002	27.85	9.37E+001
F	4	1176-	1191	1181.61	295.84	1.25	5.34E+001	19.00	6.46E+001
F	5	1399-	1416	1407.18	352.32	1.34	7.77E+001	21.80	7.83E+001
F	6	2033-	2053	2043.77	511.61	2.11	1.15E+002	22.95	6.28E+001
F	7	2326-	2340	2332.81	583.89	1.20	5.13E+001	17.87	3.93E+001
F	8	2431-	2446	2437.52	610.07	1.31	6.99E+001	18.90	3.07E+001
F	9	3639-	3653	3646.37	912.05	1.38	4.95E+001	17.14	3.07E+001
F	10	4479-	4490	4484.21	1121.16	1.37	2.25E+001	11.96	1.33E+001
F	11	5835-	5860	5847.17	1461.17	1.95	4.12E+002	39.50	1.19E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.989	511.00*		100.00	1.20605E+005	2.94800E+004
K-40	0.996	1460.81*		10.67	6.05260E+006	7.59227E+005
TL-208	0.738	277.35		6.80		
		510.84*		21.60	5.58356E+005	1.43897E+005
		583.14*		84.20	6.75486E+004	2.51730E+004
		860.37		12.46		
Pb-212	0.491	74.81*	@	10.70	2.16730E+006	5.81640E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.18170E+005	6.05418E+004
Bi-214	0.700	609.31*		46.30	1.70451E+005	5.07269E+004
		1120.29*		15.10	2.12354E+005	1.14907E+005
		1764.49		15.80		
PB-214	0.560	74.82*	@	6.21	3.73432E+006	1.03820E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.39334E+005	9.42246E+004
		351.92*		37.20	1.91080E+005	6.23715E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.989	1.060144E+005	2.997347E+004
K-40		0.996	6.052602E+006	7.592274E+005
TL-208		0.738	6.754858E+004	2.507654E+004
Pb-212	@	0.491	2.181702E+005	6.054182E+004
Bi-214		0.700	1.772850E+005	4.640612E+004
PB-214	@	0.560	2.057818E+005	5.200929E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.93	1.6931E-001	25.21
F	9	912.05	5.5017E-002	34.62

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1233E+004	5.74E+004	5.4607E+004
	1332.49	100.00	5.7407E+004		-1.0422E+004
Nb-94	702.63	100.00	5.3594E+004	5.36E+004	-1.1974E+004
	871.10	100.00	5.4085E+004		-6.9523E+004
Ag-108m	79.20	7.10	1.9770E+006	6.00E+004	-1.9647E+006
	433.93	89.90	6.0002E+004		1.2740E+004
	614.37	90.40	8.2406E+004		4.2685E+003
	722.95	90.50	6.4321E+004		1.3233E+004
Sb-125	176.33	6.89	1.0276E+006	1.82E+005	-6.4395E+005
	427.89	29.33	1.8225E+005		3.7608E+004
	463.38	10.35	5.7790E+005		1.1975E+005
	600.56	17.80	3.4875E+005		1.3042E+005
	606.64	5.02	1.4842E+006		8.9767E+005
	635.90	11.32	4.9430E+005		1.6244E+005
Cs-134	563.23	8.38	7.2746E+005	6.35E+004	2.2492E+005
	569.32	15.43	3.8647E+005		2.1336E+005
	604.70	97.60	7.3843E+004		6.9141E+003
	795.84	85.40	6.3452E+004		7.8780E+004
	801.93	8.73	5.6311E+005		-1.9179E+005
Cs-137	661.65	85.12	6.1404E+004	6.14E+004	1.8337E+004
Eu-152	121.78	28.40	3.2330E+005	2.17E+005	-5.4411E+004
	244.69	7.49	8.7331E+005		-6.5294E+005
	344.27	26.50	2.2233E+005		-3.0708E+005
	778.89	12.74	4.5649E+005		8.3865E+002
	867.32	4.16	1.3312E+006		3.0528E+005
	964.01	14.40	4.7915E+005		6.2122E+005
	1085.78	10.00	6.0644E+005		-1.4643E+005
	1112.02	13.30	4.1274E+005		-1.8782E+005
	1407.95	20.70	2.1685E+005		-1.0232E+005
Eu-154	123.07	40.50	2.2543E+005	1.53E+005	6.6584E+004
	247.94	6.60	9.2889E+005		-1.1683E+006
	591.81	4.83	1.2043E+006		-8.9130E+005
	723.30	19.70	2.9409E+005		1.2268E+005
	756.87	4.33	1.1937E+006		-1.8621E+005
	873.19	11.50	4.7963E+005		4.1278E+005
	996.32	10.30	5.1881E+005		2.2059E+005
	1004.76	17.90	3.1477E+005		-2.0575E+004
	1274.45	35.50	1.5259E+005		-2.8811E+004
Eu-155	86.54	30.90	4.2227E+005	4.22E+005	2.4578E+005
	105.31	20.70	4.8082E+005		-1.0862E+004
Am-241	59.54	35.90	4.6342E+005	4.63E+005	1.2058E+005
Cm-243	228.19	10.56	5.8905E+005	4.48E+005	-1.0897E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4809E+005	4.48E+005	-1.8640E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 1:15:16 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 1:00:14 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	292.38	72.95	0.82	1.57E+002	39.56	4.35E+002
m	2	284-	306	300.46	74.97	0.82	2.97E+002	50.15	4.85E+002
M	3	330-	357	339.32	84.72	1.51	1.95E+002	42.79	5.95E+002
m	4	330-	357	349.98	87.40	1.51	7.70E+001	38.79	6.95E+002
F	5	948-	963	954.52	238.95	0.96	1.22E+002	28.23	1.45E+002
F	6	1174-	1188	1181.76	295.87	1.32	5.47E+001	21.29	9.00E+001
F	7	1403-	1412	1408.14	352.56	0.72	5.00E+001	18.96	5.29E+001
F	8	1645-	1655	1650.70	413.27	0.59	1.56E+001	11.60	3.09E+001
F	9	2033-	2054	2045.45	512.03	2.72	1.42E+002	22.66	4.17E+001
F	10	2325-	2340	2333.35	584.02	1.23	5.15E+001	18.33	4.60E+001
F	11	2430-	2444	2437.68	610.11	1.22	6.38E+001	18.55	3.15E+001
F	12	3639-	3651	3645.20	911.75	0.99	3.84E+001	14.95	2.28E+001
F	13	3870-	3881	3875.46	969.24	1.03	2.72E+001	13.24	1.84E+001
F	14	5835-	5860	5846.94	1461.11	1.95	4.11E+002	39.50	1.65E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.968	511.00*	100.00	1.49337E+005	3.17273E+004
K-40	0.997	1460.81*	10.67	6.03162E+006	7.58115E+005
Eu-155	0.330	86.54*	30.90	1.96544E+005	1.06219E+005
		105.31	20.70		
TL-208	0.729	277.35	6.80		
		510.84*	21.60	6.91373E+005	1.57364E+005
		583.14*	84.20	6.77844E+004	2.57608E+004
		860.37	12.46		
Pb-212	0.656	74.81* @	10.70	2.54634E+006	6.59160E+005
		77.11 @	18.00		
		87.30* @	8.00	7.59152E+005	4.10271E+005
		238.63*	44.60	2.19665E+005	6.12304E+004
Bi-214	0.407	609.31*	46.30	1.55548E+005	4.91855E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.649	74.82* @	6.21	4.38741E+006	1.17956E+006
		77.11 @	10.50		
		87.30* @	4.67	1.30047E+006	7.09654E+005
		241.98	7.49		
		295.21*	19.20	2.45272E+005	1.04019E+005
		351.92*	37.20	1.22974E+005	5.09365E+004
Ac-228	0.614	338.32	11.40		
		911.07*	27.70	1.79440E+005	7.28722E+004
		969.11*	16.60	2.18221E+005	1.08597E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.968	1.346951E+005	3.220803E+004
K-40		0.997	6.031616E+006	7.581148E+005
Eu-155		0.330	1.175088E+005	1.076135E+005
TL-208		0.729	6.778439E+004	2.566592E+004
Pb-212	@	0.656	2.196654E+005	6.123041E+004
Bi-214		0.407	1.555480E+005	4.918551E+004
PB-214	@	0.649	1.466530E+005	4.529042E+004
Ac-228		0.614	1.914809E+005	6.051108E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	1.7416E-001	25.24
M 3	84.72	2.1644E-001	21.97
F 8	413.27	1.7339E-002	74.31

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.3573E+004	5.69E+004	4.3908E+004
		1332.49	100.00	5.6938E+004		5.4307E+004
	Nb-94	702.63	100.00	5.3897E+004	5.39E+004	-4.3507E+003
		871.10	100.00	5.9673E+004		-6.7017E+003
	Ag-108m	79.20	7.10	2.0151E+006	5.72E+004	-9.0456E+005
		433.93	89.90	5.7196E+004		-2.2203E+004
		614.37	90.40	8.1107E+004		-7.9155E+003
		722.95	90.50	6.2089E+004		2.0941E+004
	Sb-125	176.33	6.89	1.0670E+006	1.80E+005	2.1098E+005
		427.89	29.33	1.8014E+005		8.5645E+003
		463.38	10.35	5.8904E+005		7.8140E+004
		600.56	17.80	2.9826E+005		1.2133E+005
		606.64	5.02	1.4256E+006		1.5598E+006
		635.90	11.32	4.9191E+005		-2.8318E+004
	Cs-134	563.23	8.38	6.8347E+005	7.03E+004	3.1153E+005
		569.32	15.43	3.6335E+005		9.3007E+004
		604.70	97.60	7.0725E+004		-1.6454E+004
		795.84	85.40	7.0308E+004		-5.9555E+003
		801.93	8.73	6.5144E+005		-4.1051E+004
	Cs-137	661.65	85.12	6.8996E+004	6.90E+004	5.6655E+004
	Eu-152	121.78	28.40	3.3429E+005	2.26E+005	1.1903E+004
		244.69	7.49	9.4186E+005		3.7959E+005
		344.27	26.50	2.2878E+005		-3.1493E+005
		778.89	12.74	4.3735E+005		3.9159E+005
		867.32	4.16	1.4249E+006		-1.1772E+006
		964.01	14.40	4.5627E+005		6.0289E+005
		1085.78	10.00	5.0818E+005		-3.1232E+005
		1112.02	13.30	4.7490E+005		-5.5232E+005
		1407.95	20.70	2.2586E+005		1.5502E+005
	Eu-154	123.07	40.50	2.2847E+005	1.68E+005	-9.6157E+004
		247.94	6.60	1.0223E+006		-3.7598E+005
		591.81	4.83	1.0872E+006		2.8326E+005
		723.30	19.70	2.8378E+005		8.7239E+004
		756.87	4.33	1.2750E+006		8.4593E+004
		873.19	11.50	5.2470E+005		2.7261E+005
		996.32	10.30	4.9923E+005		4.8633E+004
		1004.76	17.90	2.8604E+005		2.2207E+005
		1274.45	35.50	1.6803E+005		1.8173E+005
+	Eu-155	86.54*	30.90	3.1983E+005	3.20E+005	1.9654E+005
		105.31	20.70	5.1250E+005		1.8292E+005
	Am-241	59.54	35.90	4.7488E+005	4.75E+005	-1.8548E+005
	Cm-243	228.19	10.56	6.2988E+005	4.59E+005	-3.2256E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5884E+005	4.59E+005	1.9051E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 10:48:19 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 10:33:19 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	291.62	72.75	1.01	1.79E+002	41.69	4.49E+002
m	2	286-	308	300.34	74.94	1.02	3.68E+002	51.99	5.41E+002
M	3	333-	356	339.91	84.87	1.19	1.80E+002	43.33	5.20E+002
m	4	333-	356	350.05	87.41	1.20	6.51E+001	35.51	5.20E+002
M	5	949-	973	955.15	239.11	0.98	1.18E+002	28.00	1.17E+002
m	6	949-	973	967.81	242.28	0.98	2.65E+001	19.02	1.17E+002
F	7	1349-	1361	1353.55	338.89	1.11	5.18E+001	19.03	5.14E+001
F	8	1402-	1414	1407.80	352.47	1.11	7.61E+001	22.42	6.71E+001
F	9	2034-	2053	2043.16	511.46	2.04	9.59E+001	21.15	5.05E+001
F	10	2324-	2339	2332.68	583.86	1.66	5.78E+001	18.70	4.60E+001
F	11	2429-	2446	2437.45	610.05	1.45	1.02E+002	21.29	2.73E+001
F	12	3638-	3653	3645.60	911.86	1.29	5.50E+001	17.49	2.83E+001
F	13	5091-	5109	5100.08	1274.81	2.12	5.27E+001	16.06	1.67E+001
F	14	5834-	5858	5846.64	1461.03	1.93	4.18E+002	39.72	1.25E+001
F	15	7058-	7071	7064.50	1764.83	1.15	2.20E+001	10.98	9.44E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*		100.00	1.00954E+005	2.63738E+004
K-40	0.998	1460.81*		10.67	6.12970E+006	7.65649E+005
TL-208	0.740	277.35		6.80		
		510.84*		21.60	4.67379E+005	1.27928E+005
		583.14*		84.20	7.60758E+004	2.66057E+004
		860.37		12.46		
Pb-212	0.654	74.81*	@	10.70	3.16145E+006	7.63799E+005
		77.11	@	18.00		
		87.30*	@	8.00	6.41767E+005	3.71886E+005
		238.63*		44.60	2.12341E+005	6.02611E+004
Bi-214	0.694	609.31*		46.30	2.48578E+005	6.04052E+004
		1120.29		15.10		
		1764.49*		15.80	2.32585E+005	1.18445E+005
PB-214	0.435	74.82*	@	6.21	5.44727E+006	1.37417E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.09939E+006	6.42454E+005
		241.98*		7.49	2.84677E+005	2.09483E+005
		295.21		19.20		
		351.92*		37.20	1.86977E+005	6.33678E+004
Ac-228	0.535	338.32*		11.40	4.09853E+005	1.63762E+005
		911.07*		27.70	2.57167E+005	8.69485E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		0.994	8.452141E+004	2.698732E+004
	K-40		0.998	6.129704E+006	7.656494E+005
X	Eu-155		0.329		
	TL-208		0.740	7.607575E+004	2.648997E+004
	Pb-212	@	0.654	2.123408E+005	6.026108E+004
	Bi-214		0.694	2.452767E+005	5.381142E+004
	PB-214	@	0.435	1.951673E+005	6.065348E+004
	Ac-228		0.535	2.907440E+005	7.679532E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	1.9896E-001	23.28
M 3	84.87	1.9997E-001	24.07
F 13	1274.81	5.8540E-002	30.49

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6557E+004	4.82E+004	3.5629E+004
	1332.49	100.00	4.8195E+004		-5.6463E+004
Nb-94	702.63	100.00	5.7677E+004	5.51E+004	-4.7282E+004
	871.10	100.00	5.5115E+004		-9.3944E+003
Ag-108m	79.20	7.10	2.0653E+006	6.29E+004	-8.5844E+005
	433.93	89.90	6.2895E+004		-3.3222E+004
	614.37	90.40	8.1975E+004		-1.4369E+004
	722.95	90.50	6.3692E+004		-2.0212E+004
Sb-125	176.33	6.89	1.1051E+006	1.91E+005	-2.2777E+005
	427.89	29.33	1.9110E+005		-4.0078E+004
	463.38	10.35	6.0714E+005		-4.0111E+005
	600.56	17.80	3.3418E+005		1.3416E+005
	606.64	5.02	1.5588E+006		1.8699E+006
	635.90	11.32	5.1068E+005		4.7879E+005
Cs-134	563.23	8.38	6.7776E+005	6.23E+004	2.0937E+005
	569.32	15.43	3.6176E+005		-6.3532E+004
	604.70	97.60	7.7797E+004		2.3996E+003
	795.84	85.40	6.2296E+004		-1.3666E+003
	801.93	8.73	6.0322E+005		-1.3896E+005
Cs-137	661.65	85.12	7.4371E+004	7.44E+004	5.6066E+004
Eu-152	121.78	28.40	3.3409E+005	2.43E+005	-1.7271E+005
	244.69	7.49	1.0043E+006		4.1988E+005
	344.27	26.50	2.4385E+005		6.8186E+004
	778.89	12.74	4.6575E+005		1.1593E+005
	867.32	4.16	1.4021E+006		-8.5422E+005
	964.01	14.40	4.9116E+005		4.3630E+005
	1085.78	10.00	6.1016E+005		-4.4691E+005
	1112.02	13.30	4.1593E+005		-8.2981E+005
	1407.95	20.70	2.4279E+005		9.3388E+004
Eu-154	123.07	40.50	2.3345E+005	2.16E+005	1.4765E+005
	247.94	6.60	1.0500E+006		3.1548E+005
	591.81	4.83	1.2043E+006		1.5405E+005
	723.30	19.70	2.9553E+005		-4.0147E+004
	756.87	4.33	1.3375E+006		3.0608E+004
	873.19	11.50	4.7963E+005		2.8260E+004
	996.32	10.30	4.8295E+005		2.0470E+005
	1004.76	17.90	2.7655E+005		-1.8242E+005
	1274.45	35.50	2.1582E+005		1.8593E+005
Eu-155	86.54*	30.90	2.7767E+005	2.78E+005	1.6615E+005
	105.31	20.70	5.2218E+005		-1.1087E+005
Am-241	59.54	35.90	4.8536E+005	4.85E+005	-1.9953E+004
Cm-243	228.19	10.56	6.8010E+005	4.82E+005	1.8670E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8213E+005	4.82E+005	2.0086E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 8:55:37 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 8:40:35 AM
Live Time: 900.0 seconds
Real Time: 900.7 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	316	291.82	72.80	0.95	1.89E+002	42.83	5.29E+002
m	2	285-	316	300.85	75.07	0.95	3.70E+002	51.58	5.26E+002
m	3	285-	316	310.60	77.52	0.96	1.03E+002	38.35	5.24E+002
F	4	330-	344	338.95	84.63	0.95	1.32E+002	44.67	6.53E+002
F	5	949-	962	954.78	239.01	0.89	1.27E+002	30.37	1.78E+002
F	6	1175-	1187	1181.19	295.73	0.95	5.62E+001	21.99	9.34E+001
F	7	1404-	1413	1408.59	352.67	1.03	6.15E+001	23.53	8.05E+001
F	8	2327-	2342	2333.16	583.98	1.47	1.07E+002	23.13	3.87E+001
F	9	2431-	2448	2436.89	609.91	1.28	8.65E+001	22.03	4.92E+001
F	10	3638-	3655	3645.45	911.82	1.71	6.94E+001	18.24	2.31E+001
F	11	3870-	3881	3875.33	969.21	0.67	3.32E+001	14.22	3.16E+001
F	12	5093-	5108	5100.15	1274.83	1.73	6.29E+001	17.48	1.54E+001
F	13	5834-	5858	5846.81	1461.08	1.78	4.89E+002	43.51	2.19E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	7.18490E+006	8.63889E+005
TL-208	0.456	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.41050E+005	3.57217E+004
		860.37	12.46		
Pb-212	0.834	74.81* @	10.70	3.17252E+006	7.63091E+005
		77.11* @	18.00	5.08214E+005	2.13926E+005
		87.30 @	8.00		
		238.63*	44.60	2.27785E+005	6.51365E+004
Bi-214	0.412	609.31*	46.30	2.10805E+005	5.97547E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.750	74.82* @	6.21	5.46634E+006	1.37340E+006
		77.11* @	10.50	8.71224E+005	3.72456E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.51946E+005	1.07328E+005
		351.92*	37.20	1.51155E+005	6.31246E+004
Ac-228	0.613	338.32	11.40		
		911.07*	27.70	3.24355E+005	9.30909E+004
		969.11*	16.60	2.66144E+005	1.17414E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.998	7.184895E+006	8.638893E+005
TL-208		0.456	1.410503E+005	3.572170E+004
Pb-212	@	0.834	2.277854E+005	6.513646E+004
Bi-214		0.412	2.108050E+005	5.975472E+004
PB-214	@	0.750	1.770594E+005	5.441131E+004
Ac-228		0.613	3.018872E+005	7.294578E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	2.0987E-001	22.68
F 4	84.63	1.4613E-001	33.96
F 12	1274.83	6.9848E-002	27.81

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6557E+004	5.69E+004	-4.1435E+003
	1332.49	100.00	5.6938E+004		1.3379E+004
Nb-94	702.63	100.00	6.5778E+004	6.12E+004	-2.2426E+004
	871.10	100.00	6.1214E+004		-1.8671E+003
Ag-108m	79.20	7.10	2.2029E+006	7.16E+004	-5.6290E+003
	433.93	89.90	7.1599E+004		1.8660E+004
	614.37	90.40	9.1924E+004		-4.3164E+004
	722.95	90.50	7.7843E+004		-3.8674E+004
Sb-125	176.33	6.89	1.2128E+006	2.21E+005	2.5353E+005
	427.89	29.33	2.2060E+005		3.9284E+004
	463.38	10.35	6.6645E+005		-9.8169E+005
	600.56	17.80	3.6765E+005		1.2790E+004
	606.64	5.02	1.7044E+006		-8.4750E+005
	635.90	11.32	5.6515E+005		-5.9437E+005
Cs-134	563.23	8.38	7.7632E+005	7.78E+004	-1.2925E+005
	569.32	15.43	4.3413E+005		-1.4577E+005
	604.70	97.60	8.5135E+004		-1.8474E+004
	795.84	85.40	7.7760E+004		7.6059E+003
	801.93	8.73	7.3172E+005		-7.9862E+005
Cs-137	661.65	85.12	7.8826E+004	7.88E+004	2.9443E+004
Eu-152	121.78	28.40	3.7103E+005	2.26E+005	-2.7502E+004
	244.69	7.49	1.1300E+006		3.6269E+005
	344.27	26.50	2.7045E+005		-2.6859E+005
	778.89	12.74	5.1968E+005		-3.0548E+005
	867.32	4.16	1.5544E+006		-1.0941E+006
	964.01	14.40	5.5408E+005		3.1726E+005
	1085.78	10.00	6.6001E+005		-9.9343E+004
	1112.02	13.30	5.3428E+005		-4.0966E+005
	1407.95	20.70	2.2586E+005		1.1457E+005
Eu-154	123.07	40.50	2.5802E+005	2.33E+005	5.3169E+004
	247.94	6.60	1.1739E+006		-1.1906E+006
	591.81	4.83	1.3152E+006		1.0016E+004
	723.30	19.70	3.6465E+005		-9.8502E+004
	756.87	4.33	1.4542E+006		8.6596E+005
	873.19	11.50	5.1657E+005		-5.3682E+004
	996.32	10.30	5.7328E+005		-1.8283E+005
	1004.76	17.90	3.5418E+005		-6.9326E+004
	1274.45	35.50	2.3292E+005		4.6228E+005
Eu-155	86.54	30.90	4.6176E+005	4.62E+005	7.7604E+003
	105.31	20.70	5.6784E+005		4.6156E+004
Am-241	59.54	35.90	5.0361E+005	5.04E+005	-1.7098E+005
Cm-243	228.19	10.56	7.8088E+005	5.46E+005	4.8471E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.4588E+005	5.46E+005	1.2854E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 8:28:00 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 8:12:58 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.93	72.83	0.98	1.40E+002	38.06	4.27E+002
m	2	283-	306	300.39	74.95	0.99	2.53E+002	47.35	5.30E+002
F	3	333-	345	339.92	84.87	0.78	8.42E+001	37.69	4.63E+002
F	4	367-	376	371.55	92.81	0.71	4.23E+001	31.06	2.88E+002
F	5	946-	964	954.77	239.01	1.27	1.03E+002	27.61	1.82E+002
F	6	1221-	1230	1225.95	306.94	0.65	1.99E+001	13.14	3.66E+001
F	7	1402-	1412	1407.63	352.43	0.93	2.91E+001	17.68	5.79E+001
F	8	2327-	2340	2333.06	583.95	1.09	6.10E+001	18.42	3.28E+001
F	9	2431-	2445	2437.66	610.10	1.35	6.80E+001	19.13	3.35E+001
F	10	3639-	3654	3646.51	912.08	1.53	4.93E+001	16.83	2.68E+001
F	11	5093-	5106	5099.77	1274.73	0.80	2.49E+001	12.50	2.46E+001
F	12	5832-	5859	5846.23	1460.93	2.08	3.62E+002	36.73	1.05E+001
F	13	7056-	7069	7062.38	1764.30	1.14	2.03E+001	9.95	5.01E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	1.000	1460.81*	10.67	5.30847E+006	6.89560E+005
TL-208	0.457	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	8.03429E+004	2.64886E+004
		860.37	12.46		
Pb-212	0.494	74.81* @	10.70	2.17554E+006	5.89247E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.84105E+005	5.73118E+004
Bi-214	0.693	609.31*	46.30	1.65747E+005	5.09829E+004
		1120.29	15.10		
		1764.49*	15.80	2.14587E+005	1.07430E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		1.000	5.308475E+006	6.895603E+005
TL-208		0.457	8.034295E+004	2.648864E+004
Pb-212	@	0.494	1.841048E+005	5.731183E+004
Bi-214		0.693	1.747251E+005	4.605941E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.83	1.5544E-001	27.21
F	3	84.87	9.3534E-002	44.78
F	4	92.81	4.6959E-002	73.49
F	6	306.94	2.2058E-002	66.17
F	7	352.43	3.2386E-002	60.67
F	10	912.08	5.4769E-002	34.14
F	11	1274.73	2.7647E-002	50.24

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0026E+004	5.20E+004	5.0544E+004
	1332.49	100.00	5.1989E+004		2.3800E+004
Nb-94	702.63	100.00	5.9608E+004	4.82E+004	4.7596E+003
	871.10	100.00	4.8193E+004		4.3019E+002
Ag-108m	79.20	7.10	1.9090E+006	6.24E+004	-2.5377E+006
	433.93	89.90	6.2677E+004		-1.1202E+004
	614.37	90.40	8.1542E+004		-3.7894E+003
	722.95	90.50	6.2413E+004		-7.4097E+003
Sb-125	176.33	6.89	1.0556E+006	1.87E+005	5.9223E+005
	427.89	29.33	1.8707E+005		7.8214E+003
	463.38	10.35	5.4703E+005		-4.6172E+004
	600.56	17.80	3.0729E+005		1.4670E+005
	606.64	5.02	1.4335E+006		7.5574E+005
	635.90	11.32	5.2653E+005		4.7832E+005
Cs-134	563.23	8.38	6.4540E+005	6.07E+004	-6.4462E+004
	569.32	15.43	3.6176E+005		7.8895E+004
	604.70	97.60	7.1149E+004		-7.5300E+003
	795.84	85.40	6.0718E+004		-8.6766E+004
	801.93	8.73	6.2967E+005		4.9724E+004
Cs-137	661.65	85.12	6.3137E+004	6.31E+004	-1.4690E+004
Eu-152	121.78	28.40	3.1745E+005	1.97E+005	-2.5920E+005
	244.69	7.49	9.1111E+005		7.9384E+004
	344.27	26.50	2.2762E+005		-2.1565E+005
	778.89	12.74	3.8786E+005		-4.9374E+005
	867.32	4.16	1.1569E+006		-6.8920E+005
	964.01	14.40	4.6052E+005		3.2904E+005
	1085.78	10.00	5.0364E+005		-4.0467E+004
	1112.02	13.30	4.3754E+005		-3.7883E+005
	1407.95	20.70	1.9746E+005		3.6062E+004
Eu-154	123.07	40.50	2.2234E+005	2.03E+005	-1.5261E+005
	247.94	6.60	1.0040E+006		-1.1894E+006
	591.81	4.83	1.0701E+006		6.0170E+005
	723.30	19.70	2.9118E+005		2.4796E+004
	756.87	4.33	1.3170E+006		4.6388E+005
	873.19	11.50	4.3282E+005		-3.4646E+005
	996.32	10.30	5.2263E+005		-2.5739E+005
	1004.76	17.90	3.0188E+005		1.8063E+005
	1274.45	35.50	2.0324E+005		1.9719E+005
Eu-155	86.54	30.90	4.1158E+005	4.12E+005	3.7664E+005
	105.31	20.70	4.8486E+005		1.4890E+005
Am-241	59.54	35.90	4.2851E+005	4.29E+005	-3.9247E+004
Cm-243	228.19	10.56	6.4451E+005	4.40E+005	5.5049E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.3985E+005	4.40E+005	-5.3590E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 7:57:59 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 7:42:57 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	307	291.82	72.81	0.87	1.48E+002	38.74	4.32E+002
m	2	286-	307	300.28	74.93	0.87	2.67E+002	47.73	4.75E+002
	3	332-	346	339.85	84.85	1.01	7.92E+001	77.09	5.09E+002
F	4	948-	963	955.39	239.17	1.02	1.22E+002	27.84	1.34E+002
F	5	1401-	1418	1407.71	352.45	1.61	9.07E+001	21.97	5.97E+001
F	6	2326-	2340	2332.60	583.84	1.02	5.53E+001	17.83	3.77E+001
F	7	2430-	2444	2437.11	609.96	1.23	3.74E+001	16.62	4.05E+001
F	8	3638-	3653	3645.46	911.82	1.76	5.37E+001	15.95	1.53E+001
M	9	3853-	3883	3858.55	965.02	0.54	1.30E+001	8.29	8.75E+000
m	10	3853-	3883	3878.60	970.02	0.55	1.95E+001	10.02	8.75E+000
F	11	5094-	5108	5100.39	1274.89	1.44	4.03E+001	15.11	1.67E+001
F	12	5833-	5858	5846.61	1461.03	1.96	3.76E+002	37.40	6.68E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	5.51809E+006	7.07890E+005
TL-208	0.461	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	7.28485E+004	2.53800E+004
		860.37	12.46		
Pb-212	0.491	74.81* @	10.70	2.29186E+006	6.08216E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.19102E+005	6.06155E+004
Bi-214	0.411	609.31*	46.30	9.11387E+004	4.20611E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.605	338.32	11.40		
		911.07*	27.70	2.51254E+005	7.99905E+004
		969.11*	16.60	1.56101E+005	8.20341E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	5.518087E+006	7.078900E+005
TL-208		0.461	7.284850E+004	2.537997E+004
Pb-212	@	0.491	2.191025E+005	6.061551E+004
Bi-214		0.411	9.113869E+004	4.206115E+004
Ac-228		0.605	2.048776E+005	5.727068E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.6457E-001	26.15
3	84.85	8.8011E-002	97.33
F 5	352.45	1.0078E-001	24.22
M 9	965.02	1.4479E-002	63.58
F 11	1274.89	4.4826E-002	37.46

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.9207E+004	4.93E+004	5.7334E+004
	1332.49	100.00	4.9312E+004		6.8559E+003
Nb-94	702.63	100.00	4.8479E+004	4.85E+004	-1.8124E+004
	871.10	100.00	5.3034E+004		-3.3233E+004
Ag-108m	79.20	7.10	1.9737E+006	6.08E+004	1.4020E+006
	433.93	89.90	6.4396E+004		2.7051E+003
	614.37	90.40	7.4494E+004		3.0080E+002
	722.95	90.50	6.0774E+004		-1.1173E+003
Sb-125	176.33	6.89	1.0287E+006	2.00E+005	-1.4838E+005
	427.89	29.33	2.0017E+005		-3.9218E+004
	463.38	10.35	5.7414E+005		3.1334E+005
	600.56	17.80	3.2032E+005		-7.5586E+004
	606.64	5.02	1.3643E+006		4.5739E+005
	635.90	11.32	4.7978E+005		2.0074E+005
Cs-134	563.23	8.38	6.6910E+005	6.38E+004	1.7333E+005
	569.32	15.43	3.6494E+005		1.9749E+003
	604.70	97.60	6.9654E+004		3.6011E+004
	795.84	85.40	6.3832E+004		2.2437E+004
	801.93	8.73	6.1848E+005		-6.7594E+005
Cs-137	661.65	85.12	6.3477E+004	6.35E+004	-4.5519E+002
Eu-152	121.78	28.40	3.2310E+005	2.17E+005	3.2705E+004
	244.69	7.49	9.5415E+005		1.5906E+005
	344.27	26.50	2.1993E+005		-2.6438E+005
	778.89	12.74	4.2239E+005		2.6768E+005
	867.32	4.16	1.3552E+006		5.9626E+005
	964.01	14.40	4.7508E+005		1.2564E+005
	1085.78	10.00	5.0364E+005		1.3665E+005
	1112.02	13.30	4.3754E+005		-4.7310E+005
	1407.95	20.70	2.1685E+005		1.2747E+005
Eu-154	123.07	40.50	2.2440E+005	2.10E+005	3.8591E+004
	247.94	6.60	1.0256E+006		-7.9327E+005
	591.81	4.83	1.1313E+006		-1.8365E+005
	723.30	19.70	2.7923E+005		-1.0915E+005
	756.87	4.33	1.2606E+006		6.1114E+005
	873.19	11.50	4.7368E+005		1.1362E+005
	996.32	10.30	5.0716E+005		-2.5524E+005
	1004.76	17.90	3.2307E+005		2.6886E+005
	1274.45	35.50	2.1011E+005		1.6006E+005
Eu-155	86.54	30.90	4.0459E+005	4.05E+005	6.7783E+005
	105.31	20.70	4.9594E+005		3.1749E+004
Am-241	59.54	35.90	4.5995E+005	4.60E+005	-3.1526E+005
Cm-243	228.19	10.56	6.4258E+005	4.49E+005	-1.3046E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4899E+005	4.49E+005	9.5737E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/2/2005 7:19:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/2/2005 7:04:49 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	292.06	72.87	0.91	1.73E+002	41.19	4.67E+002
m	2	282-	308	300.41	74.96	0.91	2.87E+002	50.00	5.16E+002
M	3	332-	356	340.03	84.90	0.90	1.08E+002	38.51	4.35E+002
m	4	332-	356	350.30	87.47	0.90	8.15E+001	36.02	4.27E+002
M	5	948-	971	954.45	238.93	1.02	1.52E+002	30.73	1.29E+002
m	6	948-	971	966.91	242.05	1.02	3.79E+001	20.20	1.06E+002
M	7	1379-	1414	1383.17	346.31	0.97	2.64E+001	14.92	3.93E+001
m	8	1379-	1414	1407.10	352.30	0.98	5.44E+001	20.77	7.30E+001
F	9	2035-	2052	2043.68	511.59	1.76	7.70E+001	21.26	6.77E+001
F	10	2325-	2342	2332.85	583.90	1.45	1.07E+002	22.63	4.34E+001
F	11	2428-	2445	2436.98	609.93	1.52	6.80E+001	20.15	5.40E+001
F	12	3439-	3450	3445.11	861.80	0.80	1.58E+001	11.13	2.23E+001
F	13	3639-	3653	3645.76	911.90	1.42	5.27E+001	17.90	3.23E+001
F	14	3870-	3884	3877.02	969.63	1.26	3.68E+001	15.68	3.09E+001
F	15	4476-	4489	4483.15	1120.90	1.18	3.82E+001	14.04	1.40E+001
F	16	5094-	5108	5100.83	1275.00	1.20	4.10E+001	15.11	2.04E+001
F	17	5834-	5859	5845.97	1460.87	1.98	4.89E+002	42.91	1.60E+001
F	18	7056-	7069	7062.04	1764.22	1.03	2.24E+001	10.68	8.52E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.990	511.00*		100.00	8.09874E+004	2.50912E+004
K-40	1.000	1460.81*		10.67	7.17912E+006	8.57085E+005
Eu-155	0.327	86.54*		30.90	2.07685E+005	1.00458E+005
		105.31		20.70		
TL-208	0.880	277.35		6.80		
		510.84*		21.60	3.74942E+005	1.20131E+005
		583.14*		84.20	1.41120E+005	3.51682E+004
		860.37*		12.46	1.60999E+005	1.15069E+005
Pb-212	0.656	74.81*	@	10.70	2.46134E+006	6.45856E+005
		77.11	@	18.00		
		87.30*	@	8.00	8.02183E+005	3.88018E+005
		238.63*		44.60	2.72130E+005	6.96919E+004
Bi-214	0.990	609.31*		46.30	1.65722E+005	5.32569E+004
		1120.29*		15.10	3.59872E+005	1.37587E+005
		1764.49*		15.80	2.37295E+005	1.15451E+005
PB-214	0.438	74.82*	@	6.21	4.24096E+006	1.15463E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.37419E+006	6.72757E+005
		241.98*		7.49	4.06218E+005	2.26979E+005
		295.21		19.20		
		351.92*		37.20	1.33814E+005	5.57432E+004
Ac-228	0.609	338.32		11.40		
		911.07*		27.70	2.46296E+005	8.83795E+004
		969.11*		16.60	2.95451E+005	1.29515E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.990	5.014370E+004	2.610567E+004
K-40		1.000	7.179118E+006	8.570845E+005
Eu-155		0.327	1.146867E+005	1.023865E+005
TL-208		0.880	1.427950E+005	3.336503E+004
Pb-212	@	0.656	2.721296E+005	6.969188E+004
Bi-214		0.990	1.982469E+005	4.562344E+004
PB-214	@	0.438	1.491664E+005	5.362297E+004
Ac-228		0.609	2.619133E+005	7.300219E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	1.9260E-001	23.76
M 3	84.90	1.1985E-001	35.70
M 7	346.31	2.9284E-002	56.61
F 16	1275.00	4.5587E-002	36.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.7281E+004	5.79E+004	8.7774E+004
		1332.49	100.00	5.7873E+004		1.0981E+004
	Nb-94	702.63	100.00	5.8513E+004	5.65E+004	-3.0009E+004
		871.10	100.00	5.6457E+004		-3.5985E+004
	Ag-108m	79.20	7.10	2.0565E+006	6.81E+004	-1.3971E+006
		433.93	89.90	6.8097E+004		-1.5134E+002
		614.37	90.40	8.5770E+004		2.2977E+003
		722.95	90.50	7.2807E+004		7.1002E+003
	Sb-125	176.33	6.89	1.1193E+006	2.11E+005	2.6717E+005
		427.89	29.33	2.1065E+005		1.4595E+004
		463.38	10.35	6.3497E+005		2.6674E+005
		600.56	17.80	3.5517E+005		2.3522E+005
		606.64	5.02	1.5624E+006		1.9412E+006
		635.90	11.32	5.2876E+005		5.5116E+005
	Cs-134	563.23	8.38	7.0857E+005	6.38E+004	1.1456E+005
		569.32	15.43	3.7587E+005		2.0122E+004
		604.70	97.60	7.7023E+004		3.9583E+004
		795.84	85.40	6.3832E+004		-2.2176E+004
		801.93	8.73	6.5853E+005		2.5048E+005
	Cs-137	661.65	85.12	7.3504E+004	7.35E+004	8.5333E+003
	Eu-152	121.78	28.40	3.5106E+005	2.11E+005	-1.1087E+004
		244.69	7.49	1.0158E+006		-4.2038E+005
		344.27	26.50	2.5546E+005		-9.1867E+004
		778.89	12.74	4.3490E+005		-1.6444E+005
		867.32	4.16	1.4911E+006		-5.0495E+005
		964.01	14.40	5.4883E+005		5.8269E+004
		1085.78	10.00	6.2484E+005		-1.9739E+005
		1112.02	13.30	4.7214E+005		-4.4474E+005
		1407.95	20.70	2.1061E+005		-2.5233E+005
	Eu-154	123.07	40.50	2.4698E+005	2.20E+005	-1.0616E+004
		247.94	6.60	1.0769E+006		-1.2065E+006
		591.81	4.83	1.2778E+006		5.8511E+005
		723.30	19.70	3.3953E+005		2.6946E+005
		756.87	4.33	1.3375E+006		-6.1284E+005
		873.19	11.50	4.8258E+005		-2.8005E+005
		996.32	10.30	6.0996E+005		2.3704E+005
		1004.76	17.90	3.2713E+005		1.1398E+005
		1274.45	35.50	2.1953E+005		1.4302E+005
+	Eu-155	86.54*	30.90	2.5212E+005	2.52E+005	2.0768E+005
		105.31	20.70	5.3611E+005		3.6257E+005
	Am-241	59.54	35.90	4.7896E+005	4.79E+005	-2.0335E+005
	Cm-243	228.19	10.56	6.9185E+005	4.97E+005	-1.3117E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9702E+005	4.97E+005	-9.7242E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 3:58:24 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 3:43:24 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	291.75	72.79	0.79	1.44E+002	39.46	4.25E+002
m	2	287-	305	300.48	74.98	0.79	2.95E+002	50.82	5.17E+002
F	3	439-	449	442.50	110.60	0.90	5.31E+001	31.31	2.68E+002
M	4	947-	974	955.33	239.15	0.98	1.39E+002	29.70	1.26E+002
m	5	947-	974	965.68	241.74	0.99	3.46E+001	19.42	1.12E+002
F	6	1174-	1191	1182.12	295.96	1.60	6.72E+001	21.60	9.61E+001
F	7	1350-	1359	1354.66	339.17	0.36	3.99E+001	6.29	6.22E+001
F	8	1399-	1417	1407.81	352.48	1.29	8.30E+001	22.29	8.35E+001
F	9	2031-	2054	2042.04	511.18	2.47	1.14E+002	22.80	7.84E+001
F	10	2325-	2341	2333.10	583.96	1.35	7.47E+001	21.43	6.20E+001
F	11	2431-	2445	2438.04	610.20	1.12	8.22E+001	21.92	5.28E+001
F	12	3639-	3654	3646.46	912.07	1.37	6.10E+001	21.00	5.98E+001
F	13	3869-	3884	3876.49	969.49	1.14	4.27E+001	16.85	3.75E+001
F	14	4476-	4488	4481.62	1120.51	1.35	3.76E+001	15.36	2.31E+001
F	15	5090-	5114	5102.12	1275.32	1.88	2.13E+002	29.50	3.10E+001
F	16	5631-	5644	5636.24	1408.55	0.51	9.16E+000	3.74	5.07E+000
F	17	5836-	5862	5848.30	1461.45	1.95	4.58E+002	41.60	1.23E+001
F	18	7058-	7071	7064.42	1764.81	1.74	3.67E+001	12.45	1.87E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.20182E+005	2.93132E+004
K-40	0.988	1460.81*		10.67	6.71734E+006	8.17841E+005
TL-208	0.738	277.35		6.80		
		510.84*		21.60	5.56397E+005	1.43114E+005
		583.14*		84.20	9.84050E+004	3.10765E+004
		860.37		12.46		
Pb-212	0.492	74.81*	@	10.70	2.53604E+006	6.61369E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.50164E+005	6.61619E+004
Bi-214	0.985	609.31*		46.30	2.00336E+005	5.89549E+004
		1120.29*		15.10	3.53826E+005	1.49432E+005
		1764.49*		15.80	3.87923E+005	1.37377E+005
PB-214	0.704	74.82*	@	6.21	4.36967E+006	1.18288E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	3.70952E+005	2.17127E+005
		295.21*		19.20	3.01251E+005	1.09330E+005
		351.92*		37.20	2.04105E+005	6.45509E+004
Ac-228	0.979	338.32*		11.40	3.15933E+005	7.02576E+004
		911.07*		27.70	2.85429E+005	1.03540E+005
		969.11*		16.60	3.42481E+005	1.39881E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	9.892622E+004	3.006398E+004
K-40		0.988	6.717344E+006	8.178410E+005
TL-208		0.738	9.840503E+004	3.091060E+004
Pb-212	@	0.492	2.501642E+005	6.616188E+004
Bi-214		0.985	2.439523E+005	5.093274E+004
PB-214	@	0.704	2.379340E+005	5.384882E+004
Ac-228		0.979	3.116428E+005	5.368489E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.79	1.6044E-001	27.32
F	3	110.60	5.8982E-002	58.99
F	15	1275.32	2.3670E-001	13.85
F	16	1408.55	1.0175E-002	40.82

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.5083E+004	5.55E+004	4.1332E+004
	1332.49	100.00	5.5503E+004		3.0068E+004
Nb-94	702.63	100.00	6.4792E+004	6.48E+004	-1.8862E+004
	871.10	100.00	6.6449E+004		-4.2430E+004
Ag-108m	79.20	7.10	2.0796E+006	6.83E+004	-4.2146E+006
	433.93	89.90	6.8297E+004		-4.3098E+004
	614.37	90.40	9.0182E+004		1.2119E+004
	722.95	90.50	7.7843E+004		3.0897E+004
Sb-125	176.33	6.89	1.1471E+006	2.12E+005	-4.9527E+005
	427.89	29.33	2.1244E+005		-9.9456E+003
	463.38	10.35	6.5008E+005		1.3457E+005
	600.56	17.80	3.2733E+005		-2.4430E+005
	606.64	5.02	1.6298E+006		2.5961E+006
	635.90	11.32	5.5259E+005		-2.3671E+005
Cs-134	563.23	8.38	7.7133E+005	7.40E+004	9.8765E+004
	569.32	15.43	4.0822E+005		-2.1816E+005
	604.70	97.60	7.8372E+004		-1.1277E+004
	795.84	85.40	7.3971E+004		9.9869E+003
	801.93	8.73	7.8337E+005		4.4872E+005
Cs-137	661.65	85.12	7.6074E+004	7.61E+004	2.3652E+004
Eu-152	121.78	28.40	3.3747E+005	2.32E+005	-3.3333E+005
	244.69	7.49	1.0247E+006		1.5662E+005
	344.27	26.50	2.5700E+005		1.2139E+005
	778.89	12.74	5.0938E+005		1.4237E+005
	867.32	4.16	1.6150E+006		-2.0418E+006
	964.01	14.40	5.5582E+005		-1.5961E+005
	1085.78	10.00	7.0933E+005		5.1700E+005
	1112.02	13.30	5.2446E+005		-2.7713E+005
	1407.95	20.70	2.3166E+005		-2.4271E+005
Eu-154	123.07	40.50	2.3818E+005	2.38E+005	8.1487E+004
	247.94	6.60	1.0877E+006		-6.5127E+005
	591.81	4.83	1.3152E+006		5.4254E+005
	723.30	19.70	3.6000E+005		1.9080E+005
	756.87	4.33	1.4101E+006		1.0594E+006
	873.19	11.50	5.6351E+005		-2.4729E+005
	996.32	10.30	6.5649E+005		4.9412E+005
	1004.76	17.90	3.8092E+005		-1.0417E+005
	1274.45	35.50	3.4827E+005		9.7940E+005
Eu-155	86.54	30.90	4.4255E+005	4.43E+005	2.6763E+005
	105.31	20.70	5.2351E+005		3.8536E+005
Am-241	59.54	35.90	4.6662E+005	4.67E+005	-2.1290E+005
Cm-243	228.19	10.56	6.9720E+005	5.12E+005	3.1715E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1226E+005	5.12E+005	4.5418E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 3:34:43 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 3:19:43 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-128-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	306	301.19	75.16	0.86	2.09E+002	51.65	6.29E+002
F	2	333-	345	339.78	84.84	1.08	1.52E+002	44.56	5.07E+002
F	3	947-	960	955.11	239.10	1.14	1.37E+002	30.84	1.51E+002
F	4	1401-	1416	1407.65	352.44	1.38	7.47E+001	22.09	8.08E+001
F	5	2033-	2054	2043.66	511.58	2.00	1.16E+002	23.19	6.60E+001
F	6	2324-	2342	2333.35	584.03	1.72	7.70E+001	20.58	5.49E+001
F	7	2431-	2446	2437.91	610.16	1.31	7.99E+001	21.14	4.68E+001
F	8	3639-	3652	3646.56	912.10	1.22	4.28E+001	17.38	3.67E+001
F	9	3873-	3885	3878.83	970.08	0.86	2.69E+001	13.49	2.77E+001
F	10	5088-	5114	5101.20	1275.09	1.99	2.68E+002	31.86	1.32E+001
F	11	5509-	5522	5516.00	1378.56	0.98	9.47E+000	8.01	7.00E+000
F	12	5835-	5862	5847.85	1461.33	2.06	5.12E+002	43.53	9.55E+000
F	13	7057-	7070	7063.76	1764.64	2.19	2.72E+001	11.44	5.33E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.990	511.00*	100.00	1.22546E+005	2.98451E+004
K-40	0.992	1460.81*	10.67	7.52226E+006	8.82781E+005
TL-208	0.734	277.35	6.80		
		510.84*	21.60	5.67343E+005	1.45733E+005
		583.14*	84.20	1.01378E+005	3.02430E+004
		860.37	12.46		
Pb-212	0.492	74.81* @	10.70	1.79200E+006	5.64874E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.45482E+005	6.73973E+004
Bi-214	0.691	609.31*	46.30	1.94781E+005	5.69563E+004
		1120.29	15.10		
		1764.49*	15.80	2.88088E+005	1.24413E+005
Ac-228	0.597	338.32	11.40		
		911.07*	27.70	1.99930E+005	8.44515E+004
		969.11*	16.60	2.16156E+005	1.10598E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.990	1.006483E+005	3.054331E+004
K-40		0.992	7.522259E+006	8.827809E+005
TL-208		0.734	1.013781E+005	3.006200E+004
Pb-212	@	0.492	2.454815E+005	6.739735E+004
Bi-214		0.691	2.109484E+005	5.178743E+004
Ac-228		0.597	2.059066E+005	6.712076E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.84	1.6904E-001	29.29
F	4	352.44	8.2965E-002	29.59
F	10	1275.09	2.9796E-001	11.88
F	11	1378.56	1.0523E-002	84.59

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6191E+004	5.55E+004	3.3457E+004
	1332.49	100.00	5.5503E+004		1.5553E+004
Nb-94	702.63	100.00	6.6265E+004	6.63E+004	3.5563E+004
	871.10	100.00	6.6449E+004		6.9552E+003
Ag-108m	79.20	7.10	2.1773E+006	7.12E+004	-2.5164E+006
	433.93	89.90	7.1219E+004		2.3904E+004
	614.37	90.40	8.7804E+004		1.8643E+004
	722.95	90.50	7.2255E+004		-3.5833E+004
Sb-125	176.33	6.89	1.1835E+006	2.25E+005	-1.3934E+005
	427.89	29.33	2.2457E+005		3.9288E+004
	463.38	10.35	6.2468E+005		-1.9709E+005
	600.56	17.80	3.4221E+005		-2.0259E+005
	606.64	5.02	1.5947E+006		2.3024E+006
	635.90	11.32	5.6099E+005		-1.3565E+005
Cs-134	563.23	8.38	7.8374E+005	7.74E+004	2.3811E+005
	569.32	15.43	4.2070E+005		4.8180E+004
	604.70	97.60	7.7411E+004		-5.3008E+004
	795.84	85.40	7.9584E+004		-1.1929E+004
	801.93	8.73	8.0931E+005		2.0153E+005
Cs-137	661.65	85.12	7.7187E+004	7.72E+004	1.3123E+004
Eu-152	121.78	28.40	3.5485E+005	1.91E+005	1.6910E+005
	244.69	7.49	1.0569E+006		-1.9250E+006
	344.27	26.50	2.4059E+005		-2.1864E+005
	778.89	12.74	5.1764E+005		3.3794E+004
	867.32	4.16	1.6542E+006		1.3454E+006
	964.01	14.40	5.7121E+005		-6.6451E+004
	1085.78	10.00	6.2120E+005		-4.2048E+005
	1112.02	13.30	5.0936E+005		-8.4370E+005
	1407.95	20.70	1.9051E+005		-9.4555E+004
Eu-154	123.07	40.50	2.4618E+005	2.46E+005	-1.6705E+005
	247.94	6.60	1.1077E+006		-1.4742E+006
	591.81	4.83	1.2489E+006		-9.4514E+005
	723.30	19.70	3.3704E+005		6.3988E+003
	756.87	4.33	1.4788E+006		1.7920E+005
	873.19	11.50	5.4834E+005		1.6359E+005
	996.32	10.30	6.2588E+005		-7.3940E+004
	1004.76	17.90	3.8940E+005		2.7666E+005
	1274.45	35.50	3.5946E+005		9.7962E+005
Eu-155	86.54	30.90	4.4600E+005	4.46E+005	2.3726E+005
	105.31	20.70	5.3456E+005		2.5008E+005
Am-241	59.54	35.90	4.8794E+005	4.88E+005	-9.8789E+004
Cm-243	228.19	10.56	7.2249E+005	4.95E+005	2.3629E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9539E+005	4.95E+005	-3.6586E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 2:44:27 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 2:29:24 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	308	292.20	72.90	0.87	1.41E+002	40.37	5.12E+002
m	2	286-	308	300.56	75.00	0.87	2.90E+002	51.76	5.37E+002
F	3	334-	348	339.21	84.69	0.79	1.56E+002	42.17	5.96E+002
F	4	949-	961	955.67	239.24	0.85	1.16E+002	30.41	1.80E+002
F	5	1176-	1187	1181.90	295.91	0.80	3.16E+001	19.12	9.01E+001
F	6	1401-	1416	1408.45	352.64	1.48	1.10E+002	24.60	7.66E+001
F	7	2036-	2054	2043.94	511.65	1.41	9.20E+001	24.31	9.71E+001
F	8	2328-	2341	2333.98	584.18	0.86	6.78E+001	20.45	5.98E+001
F	9	2433-	2446	2438.50	610.31	1.21	7.73E+001	22.45	5.82E+001
F	10	2905-	2916	2909.80	728.09	1.33	2.39E+001	13.30	3.42E+001
F	11	3071-	3083	3076.09	769.63	1.07	2.18E+001	14.09	3.35E+001
F	12	3641-	3656	3647.57	912.35	1.16	6.18E+001	18.87	3.78E+001
F	13	3871-	3888	3880.52	970.50	2.04	4.91E+001	16.17	2.68E+001
F	14	5091-	5111	5102.08	1275.31	1.86	2.04E+002	29.13	2.54E+001
F	15	5835-	5861	5848.74	1461.56	1.90	4.97E+002	43.65	2.03E+001
F	16	7058-	7071	7064.29	1764.78	1.08	1.85E+001	10.25	8.83E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.987	511.00*		100.00	9.68728E+004	2.89626E+004
K-40	0.983	1460.81*		10.67	7.30056E+006	8.71795E+005
TL-208	0.727	277.35		6.80		
		510.84*		21.60	4.48485E+005	1.38999E+005
		583.14*		84.20	8.93752E+004	2.94170E+004
		860.37		12.46		
Bi-212	0.975	727.17*		11.80	2.43527E+005	1.38458E+005
Pb-212	0.490	74.81*	@	10.70	2.48789E+006	6.59668E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.08389E+005	6.35998E+004
Bi-214	0.686	609.31*		46.30	1.88435E+005	5.95512E+004
		1120.29		15.10		
		1764.49*		15.80	1.95800E+005	1.10198E+005
PB-214	0.554	74.82*	@	6.21	4.28670E+006	1.17845E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.41752E+005	8.89862E+004
		351.92*		37.20	2.71388E+005	7.56091E+004
Ac-228	0.580	338.32		11.40		
		911.07*		27.70	2.88942E+005	9.42754E+004
		969.11*		16.60	3.94231E+005	1.36191E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.987	7.756771E+004	2.964478E+004
K-40		0.983	7.300557E+006	8.717950E+005
TL-208		0.727	8.937522E+004	2.927245E+004
Bi-212		0.975	2.435265E+005	1.384577E+005
Pb-212	@	0.490	2.083886E+005	6.359978E+004
Bi-214		0.686	1.900997E+005	5.239055E+004
PB-214	@	0.554	2.170370E+005	5.761886E+004
Ac-228		0.580	3.230507E+005	7.751531E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.5715E-001	28.54
F 3	84.69	1.7384E-001	26.95
F 11	769.63	2.4167E-002	64.78
F 14	1275.31	2.2668E-001	14.28

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.1799E+004	5.25E+004	1.3570E+004
	1332.49	100.00	5.2507E+004		2.8071E+004
Nb-94	702.63	100.00	6.6265E+004	6.42E+004	-1.2708E+004
	871.10	100.00	6.4178E+004		-2.2377E+004
Ag-108m	79.20	7.10	2.1360E+006	7.20E+004	-1.8057E+005
	433.93	89.90	7.1977E+004		3.1654E+004
	614.37	90.40	9.4195E+004		3.3339E+004
	722.95	90.50	7.6028E+004		-6.7482E+004
Sb-125	176.33	6.89	1.2395E+006	2.12E+005	-1.5245E+005
	427.89	29.33	2.1244E+005		7.4189E+003
	463.38	10.35	6.6158E+005		-2.0119E+005
	600.56	17.80	3.4745E+005		3.5364E+004
	606.64	5.02	1.6709E+006		3.0893E+006
	635.90	11.32	5.4620E+005		2.8871E+005
Cs-134	563.23	8.38	7.9595E+005	7.10E+004	4.3382E+005
	569.32	15.43	3.9386E+005		-3.2087E+005
	604.70	97.60	7.9132E+004		-8.7797E+004
	795.84	85.40	7.0989E+004		-1.4212E+005
	801.93	8.73	7.5953E+005		1.4476E+005
Cs-137	661.65	85.12	7.6910E+004	7.69E+004	1.9722E+004
Eu-152	121.78	28.40	3.5635E+005	2.40E+005	5.2243E+003
	244.69	7.49	1.0835E+006		3.7873E+005
	344.27	26.50	2.5649E+005		-1.2798E+005
	778.89	12.74	5.4358E+005		2.1710E+005
	867.32	4.16	1.6216E+006		-1.5455E+006
	964.01	14.40	5.6271E+005		2.6288E+005
	1085.78	10.00	6.6342E+005		2.3416E+005
	1112.02	13.30	4.8846E+005		-9.3820E+005
	1407.95	20.70	2.4006E+005		2.6802E+004
Eu-154	123.07	40.50	2.4751E+005	2.48E+005	4.7654E+004
	247.94	6.60	1.0908E+006		-1.5740E+006
	591.81	4.83	1.3335E+006		7.8331E+004
	723.30	19.70	3.4568E+005		-3.2528E+005
	756.87	4.33	1.5903E+006		-3.6884E+005
	873.19	11.50	5.8069E+005		2.6342E+005
	996.32	10.30	6.4747E+005		4.9574E+005
	1004.76	17.90	3.8772E+005		1.2804E+005
	1274.45	35.50	3.3492E+005		1.0361E+006
Eu-155	86.54	30.90	4.4991E+005	4.50E+005	3.4436E+005
	105.31	20.70	5.1332E+005		2.6751E+005
Am-241	59.54	35.90	4.6662E+005	4.67E+005	-3.5628E+005
Cm-243	228.19	10.56	7.1388E+005	5.07E+005	-7.5528E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0670E+005	5.07E+005	-1.2948E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/1/2005 3:04:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-14-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/1/2005 2:48:57 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-14-130-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	313	292.45	72.96	1.00	1.88E+002	41.29	5.02E+002
m	2	283-	313	300.40	74.96	1.00	3.96E+002	52.08	5.13E+002
m	3	283-	313	309.15	77.15	1.00	8.27E+001	36.93	4.49E+002
F	4	333-	363	339.73	84.82	0.94	1.40E+002	42.86	1.20E+003
F	5	951-	961	955.28	239.14	0.89	1.48E+002	31.28	1.26E+002
F	6	1346-	1359	1353.34	338.84	1.24	4.40E+001	20.86	9.08E+001
F	7	1402-	1415	1408.40	352.62	1.15	7.93E+001	22.66	7.03E+001
F	8	2034-	2054	2044.04	511.68	2.19	1.03E+002	23.03	8.21E+001
F	9	2324-	2341	2334.06	584.20	1.34	8.43E+001	21.94	6.26E+001
F	10	2430-	2446	2438.47	610.30	1.28	6.73E+001	19.12	3.83E+001
F	11	2988-	2999	2993.97	749.12	0.92	1.53E+001	11.19	2.05E+001
F	12	3638-	3656	3646.83	912.16	1.55	7.44E+001	20.64	4.94E+001
F	13	3871-	3885	3878.84	970.08	1.25	4.23E+001	16.38	2.99E+001
F	14	4479-	4491	4484.36	1121.20	1.57	3.63E+001	15.80	2.55E+001
F	15	5093-	5113	5102.07	1275.31	1.67	2.06E+002	29.26	2.33E+001
F	16	5835-	5861	5848.33	1461.46	1.99	5.21E+002	44.20	1.66E+001
F	17	7058-	7072	7064.56	1764.84	1.24	2.50E+001	11.71	9.56E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*		100.00	1.08609E+005	2.86170E+004
K-40	0.987	1460.81*		10.67	7.65155E+006	8.97104E+005
TL-208	0.726	277.35		6.80		
		510.84*		21.60	5.02821E+005	1.38704E+005
		583.14*		84.20	1.11064E+005	3.24172E+004
		860.37		12.46		
Pb-212	0.834	74.81*	@	10.70	3.39822E+006	8.02294E+005
		77.11*	@	18.00	4.10064E+005	2.00053E+005
		87.30	@	8.00		
		238.63*		44.60	2.65514E+005	6.98634E+004
Bi-214	0.977	609.31*		46.30	1.63986E+005	5.08767E+004
		1120.29*		15.10	3.41825E+005	1.53190E+005
		1764.49*		15.80	2.64775E+005	1.26762E+005
PB-214	0.389	74.82*	@	6.21	5.85522E+006	1.44625E+006
		77.11*	@	10.50	7.02967E+005	3.46941E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	1.94948E+005	6.45483E+004
Ac-228	0.972	338.32*		11.40	3.48540E+005	1.73871E+005
		911.07*		27.70	3.47921E+005	1.04480E+005
		969.11*		16.60	3.39493E+005	1.36163E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	8.461944E+004	2.945083E+004
K-40		0.987	7.651548E+006	8.971043E+005
TL-208		0.726	1.110643E+005	3.221452E+004
Pb-212	@	0.834	2.655137E+005	6.986342E+004
Bi-214		0.977	1.921848E+005	4.512114E+004
PB-214	@	0.389	1.949483E+005	6.359559E+004
Ac-228		0.972	3.454906E+005	7.482237E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.96	2.0934E-001	21.92
F 4	84.82	1.5523E-001	30.68
F 11	749.12	1.7007E-002	73.08
F 15	1275.31	2.2896E-001	14.20

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.8351E+004	5.09E+004	2.6238E+003
	1332.49	100.00	5.0936E+004		1.2923E+004
Nb-94	702.63	100.00	6.6022E+004	6.56E+004	2.0398E+004
	871.10	100.00	6.5607E+004		2.6837E+004
Ag-108m	79.20	7.10	2.0978E+006	7.25E+004	-8.5640E+005
	433.93	89.90	7.2541E+004		-2.6040E+004
	614.37	90.40	8.4524E+004		-3.6741E+004
	722.95	90.50	7.9364E+004		9.3887E+004
Sb-125	176.33	6.89	1.2168E+006	2.32E+005	6.6462E+005
	427.89	29.33	2.3174E+005		8.8139E+004
	463.38	10.35	6.7288E+005		5.0155E+005
	600.56	17.80	3.6642E+005		-1.9969E+004
	606.64	5.02	1.5182E+006		1.2440E+006
	635.90	11.32	5.5259E+005		-2.4554E+005
Cs-134	563.23	8.38	7.4585E+005	7.55E+004	-1.0762E+005
	569.32	15.43	3.8796E+005		-3.5237E+004
	604.70	97.60	7.5450E+004		-5.5548E+003
	795.84	85.40	7.6519E+004		-7.8338E+003
	801.93	8.73	7.4730E+005		-1.1634E+006
Cs-137	661.65	85.12	7.2331E+004	7.23E+004	-8.6888E+003
Eu-152	121.78	28.40	3.5258E+005	2.14E+005	1.4582E+005
	244.69	7.49	1.0533E+006		1.6882E+005
	344.27	26.50	2.4761E+005		-1.1184E+005
	778.89	12.74	4.8589E+005		-5.1782E+005
	867.32	4.16	1.6150E+006		-1.0128E+006
	964.01	14.40	5.6952E+005		2.9539E+005
	1085.78	10.00	6.3561E+005		-3.3705E+005
	1112.02	13.30	5.1948E+005		-5.9496E+005
	1407.95	20.70	2.1376E+005		1.1140E+005
Eu-154	123.07	40.50	2.4106E+005	2.41E+005	4.7831E+003
	247.94	6.60	1.1092E+006		-1.1793E+006
	591.81	4.83	1.3380E+006		-7.6674E+005
	723.30	19.70	3.6465E+005		2.6858E+005
	756.87	4.33	1.4727E+006		1.1653E+006
	873.19	11.50	5.5090E+005		5.4338E+002
	996.32	10.30	6.6832E+005		-1.4325E+005
	1004.76	17.90	3.8434E+005		8.2759E+004
	1274.45	35.50	3.3786E+005		9.8399E+005
Eu-155	86.54	30.90	4.4926E+005	4.49E+005	-9.2025E+003
	105.31	20.70	5.4867E+005		2.1364E+005
Am-241	59.54	35.90	4.7800E+005	4.78E+005	-3.3020E+005
Cm-243	228.19	10.56	7.4276E+005	5.07E+005	5.5687E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0670E+005	5.07E+005	-5.1124E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisitior	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 Ur	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-15-101-F-G.RPT	TBN-01-15-101-F-G	0.00	31-Oct-05	10:52:00	900.6	RED6264	RED_CONC_2M90D	dpm/m2	51100			76000			68600			5948184
TBN-01-15-102-F-G.RPT	TBN-01-15-102-F-G	0.00	31-Oct-05	10:26:02	900.5	RED6264	RED_CONC_2M90D	dpm/m2	52800			71300			72100			6017955
TBN-01-15-103-F-G.RPT	TBN-01-15-103-F-G	0.00	31-Oct-05	10:03:22	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52200			67900			67100			5753208
TBN-01-15-104-F-G.RPT	TBN-01-15-104-F-G	0.00	31-Oct-05	9:41:42	900.6	RED6264	RED_CONC_2M90D	dpm/m2	51600			65100			69100			7128121
TBN-01-15-105-F-G.RPT	TBN-01-15-105-F-G	0.00	31-Oct-05	11:12:30	900.6	RED6264	RED_CONC_2M90D	dpm/m2	56500			72600			69400			5812023
TBN-01-15-106-F-G.RPT	TBN-01-15-106-F-G	0.00	31-Oct-05	11:35:06	900.6	RED6264	RED_CONC_2M90D	dpm/m2	54400			73500			69600			6101013
TBN-01-15-107-F-G.RPT	TBN-01-15-107-F-G	0.00	31-Oct-05	12:45:57	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52200			75700			70200			6055390
TBN-01-15-116-F-G.RPT	TBN-01-15-116-F-G	0.00	29-Oct-05	15:03:28	900.5	RED6264	RED_CONC_2M90D	dpm/m2	52200			70600			70400			6079875
TBN-01-15-117-F-G.RPT	TBN-01-15-117-F-G	0.00	29-Oct-05	14:45:15	900.5	RED6264	RED_CONC_2M90D	dpm/m2	49900			72900			66600			5987224
TBN-01-15-118-F-G.RPT	TBN-01-15-118-F-G	0.00	29-Oct-05	15:22:06	900.5	RED6264	RED_CONC_2M90D	dpm/m2	49300			66900			66800			6776960
TBN-01-15-119-F-G.RPT	TBN-01-15-119-F-G	0.00	29-Oct-05	14:26:04	900.6	RED6264	RED_CONC_2M90D	dpm/m2	51100			75400			70600			6326041
TBN-01-15-120-F-G.RPT	TBN-01-15-120-F-G	0.00	31-Oct-05	8:42:21	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52800			71900			68400			6374022
TBN-01-15-121-F-G.RPT	TBN-01-15-121-F-G	0.00	29-Oct-05	14:01:40	900.6	RED6264	RED_CONC_2M90D	dpm/m2	54900			75100			64100			7170594
TBN-01-15-122-F-G.RPT	TBN-01-15-122-F-G	0.00	29-Oct-05	13:41:03	900.6	RED6264	RED_CONC_2M90D	dpm/m2	51100			73500			67800			6636682
TBN-01-15-123-F-G.RPT	TBN-01-15-123-F-G	0.00	29-Oct-05	13:18:32	900.6	RED6264	RED_CONC_2M90D	dpm/m2	47500			66200			64900			6177263
TBN-01-15-124-F-G.RPT	TBN-01-15-124-F-G	0.00	29-Oct-05	12:58:41	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52800			70000			68100			6942812
TBN-01-15-108-F-G.RPT	TBN-01-15-108-F-G	0.00	31-Oct-05	14:15:08	900.5	RED6264	RED_CONC_2M90D	dpm/m2	47500			71000			67700			5932776
TBN-01-15-109-F-G.RPT	TBN-01-15-109-F-G	0.00	31-Oct-05	13:53:06	900.6	RED6264	RED_CONC_2M90D	dpm/m2	54600			73500			69200			5391963
TBN-01-15-110-F-G.RPT	TBN-01-15-110-F-G	0.00	31-Oct-05	13:30:07	900.5	RED6264	RED_CONC_2M90D	dpm/m2	52800			76300			70300			6164719
TBN-01-15-111-F-G.RPT	TBN-01-15-111-F-G	0.00	31-Oct-05	15:00:11	900.5	RED6264	RED_CONC_2M90D	dpm/m2	48100			71300			67700			6137877
TBN-01-15-112-F-G.RPT	TBN-01-15-112-F-G	0.00	31-Oct-05	13:08:39	900.6	RED6264	RED_CONC_2M90D	dpm/m2	50500			71900			70400			6690352
TBN-01-15-113-F-G.RPT	TBN-01-15-113-F-G	0.00	31-Oct-05	14:34:21	900.5	RED6264	RED_CONC_2M90D	dpm/m2	52800			70600			70600			6913840
TBN-01-15-114-F-G.RPT	TBN-01-15-114-F-G	0.00	31-Oct-05	15:23:36	900.6	RED6264	RED_CONC_2M90D	dpm/m2	46900			72600			69000			6138588
TBN-01-15-115-F-G.RPT	TBN-01-15-115-F-G	0.00	31-Oct-05	15:46:31	900.6	RED6264	RED_CONC_2M90D	dpm/m2	46300			70600			69000			6194994

Report Generated On 10/31/2005 11:07:03 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 10:52:00 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.95	72.95	0.80	1.13E+002	37.43	4.19E+002
m	2	287-	306	300.46	75.07	0.80	2.42E+002	47.62	5.03E+002
F	3	332-	344	338.91	84.69	0.85	9.11E+001	38.77	4.96E+002
F	4	948-	963	955.11	238.75	1.07	1.50E+002	30.32	1.57E+002
F	5	1176-	1190	1182.49	295.60	1.35	5.85E+001	20.63	7.97E+001
F	6	1400-	1413	1408.30	352.06	1.11	7.91E+001	22.32	7.37E+001
F	7	2032-	2052	2042.89	510.72	2.04	8.52E+001	21.68	7.88E+001
F	8	2322-	2340	2333.09	583.27	1.48	6.73E+001	19.02	4.29E+001
F	9	2430-	2446	2438.37	609.60	1.14	8.83E+001	21.40	4.63E+001
F	10	2905-	2916	2911.18	727.81	0.43	1.96E+001	2.00	2.03E+001
F	11	3638-	3654	3646.34	911.61	1.55	6.54E+001	18.74	3.15E+001
F	12	3871-	3890	3879.33	969.86	1.57	4.80E+001	16.17	2.33E+001
F	13	5096-	5110	5103.00	1275.81	1.30	4.59E+001	15.30	1.46E+001
F	14	5837-	5862	5849.35	1462.41	1.92	3.92E+002	38.72	9.57E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	9.27409E+004	2.69622E+004
K-40	0.926	1460.81*		10.67	5.94818E+006	7.60097E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	4.29356E+005	1.29656E+005
		583.14*		84.20	9.20215E+004	2.87234E+004
		860.37		12.46		
Bi-212	0.988	727.17*		11.80	2.08007E+005	3.24308E+004
Pb-212	0.497	74.81*	@	10.70	2.17714E+006	6.04744E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.78985E+005	7.12789E+004
Bi-214	0.416	609.31*		46.30	2.23817E+005	6.09974E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	3.75127E+006	1.07699E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.71353E+005	1.05981E+005
		351.92*		37.20	2.00840E+005	6.58441E+004
Ac-228	0.610	338.32		11.40		
		911.07*		27.70	3.19713E+005	9.87187E+004
		969.11*		16.60	4.02050E+005	1.41828E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	7.286431E+004	2.765925E+004
K-40		0.926	5.948184E+006	7.600973E+005
TL-208		0.753	9.202145E+004	2.856643E+004
Bi-212		0.988	2.080069E+005	3.243083E+004
Pb-212	@	0.497	2.789846E+005	7.127893E+004
Bi-214		0.416	2.238169E+005	6.099739E+004
PB-214	@	0.564	2.204777E+005	5.592901E+004
Ac-228		0.610	3.465848E+005	8.102364E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	1.2581E-001	33.06
F 3	84.69	1.0126E-001	42.54
F 13	1275.81	5.1038E-002	33.31

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.8353E+004	5.11E+004	5.2368E+004
	1332.49	100.00	5.1082E+004		-1.3303E+004
Nb-94	702.63	100.00	5.8986E+004	5.58E+004	-1.5468E+004
	871.10	100.00	5.5822E+004		8.1839E+003
Ag-108m	79.20	7.10	2.2070E+006	6.86E+004	1.6858E+005
	433.93	89.90	6.8562E+004		-3.4748E+004
	614.37	90.40	9.0313E+004		9.4125E+003
	722.95	90.50	7.4528E+004		-2.4841E+004
Sb-125	176.33	6.89	1.1154E+006	2.11E+005	-1.4623E+005
	427.89	29.33	2.1098E+005		3.4191E+004
	463.38	10.35	6.1231E+005		-2.8786E+005
	600.56	17.80	3.5033E+005		-1.8541E+005
	606.64	5.02	1.6252E+006		3.0187E+006
	635.90	11.32	5.4604E+005		4.3486E+004
Cs-134	563.23	8.38	7.3567E+005	7.38E+004	2.9463E+005
	569.32	15.43	3.8714E+005		-3.6807E+004
	604.70	97.60	8.3479E+004		2.6737E+004
	795.84	85.40	7.3801E+004		8.2270E+003
	801.93	8.73	6.6929E+005		-8.2171E+005
Cs-137	661.65	85.12	7.6021E+004	7.60E+004	-8.2013E+004
Eu-152	121.78	28.40	3.4620E+005	2.40E+005	-2.4001E+005
	244.69	7.49	9.6222E+005		3.9342E+005
	344.27	26.50	2.4850E+005		-4.0484E+005
	778.89	12.74	4.7674E+005		4.6476E+005
	867.32	4.16	1.4003E+006		-5.2117E+005
	964.01	14.40	5.3295E+005		2.1838E+005
	1085.78	10.00	5.5627E+005		-3.7066E+005
	1112.02	13.30	4.7932E+005		2.1959E+005
	1407.95	20.70	2.3973E+005		1.1101E+005
Eu-154	123.07	40.50	2.4320E+005	2.04E+005	-5.2002E+004
	247.94	6.60	1.0463E+006		-2.5387E+005
	591.81	4.83	1.3084E+006		5.7218E+005
	723.30	19.70	3.3973E+005		1.8413E+005
	756.87	4.33	1.3459E+006		5.0087E+005
	873.19	11.50	4.7935E+005		6.0854E+004
	996.32	10.30	5.6459E+005		3.9933E+005
	1004.76	17.90	3.3260E+005		-2.1758E+005
	1274.45	35.50	2.0440E+005		1.3090E+003
Eu-155	86.54	30.90	4.5333E+005	4.53E+005	5.7367E+005
	105.31	20.70	5.3586E+005		9.8057E+004
Am-241	59.54	35.90	4.9872E+005	4.99E+005	-1.4870E+005
Cm-243	228.19	10.56	6.8140E+005	4.67E+005	-2.4361E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6725E+005	4.67E+005	2.0202E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 10:41:05 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 10:26:02 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	291-	309	300.13	74.99	2.35	4.60E+002	54.42	7.61E+002
F	2	949-	961	955.07	238.74	1.23	1.01E+002	29.15	1.65E+002
F	3	1176-	1187	1181.21	295.28	0.95	3.68E+001	19.24	7.76E+001
F	4	1397-	1417	1407.43	351.84	1.84	1.04E+002	22.82	8.46E+001
F	5	2036-	2055	2043.56	510.88	1.66	6.62E+001	19.74	7.11E+001
F	6	2324-	2340	2332.94	583.23	1.74	8.27E+001	21.12	5.05E+001
F	7	2430-	2447	2438.73	609.69	1.58	1.10E+002	22.52	4.05E+001
F	8	5096-	5109	5102.15	1275.59	1.29	3.07E+001	13.14	1.40E+001
F	9	5836-	5861	5848.77	1462.26	2.19	3.96E+002	38.57	1.30E+001
F	10	7061-	7074	7068.46	1767.21	1.42	1.77E+001	11.00	1.22E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	7.20966E+004	2.37640E+004
K-40	0.938	1460.81*		10.67	6.01796E+006	7.61817E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	3.33780E+005	1.13345E+005
		583.14*		84.20	1.13176E+005	3.25483E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	4.14042E+006	9.48117E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.86951E+005	6.15472E+004
Bi-214	0.415	609.31*		46.30	2.78680E+005	6.68161E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.566	74.82*	@	6.21	7.13406E+006	1.71375E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.70385E+005	9.36512E+004
		351.92*		37.20	2.64128E+005	7.28012E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	4.765048E+004	2.476936E+004
K-40		0.938	6.017955E+006	7.618174E+005
TL-208		0.753	1.131764E+005	3.233864E+004
Pb-212	@	0.497	1.869510E+005	6.154719E+004
Bi-214		0.415	2.786795E+005	6.681611E+004
PB-214	@	0.566	2.288175E+005	5.747729E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	8	1275.59	3.4125E-002	42.79
F	10	1767.21	1.9710E-002	62.03

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7969E+004	5.28E+004	7.3102E+004
	1332.49	100.00	5.2765E+004		-3.3937E+002
Nb-94	702.63	100.00	6.4405E+004	6.04E+004	1.5830E+003
	871.10	100.00	6.0402E+004		4.3668E+004
Ag-108m	79.20	7.10	2.1939E+006	7.21E+004	-1.8927E+006
	433.93	89.90	7.2061E+004		3.4647E+003
	614.37	90.40	9.3022E+004		-2.2431E+004
	722.95	90.50	7.7395E+004		1.6338E+003
Sb-125	176.33	6.89	1.0941E+006	2.04E+005	-3.9324E+005
	427.89	29.33	2.0384E+005		-2.0081E+005
	463.38	10.35	6.3271E+005		-4.8221E+005
	600.56	17.80	3.4040E+005		1.8407E+005
	606.64	5.02	1.6699E+006		2.8131E+006
	635.90	11.32	5.2218E+005		2.5584E+005
Cs-134	563.23	8.38	7.2421E+005	7.31E+004	1.5686E+005
	569.32	15.43	3.6728E+005		3.2279E+004
	604.70	97.60	8.2111E+004		2.9965E+002
	795.84	85.40	7.3086E+004		1.9343E+004
	801.93	8.73	7.0611E+005		-3.1124E+005
Cs-137	661.65	85.12	7.1279E+004	7.13E+004	1.2849E+004
Eu-152	121.78	28.40	3.4432E+005	2.41E+005	2.1429E+005
	244.69	7.49	1.0318E+006		-4.3622E+005
	344.27	26.50	2.4103E+005		-3.6128E+005
	778.89	12.74	4.6184E+005		-7.1458E+005
	867.32	4.16	1.4740E+006		-7.1384E+004
	964.01	14.40	5.2698E+005		4.2794E+004
	1085.78	10.00	5.7380E+005		2.1013E+005
	1112.02	13.30	4.6733E+005		-6.3044E+004
	1407.95	20.70	2.4843E+005		1.2602E+005
Eu-154	123.07	40.50	2.3788E+005	2.02E+005	-7.3990E+004
	247.94	6.60	1.0147E+006		-4.6349E+005
	591.81	4.83	1.2146E+006		-4.1344E+005
	723.30	19.70	3.5689E+005		7.4451E+004
	756.87	4.33	1.3822E+006		-3.2287E+005
	873.19	11.50	5.1072E+005		1.0781E+005
	996.32	10.30	6.1565E+005		1.2386E+005
	1004.76	17.90	3.4531E+005		-4.4348E+005
	1274.45	35.50	2.0225E+005		1.0477E+005
Eu-155	86.54	30.90	4.5333E+005	4.53E+005	5.6628E+005
	105.31	20.70	5.3501E+005		2.7980E+005
Am-241	59.54	35.90	4.9175E+005	4.92E+005	-4.4289E+004
Cm-243	228.19	10.56	6.8724E+005	4.87E+005	2.0768E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8727E+005	4.87E+005	6.9582E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 10:18:25 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 10:03:22 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.44	73.07	0.98	1.29E+002	38.48	5.40E+002
m	2	283-	305	300.27	75.02	0.98	2.74E+002	48.37	5.40E+002
F	3	333-	344	340.43	85.07	0.80	9.38E+001	38.43	4.49E+002
F	4	949-	962	954.77	238.67	1.19	1.43E+002	30.98	1.56E+002
F	5	1400-	1416	1408.04	351.99	1.35	9.28E+001	22.39	7.00E+001
F	6	2039-	2054	2046.07	511.51	1.94	7.92E+001	21.22	5.46E+001
F	7	2327-	2342	2333.45	583.36	1.11	7.38E+001	20.14	4.66E+001
F	8	2432-	2447	2438.63	609.66	1.15	8.27E+001	21.33	4.80E+001
F	9	3638-	3656	3647.32	911.86	1.55	6.63E+001	17.84	2.33E+001
M	10	3854-	3885	3860.63	965.19	1.26	1.29E+001	10.62	2.18E+001
m	11	3854-	3885	3877.73	969.47	1.26	4.09E+001	15.06	2.26E+001
F	12	5096-	5111	5102.94	1275.79	1.49	4.24E+001	15.21	1.66E+001
F	13	5837-	5863	5848.95	1462.31	2.12	3.79E+002	37.98	1.56E+001
F	14	7059-	7072	7065.54	1766.48	0.72	1.64E+001	9.74	1.38E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.992	511.00*	100.00	8.63000E+004	2.60981E+004
K-40	0.934	1460.81*	10.67	5.75321E+006	7.41389E+005
TL-208	0.750	277.35	6.80		
		510.84*	21.60	3.99537E+005	1.25153E+005
		583.14*	84.20	1.00969E+005	3.06201E+004
		860.37	12.46		
Pb-212	0.498	74.81* @	10.70	2.47085E+006	6.51329E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.65952E+005	7.10278E+004
Bi-214	0.678	609.31*	46.30	2.09747E+005	6.00424E+004
		1120.29	15.10		
		1764.49*	15.80	1.78589E+005	1.07712E+005
Ac-228	0.609	338.32	11.40		
		911.07*	27.70	3.24094E+005	9.48513E+004
		969.11*	16.60	3.42604E+005	1.31136E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.992	6.449066E+004	2.691374E+004
K-40		0.934	5.753208E+006	7.413892E+005
TL-208		0.750	1.009694E+005	3.044283E+004
Pb-212	@	0.498	2.659522E+005	7.102784E+004
Bi-214		0.678	2.023602E+005	5.244459E+004
Ac-228		0.609	3.304515E+005	7.685445E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.07	1.4339E-001	29.81
F 3	85.07	1.0425E-001	40.96
F 5	351.99	1.0309E-001	24.13
M 10	965.19	1.4369E-002	82.15
F 12	1275.79	4.7113E-002	35.87

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4812E+004	5.22E+004	-4.7931E+003
	1332.49	100.00	5.2210E+004		1.1195E+004
Nb-94	702.63	100.00	6.1615E+004	5.36E+004	-1.1225E+004
	871.10	100.00	5.3567E+004		1.8647E+004
Ag-108m	79.20	7.10	2.1723E+006	6.71E+004	-2.9655E+006
	433.93	89.90	6.8138E+004		1.4484E+004
	614.37	90.40	9.2817E+004		2.2711E+004
	722.95	90.50	6.7121E+004		2.1102E+003
Sb-125	176.33	6.89	1.0833E+006	2.04E+005	-1.0562E+005
	427.89	29.33	2.0384E+005		-7.5504E+004
	463.38	10.35	6.1419E+005		3.4731E+005
	600.56	17.80	3.5312E+005		-3.6205E+005
	606.64	5.02	1.6290E+006		9.0925E+005
	635.90	11.32	5.3425E+005		-2.4091E+005
Cs-134	563.23	8.38	7.2131E+005	7.13E+004	-2.2633E+005
	569.32	15.43	4.0136E+005		-4.8128E+004
	604.70	97.60	8.3866E+004		-7.6920E+004
	795.84	85.40	7.1265E+004		3.2595E+004
	801.93	8.73	7.0611E+005		-1.9618E+005
Cs-137	661.65	85.12	6.7923E+004	6.79E+004	-1.1364E+004
Eu-152	121.78	28.40	3.3987E+005	2.46E+005	-1.2244E+005
	244.69	7.49	1.0032E+006		1.7143E+005
	344.27	26.50	2.5355E+005		-2.4804E+005
	778.89	12.74	4.7918E+005		3.6714E+004
	867.32	4.16	1.3132E+006		-1.7845E+006
	964.01	14.40	5.2698E+005		-7.9375E+004
	1085.78	10.00	5.8235E+005		-7.5887E+004
	1112.02	13.30	4.3254E+005		-1.7248E+005
	1407.95	20.70	2.4557E+005		-2.1990E+005
Eu-154	123.07	40.50	2.4085E+005	2.19E+005	-3.3428E+004
	247.94	6.60	1.0634E+006		-1.3612E+006
	591.81	4.83	1.3034E+006		-1.4252E+006
	723.30	19.70	3.0840E+005		8.5231E+004
	756.87	4.33	1.4175E+006		7.7126E+005
	873.19	11.50	4.5943E+005		-1.4705E+005
	996.32	10.30	6.2258E+005		7.0314E+005
	1004.76	17.90	3.3475E+005		-9.7200E+004
	1274.45	35.50	2.1884E+005		-1.9934E+005
Eu-155	86.54	30.90	4.4998E+005	4.50E+005	6.2776E+005
	105.31	20.70	5.2990E+005		2.9920E+005
Am-241	59.54	35.90	4.9949E+005	4.99E+005	-3.6715E+005
Cm-243	228.19	10.56	6.7748E+005	5.18E+005	-1.7771E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1832E+005	5.18E+005	3.9872E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 10:48:22 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-15-104-F-G.CNF
Sample ID:
Sample Title: TBN-01-15-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 9:41:42 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-15-104-F-G.CNF
Log Number:
Title: TBN-01-15-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.74	72.89	1.19	1.77E+002	42.14	4.96E+002
m	2	286-	309	300.85	75.17	1.19	3.60E+002	50.49	7.04E+002
F	3	739-	749	744.28	186.04	0.87	3.98E+001	22.01	1.12E+002
F	4	947-	961	954.58	238.62	0.96	1.33E+002	30.32	1.78E+002
F	5	1346-	1359	1354.15	338.52	0.59	2.60E+001	16.00	8.92E+001
F	6	1397-	1413	1407.57	351.87	1.44	9.08E+001	22.61	7.89E+001
F	7	2036-	2054	2044.15	511.03	2.16	1.03E+002	23.12	7.29E+001
F	8	2326-	2343	2333.74	583.43	1.35	9.57E+001	22.32	5.11E+001
F	9	2429-	2446	2437.45	609.37	1.60	1.17E+002	22.94	3.88E+001
F	10	3638-	3654	3645.56	911.42	1.66	5.40E+001	17.02	2.55E+001
F	11	3870-	3885	3877.58	969.43	1.61	4.65E+001	16.84	2.99E+001
F	12	5094-	5108	5101.31	1275.39	1.29	3.67E+001	14.37	1.73E+001
F	13	5835-	5861	5848.30	1462.15	2.05	4.69E+002	42.14	1.32E+001
F	14	7055-	7071	7064.49	1766.22	2.07	3.47E+001	13.01	5.58E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-15-104-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.12636E+005	2.68584E+004
K-40	0.948	1460.81*		10.67	7.12812E+006	7.72950E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	5.21462E+005	1.31435E+005
		583.14*		84.20	1.30636E+005	3.25823E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	3.09197E+006	6.49955E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.40273E+005	6.42917E+004
Bi-214	0.686	609.31*		46.30	2.94986E+005	6.28120E+004
		1120.29		15.10		
		1764.49*		15.80	3.78560E+005	1.46180E+005
Ac-228	0.997	338.32*		11.40	2.10073E+005	1.31161E+005
		911.07*		27.70	2.66724E+005	8.57236E+004
		969.11*		16.60	3.92106E+005	1.43890E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-15-104-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	8.441829E+004	2.774991E+004
K-40		0.948	7.128121E+006	7.729497E+005
TL-208		0.751	1.306365E+005	3.230295E+004
Pb-212	@	0.497	2.402731E+005	6.429171E+004
Bi-214		0.686	3.080115E+005	5.770997E+004
Ac-228		0.997	2.781165E+005	6.421489E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.89	1.9639E-001	23.84
F	3	186.04	4.4211E-002	55.32
F	6	351.87	1.0086E-001	24.90
F	12	1275.39	4.0768E-002	39.18

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-15-104-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1284E+004	5.16E+004	-8.0087E+004
	1332.49	100.00	5.1635E+004		3.1709E+004
Nb-94	702.63	100.00	5.9197E+004	5.53E+004	-2.0118E+004
	871.10	100.00	5.5276E+004		3.3803E+004
Ag-108m	79.20	7.10	2.1717E+006	6.91E+004	-1.2937E+006
	433.93	89.90	6.9064E+004		-2.6943E+004
	614.37	90.40	9.4309E+004		2.5790E+004
	722.95	90.50	7.2469E+004		1.0630E+004
Sb-125	176.33	6.89	1.0877E+006	2.05E+005	-1.1559E+006
	427.89	29.33	2.0528E+005		1.6164E+005
	463.38	10.35	6.0117E+005		9.6782E+004
	600.56	17.80	3.5200E+005		2.1411E+005
	606.64	5.02	1.7182E+006		2.3780E+006
	635.90	11.32	5.8605E+005		5.6007E+005
Cs-134	563.23	8.38	7.5926E+005	7.42E+004	5.7635E+004
	569.32	15.43	3.7981E+005		-9.3117E+004
	604.70	97.60	8.7716E+004		-4.4749E+004
	795.84	85.40	7.4223E+004		8.0682E+003
	801.93	8.73	7.1407E+005		-1.3968E+006
Cs-137	661.65	85.12	6.5121E+004	6.51E+004	-1.8570E+004
Eu-152	121.78	28.40	3.5657E+005	2.40E+005	6.8790E+004
	244.69	7.49	1.0312E+006		7.2722E+004
	344.27	26.50	2.4667E+005		-1.3537E+004
	778.89	12.74	4.6899E+005		-4.7005E+005
	867.32	4.16	1.4564E+006		-7.5422E+005
	964.01	14.40	5.3538E+005		-6.6892E+004
	1085.78	10.00	6.1228E+005		-5.9156E+004
	1112.02	13.30	5.4553E+005		-1.6147E+005
	1407.95	20.70	2.3989E+005		2.8625E+005
Eu-154	123.07	40.50	2.4644E+005	2.27E+005	-6.0191E+004
	247.94	6.60	1.1143E+006		-4.8153E+005
	591.81	4.83	1.2794E+006		-5.2647E+005
	723.30	19.70	3.3712E+005		3.4698E+005
	756.87	4.33	1.4766E+006		-5.3899E+005
	873.19	11.50	4.7442E+005		7.8927E+004
	996.32	10.30	5.7973E+005		3.0729E+004
	1004.76	17.90	3.5971E+005		3.5694E+004
	1274.45	35.50	2.2735E+005		3.1876E+005
Eu-155	86.54	30.90	4.5437E+005	4.54E+005	7.2466E+005
	105.31	20.70	5.2863E+005		-1.1159E+005
Am-241	59.54	35.90	5.0218E+005	5.02E+005	2.0729E+005
Cm-243	228.19	10.56	6.8576E+005	4.86E+005	-2.1054E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8640E+005	4.86E+005	-1.1978E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 11:27:34 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 11:12:30 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	307	292.29	73.03	1.01	1.50E+002	40.00	5.45E+002
m	2	283-	307	300.72	75.14	1.02	2.84E+002	48.90	5.94E+002
F	3	332-	347	340.48	85.08	1.49	1.51E+002	41.75	5.53E+002
F	4	944-	961	954.83	238.68	0.97	1.44E+002	29.48	1.66E+002
F	5	1177-	1187	1182.26	295.54	0.96	4.14E+001	19.31	6.74E+001
F	6	1401-	1416	1408.17	352.02	1.47	9.79E+001	22.43	6.05E+001
F	7	2034-	2053	2044.40	511.09	1.72	7.62E+001	21.10	7.51E+001
F	8	2324-	2342	2332.91	583.23	1.56	7.44E+001	19.92	5.06E+001
F	9	2432-	2448	2439.04	609.76	1.36	1.00E+002	22.63	4.66E+001
F	10	3642-	3655	3647.76	911.97	1.26	5.36E+001	17.83	2.74E+001
F	11	3871-	3885	3877.33	969.36	1.48	3.51E+001	15.67	2.79E+001
F	12	4476-	4491	4483.90	1121.02	1.15	3.61E+001	14.23	1.98E+001
F	13	5835-	5861	5849.23	1462.38	2.09	3.83E+002	37.78	3.21E+000
F	14	7060-	7073	7066.26	1766.66	1.47	2.14E+001	10.67	6.55E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	8.30659E+004	2.57706E+004
K-40	0.928	1460.81*	10.67	5.81202E+006	7.42004E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	3.84564E+005	1.23373E+005
		583.14*	84.20	1.01775E+005	3.03929E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.54931E+006	6.65542E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.66900E+005	6.88844E+004
Bi-214	0.965	609.31*	46.30	2.54323E+005	6.55190E+004
		1120.29*	15.10	3.53710E+005	1.44323E+005
		1764.49*	15.80	2.33434E+005	1.18668E+005
PB-214	0.565	74.82* @	6.21	4.39254E+006	1.19025E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.91937E+005	9.51395E+004
		351.92*	37.20	2.48460E+005	7.04495E+004
Ac-228	0.607	338.32	11.40		
		911.07*	27.70	2.62135E+005	9.22498E+004
		969.11*	16.60	2.93553E+005	1.34750E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	6.108244E+004	2.658399E+004
K-40		0.928	5.812023E+006	7.420045E+005
TL-208		0.752	1.017753E+005	3.021139E+004
Pb-212	@	0.497	2.669002E+005	6.888439E+004
Bi-214		0.965	2.636653E+005	5.330222E+004
PB-214	@	0.565	2.284429E+005	5.661711E+004
Ac-228		0.607	2.721611E+005	7.612062E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	1.6613E-001	26.75
F 3	85.08	1.6771E-001	27.66

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7487E+004	5.65E+004	-3.1432E+004
	1332.49	100.00	5.6481E+004		1.2968E+004
Nb-94	702.63	100.00	6.0169E+004	6.02E+004	-2.2867E+004
	871.10	100.00	6.3688E+004		-7.6444E+004
Ag-108m	79.20	7.10	2.2013E+006	6.94E+004	-7.0341E+005
	433.93	89.90	7.1659E+004		-2.4674E+004
	614.37	90.40	8.9462E+004		-6.6936E+003
	722.95	90.50	6.9368E+004		3.7303E+004
Sb-125	176.33	6.89	1.0989E+006	2.05E+005	-2.0638E+005
	427.89	29.33	2.0516E+005		2.1567E+004
	463.38	10.35	6.4891E+005		2.9034E+005
	600.56	17.80	3.3312E+005		-1.8847E+005
	606.64	5.02	1.6514E+006		3.0744E+006
	635.90	11.32	5.0477E+005		-1.2727E+005
Cs-134	563.23	8.38	7.0070E+005	7.34E+004	-2.5460E+005
	569.32	15.43	3.8391E+005		1.1558E+005
	604.70	97.60	8.0919E+004		-4.0744E+004
	795.84	85.40	7.3444E+004		-2.5735E+004
	801.93	8.73	7.4440E+005		4.5810E+004
Cs-137	661.65	85.12	7.2575E+004	7.26E+004	-5.0529E+004
Eu-152	121.78	28.40	3.5057E+005	2.46E+005	1.9469E+005
	244.69	7.49	9.6222E+005		-2.9225E+005
	344.27	26.50	2.5685E+005		-1.5030E+005
	778.89	12.74	4.4640E+005		-1.6112E+005
	867.32	4.16	1.5516E+006		2.4778E+005
	964.01	14.40	5.5047E+005		-1.1191E+005
	1085.78	10.00	6.4262E+005		-4.5144E+005
	1112.02	13.30	4.7036E+005		2.7846E+005
	1407.95	20.70	2.4557E+005		-5.2186E+004
Eu-154	123.07	40.50	2.4320E+005	2.14E+005	1.4847E+004
	247.94	6.60	1.0183E+006		-5.3712E+005
	591.81	4.83	1.3234E+006		6.2273E+005
	723.30	19.70	3.1727E+005		-1.3881E+003
	756.87	4.33	1.3161E+006		-2.4710E+006
	873.19	11.50	5.7605E+005		4.5268E+005
	996.32	10.30	5.6075E+005		3.7494E+005
	1004.76	17.90	3.5351E+005		2.5013E+005
	1274.45	35.50	2.1380E+005		1.5051E+005
Eu-155	86.54	30.90	4.4624E+005	4.46E+005	6.1924E+005
	105.31	20.70	5.1543E+005		7.0037E+004
Am-241	59.54	35.90	5.0509E+005	5.05E+005	-1.0088E+004
Cm-243	228.19	10.56	6.9013E+005	4.86E+005	-1.4348E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8638E+005	4.86E+005	4.9989E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 11:50:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 11:35:06 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.76	72.90	0.87	1.12E+002	36.86	4.87E+002
m	2	285-	306	300.81	75.16	0.88	2.47E+002	48.53	5.93E+002
F	3	332-	345	339.31	84.79	1.06	1.10E+002	40.82	5.28E+002
F	4	948-	961	954.84	238.68	0.89	1.34E+002	29.63	1.49E+002
F	5	1347-	1358	1353.76	338.42	1.19	4.72E+001	18.91	5.70E+001
F	6	1400-	1415	1408.29	352.05	0.93	9.01E+001	23.67	9.43E+001
F	7	2034-	2054	2043.33	510.83	1.68	6.65E+001	20.45	8.13E+001
F	8	2326-	2342	2333.36	583.34	1.27	7.20E+001	19.51	4.02E+001
F	9	2431-	2447	2438.29	609.57	1.44	9.53E+001	22.21	4.63E+001
F	10	3640-	3655	3647.41	911.88	1.28	6.41E+001	19.50	3.78E+001
F	11	3870-	3887	3878.03	969.54	1.55	4.06E+001	14.75	1.91E+001
F	12	5094-	5112	5102.51	1275.68	2.01	5.02E+001	15.46	1.27E+001
F	13	5836-	5862	5849.65	1462.49	1.94	4.02E+002	39.45	1.66E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	7.23914E+004	2.44840E+004
K-40	0.919	1460.81*		10.67	6.10101E+006	7.76527E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	3.35145E+005	1.16609E+005
		583.14*		84.20	9.84670E+004	2.97026E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.22449E+006	6.16713E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.49539E+005	6.74925E+004
Bi-214	0.416	609.31*		46.30	2.41495E+005	6.38328E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.988	338.32*		11.40	3.85771E+005	1.65911E+005
		911.07*		27.70	3.13429E+005	1.01897E+005
		969.11*		16.60	3.39858E+005	1.28503E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	5.112251E+004	2.530112E+004
K-40		0.919	6.101013E+006	7.765266E+005
TL-208		0.752	9.846696E+004	2.952878E+004
Pb-212	@	0.497	2.495394E+005	6.749247E+004
Bi-214		0.416	2.414953E+005	6.383283E+004
Ac-228		0.988	3.353163E+005	7.194450E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.2463E-001	32.86
F 3	84.79	1.2201E-001	37.18
F 6	352.05	1.0011E-001	26.27
F 12	1275.68	5.5779E-002	30.79

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1052E+004	5.44E+004	-7.9131E+003
	1332.49	100.00	5.4391E+004		2.0175E+004
Nb-94	702.63	100.00	6.5752E+004	6.04E+004	3.1210E+004
	871.10	100.00	6.0402E+004		1.8179E+004
Ag-108m	79.20	7.10	2.2275E+006	6.96E+004	-1.0754E+006
	433.93	89.90	6.9611E+004		-5.4424E+004
	614.37	90.40	9.3432E+004		3.1956E+004
	722.95	90.50	7.2751E+004		3.4799E+004
Sb-125	176.33	6.89	1.1142E+006	2.14E+005	5.9760E+005
	427.89	29.33	2.1415E+005		-5.2148E+004
	463.38	10.35	6.1231E+005		3.3733E+005
	600.56	17.80	3.1491E+005		-2.9809E+005
	606.64	5.02	1.6365E+006		2.1723E+006
	635.90	11.32	5.5529E+005		-7.2057E+005
Cs-134	563.23	8.38	6.9770E+005	8.03E+004	3.5248E+005
	569.32	15.43	3.7235E+005		2.2356E+005
	604.70	97.60	8.0316E+004		-3.7133E+004
	795.84	85.40	8.2504E+004		7.4722E+004
	801.93	8.73	7.7424E+005		-9.0857E+004
Cs-137	661.65	85.12	7.3532E+004	7.35E+004	7.2734E+004
Eu-152	121.78	28.40	3.4516E+005	2.31E+005	-7.1510E+004
	244.69	7.49	1.0142E+006		8.9796E+004
	344.27	26.50	2.3451E+005		-4.0589E+005
	778.89	12.74	4.6184E+005		-2.2331E+005
	867.32	4.16	1.4899E+006		-7.9048E+005
	964.01	14.40	5.1275E+005		-1.2925E+005
	1085.78	10.00	5.9906E+005		-1.2113E+005
	1112.02	13.30	4.7635E+005		6.2996E+004
	1407.95	20.70	2.3067E+005		4.8889E+004
Eu-154	123.07	40.50	2.3833E+005	2.10E+005	-1.1798E+005
	247.94	6.60	1.1018E+006		-1.1778E+006
	591.81	4.83	1.1647E+006		-9.0489E+005
	723.30	19.70	3.2870E+005		6.6324E+004
	756.87	4.33	1.3822E+006		-8.5880E+005
	873.19	11.50	5.4015E+005		1.5629E+005
	996.32	10.30	5.5299E+005		-8.5948E+004
	1004.76	17.90	3.1017E+005		-3.2935E+004
	1274.45	35.50	2.0968E+005		7.7722E+004
Eu-155	86.54	30.90	4.5122E+005	4.51E+005	4.9726E+005
	105.31	20.70	5.3529E+005		-1.4705E+005
Am-241	59.54	35.90	4.8784E+005	4.88E+005	-2.5575E+005
Cm-243	228.19	10.56	7.0066E+005	5.08E+005	-3.0387E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0819E+005	5.08E+005	4.2621E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 1:01:00 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 12:45:57 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	305	292.31	73.04	0.81	8.73E+001	37.02	4.53E+002
m	2	288-	305	300.63	75.12	0.81	2.31E+002	49.39	5.60E+002
F	3	330-	345	339.27	84.78	1.39	1.83E+002	43.02	5.57E+002
F	4	948-	963	955.45	238.83	0.98	1.28E+002	29.08	1.63E+002
F	5	1174-	1188	1181.62	295.38	1.23	5.16E+001	20.72	9.02E+001
F	6	1404-	1418	1408.92	352.21	0.67	6.77E+001	21.28	1.01E+002
F	7	2035-	2052	2044.36	511.08	1.65	6.53E+001	19.65	6.06E+001
F	8	2325-	2344	2334.48	583.62	1.53	9.45E+001	21.22	4.49E+001
F	9	2431-	2448	2439.47	609.87	1.46	1.08E+002	21.95	3.08E+001
F	10	3176-	3187	3181.11	795.29	0.95	1.56E+001	11.16	1.79E+001
F	11	3640-	3656	3647.87	912.00	1.46	5.82E+001	18.10	3.11E+001
F	12	3873-	3888	3879.87	970.00	1.46	4.61E+001	15.18	1.37E+001
F	13	5839-	5864	5851.19	1462.87	2.05	3.99E+002	38.84	1.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	7.11032E+004	2.36120E+004
K-40	0.880	1460.81*		10.67	6.05539E+006	7.67058E+005
TL-208	0.748	277.35		6.80		
		510.84*		21.60	3.29181E+005	1.12572E+005
		583.14*		84.20	1.29394E+005	3.37054E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.08094E+006	6.03068E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.38238E+005	6.56549E+004
Bi-214	0.412	609.31*		46.30	2.74613E+005	6.53183E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	3.58551E+006	1.07120E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.39218E+005	1.04121E+005
		351.92*		37.20	1.71919E+005	6.11814E+004
Ac-228	0.600	338.32		11.40		
		911.07*		27.70	2.84587E+005	9.43647E+004
		969.11*		16.60	3.86177E+005	1.33439E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	4.315401E+004	2.469215E+004
K-40		0.880	6.055390E+006	7.670580E+005
TL-208		0.748	1.293944E+005	3.344053E+004
Pb-212	@	0.497	2.382383E+005	6.565492E+004
Bi-214		0.412	2.746127E+005	6.531831E+004
PB-214	@	0.564	1.891915E+005	5.274898E+004
Ac-228		0.600	3.184552E+005	7.704598E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.04	9.6974E-002	42.42
F 3	84.78	2.0346E-001	23.49
F 10	795.29	1.7334E-002	71.57

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.7946E+004	5.22E+004	1.3584E+004
	1332.49	100.00	5.2210E+004		1.3388E+004
Nb-94	702.63	100.00	6.1615E+004	5.83E+004	4.8846E+004
	871.10	100.00	5.8336E+004		-6.2114E+003
Ag-108m	79.20	7.10	2.2678E+006	7.02E+004	-3.7497E+006
	433.93	89.90	7.0232E+004		5.9748E+003
	614.37	90.40	9.0101E+004		2.1991E+004
	722.95	90.50	7.3645E+004		1.5595E+004
Sb-125	176.33	6.89	1.1614E+006	2.04E+005	1.1783E+006
	427.89	29.33	2.0384E+005		-1.4152E+005
	463.38	10.35	6.7329E+005		9.5751E+004
	600.56	17.80	3.3016E+005		-7.5266E+004
	606.64	5.02	1.6252E+006		3.0441E+006
	635.90	11.32	5.3900E+005		2.8634E+005
Cs-134	563.23	8.38	7.7974E+005	7.79E+004	2.8706E+005
	569.32	15.43	4.0136E+005		-1.2567E+005
	604.70	97.60	8.0114E+004		2.6740E+004
	795.84	85.40	7.7945E+004		2.2446E+004
	801.93	8.73	7.0968E+005		1.8575E+005
Cs-137	661.65	85.12	7.5714E+004	7.57E+004	6.5966E+004
Eu-152	121.78	28.40	3.4263E+005	2.51E+005	1.7613E+005
	244.69	7.49	1.0371E+006		3.2733E+005
	344.27	26.50	2.5132E+005		-3.7305E+005
	778.89	12.74	5.3198E+005		-2.4424E+005
	867.32	4.16	1.4499E+006		-6.0422E+005
	964.01	14.40	5.2497E+005		-2.3315E+005
	1085.78	10.00	6.2322E+005		7.6571E+004
	1112.02	13.30	4.4553E+005		-5.9054E+004
	1407.95	20.70	2.6753E+005		7.5668E+004
Eu-154	123.07	40.50	2.3668E+005	2.20E+005	-4.5399E+004
	247.94	6.60	1.0952E+006		-9.1019E+005
	591.81	4.83	1.2831E+006		2.2465E+005
	723.30	19.70	3.3427E+005		-5.9969E+004
	756.87	4.33	1.4175E+006		-1.7611E+005
	873.19	11.50	5.0153E+005		1.4108E+005
	996.32	10.30	5.7218E+005		-2.9694E+005
	1004.76	17.90	3.2824E+005		-2.1737E+004
	1274.45	35.50	2.1983E+005		2.9744E+005
Eu-155	86.54	30.90	4.5368E+005	4.54E+005	-1.3002E+004
	105.31	20.70	5.3132E+005		2.5791E+005
Am-241	59.54	35.90	4.8888E+005	4.89E+005	-1.3222E+005
Cm-243	228.19	10.56	6.6857E+005	5.08E+005	6.6066E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0819E+005	5.08E+005	2.0432E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 2:30:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 2:15:08 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	268-	305	271.13	67.74	0.90	3.96E+001	30.24	2.78E+002
m	2	268-	305	291.79	72.90	0.91	1.54E+002	39.51	4.96E+002
m	3	268-	305	300.82	75.16	0.92	2.53E+002	47.85	5.20E+002
M	4	333-	357	339.96	84.95	0.95	1.08E+002	37.14	4.40E+002
m	5	333-	357	350.57	87.60	0.96	8.53E+001	35.42	4.71E+002
F	6	949-	960	955.45	238.83	0.98	1.08E+002	27.79	1.23E+002
F	7	1400-	1416	1409.11	352.26	1.41	1.01E+002	22.71	6.37E+001
F	8	2035-	2056	2044.72	511.17	1.91	1.01E+002	22.14	6.95E+001
F	9	2327-	2343	2334.86	583.72	1.42	6.77E+001	18.62	3.44E+001
F	10	2430-	2446	2438.00	609.50	1.45	9.35E+001	21.64	4.11E+001
F	11	3640-	3658	3648.43	912.13	1.52	5.62E+001	18.64	4.35E+001
F	12	3873-	3886	3878.91	969.76	1.38	3.52E+001	14.18	1.59E+001
F	13	4952-	4965	4958.77	1239.75	1.66	2.92E+001	13.02	1.33E+001
F	14	5097-	5110	5102.95	1275.79	0.96	2.03E+001	11.80	1.97E+001
F	15	5838-	5864	5851.79	1463.02	2.08	3.91E+002	38.32	1.02E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.09552E+005	2.85948E+004
K-40	0.863	1460.81*		10.67	5.93278E+006	7.54589E+005
Eu-155	0.322	86.54*		30.90	2.26675E+005	1.04127E+005
		105.31		20.70		
TL-208	0.746	277.35		6.80		
		510.84*		21.60	5.07187E+005	1.38712E+005
		583.14*		84.20	9.27033E+004	2.82729E+004
		860.37		12.46		
Pb-212	0.658	74.81*	@	10.70	2.27753E+006	6.19849E+005
		77.11	@	18.00		
		87.30*	@	8.00	8.75533E+005	4.02192E+005
		238.63*		44.60	2.00968E+005	6.04514E+004
Bi-214	0.417	609.31*		46.30	2.37071E+005	6.22834E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.599	338.32		11.40		
		911.07*		27.70	2.75030E+005	9.64479E+004
		969.11*		16.60	2.94769E+005	1.22710E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	8.952857E+004	2.923235E+004
K-40		0.863	5.932776E+006	7.545890E+005
Eu-155		0.322	1.746445E+005	1.052970E+005
TL-208		0.746	9.270331E+004	2.811104E+004
Pb-212	@	0.658	2.009682E+005	6.045145E+004
Bi-214		0.417	2.370708E+005	6.228338E+004
Ac-228		0.599	2.825676E+005	7.582892E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	67.74	4.4004E-002	76.36
m 2	72.90	1.7149E-001	25.60
M 4	84.95	1.1950E-001	34.54
F 7	352.26	1.1272E-001	22.39
F 13	1239.75	3.2452E-002	44.57
F 14	1275.79	2.2529E-002	58.20

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	5.9742E+004	4.75E+004	-1.4510E+004
		1332.49	100.00	4.7520E+004		2.1298E+004
	Nb-94	702.63	100.00	6.4947E+004	6.01E+004	1.3720E+004
		871.10	100.00	6.0063E+004		2.4673E+004
	Ag-108m	79.20	7.10	2.2128E+006	6.77E+004	-2.8826E+006
		433.93	89.90	6.7712E+004		1.8379E+004
		614.37	90.40	8.8170E+004		1.3697E+003
		722.95	90.50	7.5976E+004		6.7378E+004
	Sb-125	176.33	6.89	1.0711E+006	2.08E+005	-2.1967E+005
		427.89	29.33	2.0841E+005		-1.1189E+005
		463.38	10.35	5.9701E+005		7.5740E+003
		600.56	17.80	3.6803E+005		1.7867E+005
		606.64	5.02	1.6551E+006		2.1074E+006
		635.90	11.32	5.5529E+005		8.6150E+004
	Cs-134	563.23	8.38	6.9166E+005	7.42E+004	-5.7346E+005
		569.32	15.43	3.9668E+005		-2.7841E+005
		604.70	97.60	8.4442E+004		-4.7716E+004
		795.84	85.40	7.4155E+004		2.3877E+004
		801.93	8.73	7.4777E+005		5.3713E+005
	Cs-137	661.65	85.12	7.0951E+004	7.10E+004	2.9988E+004
	Eu-152	121.78	28.40	3.3687E+005	2.45E+005	-1.3232E+005
		244.69	7.49	9.4032E+005		-1.2534E+006
		344.27	26.50	2.4508E+005		-1.9798E+005
		778.89	12.74	4.9588E+005		-4.7426E+005
		867.32	4.16	1.5055E+006		-5.5247E+004
		964.01	14.40	5.3295E+005		-1.1970E+005
		1085.78	10.00	5.8235E+005		-9.6927E+005
		1112.02	13.30	4.9386E+005		-1.8641E+005
		1407.95	20.70	2.4557E+005		-1.1419E+005
	Eu-154	123.07	40.50	2.3907E+005	1.99E+005	1.7137E+005
		247.94	6.60	1.0201E+006		-2.0014E+005
		591.81	4.83	1.3184E+006		-1.3996E+006
		723.30	19.70	3.4644E+005		1.5077E+005
		756.87	4.33	1.4175E+006		2.8557E+005
		873.19	11.50	5.1675E+005		2.7036E+005
		996.32	10.30	5.9795E+005		7.9753E+005
		1004.76	17.90	2.9828E+005		-5.3636E+005
		1274.45	35.50	1.9897E+005		3.7305E+004
+	Eu-155	86.54*	30.90	2.7569E+005	2.76E+005	2.2668E+005
		105.31	20.70	5.2474E+005		5.5146E+004
	Am-241	59.54	35.90	4.8494E+005	4.85E+005	-1.0067E+005
	Cm-243	228.19	10.56	6.7650E+005	4.70E+005	-3.5526E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7003E+005	4.70E+005	9.7463E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 2:08:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 1:53:06 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	315	292.30	73.03	0.93	1.48E+002	39.10	4.17E+002
m	2	287-	315	300.50	75.08	0.94	3.39E+002	48.51	4.68E+002
m	3	287-	315	309.45	77.32	0.94	7.70E+001	34.03	4.79E+002
F	4	946-	960	955.33	238.80	0.88	1.56E+002	31.25	1.65E+002
F	5	1401-	1415	1408.40	352.08	1.26	8.23E+001	23.21	8.66E+001
F	6	1751-	1760	1755.08	438.76	0.44	1.90E+001	10.21	1.68E+001
F	7	2034-	2058	2045.71	511.42	2.14	1.35E+002	23.08	5.38E+001
F	8	2326-	2343	2334.95	583.74	1.26	9.89E+001	21.76	4.04E+001
F	9	2430-	2447	2438.97	609.75	1.38	9.26E+001	21.81	4.51E+001
F	10	3642-	3658	3649.49	912.40	1.55	5.43E+001	16.51	1.87E+001
F	11	3873-	3887	3879.76	969.97	1.40	3.47E+001	13.98	1.62E+001
F	12	5096-	5110	5102.08	1275.58	1.81	3.16E+001	14.06	1.71E+001
F	13	5840-	5864	5851.56	1462.96	1.98	3.55E+002	37.21	1.76E+001
F	14	7063-	7076	7069.85	1767.56	2.32	2.37E+001	11.53	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.46742E+005	3.24970E+004
K-40	0.870	1460.81*	10.67	5.39196E+006	7.14135E+005
TL-208	0.744	277.35	6.80		
		510.84*	21.60	6.79362E+005	1.60353E+005
		583.14*	84.20	1.35438E+005	3.47478E+004
		860.37	12.46		
Pb-212	0.837	74.81* @	10.70	3.05047E+006	7.40275E+005
		77.11* @	18.00	3.99433E+005	1.93161E+005
		87.30 @	8.00		
		238.63*	44.60	2.90085E+005	7.37247E+004
Bi-214	0.414	609.31*	46.30	2.34788E+005	6.25487E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.394	74.82* @	6.21	5.25605E+006	1.33136E+006
		77.11* @	10.50	6.84743E+005	3.35058E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21	19.20		
		351.92*	37.20	2.08730E+005	6.84541E+004
Ac-228	0.587	338.32	11.40		
		911.07*	27.70	2.65326E+005	8.62804E+004
		969.11*	16.60	2.90506E+005	1.20982E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	1.174876E+005	3.333882E+004
K-40		0.870	5.391963E+006	7.141354E+005
TL-208		0.744	1.354380E+005	3.446636E+004
Pb-212	@	0.837	2.900847E+005	7.372473E+004
Bi-214		0.414	2.347881E+005	6.254872E+004
PB-214	@	0.394	2.087304E+005	6.742411E+004
Ac-228		0.587	2.738152E+005	7.024640E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	1.6391E-001	26.50
F 6	438.76	2.1101E-002	53.77
F 12	1275.58	3.5119E-002	44.48
F 14	1767.56	2.6338E-002	48.63

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4650E+004	5.46E+004	-1.9689E+004
	1332.49	100.00	5.4922E+004		5.0691E+004
Nb-94	702.63	100.00	5.9876E+004	5.99E+004	-4.3058E+004
	871.10	100.00	6.2721E+004		3.5984E+004
Ag-108m	79.20	7.10	2.2046E+006	6.92E+004	-1.5681E+005
	433.93	89.90	6.9193E+004		-5.0612E+004
	614.37	90.40	8.9888E+004		7.5561E+002
	722.95	90.50	7.3645E+004		1.8768E+004
Sb-125	176.33	6.89	1.1329E+006	2.20E+005	3.3140E+004
	427.89	29.33	2.1973E+005		1.1752E+005
	463.38	10.35	6.3816E+005		6.7249E+005
	600.56	17.80	3.3016E+005		-3.8897E+004
	606.64	5.02	1.5870E+006		2.0275E+006
	635.90	11.32	5.3425E+005		6.6576E+004
Cs-134	563.23	8.38	7.0368E+005	6.94E+004	-9.8755E+004
	569.32	15.43	3.9194E+005		-7.6274E+003
	604.70	97.60	7.9096E+004		-3.1463E+004
	795.84	85.40	6.9394E+004		-1.5186E+004
	801.93	8.73	7.1677E+005		-1.8390E+005
Cs-137	661.65	85.12	7.3532E+004	7.35E+004	-1.9111E+004
Eu-152	121.78	28.40	3.4537E+005	2.42E+005	-9.1208E+004
	244.69	7.49	9.6797E+005		-1.0787E+006
	344.27	26.50	2.4219E+005		-1.9006E+005
	778.89	12.74	4.3309E+005		-7.0577E+005
	867.32	4.16	1.5741E+006		1.1590E+006
	964.01	14.40	5.0652E+005		1.2099E+005
	1085.78	10.00	5.8235E+005		-6.0277E+004
	1112.02	13.30	5.1349E+005		6.0928E+004
	1407.95	20.70	2.7014E+005		-4.1032E+004
Eu-154	123.07	40.50	2.4085E+005	2.03E+005	1.0788E+005
	247.94	6.60	1.0112E+006		-2.3744E+006
	591.81	4.83	1.2831E+006		1.7798E+005
	723.30	19.70	3.3701E+005		2.0453E+005
	756.87	4.33	1.4035E+006		-2.1390E+005
	873.19	11.50	5.5425E+005		-1.1986E+005
	996.32	10.30	5.4511E+005		-2.9406E+005
	1004.76	17.90	3.2383E+005		1.9971E+005
	1274.45	35.50	2.0332E+005		4.8559E+004
Eu-155	86.54	30.90	4.4606E+005	4.46E+005	6.2968E+005
	105.31	20.70	5.2531E+005		2.4433E+005
Am-241	59.54	35.90	4.8784E+005	4.88E+005	-6.3242E+004
Cm-243	228.19	10.56	6.6357E+005	4.96E+005	2.5317E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9610E+005	4.96E+005	7.9523E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 1:45:08 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 1:30:07 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	309	292.51	73.09	1.07	1.33E+002	38.93	4.45E+002
m	2	287-	309	300.63	75.12	1.07	3.19E+002	48.07	5.94E+002
F	3	948-	962	955.55	238.86	1.13	1.59E+002	31.20	1.52E+002
F	4	1177-	1190	1181.96	295.47	1.12	3.99E+001	19.74	8.11E+001
F	5	1402-	1414	1408.62	352.14	0.90	7.91E+001	22.36	7.29E+001
F	6	2035-	2051	2043.68	510.92	1.62	5.96E+001	19.74	6.47E+001
F	7	2326-	2343	2334.70	583.67	1.44	8.27E+001	21.54	5.81E+001
F	8	2429-	2447	2439.51	609.88	1.56	9.79E+001	21.10	3.33E+001
F	9	2498-	2509	2503.54	625.89	0.41	1.28E+001	6.58	2.29E+001
F	10	3640-	3656	3648.90	912.25	1.32	7.11E+001	18.79	2.75E+001
F	11	3874-	3886	3879.39	969.88	1.12	3.05E+001	14.68	2.79E+001
F	12	4479-	4492	4484.43	1121.15	0.71	2.04E+001	12.33	3.32E+001
F	13	5099-	5112	5105.07	1276.32	1.25	2.78E+001	12.40	1.05E+001
F	14	5837-	5863	5851.41	1462.92	2.07	4.06E+002	39.48	2.06E+001
F	15	7063-	7076	7069.71	1767.53	1.91	3.18E+001	12.52	6.99E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	6.49750E+004	2.33527E+004
K-40	0.874	1460.81*		10.67	6.16472E+006	7.80165E+005
TL-208	0.747	277.35		6.80		
		510.84*		21.60	3.00810E+005	1.10870E+005
		583.14*		84.20	1.13146E+005	3.30572E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.87274E+006	7.09874E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.95932E+005	7.42208E+004
Bi-214	0.703	609.31*		46.30	2.48151E+005	6.17666E+004
		1120.29*		15.10	1.99662E+005	1.22563E+005
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	4.94981E+006	1.27482E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.85077E+005	9.66397E+004
		351.92*		37.20	2.00652E+005	6.59232E+004
Ac-228	0.594	338.32		11.40		
		911.07*		27.70	3.47599E+005	1.00194E+005
		969.11*		16.60	2.55466E+005	1.25838E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	4.053551E+004	2.440695E+004
K-40		0.874	6.164719E+006	7.801654E+005
TL-208		0.747	1.131460E+005	3.285092E+004
Pb-212	@	0.496	2.959319E+005	7.422075E+004
Bi-214		0.703	2.383303E+005	5.515812E+004
PB-214	@	0.564	1.957057E+005	5.445903E+004
Ac-228		0.594	3.118522E+005	7.838282E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.09	1.4802E-001	29.22
F 9	625.89	1.4239E-002	51.35
F 13	1276.32	3.0887E-002	44.60
F 15	1767.53	3.5299E-002	39.42

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4406E+004	5.28E+004	8.2543E+003
	1332.49	100.00	5.2765E+004		1.3030E+004
Nb-94	702.63	100.00	6.2184E+004	6.07E+004	-2.2400E+004
	871.10	100.00	6.0739E+004		-6.8164E+003
Ag-108m	79.20	7.10	2.1823E+006	7.03E+004	-9.9962E+005
	433.93	89.90	7.5007E+004		3.8566E+004
	614.37	90.40	8.7297E+004		1.2764E+004
	722.95	90.50	7.0307E+004		2.1657E+004
Sb-125	176.33	6.89	1.1236E+006	2.10E+005	-5.9664E+005
	427.89	29.33	2.0970E+005		-1.1619E+005
	463.38	10.35	6.0471E+005		3.6439E+005
	600.56	17.80	3.4893E+005		1.9453E+005
	606.64	5.02	1.6402E+006		2.0134E+006
	635.90	11.32	5.0223E+005		9.0894E+004
Cs-134	563.23	8.38	7.0070E+005	7.86E+004	3.6020E+005
	569.32	15.43	3.8553E+005		-3.6478E+004
	604.70	97.60	8.1318E+004		-3.0000E+003
	795.84	85.40	7.8613E+004		6.2460E+003
	801.93	8.73	7.0252E+005		-1.4201E+005
Cs-137	661.65	85.12	7.6326E+004	7.63E+004	4.5479E+004
Eu-152	121.78	28.40	3.4263E+005	2.38E+005	9.2723E+004
	244.69	7.49	1.0318E+006		-2.9119E+005
	344.27	26.50	2.3809E+005		-5.4599E+005
	778.89	12.74	4.7429E+005		-6.3143E+004
	867.32	4.16	1.4820E+006		-8.3597E+005
	964.01	14.40	5.2296E+005		-2.0247E+005
	1085.78	10.00	5.5180E+005		-5.7956E+005
	1112.02	13.30	4.5501E+005		-4.0968E+005
	1407.95	20.70	2.4267E+005		2.3245E+005
Eu-154	123.07	40.50	2.3743E+005	1.93E+005	-1.6263E+005
	247.94	6.60	1.0853E+006		-4.7567E+005
	591.81	4.83	1.2254E+006		-3.6106E+005
	723.30	19.70	3.2730E+005		2.9362E+005
	756.87	4.33	1.4921E+006		8.7995E+005
	873.19	11.50	5.1974E+005		6.3752E+004
	996.32	10.30	5.4511E+005		-3.3710E+005
	1004.76	17.90	3.4943E+005		2.1124E+005
	1274.45	35.50	1.9338E+005		-4.1996E+004
Eu-155	86.54	30.90	4.3885E+005	4.39E+005	4.2980E+005
	105.31	20.70	5.3189E+005		3.7483E+005
Am-241	59.54	35.90	4.9564E+005	4.96E+005	-1.9569E+005
Cm-243	228.19	10.56	7.2123E+005	4.94E+005	2.5258E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9435E+005	4.94E+005	-1.5990E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 3:15:13 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 3:00:11 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.96	72.95	0.75	1.21E+002	37.29	4.06E+002
m	2	285-	305	300.78	75.15	0.76	1.99E+002	45.91	5.21E+002
F	3	947-	960	955.05	238.73	0.97	1.35E+002	29.70	1.43E+002
F	4	1349-	1363	1355.25	338.79	1.16	4.76E+001	18.82	6.70E+001
M	5	1400-	1431	1408.93	352.21	1.92	1.35E+002	23.62	5.95E+001
m	6	1400-	1431	1425.97	356.47	1.93	2.39E+001	12.35	4.84E+001
F	7	2036-	2052	2044.68	511.17	1.92	9.21E+001	20.99	4.68E+001
F	8	2325-	2342	2334.12	583.53	1.63	7.41E+001	19.42	4.06E+001
F	9	2430-	2447	2438.61	609.65	1.42	8.97E+001	21.52	4.50E+001
F	10	3639-	3656	3647.82	911.98	2.03	5.97E+001	17.23	2.48E+001
F	11	3872-	3886	3878.88	969.75	1.31	4.39E+001	15.76	2.19E+001
F	12	4479-	4493	4485.79	1121.49	1.49	3.76E+001	14.39	1.51E+001
F	13	5096-	5109	5103.13	1275.84	1.63	3.15E+001	12.68	6.99E+000
F	14	5838-	5862	5850.56	1462.71	1.88	4.04E+002	39.56	1.56E+001
F	15	7063-	7076	7069.54	1767.48	2.02	3.19E+001	13.46	1.11E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.00357E+005	2.68562E+004
K-40	0.896	1460.81*		10.67	6.13788E+006	7.79730E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	4.64617E+005	1.29995E+005
		583.14*		84.20	1.01377E+005	2.97702E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.79208E+006	5.41924E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.51294E+005	6.77670E+004
Bi-214	0.703	609.31*		46.30	2.27329E+005	6.14635E+004
		1120.29*		15.10	3.68581E+005	1.46209E+005
		1764.49		15.80		
Ac-228	0.983	338.32*		11.40	3.88889E+005	1.65469E+005
		911.07*		27.70	2.92035E+005	9.06671E+004
		969.11*		16.60	3.67384E+005	1.37496E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	7.845994E+004	2.760611E+004
K-40		0.896	6.137877E+006	7.797299E+005
TL-208		0.749	1.013768E+005	2.958627E+004
Pb-212	@	0.497	2.512939E+005	6.776700E+004
Bi-214		0.703	2.485421E+005	5.666055E+004
Ac-228		0.983	3.276781E+005	6.883223E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	1.3427E-001	30.86
M 5	352.21	1.4960E-001	17.54
m 6	356.47	2.6543E-002	51.72
F 13	1275.84	3.4945E-002	40.30
F 15	1767.48	3.5455E-002	42.17

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2332E+004	4.81E+004	-2.0315E+004
	1332.49	100.00	4.8133E+004		-2.7321E+004
Nb-94	702.63	100.00	6.2466E+004	5.76E+004	-2.1697E+004
	871.10	100.00	5.7630E+004		-3.4227E+004
Ag-108m	79.20	7.10	2.2477E+006	6.77E+004	-3.3379E+006
	433.93	89.90	6.7712E+004		-1.2427E+004
	614.37	90.40	9.2404E+004		1.2702E+004
	722.95	90.50	7.6547E+004		2.3960E+004
Sb-125	176.33	6.89	1.1647E+006	2.07E+005	-8.4105E+004
	427.89	29.33	2.0712E+005		8.5440E+004
	463.38	10.35	6.1231E+005		4.7200E+005
	600.56	17.80	2.9214E+005		-2.3918E+005
	606.64	5.02	1.5909E+006		3.4051E+006
	635.90	11.32	5.3900E+005		1.5419E+005
Cs-134	563.23	8.38	7.2709E+005	7.47E+004	-5.1222E+005
	569.32	15.43	4.2101E+005		-7.5155E+004
	604.70	97.60	7.4661E+004		8.9275E+003
	795.84	85.40	7.8280E+004		4.2476E+004
	801.93	8.73	7.6771E+005		4.2811E+005
Cs-137	661.65	85.12	7.1279E+004	7.13E+004	3.7414E+004
Eu-152	121.78	28.40	3.5222E+005	2.28E+005	6.9394E+004
	244.69	7.49	9.9344E+005		-7.5454E+005
	344.27	26.50	2.4451E+005		6.5404E+004
	778.89	12.74	4.7674E+005		-2.9228E+005
	867.32	4.16	1.4417E+006		5.4698E+004
	964.01	14.40	5.5996E+005		-1.9328E+005
	1085.78	10.00	6.2322E+005		2.9170E+005
	1112.02	13.30	4.7036E+005		3.5172E+005
	1407.95	20.70	2.2756E+005		1.9996E+005
Eu-154	123.07	40.50	2.4423E+005	1.89E+005	-1.6284E+005
	247.94	6.60	1.0341E+006		-2.2075E+006
	591.81	4.83	1.2414E+006		9.8617E+005
	723.30	19.70	3.5431E+005		2.0350E+005
	756.87	4.33	1.3533E+006		-6.0316E+005
	873.19	11.50	5.2566E+005		8.6935E+004
	996.32	10.30	5.7967E+005		9.2154E+004
	1004.76	17.90	3.1935E+005		-4.8559E+004
	1274.45	35.50	1.8879E+005		2.0725E+005
Eu-155	86.54	30.90	4.4838E+005	4.48E+005	4.5655E+005
	105.31	20.70	5.3755E+005		-2.7580E+005
Am-241	59.54	35.90	4.8336E+005	4.83E+005	-1.6002E+005
Cm-243	228.19	10.56	6.8238E+005	4.77E+005	-2.2386E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7737E+005	4.77E+005	-1.6671E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 1:23:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 1:08:39 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.14	72.99	0.82	1.78E+002	39.28	4.19E+002
m	2	283-	305	300.59	75.11	0.82	2.41E+002	45.48	4.41E+002
M	3	335-	354	339.45	84.82	0.75	1.08E+002	37.00	3.17E+002
m	4	335-	354	350.19	87.51	0.75	4.90E+001	30.29	3.31E+002
F	5	738-	750	745.57	186.36	0.79	4.19E+001	23.15	1.55E+002
F	6	950-	960	955.46	238.84	1.02	1.57E+002	30.95	1.13E+002
F	7	1347-	1361	1353.55	338.37	1.43	5.97E+001	20.47	7.39E+001
F	8	1402-	1415	1408.46	352.10	1.22	7.61E+001	23.03	8.58E+001
F	9	2035-	2053	2044.00	510.99	1.89	8.96E+001	22.27	7.80E+001
F	10	2327-	2342	2335.12	583.78	1.22	8.54E+001	20.54	3.59E+001
F	11	2428-	2449	2438.80	609.70	1.58	1.06E+002	22.30	5.23E+001
F	12	3641-	3657	3647.91	912.00	1.14	5.49E+001	17.88	3.28E+001
F	13	3874-	3886	3880.08	970.05	1.39	3.90E+001	15.03	1.83E+001
F	14	5097-	5110	5104.31	1276.14	1.00	1.94E+001	12.72	2.80E+001
F	15	5838-	5864	5851.45	1462.94	1.96	4.41E+002	41.48	2.69E+001
F	16	7064-	7077	7070.11	1767.62	1.98	2.65E+001	10.66	1.52E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	9.75876E+004	2.78546E+004
K-40	0.872	1460.81*		10.67	6.69035E+006	8.30865E+005
TL-208	0.744	277.35		6.80		
		510.84*		21.60	4.51794E+005	1.34131E+005
		583.14*		84.20	1.16930E+005	3.20791E+004
		860.37		12.46		
Pb-212	0.658	74.81*	@	10.70	2.16696E+006	5.89689E+005
		77.11	@	18.00		
		87.30*	@	8.00	5.03502E+005	3.26725E+005
		238.63*		44.60	2.90652E+005	7.33456E+004
Bi-214	0.415	609.31*		46.30	2.69481E+005	6.57432E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.979	338.32*		11.40	4.87980E+005	1.83896E+005
		911.07*		27.70	2.68434E+005	9.27128E+004
		969.11*		16.60	3.27044E+005	1.30481E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		1.000	7.233070E+004	2.869168E+004
	K-40		0.872	6.690352E+006	8.308652E+005
X	Eu-155		0.326		
	TL-208		0.744	1.169301E+005	3.185197E+004
	Pb-212	@	0.658	2.906522E+005	7.334559E+004
	Bi-214		0.415	2.694807E+005	6.574320E+004
	Ac-228		0.979	3.169796E+005	6.990372E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.99	1.9800E-001	22.04
M 3	84.82	1.1983E-001	34.30
F 5	186.36	4.6581E-002	55.23
F 8	352.10	8.4524E-002	30.27
F 14	1276.14	2.1565E-002	65.54
F 16	1767.62	2.9394E-002	40.31

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9114E+004	5.05E+004	3.1548E+002
	1332.49	100.00	5.0507E+004		-8.3690E+004
Nb-94	702.63	100.00	6.5217E+004	5.94E+004	5.2113E+004
	871.10	100.00	5.9379E+004		-2.7662E+004
Ag-108m	79.20	7.10	2.1190E+006	7.04E+004	-3.3595E+006
	433.93	89.90	7.0437E+004		-1.1939E+004
	614.37	90.40	9.2404E+004		-4.1164E+004
	722.95	90.50	7.4235E+004		2.4457E+004
Sb-125	176.33	6.89	1.1224E+006	2.08E+005	5.5055E+005
	427.89	29.33	2.0777E+005		-6.5884E+004
	463.38	10.35	6.9844E+005		6.5879E+005
	600.56	17.80	3.5312E+005		6.4040E+003
	606.64	5.02	1.6625E+006		-2.2307E+005
	635.90	11.32	5.0981E+005		7.6205E+004
Cs-134	563.23	8.38	7.4694E+005	7.79E+004	6.5361E+005
	569.32	15.43	3.9668E+005		-2.4537E+005
	604.70	97.60	8.2111E+004		9.7788E+003
	795.84	85.40	7.7945E+004		2.0723E+004
	801.93	8.73	7.4100E+005		6.9008E+005
Cs-137	661.65	85.12	7.1930E+004	7.19E+004	2.4175E+004
Eu-152	121.78	28.40	3.4746E+005	2.34E+005	-1.5268E+005
	244.69	7.49	1.0155E+006		-2.0921E+006
	344.27	26.50	2.4737E+005		-1.2336E+005
	778.89	12.74	4.9117E+005		-5.0259E+005
	867.32	4.16	1.5055E+006		-9.8197E+004
	964.01	14.40	5.4470E+005		6.6666E+003
	1085.78	10.00	6.2715E+005		2.0166E+005
	1112.02	13.30	4.9386E+005		1.5242E+005
	1407.95	20.70	2.3373E+005		-2.5016E+004
Eu-154	123.07	40.50	2.4100E+005	2.20E+005	-2.5102E+005
	247.94	6.60	1.0685E+006		-2.6814E+006
	591.81	4.83	1.3576E+006		3.9600E+005
	723.30	19.70	3.4511E+005		1.8467E+005
	756.87	4.33	1.5629E+006		6.0943E+003
	873.19	11.50	5.5702E+005		5.8197E+005
	996.32	10.30	5.8338E+005		1.9321E+005
	1004.76	17.90	3.3689E+005		1.6466E+005
	1274.45	35.50	2.1983E+005		5.7314E+004
Eu-155	86.54*	30.90	2.3238E+005	2.32E+005	1.3036E+005
	105.31	20.70	5.1160E+005		2.4063E+004
Am-241	59.54	35.90	4.7184E+005	4.72E+005	-4.2890E+005
Cm-243	228.19	10.56	7.0350E+005	4.88E+005	3.4725E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8816E+005	4.88E+005	1.4455E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 2:49:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 2:34:21 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.52	72.84	1.05	1.79E+002	41.36	4.89E+002
m	2	285-	305	300.50	75.08	1.05	3.23E+002	49.96	5.71E+002
F	3	949-	962	955.57	238.86	1.05	1.26E+002	28.72	1.37E+002
F	4	1400-	1416	1408.01	351.98	1.39	9.46E+001	22.28	6.61E+001
F	5	2325-	2343	2334.22	583.56	1.56	8.09E+001	19.90	4.03E+001
F	6	2430-	2445	2438.50	609.63	1.48	8.06E+001	20.60	4.15E+001
F	7	3641-	3656	3648.07	912.04	1.32	6.41E+001	18.06	2.10E+001
F	8	3874-	3886	3879.23	969.84	1.38	3.10E+001	13.14	1.33E+001
F	9	5098-	5112	5105.43	1276.41	1.69	3.93E+001	14.27	1.28E+001
F	10	5838-	5864	5851.20	1462.87	2.00	4.55E+002	41.63	1.66E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.879	1460.81*	10.67	6.91384E+006	8.44488E+005
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.10659E+005	3.09144E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.90980E+006	7.26217E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.34069E+005	6.47313E+004
Bi-214	0.416	609.31*	46.30	2.04416E+005	5.80926E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.601	338.32	11.40		
		911.07*	27.70	3.13589E+005	9.53559E+004
		969.11*	16.60	2.59511E+005	1.13373E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.879	6.913840E+006	8.444884E+005
TL-208		0.467	1.106587E+005	3.091435E+004
Pb-212	@	0.497	2.340693E+005	6.473128E+004
Bi-214		0.416	2.044159E+005	5.809256E+004
Ac-228		0.601	2.911834E+005	7.297563E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.84	1.9911E-001	23.08
F	4	351.98	1.0511E-001	23.55
F	9	1276.41	4.3714E-002	36.28

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7195E+004	5.28E+004	2.3088E+004
	1332.49	100.00	5.2765E+004		3.4830E+003
Nb-94	702.63	100.00	6.4405E+004	6.01E+004	-4.3394E+004
	871.10	100.00	6.0063E+004		8.6576E+003
Ag-108m	79.20	7.10	2.1614E+006	7.06E+004	-3.8421E+006
	433.93	89.90	7.0642E+004		-1.6713E+004
	614.37	90.40	9.0945E+004		-6.4203E+004
	722.95	90.50	7.4235E+004		2.9275E+003
Sb-125	176.33	6.89	1.1201E+006	2.13E+005	-3.4679E+005
	427.89	29.33	2.1289E+005		2.1969E+005
	463.38	10.35	6.1231E+005		2.9221E+004
	600.56	17.80	3.7720E+005		2.0951E+005
	606.64	5.02	1.7311E+006		2.5972E+006
	635.90	11.32	5.5299E+005		3.9503E+005
Cs-134	563.23	8.38	6.9469E+005	7.49E+004	-5.8569E+005
	569.32	15.43	3.9035E+005		2.3611E+005
	604.70	97.60	8.4634E+004		5.4360E+004
	795.84	85.40	7.4859E+004		-3.3976E+003
	801.93	8.73	7.1323E+005		-3.0027E+005
Cs-137	661.65	85.12	7.0621E+004	7.06E+004	-6.1701E+003
Eu-152	121.78	28.40	3.3837E+005	2.15E+005	4.0611E+004
	244.69	7.49	1.0210E+006		2.1386E+005
	344.27	26.50	2.5020E+005		-2.2223E+005
	778.89	12.74	4.7183E+005		8.3345E+004
	867.32	4.16	1.4253E+006		-8.6855E+005
	964.01	14.40	5.1481E+005		1.6353E+005
	1085.78	10.00	5.9906E+005		1.8960E+005
	1112.02	13.30	4.5187E+005		-1.8655E+005
	1407.95	20.70	2.1464E+005		-1.1597E+004
Eu-154	123.07	40.50	2.3578E+005	1.99E+005	-1.2639E+005
	247.94	6.60	1.0719E+006		-1.0229E+006
	591.81	4.83	1.1816E+006		1.9200E+004
	723.30	19.70	3.4511E+005		1.4932E+005
	756.87	4.33	1.4655E+006		1.4883E+006
	873.19	11.50	5.1072E+005		3.2727E+005
	996.32	10.30	5.9795E+005		5.2220E+005
	1004.76	17.90	3.2824E+005		-7.0619E+004
	1274.45	35.50	1.9897E+005		2.1232E+005
Eu-155	86.54	30.90	4.3575E+005	4.36E+005	5.9018E+005
	105.31	20.70	5.3360E+005		9.6716E+003
Am-241	59.54	35.90	4.8573E+005	4.86E+005	-2.2572E+005
Cm-243	228.19	10.56	6.8042E+005	4.80E+005	3.4827E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8009E+005	4.80E+005	-7.9128E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 3:38:37 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 3:23:36 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	292.57	73.10	0.87	1.50E+002	39.82	4.44E+002
m	2	287-	306	300.49	75.08	0.88	2.42E+002	47.57	5.38E+002
F	3	332-	345	338.79	84.66	1.56	1.35E+002	41.54	5.01E+002
F	4	948-	964	955.21	238.77	0.99	1.48E+002	29.75	1.59E+002
F	5	1404-	1417	1408.81	352.18	0.76	6.75E+001	20.69	6.92E+001
F	6	2325-	2342	2334.13	583.53	1.36	7.12E+001	19.49	4.30E+001
F	7	2430-	2443	2437.88	609.47	1.00	7.55E+001	20.79	4.33E+001
F	8	2905-	2917	2911.01	727.76	1.02	2.21E+001	13.60	3.00E+001
F	9	3640-	3656	3648.70	912.20	1.58	5.39E+001	17.43	2.92E+001
F	10	3874-	3885	3879.87	970.00	1.18	2.80E+001	12.90	1.34E+001
F	11	5837-	5861	5850.23	1462.63	1.84	4.04E+002	39.13	2.96E+000
F	12	6359-	6372	6365.65	1591.50	0.73	1.21E+001	8.19	8.49E+000
F	13	7063-	7076	7069.57	1767.49	1.50	2.32E+001	11.08	6.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.905	1460.81*	10.67	6.13859E+006	7.74720E+005
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.74532E+004	2.96181E+004
		860.37	12.46		
Bi-212	0.989	727.17*	11.80	2.34535E+005	1.47233E+005
Pb-212	0.497	74.81* @	10.70	2.17928E+006	6.04734E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.75361E+005	7.00977E+004
Bi-214	0.417	609.31*	46.30	1.91348E+005	5.78306E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.594	338.32	11.40		
		911.07*	27.70	2.63758E+005	9.04370E+004
		969.11*	16.60	2.34233E+005	1.10799E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.905	6.138588E+006	7.747199E+005
TL-208	0.467	9.745319E+004	2.961811E+004
Bi-212	0.989	2.345350E+005	1.472328E+005
Pb-212 @	0.497	2.753613E+005	7.009765E+004
Bi-214	0.417	1.913485E+005	5.783058E+004
Ac-228	0.594	2.519527E+005	7.006141E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	73.10	1.6674E-001	26.54
F	3	84.66	1.5010E-001	30.75
F	5	352.18	7.5014E-002	30.64
F	12	1591.50	1.3468E-002	67.59
F	13	1767.49	2.5798E-002	47.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3171E+004	4.69E+004	-2.1855E+004
	1332.49	100.00	4.6897E+004		2.0145E+004
Nb-94	702.63	100.00	5.9581E+004	5.96E+004	-2.6575E+004
	871.10	100.00	6.1407E+004		3.1737E+004
Ag-108m	79.20	7.10	2.1939E+006	6.90E+004	-1.5792E+006
	433.93	89.90	6.8984E+004		-5.6539E+002
	614.37	90.40	8.9675E+004		-8.3059E+004
	722.95	90.50	7.5111E+004		-2.5080E+003
Sb-125	176.33	6.89	1.0977E+006	1.97E+005	-1.2748E+006
	427.89	29.33	1.9710E+005		6.4857E+004
	463.38	10.35	5.9701E+005		2.9757E+005
	600.56	17.80	3.4040E+005		-1.4566E+005
	606.64	5.02	1.6177E+006		2.1957E+006
	635.90	11.32	5.1480E+005		4.2226E+004
Cs-134	563.23	8.38	7.4414E+005	7.31E+004	4.8643E+005
	569.32	15.43	4.1055E+005		-1.6677E+005
	604.70	97.60	8.2896E+004		3.4843E+002
	795.84	85.40	7.3086E+004		-3.8851E+004
	801.93	8.73	7.3759E+005		-2.4391E+005
Cs-137	661.65	85.12	7.2575E+004	7.26E+004	2.6752E+004
Eu-152	121.78	28.40	3.4495E+005	2.28E+005	-2.3716E+005
	244.69	7.49	9.5933E+005		-1.2112E+005
	344.27	26.50	2.2841E+005		-6.1725E+005
	778.89	12.74	4.6436E+005		-4.3552E+005
	867.32	4.16	1.4820E+006		-8.2980E+005
	964.01	14.40	4.9167E+005		-3.5148E+005
	1085.78	10.00	5.8657E+005		2.4071E+005
	1112.02	13.30	5.0518E+005		1.8213E+004
	1407.95	20.70	2.3973E+005		5.0254E+004
Eu-154	123.07	40.50	2.4100E+005	2.12E+005	-3.7552E+004
	247.94	6.60	1.0651E+006		-3.0303E+003
	591.81	4.83	1.2984E+006		5.6273E+005
	723.30	19.70	3.4377E+005		-1.7203E+004
	756.87	4.33	1.3606E+006		3.4589E+005
	873.19	11.50	5.1072E+005		5.1757E+004
	996.32	10.30	6.0153E+005		-2.8515E+004
	1004.76	17.90	3.2604E+005		3.4650E+004
	1274.45	35.50	2.1175E+005		1.4051E+005
Eu-155	86.54	30.90	4.5544E+005	4.55E+005	9.0174E+005
	105.31	20.70	5.1865E+005		1.5632E+005
Am-241	59.54	35.90	4.7964E+005	4.80E+005	-2.9951E+005
Cm-243	228.19	10.56	6.9302E+005	4.99E+005	8.8682E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9872E+005	4.99E+005	-9.4943E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 4:01:32 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 3:46:31 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	274-	313	292.06	72.97	1.04	1.67E+002	38.65	4.89E+002
m	2	274-	313	300.45	75.07	1.04	2.73E+002	44.70	5.08E+002
m	3	274-	313	309.38	77.30	1.05	6.74E+001	35.30	4.56E+002
F	4	331-	345	339.87	84.93	1.12	9.90E+001	39.03	5.14E+002
F	5	950-	961	955.02	238.73	1.06	1.64E+002	31.05	1.16E+002
F	6	1176-	1186	1181.26	295.29	0.94	3.57E+001	20.04	7.90E+001
F	7	1348-	1362	1354.39	338.58	1.57	6.46E+001	19.60	5.73E+001
F	8	1401-	1416	1408.49	352.10	1.20	7.97E+001	21.79	7.12E+001
F	9	2326-	2342	2333.92	583.48	1.25	7.18E+001	19.91	4.62E+001
F	10	2430-	2446	2438.07	609.52	1.51	1.02E+002	22.25	4.28E+001
F	11	3641-	3658	3647.83	911.99	1.38	7.70E+001	18.99	1.82E+001
F	12	5096-	5110	5102.88	1275.78	1.35	3.07E+001	14.00	2.03E+001
F	13	5838-	5863	5850.03	1462.58	1.90	4.08E+002	39.89	1.90E+001
F	14	7060-	7073	7066.69	1766.77	3.11	2.35E+001	11.17	3.66E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.910	1460.81*	10.67	6.19499E+006	7.86497E+005
TL-208	0.468	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.82097E+004	3.01829E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	2.45671E+006	6.27428E+005
		77.11* @	18.00	3.49895E+005	1.95662E+005
		87.30 @	8.00		
		238.63*	44.60	3.04925E+005	7.48930E+004
Bi-214	0.672	609.31*	46.30	2.58646E+005	6.49528E+004
		1120.29	15.10		
		1764.49*	15.80	2.56416E+005	1.24469E+005
PB-214	0.760	74.82* @	6.21	4.23297E+006	1.12390E+006
		77.11* @	10.50	5.99820E+005	3.38398E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.65237E+005	9.69153E+004
		351.92*	37.20	2.02378E+005	6.48318E+004
Ac-228	0.534	338.32*	11.40	5.27980E+005	1.80313E+005
		911.07*	27.70	3.76562E+005	1.02419E+005
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.910	6.194994E+006	7.864967E+005
TL-208		0.468	9.820969E+004	3.018289E+004
Pb-212	@	0.838	3.049247E+005	7.489297E+004
Bi-214		0.672	2.581686E+005	5.758380E+004
PB-214	@	0.760	1.908960E+005	5.388638E+004
Ac-228		0.534	4.134980E+005	8.905551E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.97	1.8538E-001	23.16
F 4	84.93	1.1004E-001	39.41
F 12	1275.78	3.4069E-002	45.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7195E+004	4.63E+004	5.3312E+003
	1332.49	100.00	4.6265E+004		-2.8281E+004
Nb-94	702.63	100.00	6.4131E+004	5.24E+004	3.9716E+004
	871.10	100.00	5.2401E+004		-2.9754E+003
Ag-108m	79.20	7.10	2.1437E+006	6.90E+004	-1.5074E+006
	433.93	89.90	6.8984E+004		-3.1324E+004
	614.37	90.40	9.1990E+004		-2.9827E+004
	722.95	90.50	7.4820E+004		-5.9273E+004
Sb-125	176.33	6.89	1.1119E+006	2.15E+005	4.8169E+003
	427.89	29.33	2.1540E+005		1.6627E+005
	463.38	10.35	6.3635E+005		1.0156E+005
	600.56	17.80	3.4184E+005		-2.0639E+005
	606.64	5.02	1.7133E+006		2.2080E+006
	635.90	11.32	5.0730E+005		1.9916E+005
Cs-134	563.23	8.38	6.9469E+005	7.13E+004	-8.5833E+005
	569.32	15.43	4.1055E+005		2.4763E+005
	604.70	97.60	8.5960E+004		-3.2703E+004
	795.84	85.40	7.1265E+004		-6.9681E+003
	801.93	8.73	7.6443E+005		3.9358E+005
Cs-137	661.65	85.12	7.0621E+004	7.06E+004	1.8058E+004
Eu-152	121.78	28.40	3.4051E+005	2.42E+005	3.4358E+004
	244.69	7.49	1.0223E+006		-1.7549E+005
	344.27	26.50	2.4161E+005		-5.8444E+003
	778.89	12.74	4.8879E+005		-2.4305E+005
	867.32	4.16	1.3575E+006		-5.5096E+005
	964.01	14.40	5.2898E+005		3.4716E+005
	1085.78	10.00	6.5397E+005		5.0732E+005
	1112.02	13.30	4.2251E+005		-1.4153E+005
	1407.95	20.70	2.5125E+005		8.1179E+004
Eu-154	123.07	40.50	2.4056E+005	2.09E+005	-5.6187E+004
	247.94	6.60	1.0752E+006		-5.6547E+005
	591.81	4.83	1.1927E+006		-2.2524E+005
	723.30	19.70	3.4908E+005		6.8464E+004
	756.87	4.33	1.3459E+006		4.6964E+005
	873.19	11.50	4.6282E+005		-7.3849E+004
	996.32	10.30	5.1652E+005		3.1466E+005
	1004.76	17.90	3.2383E+005		1.6397E+005
	1274.45	35.50	2.0863E+005		1.6455E+005
Eu-155	86.54	30.90	4.3885E+005	4.39E+005	-1.0031E+005
	105.31	20.70	5.3388E+005		3.4270E+005
Am-241	59.54	35.90	4.6197E+005	4.62E+005	-5.6019E+005
Cm-243	228.19	10.56	6.8042E+005	4.86E+005	5.2535E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8638E+005	4.86E+005	2.7725E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 3:18:31 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 3:03:28 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	297-	306	301.05	75.22	0.82	1.86E+002	47.59	5.02E+002
F	2	949-	962	954.91	238.70	1.08	1.55E+002	31.43	1.58E+002
F	3	1175-	1187	1181.84	295.44	0.96	4.12E+001	19.87	8.31E+001
F	4	1402-	1414	1408.00	351.98	1.17	6.80E+001	21.84	7.15E+001
F	5	2325-	2343	2333.34	583.33	1.81	1.03E+002	21.17	3.44E+001
F	6	2429-	2445	2437.28	609.32	1.58	9.92E+001	20.64	2.48E+001
F	7	3638-	3656	3646.64	911.69	1.82	7.96E+001	18.99	2.33E+001
F	8	3871-	3883	3876.32	969.11	1.38	2.38E+001	13.41	2.03E+001
F	9	5833-	5861	5847.61	1461.98	2.21	4.00E+002	38.76	1.45E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.960	1460.81*	10.67	6.07987E+006	7.67235E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.40877E+005	3.44449E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.66641E+006	5.37938E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.86873E+005	7.36711E+004
Bi-214	0.418	609.31*	46.30	2.51403E+005	6.09659E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.565	74.82* @	6.21	2.87128E+006	9.50029E+005
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.91129E+005	9.75169E+004
		351.92*	37.20	1.72549E+005	6.24691E+004
Ac-228	0.614	338.32	11.40		
		911.07*	27.70	3.89158E+005	1.03058E+005
		969.11*	16.60	1.99179E+005	1.14178E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.960	6.079875E+006	7.672346E+005
TL-208		0.470	1.408769E+005	3.444488E+004
Pb-212	@	0.497	2.868735E+005	7.367114E+004
Bi-214		0.418	2.514026E+005	6.096590E+004
PB-214	@	0.565	1.779550E+005	5.260165E+004
Ac-228		0.614	3.038685E+005	7.650306E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.6559E+004	5.22E+004	2.0738E+004
	1332.49	100.00	5.2210E+004		-8.5080E+003
Nb-94	702.63	100.00	5.6539E+004	5.65E+004	4.7442E+003
	871.10	100.00	5.7273E+004		1.4829E+004
Ag-108m	79.20	7.10	2.1806E+006	7.04E+004	-1.3587E+006
	433.93	89.90	7.0437E+004		2.1457E+004
	614.37	90.40	8.7734E+004		2.5603E+004
	722.95	90.50	7.2148E+004		8.6135E+003
Sb-125	176.33	6.89	1.1166E+006	2.03E+005	-3.1986E+005
	427.89	29.33	2.0251E+005		4.8337E+004
	463.38	10.35	5.8921E+005		-1.2980E+005
	600.56	17.80	3.6133E+005		7.5540E+004
	606.64	5.02	1.5832E+006		1.6657E+006
	635.90	11.32	5.1231E+005		-2.0903E+005
Cs-134	563.23	8.38	7.1549E+005	6.82E+004	2.7385E+005
	569.32	15.43	3.7403E+005		3.5105E+004
	604.70	97.60	8.2111E+004		-3.5227E+004
	795.84	85.40	6.8244E+004		-2.2286E+004
	801.93	8.73	6.9163E+005		-1.8156E+005
Cs-137	661.65	85.12	7.0621E+004	7.06E+004	8.6685E+003
Eu-152	121.78	28.40	3.3816E+005	2.18E+005	6.6238E+004
	244.69	7.49	1.0358E+006		-5.2740E+004
	344.27	26.50	2.4963E+005		-4.2282E+005
	778.89	12.74	4.9588E+005		1.0062E+005
	867.32	4.16	1.4580E+006		-2.4101E+005
	964.01	14.40	4.8951E+005		-4.4481E+005
	1085.78	10.00	5.6071E+005		2.5888E+005
	1112.02	13.30	4.6121E+005		-3.0322E+005
	1407.95	20.70	2.1795E+005		-6.7198E+004
Eu-154	123.07	40.50	2.3683E+005	1.43E+005	-3.7056E+004
	247.94	6.60	1.1050E+006		9.1497E+004
	591.81	4.83	1.2882E+006		-2.2200E+005
	723.30	19.70	3.3427E+005		4.1927E+004
	756.87	4.33	1.2700E+006		2.1213E+005
	873.19	11.50	5.0153E+005		-7.5915E+004
	996.32	10.30	5.6075E+005		4.2865E+005
	1004.76	17.90	3.2159E+005		5.9130E+003
	1274.45	35.50	1.4337E+005		-6.3058E+004
Eu-155	86.54	30.90	4.4012E+005	4.40E+005	3.6455E+005
	105.31	20.70	5.2990E+005		-1.3517E+005
Am-241	59.54	35.90	4.7184E+005	4.72E+005	4.5718E+003
Cm-243	228.19	10.56	6.8724E+005	5.15E+005	4.0497E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1497E+005	5.15E+005	3.7646E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 3:00:23 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 2:45:15 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.79	72.91	1.21	1.60E+002	41.51	5.21E+002
m	2	286-	309	300.28	75.03	1.22	3.29E+002	49.39	6.65E+002
F	3	944-	960	954.60	238.62	1.15	1.29E+002	29.21	1.65E+002
F	4	1173-	1186	1182.03	295.48	0.61	3.23E+001	17.69	9.40E+001
F	5	1281-	1291	1286.08	321.50	0.86	1.91E+001	12.18	3.79E+001
F	6	1344-	1363	1353.29	338.30	1.39	6.48E+001	20.11	8.21E+001
F	7	1400-	1414	1407.75	351.92	1.50	9.14E+001	22.83	7.52E+001
F	8	2036-	2051	2043.30	510.82	1.58	7.88E+001	22.39	7.29E+001
F	9	2325-	2341	2333.29	583.32	1.35	7.88E+001	21.29	5.74E+001
F	10	2430-	2447	2438.37	609.60	1.60	1.02E+002	22.15	4.45E+001
F	11	3636-	3654	3646.07	911.55	1.82	8.76E+001	19.26	1.61E+001
F	12	3869-	3883	3876.55	969.17	1.41	3.66E+001	15.67	2.81E+001
F	13	4476-	4490	4482.98	1120.79	1.83	3.69E+001	13.89	1.24E+001
F	14	5834-	5859	5847.15	1461.86	2.08	3.94E+002	38.56	1.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	8.58653E+004	2.72052E+004
K-40	0.967	1460.81*		10.67	5.98722E+006	7.60099E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	3.97525E+005	1.30066E+005
		583.14*		84.20	1.07871E+005	3.24422E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.96221E+006	7.31338E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.39813E+005	6.59753E+004
Bi-214	0.710	609.31*		46.30	2.59281E+005	6.47576E+004
		1120.29*		15.10	3.61649E+005	1.41257E+005
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	5.10396E+006	1.31346E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.49678E+005	8.57844E+004
		351.92*		37.20	2.31831E+005	6.96852E+004
Ac-228	0.997	338.32*		11.40	5.29000E+005	1.84041E+005
		911.07*		27.70	4.27993E+005	1.06211E+005
		969.11*		16.60	3.06840E+005	1.35065E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	6.256517E+004	2.808289E+004
K-40		0.967	5.987224E+006	7.600992E+005
TL-208		0.752	1.078710E+005	3.225113E+004
Pb-212	@	0.498	2.398129E+005	6.597526E+004
Bi-214		0.710	2.770590E+005	5.886653E+004
PB-214	@	0.565	1.991713E+005	5.408817E+004
Ac-228		0.997	4.068400E+005	7.603166E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	1.7795E-001	25.92
F 5	321.50	2.1225E-002	63.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4406E+004	4.99E+004	-3.8812E+004
	1332.49	100.00	4.9925E+004		4.6651E+003
Nb-94	702.63	100.00	5.8686E+004	5.12E+004	3.8152E+004
	871.10	100.00	5.1206E+004		-4.0551E+004
Ag-108m	79.20	7.10	2.1664E+006	6.66E+004	-1.3590E+006
	433.93	89.90	6.6632E+004		-6.4192E+004
	614.37	90.40	8.6636E+004		1.3044E+004
	722.95	90.50	7.1540E+004		9.5210E+004
Sb-125	176.33	6.89	1.0965E+006	2.01E+005	-8.7823E+005
	427.89	29.33	2.0050E+005		-1.0139E+005
	463.38	10.35	6.4534E+005		5.0790E+005
	600.56	17.80	3.2566E+005		-2.4843E+005
	606.64	5.02	1.6177E+006		2.8015E+006
	635.90	11.32	5.5529E+005		4.7596E+005
Cs-134	563.23	8.38	6.9469E+005	6.79E+004	-1.9894E+005
	569.32	15.43	3.9035E+005		-9.4643E+004
	604.70	97.60	8.1517E+004		-5.4892E+004
	795.84	85.40	6.7857E+004		-1.0953E+004
	801.93	8.73	6.7682E+005		-4.5661E+005
Cs-137	661.65	85.12	7.2896E+004	7.29E+004	-5.1059E+003
Eu-152	121.78	28.40	3.5324E+005	2.37E+005	1.2983E+005
	244.69	7.49	1.0087E+006		-8.3730E+005
	344.27	26.50	2.5299E+005		7.0160E+004
	778.89	12.74	4.5161E+005		-4.5422E+005
	867.32	4.16	1.3748E+006		-8.2059E+004
	964.01	14.40	5.4856E+005		1.6928E+005
	1085.78	10.00	5.8235E+005		-1.2511E+005
	1112.02	13.30	4.2588E+005		-2.6033E+005
	1407.95	20.70	2.3675E+005		1.1404E+005
Eu-154	123.07	40.50	2.4553E+005	1.62E+005	-5.3884E+004
	247.94	6.60	1.0719E+006		-3.2974E+005
	591.81	4.83	1.1982E+006		-5.1024E+005
	723.30	19.70	3.2730E+005		3.0979E+005
	756.87	4.33	1.3750E+006		5.9512E+005
	873.19	11.50	4.4210E+005		-2.6885E+005
	996.32	10.30	5.2071E+005		-3.3472E+005
	1004.76	17.90	3.5553E+005		2.3652E+005
	1274.45	35.50	1.6236E+005		2.8876E+004
Eu-155	86.54	30.90	4.4012E+005	4.40E+005	3.8969E+005
	105.31	20.70	5.3783E+005		2.2585E+005
Am-241	59.54	35.90	4.6253E+005	4.63E+005	1.1671E+005
Cm-243	228.19	10.56	7.1102E+005	4.69E+005	6.3274E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6910E+005	4.69E+005	8.5041E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 3:37:09 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 3:22:06 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	306	300.72	75.14	0.93	1.98E+002	47.81	5.36E+002
F	2	947-	962	954.92	238.70	1.05	1.10E+002	29.38	1.98E+002
F	3	1173-	1186	1181.30	295.30	1.26	6.43E+001	22.22	9.47E+001
F	4	1349-	1359	1353.82	338.43	0.72	2.93E+001	16.18	5.62E+001
F	5	1398-	1418	1407.36	351.82	1.74	1.15E+002	23.64	8.70E+001
F	6	2034-	2053	2043.67	510.91	1.79	8.18E+001	21.31	7.25E+001
F	7	2326-	2343	2333.31	583.33	1.44	8.33E+001	20.32	3.68E+001
F	8	2429-	2447	2438.33	609.58	1.44	1.02E+002	21.59	3.50E+001
F	9	3637-	3656	3646.43	911.63	1.76	7.26E+001	18.89	3.00E+001
M	10	3853-	3884	3859.45	964.89	1.31	1.45E+001	10.20	1.37E+001
m	11	3853-	3884	3877.33	969.37	1.31	4.50E+001	14.47	1.05E+001
F	12	5835-	5861	5847.95	1462.06	2.10	4.46E+002	40.79	9.95E+000
F	13	7059-	7072	7065.67	1766.51	1.56	2.86E+001	11.90	5.89E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	8.91154E+004	2.63611E+004
K-40	0.954	1460.81*		10.67	6.77696E+006	8.27473E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	4.12571E+005	1.26608E+005
		583.14*		84.20	1.14017E+005	3.16267E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.78373E+006	5.54106E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.04024E+005	6.32199E+004
Bi-214	0.678	609.31*		46.30	2.58681E+005	6.35091E+004
		1120.29		15.10		
		1764.49*		15.80	3.11924E+005	1.33529E+005
PB-214	0.565	74.82*	@	6.21	3.07342E+006	9.80462E+005
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.97802E+005	1.14501E+005
		351.92*		37.20	2.91415E+005	7.72605E+004
Ac-228	0.995	338.32*		11.40	2.39247E+005	1.37458E+005
		911.07*		27.70	3.54668E+005	1.00957E+005
		969.11*		16.60	3.76485E+005	1.27435E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	6.448774E+004	2.722002E+004
K-40		0.954	6.776960E+006	8.274733E+005
TL-208		0.752	1.140168E+005	3.140763E+004
Pb-212	@	0.497	2.040241E+005	6.321989E+004
Bi-214		0.678	2.685037E+005	5.735258E+004
PB-214	@	0.565	2.934133E+005	6.404440E+004
Ac-228		0.995	3.322558E+005	6.858071E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 10	964.89	1.6072E-002	70.52

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2332E+004	4.93E+004	2.7999E+004
	1332.49	100.00	4.9336E+004		1.3464E+004
Nb-94	702.63	100.00	5.8986E+004	5.04E+004	1.0698E+003
	871.10	100.00	5.0392E+004		-9.3901E+004
Ag-108m	79.20	7.10	2.1614E+006	6.68E+004	-1.0956E+006
	433.93	89.90	6.6850E+004		-6.8817E+004
	614.37	90.40	8.7734E+004		2.2665E+004
	722.95	90.50	7.0927E+004		1.3872E+004
Sb-125	176.33	6.89	1.1500E+006	2.06E+005	-9.8573E+004
	427.89	29.33	2.0647E+005		-7.3641E+002
	463.38	10.35	6.0280E+005		9.8732E+004
	600.56	17.80	3.1647E+005		7.7748E+004
	606.64	5.02	1.5947E+006		1.7765E+006
	635.90	11.32	5.6211E+005		-6.2646E+004
Cs-134	563.23	8.38	6.9469E+005	7.01E+004	4.1565E+005
	569.32	15.43	3.6898E+005		-2.7653E+005
	604.70	97.60	8.3285E+004		-1.5353E+004
	795.84	85.40	7.0148E+004		8.1816E+003
	801.93	8.73	6.6549E+005		-2.9077E+005
Cs-137	661.65	85.12	6.6881E+004	6.69E+004	6.9437E+004
Eu-152	121.78	28.40	3.3644E+005	2.15E+005	-1.9009E+005
	244.69	7.49	1.0543E+006		2.9153E+005
	344.27	26.50	2.3209E+005		-5.0999E+004
	778.89	12.74	4.5419E+005		-3.8376E+005
	867.32	4.16	1.3222E+006		-9.9389E+004
	964.01	14.40	5.2296E+005		1.1555E+005
	1085.78	10.00	5.2409E+005		-3.8865E+005
	1112.02	13.30	4.4871E+005		-1.5383E+005
	1407.95	20.70	2.1464E+005		3.9590E+004
Eu-154	123.07	40.50	2.3426E+005	1.43E+005	-2.5030E+004
	247.94	6.60	1.1034E+006		-1.5220E+006
	591.81	4.83	1.1360E+006		-7.1740E+004
	723.30	19.70	3.2304E+005		9.0554E+004
	756.87	4.33	1.4383E+006		1.0044E+005
	873.19	11.50	4.6282E+005		1.1374E+005
	996.32	10.30	5.9071E+005		3.1401E+005
	1004.76	17.90	3.3043E+005		-1.0588E+005
	1274.45	35.50	1.4337E+005		5.8903E+004
Eu-155	86.54	30.90	4.3721E+005	4.37E+005	6.6109E+005
	105.31	20.70	5.1777E+005		7.2419E+004
Am-241	59.54	35.90	4.7401E+005	4.74E+005	-8.1876E+004
Cm-243	228.19	10.56	7.0066E+005	4.69E+005	-1.4030E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6910E+005	4.69E+005	-2.6466E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 2:41:04 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 2:26:04 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.89	72.93	0.93	1.44E+002	38.69	4.86E+002
m	2	282-	306	300.62	75.11	0.93	3.09E+002	51.03	5.89E+002
F	3	948-	962	954.01	238.47	1.18	1.27E+002	30.27	1.86E+002
F	4	1175-	1185	1180.09	295.00	0.89	4.92E+001	20.66	7.36E+001
F	5	1400-	1414	1407.30	351.81	1.23	9.18E+001	22.96	6.76E+001
F	6	2036-	2051	2042.67	510.66	1.34	4.86E+001	20.43	8.09E+001
F	7	2324-	2343	2333.05	583.26	1.71	1.07E+002	22.16	4.77E+001
F	8	2428-	2445	2437.43	609.36	1.36	1.12E+002	23.03	4.51E+001
F	9	3637-	3656	3646.05	911.54	1.92	8.64E+001	18.98	1.66E+001
F	10	3870-	3883	3876.48	969.15	1.06	3.69E+001	14.00	1.45E+001
F	11	4475-	4488	4481.94	1120.53	1.09	2.66E+001	13.92	2.44E+001
F	12	5834-	5860	5846.94	1461.81	2.08	4.17E+002	39.47	6.41E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	5.28923E+004	2.34598E+004
K-40	0.970	1460.81*		10.67	6.32604E+006	7.88321E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	2.44872E+005	1.10436E+005
		583.14*		84.20	1.46632E+005	3.59873E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.77585E+006	7.11793E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.34994E+005	6.71719E+004
Bi-214	0.713	609.31*		46.30	2.82658E+005	6.81698E+004
		1120.29*		15.10	2.60557E+005	1.39054E+005
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	4.78287E+006	1.27464E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.27945E+005	1.03108E+005
		351.92*		37.20	2.32985E+005	7.00768E+004
Ac-228	0.616	338.32		11.40		
		911.07*		27.70	4.22561E+005	1.04733E+005
		969.11*		16.60	3.09134E+005	1.21616E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	2.121983E+004	2.469252E+004
K-40		0.970	6.326041E+006	7.883209E+005
TL-208		0.752	1.466316E+005	3.566859E+004
Pb-212	@	0.497	2.349938E+005	6.717188E+004
Bi-214		0.713	2.783759E+005	6.121007E+004
PB-214	@	0.565	2.313923E+005	5.795800E+004
Ac-228		0.616	3.742615E+005	7.936088E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.6008E-001	26.85

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7583E+004	5.11E+004	1.6470E+004
	1332.49	100.00	5.1082E+004		9.4693E+003
Nb-94	702.63	100.00	6.6547E+004	5.62E+004	-3.5438E+003
	871.10	100.00	5.6189E+004		-4.9476E+004
Ag-108m	79.20	7.10	2.2469E+006	7.06E+004	-2.1706E+006
	433.93	89.90	7.0642E+004		2.4757E+003
	614.37	90.40	9.2611E+004		-1.3094E+004
	722.95	90.50	7.1845E+004		2.9557E+004
Sb-125	176.33	6.89	1.1421E+006	2.00E+005	4.9912E+005
	427.89	29.33	1.9983E+005		4.4732E+004
	463.38	10.35	6.1231E+005		4.2920E+005
	600.56	17.80	3.4327E+005		-2.2935E+004
	606.64	5.02	1.6588E+006		1.3736E+006
	635.90	11.32	5.9501E+005		-4.9746E+004
Cs-134	563.23	8.38	7.4694E+005	7.05E+004	-4.1303E+005
	569.32	15.43	4.0598E+005		-3.9909E+005
	604.70	97.60	8.4634E+004		-1.7675E+004
	795.84	85.40	7.0523E+004		1.6549E+004
	801.93	8.73	6.8427E+005		-3.2503E+005
Cs-137	661.65	85.12	7.5407E+004	7.54E+004	1.6406E+004
Eu-152	121.78	28.40	3.4368E+005	2.28E+005	1.5137E+005
	244.69	7.49	1.0291E+006		-1.0365E+005
	344.27	26.50	2.3630E+005		-1.2617E+005
	778.89	12.74	4.6436E+005		-3.6328E+005
	867.32	4.16	1.4417E+006		-1.1272E+006
	964.01	14.40	5.1890E+005		-2.1134E+005
	1085.78	10.00	6.3879E+005		1.3491E+005
	1112.02	13.30	4.4553E+005		-4.9914E+005
	1407.95	20.70	2.2756E+005		1.4115E+005
Eu-154	123.07	40.50	2.4100E+005	1.51E+005	-1.9394E+004
	247.94	6.60	1.0651E+006		-7.7457E+005
	591.81	4.83	1.3381E+006		-1.2143E+005
	723.30	19.70	3.3288E+005		2.2579E+005
	756.87	4.33	1.4451E+006		3.7307E+005
	873.19	11.50	4.9843E+005		5.2818E+004
	996.32	10.30	5.6075E+005		-5.8826E+004
	1004.76	17.90	3.5148E+005		2.2075E+005
	1274.45	35.50	1.5098E+005		-7.4267E+003
Eu-155	86.54	30.90	4.5157E+005	4.52E+005	6.1706E+005
	105.31	20.70	5.4647E+005		2.2186E+005
Am-241	59.54	35.90	4.8521E+005	4.85E+005	-2.4444E+004
Cm-243	228.19	10.56	7.2674E+005	4.95E+005	4.4058E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9523E+005	4.95E+005	6.2148E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 8:57:04 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/31/2005 8:42:21 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	292.24	73.02	0.91	1.62E+002	39.19	4.33E+002
m	2	283-	306	300.41	75.06	0.92	2.88E+002	49.29	5.20E+002
F	3	329-	344	338.82	84.67	0.91	1.34E+002	40.94	5.71E+002
F	4	950-	962	954.35	238.56	0.99	1.35E+002	31.07	1.63E+002
F	5	1172-	1186	1180.45	295.09	1.35	5.29E+001	20.95	9.34E+001
F	6	1400-	1416	1407.71	351.91	1.05	8.79E+001	22.32	7.35E+001
F	7	2035-	2052	2043.42	510.85	1.62	8.91E+001	22.54	7.49E+001
F	8	2323-	2343	2332.57	583.14	1.37	8.88E+001	20.79	4.40E+001
F	9	2431-	2446	2437.00	609.25	1.48	1.11E+002	22.97	3.74E+001
F	10	2905-	2916	2911.12	727.79	0.94	1.75E+001	11.81	2.19E+001
F	11	3638-	3652	3645.11	911.30	1.44	5.34E+001	16.68	1.90E+001
F	12	3871-	3883	3877.26	969.35	0.79	3.10E+001	13.37	2.02E+001
F	13	5094-	5108	5100.68	1275.23	1.93	4.34E+001	14.70	1.13E+001
F	14	5834-	5860	5847.37	1461.92	2.08	4.20E+002	39.85	1.34E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	9.70664E+004	2.80739E+004
K-40	0.964	1460.81*		10.67	6.37402E+006	7.95220E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	4.49382E+005	1.35054E+005
		583.14*		84.20	1.21539E+005	3.26664E+004
		860.37		12.46		
Bi-212	0.988	727.17*		11.80	1.86120E+005	1.27394E+005
Pb-212	0.497	74.81*	@	10.70	2.59349E+006	6.74677E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.50873E+005	6.97997E+004
Bi-214	0.418	609.31*		46.30	2.81545E+005	6.79690E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.565	74.82*	@	6.21	4.46866E+006	1.20690E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.44968E+005	1.05448E+005
		351.92*		37.20	2.22921E+005	6.77963E+004
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	2.60845E+005	8.68668E+004
		969.11*		16.60	2.59965E+005	1.15201E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	7.081387E+004	2.893438E+004
K-40		0.964	6.374022E+006	7.952202E+005
TL-208		0.753	1.215395E+005	3.242539E+004
Bi-212		0.988	1.861200E+005	1.273937E+005
Pb-212	@	0.497	2.508729E+005	6.979966E+004
Bi-214		0.418	2.815447E+005	6.796901E+004
PB-214	@	0.565	2.293687E+005	5.702680E+004
Ac-228		0.618	2.605259E+005	6.935855E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.02	1.8010E-001	24.18
F 3	84.67	1.4906E-001	30.51
F 13	1275.23	4.8261E-002	33.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3585E+004	5.28E+004	-3.1977E+004
	1332.49	100.00	5.2765E+004		2.4167E+004
Nb-94	702.63	100.00	6.2466E+004	5.58E+004	5.4243E+004
	871.10	100.00	5.5822E+004		-1.4192E+004
Ag-108m	79.20	7.10	2.1939E+006	6.84E+004	-1.8369E+004
	433.93	89.90	6.8351E+004		-9.1788E+004
	614.37	90.40	9.6050E+004		7.1964E+003
	722.95	90.50	6.9996E+004		7.0598E+003
Sb-125	176.33	6.89	1.1224E+006	2.12E+005	-1.2801E+005
	427.89	29.33	2.1162E+005		1.4124E+005
	463.38	10.35	6.7670E+005		1.6950E+005
	600.56	17.80	3.6133E+005		-5.4668E+004
	606.64	5.02	1.7451E+006		2.2014E+006
	635.90	11.32	4.8670E+005		-5.4299E+005
Cs-134	563.23	8.38	7.0368E+005	7.52E+004	-5.1186E+005
	569.32	15.43	3.7067E+005		-3.5229E+005
	604.70	97.60	8.8003E+004		-1.0659E+005
	795.84	85.40	7.5209E+004		1.3042E+004
	801.93	8.73	7.1677E+005		-1.0530E+006
Cs-137	661.65	85.12	7.1930E+004	7.19E+004	-5.2012E+004
Eu-152	121.78	28.40	3.4850E+005	2.46E+005	5.4284E+004
	244.69	7.49	1.0210E+006		2.6121E+005
	344.27	26.50	2.4850E+005		-2.8467E+005
	778.89	12.74	5.0285E+005		7.6957E+004
	867.32	4.16	1.3661E+006		-1.4234E+006
	964.01	14.40	5.3097E+005		-6.8420E+004
	1085.78	10.00	6.3879E+005		-1.4234E+005
	1112.02	13.30	4.4553E+005		1.8696E+005
	1407.95	20.70	2.4557E+005		1.8962E+005
Eu-154	123.07	40.50	2.4408E+005	2.10E+005	9.5288E+004
	247.94	6.60	1.0651E+006		-7.8299E+005
	591.81	4.83	1.2676E+006		-2.9380E+004
	723.30	19.70	3.1581E+005		1.6198E+004
	756.87	4.33	1.4383E+006		1.0967E+006
	873.19	11.50	4.4562E+005		-4.9842E+005
	996.32	10.30	5.2898E+005		-6.9172E+004
	1004.76	17.90	3.2159E+005		-4.4715E+003
	1274.45	35.50	2.0968E+005		1.9954E+005
Eu-155	86.54	30.90	4.5910E+005	4.59E+005	5.5848E+004
	105.31	20.70	5.4536E+005		6.0764E+005
Am-241	59.54	35.90	4.6830E+005	4.68E+005	-1.1478E+005
Cm-243	228.19	10.56	6.8627E+005	5.18E+005	4.2822E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1832E+005	5.18E+005	3.7696E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 2:16:41 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 2:01:40 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

YANKEE ROWE PORTABLE ISOCS
(RED ROVER SYSTEM)

PEAK ANALYSIS REPORT

Filename: RED6264
Log Number:
Title: TBN-01-15-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.88	72.93	0.98	1.65E+002	39.56	4.62E+002
m	2	285-	305	299.81	74.91	0.98	3.17E+002	49.48	5.62E+002
F	3	337-	345	340.34	85.04	0.80	7.95E+001	38.79	3.61E+002
F	4	947-	962	954.50	238.60	0.94	1.43E+002	30.42	1.77E+002
F	5	1176-	1185	1180.75	295.16	0.51	2.42E+001	16.63	8.75E+001
F	6	1348-	1361	1353.49	338.35	0.64	3.57E+001	17.10	8.26E+001
F	7	1402-	1418	1407.42	351.84	0.96	1.09E+002	23.77	6.39E+001
F	8	2031-	2051	2042.65	510.66	2.15	1.02E+002	22.35	7.32E+001
F	9	2325-	2341	2332.01	583.00	1.28	7.17E+001	19.86	4.82E+001
F	10	2428-	2445	2436.51	609.13	1.32	1.03E+002	22.81	5.22E+001
F	11	3636-	3654	3645.03	911.28	1.75	9.68E+001	20.15	1.64E+001
F	12	3868-	3884	3876.69	969.20	1.75	5.75E+001	16.09	1.27E+001
F	13	4475-	4488	4481.48	1120.41	1.38	2.67E+001	14.20	2.31E+001
F	14	5832-	5860	5846.58	1461.72	2.09	4.72E+002	41.78	7.20E+000
F	15	7057-	7070	7063.96	1766.09	1.72	2.65E+001	11.15	3.32E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*		100.00	1.10902E+005	2.88896E+004
K-40	0.975	1460.81*		10.67	7.17059E+006	8.59882E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	5.13437E+005	1.40167E+005
		583.14*		84.20	9.81307E+004	3.01109E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.86307E+006	7.16989E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.65764E+005	7.01763E+004
Bi-214	0.984	609.31*		46.30	2.60570E+005	6.62895E+004
		1120.29*		15.10	2.61467E+005	1.41768E+005
		1764.49*		15.80	2.88543E+005	1.24962E+005
PB-214	0.566	74.82*	@	6.21	4.93315E+006	1.28625E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.12327E+005	7.93230E+004
		351.92*		37.20	2.77385E+005	7.60750E+004
Ac-228	0.999	338.32*		11.40	2.91909E+005	1.47001E+005
		911.07*		27.70	4.73105E+005	1.12520E+005
		969.11*		16.60	4.81727E+005	1.43837E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	8.970622E+004	2.960459E+004
K-40		0.975	7.170594E+006	8.598824E+005
TL-208		0.752	9.813075E+004	2.994061E+004
Pb-212	@	0.498	2.657636E+005	7.017625E+004
Bi-214		0.984	2.659486E+005	5.412425E+004
PB-214	@	0.566	1.983046E+005	5.490548E+004
Ac-228		0.999	4.272031E+005	7.589822E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.8294E-001	24.03
F 3	85.04	8.8378E-002	48.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1052E+004	5.49E+004	-7.9131E+003
	1332.49	100.00	5.4922E+004		6.3823E+004
Nb-94	702.63	100.00	6.1329E+004	5.51E+004	5.0661E+004
	871.10	100.00	5.5082E+004		-9.9895E+003
Ag-108m	79.20	7.10	2.1773E+006	6.41E+004	-3.4359E+006
	433.93	89.90	6.8351E+004		7.0527E+003
	614.37	90.40	9.3022E+004		1.6154E+004
	722.95	90.50	6.4109E+004		-3.9307E+004
Sb-125	176.33	6.89	1.1534E+006	2.04E+005	-8.1962E+004
	427.89	29.33	2.0450E+005		3.1038E+004
	463.38	10.35	6.2537E+005		-3.0471E+005
	600.56	17.80	3.4184E+005		-3.1457E+005
	606.64	5.02	1.6917E+006		2.9491E+006
	635.90	11.32	5.6211E+005		5.3272E+005
Cs-134	563.23	8.38	7.0665E+005	7.20E+004	-8.4802E+005
	569.32	15.43	3.7235E+005		7.9800E+004
	604.70	97.60	8.5583E+004		-5.3937E+003
	795.84	85.40	7.1999E+004		4.6743E+003
	801.93	8.73	6.7307E+005		-2.7493E+005
Cs-137	661.65	85.12	7.5098E+004	7.51E+004	9.8261E+003
Eu-152	121.78	28.40	3.5833E+005	2.43E+005	1.5279E+005
	244.69	7.49	1.0358E+006		4.1116E+005
	344.27	26.50	2.5244E+005		9.8990E+004
	778.89	12.74	4.8160E+005		-2.1317E+005
	867.32	4.16	1.4170E+006		1.9283E+005
	964.01	14.40	5.5238E+005		1.6282E+005
	1085.78	10.00	5.5180E+005		-7.2349E+004
	1112.02	13.30	4.6121E+005		-2.9079E+005
	1407.95	20.70	2.4267E+005		1.1526E+005
Eu-154	123.07	40.50	2.5083E+005	1.74E+005	5.0365E+004
	247.94	6.60	1.0952E+006		-4.0046E+005
	591.81	4.83	1.3430E+006		-5.0016E+005
	723.30	19.70	2.8818E+005		-1.4712E+005
	756.87	4.33	1.3086E+006		-8.5067E+005
	873.19	11.50	4.6618E+005		1.3727E+005
	996.32	10.30	5.7218E+005		1.6104E+005
	1004.76	17.90	3.3689E+005		2.0062E+005
	1274.45	35.50	1.7421E+005		-3.0849E+004
Eu-155	86.54	30.90	4.5298E+005	4.53E+005	4.0569E+005
	105.31	20.70	5.4314E+005		-8.4294E+004
Am-241	59.54	35.90	4.9460E+005	4.95E+005	-1.0499E+004
Cm-243	228.19	10.56	6.9302E+005	5.14E+005	1.1652E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1413E+005	5.14E+005	4.7818E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 1:56:03 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 1:41:03 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.90	72.93	0.93	1.86E+002	41.41	4.96E+002
m	2	282-	306	300.39	75.06	0.93	2.76E+002	49.09	5.82E+002
F	3	333-	344	339.45	84.82	0.97	1.54E+002	41.07	4.26E+002
F	4	367-	377	371.77	92.90	0.93	7.22E+001	35.04	3.31E+002
F	5	949-	960	954.81	238.67	0.95	1.60E+002	31.79	1.36E+002
F	6	1075-	1088	1080.94	270.21	1.10	3.85E+001	19.27	8.16E+001
F	7	1402-	1416	1407.51	351.86	1.37	1.00E+002	24.22	7.88E+001
F	8	2036-	2051	2043.02	510.75	1.40	5.12E+001	19.66	6.75E+001
F	9	2323-	2340	2331.39	582.85	1.43	7.74E+001	21.80	6.65E+001
F	10	2429-	2445	2437.16	609.29	1.21	9.98E+001	22.51	4.80E+001
F	11	3635-	3653	3645.26	911.34	1.77	9.04E+001	19.55	1.68E+001
M	12	3853-	3881	3858.93	964.76	0.61	1.22E+001	9.32	1.64E+001
m	13	3853-	3881	3875.57	968.92	0.61	2.05E+001	11.31	1.96E+001
F	14	5834-	5860	5846.44	1461.68	2.06	4.37E+002	40.69	1.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	5.57372E+004	2.28001E+004
K-40	0.977	1460.81*		10.67	6.63668E+006	8.18819E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	2.58042E+005	1.07639E+005
		583.14*		84.20	1.05928E+005	3.29430E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.48365E+006	6.57440E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.96955E+005	7.51620E+004
Bi-214	0.418	609.31*		46.30	2.53007E+005	6.51844E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	4.41749E+005	1.08240E+005
		969.11*		16.60	1.71781E+005	9.63950E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.998	3.285674E+004	2.387308E+004
K-40	0.977	6.636682E+006	8.188189E+005
TL-208	0.751	1.059279E+005	3.276168E+004
Pb-212	@ 0.497	2.969553E+005	7.516203E+004
Bi-214	0.418	2.530067E+005	6.518438E+004
Ac-228	0.618	2.911905E+005	7.198643E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	2.0717E-001	22.21
F 3	84.82	1.7068E-001	26.73
F 4	92.90	8.0276E-002	48.50
F 6	270.21	4.2752E-002	50.07
F 7	351.86	1.1141E-001	24.15
M 12	964.76	1.3502E-002	76.71

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7583E+004	5.11E+004	2.9879E+004
	1332.49	100.00	5.1082E+004		5.4247E+003
Nb-94	702.63	100.00	6.4405E+004	5.76E+004	3.2634E+004
	871.10	100.00	5.7630E+004		-1.8016E+004
Ag-108m	79.20	7.10	2.2209E+006	6.78E+004	-2.1673E+006
	433.93	89.90	7.1254E+004		3.1292E+004
	614.37	90.40	9.0101E+004		2.0314E+004
	722.95	90.50	6.7771E+004		-1.5559E+004
Sb-125	176.33	6.89	1.1409E+006	2.11E+005	-3.4182E+004
	427.89	29.33	2.1098E+005		4.9996E+004
	463.38	10.35	6.4356E+005		4.4164E+005
	600.56	17.80	3.3016E+005		-1.5891E+005
	606.64	5.02	1.6735E+006		3.1689E+006
	635.90	11.32	4.8932E+005		-3.0518E+005
Cs-134	563.23	8.38	7.6353E+005	7.45E+004	5.5033E+005
	569.32	15.43	3.8875E+005		9.0341E+004
	604.70	97.60	8.5583E+004		-1.4698E+004
	795.84	85.40	7.4508E+004		-4.0641E+004
	801.93	8.73	6.8427E+005		-2.5999E+005
Cs-137	661.65	85.12	7.3532E+004	7.35E+004	7.3168E+004
Eu-152	121.78	28.40	3.5630E+005	2.24E+005	-1.6330E+005
	244.69	7.49	1.0504E+006		-1.4110E+006
	344.27	26.50	2.3749E+005		-4.7860E+005
	778.89	12.74	4.7429E+005		-6.2518E+005
	867.32	4.16	1.3833E+006		-1.3395E+006
	964.01	14.40	5.3886E+005		-7.5860E+004
	1085.78	10.00	5.9906E+005		9.1102E+004
	1112.02	13.30	4.7932E+005		-2.2433E+005
	1407.95	20.70	2.2441E+005		1.7637E+004
Eu-154	123.07	40.50	2.4927E+005	1.68E+005	-2.1574E+004
	247.94	6.60	1.1529E+006		4.7877E+004
	591.81	4.83	1.3624E+006		-8.0934E+004
	723.30	19.70	3.1138E+005		4.2204E+003
	756.87	4.33	1.3161E+006		-2.1280E+005
	873.19	11.50	5.0768E+005		1.6592E+005
	996.32	10.30	5.1652E+005		2.1365E+005
	1004.76	17.90	3.0310E+005		-2.2723E+005
	1274.45	35.50	1.6774E+005		5.1545E+004
Eu-155	86.54	30.90	4.5368E+005	4.54E+005	7.4335E+005
	105.31	20.70	5.3642E+005		-1.1567E+005
Am-241	59.54	35.90	4.8941E+005	4.89E+005	-1.8728E+005
Cm-243	228.19	10.56	7.3853E+005	4.88E+005	2.2671E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8816E+005	4.88E+005	6.2974E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 1:33:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 1:18:32 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	291.92	72.94	0.98	1.66E+002	39.81	4.68E+002
m	2	283-	305	300.12	74.99	0.98	2.74E+002	48.84	5.55E+002
F	3	949-	961	954.19	238.52	1.09	1.41E+002	30.68	1.47E+002
F	4	1346-	1357	1352.37	338.07	0.99	4.17E+001	18.71	5.99E+001
F	5	1401-	1414	1407.62	351.89	1.09	9.96E+001	24.16	7.37E+001
F	6	2031-	2055	2042.29	510.57	2.58	1.13E+002	21.06	5.00E+001
F	7	2325-	2341	2332.73	583.18	1.44	9.31E+001	20.99	3.53E+001
F	8	2428-	2446	2436.62	609.16	1.52	1.21E+002	23.40	4.38E+001
F	9	3436-	3448	3442.31	860.60	0.44	1.56E+001	1.18	2.39E+001
F	10	3638-	3655	3645.62	911.43	1.75	6.02E+001	18.65	3.60E+001
M	11	3853-	3883	3859.46	964.90	1.08	2.02E+001	10.93	1.23E+001
m	12	3853-	3883	3875.65	968.94	1.08	3.13E+001	13.38	2.02E+001
F	13	5832-	5858	5845.61	1461.48	2.17	4.07E+002	38.82	6.70E+000
F	14	7055-	7068	7060.40	1765.20	1.19	1.46E+001	10.62	1.58E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*		100.00	1.23205E+005	2.87185E+004
K-40	0.987	1460.81*		10.67	6.17726E+006	7.72951E+005
TL-208	0.900	277.35		6.80		
		510.84*		21.60	5.70394E+005	1.40880E+005
		583.14*		84.20	1.27423E+005	3.32927E+004
		860.37*		12.46	1.66252E+005	2.38535E+004
Pb-212	0.497	74.81*	@	10.70	2.47251E+006	6.54575E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.61394E+005	7.01546E+004
Bi-214	0.701	609.31*		46.30	3.05489E+005	7.04681E+004
		1120.29		15.10		
		1764.49*		15.80	1.59046E+005	1.16949E+005
Ac-228	0.997	338.32*		11.40	3.40602E+005	1.61882E+005
		911.07*		27.70	2.94421E+005	9.72301E+004
		969.11*		16.60	2.61702E+005	1.15322E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.994	9.006727E+004	2.901006E+004
K-40		0.987	6.177263E+006	7.729505E+005
TL-208		0.900	1.534161E+005	1.899230E+004
Pb-212	@	0.497	2.613938E+005	7.015463E+004
Bi-214		0.701	2.664821E+005	6.035782E+004
Ac-228		0.997	2.912359E+005	6.755361E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	1.8497E-001	23.91
F 5	351.89	1.1066E-001	24.25
M 11	964.90	2.2447E-002	54.10

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.5133E+004	4.75E+004	-6.9704E+004
	1332.49	100.00	4.7520E+004		-2.4476E+003
Nb-94	702.63	100.00	5.9284E+004	5.55E+004	-1.2111E+004
	871.10	100.00	5.5453E+004		-8.6576E+003
Ag-108m	79.20	7.10	2.1996E+006	6.49E+004	-1.7779E+006
	433.93	89.90	6.4866E+004		-2.1387E+004
	614.37	90.40	8.8170E+004		-1.1580E+003
	722.95	90.50	7.0618E+004		-3.7970E+003
Sb-125	176.33	6.89	1.1534E+006	1.96E+005	3.5190E+004
	427.89	29.33	1.9573E+005		-7.5147E+004
	463.38	10.35	6.1981E+005		6.6340E+004
	600.56	17.80	3.3605E+005		-3.2582E+005
	606.64	5.02	1.7169E+006		3.7134E+006
	635.90	11.32	5.0223E+005		1.7583E+005
Cs-134	563.23	8.38	7.7168E+005	7.05E+004	3.0280E+004
	569.32	15.43	4.0445E+005		2.1255E+004
	604.70	97.60	8.8734E+004		-2.8485E+003
	795.84	85.40	7.0523E+004		-9.1184E+003
	801.93	8.73	6.9163E+005		-4.6998E+005
Cs-137	661.65	85.12	6.6177E+004	6.62E+004	-3.4690E+004
Eu-152	121.78	28.40	3.4620E+005	2.40E+005	1.1671E+005
	244.69	7.49	1.0477E+006		3.1813E+004
	344.27	26.50	2.3985E+005		-2.7413E+005
	778.89	12.74	4.6935E+005		-3.2009E+005
	867.32	4.16	1.3399E+006		1.4387E+005
	964.01	14.40	5.2296E+005		-1.7367E+004
	1085.78	10.00	5.6071E+005		-9.2466E+005
	1112.02	13.30	3.9444E+005		-5.5389E+004
	1407.95	20.70	2.3973E+005		1.1409E+005
Eu-154	123.07	40.50	2.3683E+005	1.51E+005	5.7741E+004
	247.94	6.60	1.0919E+006		-1.3151E+006
	591.81	4.83	1.2831E+006		8.7117E+005
	723.30	19.70	3.2304E+005		-3.4891E+004
	756.87	4.33	1.2056E+006		-1.2252E+006
	873.19	11.50	4.7610E+005		-1.1301E+005
	996.32	10.30	5.2898E+005		-5.0798E+005
	1004.76	17.90	3.1017E+005		1.2681E+005
	1274.45	35.50	1.5098E+005		-1.0773E+005
Eu-155	86.54	30.90	4.5333E+005	4.53E+005	5.6844E+005
	105.31	20.70	5.3218E+005		1.1061E+005
Am-241	59.54	35.90	4.7130E+005	4.71E+005	-3.5168E+005
Cm-243	228.19	10.56	6.7452E+005	4.98E+005	-1.7362E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9785E+005	4.98E+005	4.9146E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 1:13:43 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-15-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 12:58:41 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-15-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	292.06	72.97	0.98	1.72E+002	40.98	5.05E+002
m	2	284-	305	300.39	75.06	0.98	3.20E+002	50.27	5.44E+002
M	3	335-	354	338.59	84.61	0.65	8.29E+001	33.75	2.90E+002
m	4	335-	354	349.26	87.27	0.66	6.58E+001	30.88	2.99E+002
F	5	948-	961	954.82	238.68	0.98	1.52E+002	30.14	1.33E+002
F	6	1177-	1186	1181.75	295.41	1.00	4.22E+001	19.82	6.44E+001
F	7	1350-	1360	1354.39	338.58	1.00	3.08E+001	17.66	5.61E+001
F	8	1402-	1416	1407.60	351.88	0.96	8.62E+001	22.39	6.59E+001
F	9	2035-	2051	2043.10	510.77	1.42	6.60E+001	21.30	7.73E+001
F	10	2324-	2341	2332.03	583.01	1.30	8.87E+001	21.07	4.29E+001
F	11	2427-	2445	2436.83	609.21	1.28	8.28E+001	20.60	4.50E+001
F	12	3637-	3652	3644.80	911.23	1.41	5.54E+001	16.56	1.81E+001
F	13	3869-	3884	3875.82	968.99	1.53	5.26E+001	16.52	2.08E+001
F	14	4475-	4488	4480.88	1120.26	0.88	1.73E+001	11.84	2.61E+001
F	15	5833-	5859	5846.08	1461.59	2.03	4.57E+002	41.55	1.00E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	7.19373E+004	2.52987E+004
K-40	0.982	1460.81*		10.67	6.94281E+006	8.44991E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	3.33043E+005	1.20240E+005
		583.14*		84.20	1.21288E+005	3.29833E+004
		860.37		12.46		
Pb-212	0.659	74.81*	@	10.70	2.88266E+006	7.23874E+005
		77.11	@	18.00		
		87.30*	@	8.00	6.78468E+005	3.44969E+005
		238.63*		44.60	2.82191E+005	7.13236E+004
Bi-214	0.713	609.31*		46.30	2.09896E+005	5.83924E+004
		1120.29*		15.10	1.69271E+005	1.17287E+005
		1764.49		15.80		
PB-214	0.658	74.82*	@	6.21	4.96689E+006	1.29833E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.16226E+006	5.97441E+005
		241.98		7.49		
		295.21*		19.20	1.95495E+005	9.75776E+004
		351.92*		37.20	2.18761E+005	6.75502E+004
Ac-228	0.999	338.32*		11.40	2.52060E+005	1.49644E+005
		911.07*		27.70	2.70687E+005	8.67098E+004
		969.11*		16.60	4.40231E+005	1.45805E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		0.998	4.573906E+004	2.626882E+004
	K-40		0.982	6.942812E+006	8.449914E+005
X	Eu-155		0.333		
	TL-208		0.753	1.212880E+005	3.274561E+004
	Pb-212	@	0.659	2.821913E+005	7.132355E+004
	Bi-214		0.713	2.018267E+005	5.227244E+004
	PB-214	@	0.658	2.112236E+005	5.554017E+004
	Ac-228		0.999	3.024774E+005	6.671137E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.97	1.9059E-001	23.89
M 3	84.61	9.2056E-002	40.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6015E+004	5.28E+004	-8.8696E+003
	1332.49	100.00	5.2765E+004		3.5116E+004
Nb-94	702.63	100.00	5.9284E+004	5.93E+004	-1.1907E+004
	871.10	100.00	6.2068E+004		4.0669E+004
Ag-108m	79.20	7.10	2.2291E+006	6.81E+004	-4.1252E+006
	433.93	89.90	6.8138E+004		-3.5620E+004
	614.37	90.40	8.8818E+004		2.5271E+004
	722.95	90.50	7.4820E+004		7.9611E+004
Sb-125	176.33	6.89	1.1432E+006	2.06E+005	1.0544E+006
	427.89	29.33	2.0647E+005		8.4087E+004
	463.38	10.35	6.1794E+005		2.3633E+005
	600.56	17.80	3.5033E+005		-1.2909E+005
	606.64	5.02	1.6062E+006		2.4020E+006
	635.90	11.32	5.2705E+005		9.5008E+004
Cs-134	563.23	8.38	7.2131E+005	7.73E+004	-4.5759E+005
	569.32	15.43	4.1357E+005		1.3743E+005
	604.70	97.60	8.3285E+004		1.0218E+004
	795.84	85.40	7.7271E+004		-1.1588E+004
	801.93	8.73	7.1323E+005		-1.1016E+006
Cs-137	661.65	85.12	6.9957E+004	7.00E+004	1.5211E+004
Eu-152	121.78	28.40	3.5671E+005	2.34E+005	1.9178E+005
	244.69	7.49	1.0004E+006		-2.7894E+005
	344.27	26.50	2.3809E+005		-1.4920E+005
	778.89	12.74	4.8401E+005		5.7569E+004
	867.32	4.16	1.5287E+006		-8.3627E+005
	964.01	14.40	5.7479E+005		1.2495E+005
	1085.78	10.00	6.3494E+005		-7.0604E+004
	1112.02	13.30	4.8226E+005		3.1295E+005
	1407.95	20.70	2.3373E+005		-4.6940E+003
Eu-154	123.07	40.50	2.4495E+005	1.58E+005	-2.0899E+005
	247.94	6.60	1.0617E+006		-9.2518E+005
	591.81	4.83	1.2780E+006		1.0068E+006
	723.30	19.70	3.3837E+005		1.9562E+005
	756.87	4.33	1.3385E+006		-1.6477E+006
	873.19	11.50	5.4584E+005		-2.7303E+005
	996.32	10.30	5.6459E+005		-2.0271E+005
	1004.76	17.90	3.3689E+005		3.1818E+005
	1274.45	35.50	1.5820E+005		1.3362E+004
Eu-155	86.54*	30.90	2.2199E+005	2.22E+005	1.7566E+005
	105.31	20.70	5.4175E+005		2.0153E+005
Am-241	59.54	35.90	4.8914E+005	4.89E+005	-1.6121E+005
Cm-243	228.19	10.56	7.1661E+005	5.05E+005	5.0706E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0477E+005	5.05E+005	-2.6265E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-16-101-F-G.RPT	TBN-01-16-101-F-G	0.00	26-Oct-05	8:52:26	900.5	RED6264	RED_CONC_2M90D	dpm/m2	56500			72600			62100			5434126
TBN-01-16-102-F-G.RPT	TBN-01-16-102-F-G	0.06	26-Oct-05	9:50:26	900.6	RED6264	RED_CONC_2M90D	dpm/m2	46900			29700	23764.15	13747.61	68700			7386320
TBN-01-16-103-F-G.RPT	TBN-01-16-103-F-G	0.00	26-Oct-05	10:11:34	900.5	RED6264	RED_CONC_2M90D	dpm/m2	57500			71300			68600			6108660
TBN-01-16-104-F-G.RPT	TBN-01-16-104-F-G	0.00	26-Oct-05	10:32:38	900.5	RED6264	RED_CONC_2M90D	dpm/m2	49900			66900			59500			5912420
TBN-01-16-105-F-G.RPT	TBN-01-16-105-F-G	0.00	26-Oct-05	10:50:25	900.5	RED6264	RED_CONC_2M90D	dpm/m2	53900			65500			65800			5479832
TBN-01-16-106-F-G.RPT	TBN-01-16-106-F-G	0.00	26-Oct-05	11:13:42	900.6	RED6264	RED_CONC_2M90D	dpm/m2	56000			74800			69400			6243783
TBN-01-16-107-F-G.RPT	TBN-01-16-107-F-G	0.17	26-Oct-05	14:44:17	900.6	RED6264	RED_CONC_2M90D	dpm/m2	43200	49095.84	15949	74500			69400			6680333
TBN-01-16-108-F-G.RPT	TBN-01-16-108-F-G	0.09	27-Oct-05	10:15:23	900.6	RED6264	RED_CONC_2M90D	dpm/m2	39900	24977.9	11680	75700			70000			7575932
TBN-01-16-109-F-G.RPT	TBN-01-16-109-F-G	0.00	27-Oct-05	10:34:30	900.6	RED6264	RED_CONC_2M90D	dpm/m2	61800			80200			72100			6950557
TBN-01-16-110-F-G.RPT	TBN-01-16-110-F-G	0.00	26-Oct-05	15:07:25	900.6	RED6264	RED_CONC_2M90D	dpm/m2	65900			81900			70200			6908940
TBN-01-16-111-F-G.RPT	TBN-01-16-111-F-G	0.10	26-Oct-05	15:27:13	900.6	RED6264	RED_CONC_2M90D	dpm/m2	75500			39700	39540.99	18495.25	71900			7083212
TBN-01-16-112-F-G.RPT	TBN-01-16-112-F-G	0.00	27-Oct-05	11:00:06	900.6	RED6264	RED_CONC_2M90D	dpm/m2	57000			73500			73300			7390115
TBN-01-16-113-F-G.RPT	TBN-01-16-113-F-G	0.00	27-Oct-05	14:34:17	900.5	RED6264	RED_CONC_2M90D	dpm/m2	54400			79300			71500			6297062
TBN-01-16-114-F-G.RPT	TBN-01-16-114-F-G	0.00	27-Oct-05	14:55:03	900.5	RED6264	RED_CONC_2M90D	dpm/m2	54400			69600			73600			7319796
TBN-01-16-115-F-G.RPT	TBN-01-16-115-F-G	0.00	27-Oct-05	15:18:10	900.5	RED6264	RED_CONC_2M90D	dpm/m2	52800			80200			69200			6407163
TBN-01-16-116-F-G.RPT	TBN-01-16-116-F-G	0.00	27-Oct-05	14:14:40	900.5	RED6264	RED_CONC_2M90D	dpm/m2	61800			76600			71300			5902885
TBN-01-16-117-F-G.RPT	TBN-01-16-117-F-G	0.00	27-Oct-05	11:20:06	900.5	RED6264	RED_CONC_2M90D	dpm/m2	53300			73200			67900			7197720
TBN-01-16-118-F-G.RPT	TBN-01-16-118-F-G	0.00	27-Oct-05	12:50:14	900.5	RED6264	RED_CONC_2M90D	dpm/m2	56500			71300			71800			6554025
TBN-01-16-119-F-G.RPT	TBN-01-16-119-F-G	0.00	27-Oct-05	13:53:39	900.5	RED6264	RED_CONC_2M90D	dpm/m2	49300			71000			70600			6072594
TBN-01-16-120-F-G.RPT	TBN-01-16-120-F-G	0.00	27-Oct-05	15:45:13	900.6	RED6264	RED_CONC_2M90D	dpm/m2	49300			83300			70200			7950771
TBN-01-16-121-F-G.RPT	TBN-01-16-121-F-G	0.00	27-Oct-05	13:31:09	900.6	RED6264	RED_CONC_2M90D	dpm/m2	52800			70000			69700			7338532
TBN-01-16-122-F-G.RPT	TBN-01-16-122-F-G	0.00	27-Oct-05	13:11:24	900.6	RED6264	RED_CONC_2M90D	dpm/m2	54400			73800			74500			7765332
TBN-01-16-123-F-G.RPT	TBN-01-16-123-F-G	0.00	27-Oct-05	9:44:35	900.6	RED6264	RED_CONC_2M90D	dpm/m2	63200			80200			79100			9350248
TBN-01-16-124-F-G.RPT	TBN-01-16-124-F-G	0.00	26-Oct-05	11:33:17	900.5	RED6264	RED_CONC_2M90D	dpm/m2	50500			76000			64400			5483420
TBN-01-16-125-F-G.RPT	TBN-01-16-125-F-G	0.00	26-Oct-05	12:57:18	902.3	RED6264	RED_CONC_2M90D	dpm/m2	49900			58200			64100			5579024
TBN-01-16-126-F-G.RPT	TBN-01-16-126-F-G	0.00	26-Oct-05	13:21:31	900.6	RED6264	RED_CONC_2M90D	dpm/m2	55400			67600			69800			6720334
TBN-01-16-127-F-G.RPT	TBN-01-16-127-F-G	0.00	26-Oct-05	13:39:20	900.6	RED6264	RED_CONC_2M90D	dpm/m2	56500			71900			71700			7627768
TBN-01-16-128-F-G.RPT	TBN-01-16-128-F-G	0.00	26-Oct-05	14:01:42	900.6	RED6264	RED_CONC_2M90D	dpm/m2	60900			79000			73300			6422994
TBN-01-16-129-F-G.RPT	TBN-01-16-129-F-G	0.00	26-Oct-05	14:21:03	900.6	RED6264	RED_CONC_2M90D	dpm/m2	62800			85500			75000			8153604
TBN-01-16-130-F-G.RPT	TBN-01-16-130-F-G	0.00	27-Oct-05	16:30:44	903	RED6264	RED_CONC_1M90D	dpm/m2	53400			69100			68500			7514405
TBN-01-16-131-F-G.RPT	TBN-01-16-131-F-G	0.00	28-Oct-05	9:39:27	900.5	RED6264	RED_CONC_1M90D	dpm/m2	45200			73200			69400			7461048
TBN-01-16-133-F-G.RPT	TBN-01-16-133-F-G	0.00	28-Oct-05	8:42:40	900.6	RED6264	RED_CONC_1M90D	dpm/m2	56000			76500			71800			7271076
TBN-01-16-134-F-G.RPT	TBN-01-16-134-F-G	0.00	28-Oct-05	10:03:48	900.6	RED6264	RED_CONC_1M90D	dpm/m2	67000			74700			69900			6563344
TBN-01-16-135-F-G.RPT	TBN-01-16-135-F-G	0.00	28-Oct-05	10:26:33	900.6	RED6264	RED_CONC_1M90D	dpm/m2	61700			74100			66800			6662351
TBN-01-16-136-F-G.RPT	TBN-01-16-136-F-G	0.00	28-Oct-05	10:54:45	900.6	RED6264	RED_CONC_1M90D	dpm/m2	50100			74400			66600			6172702
TBN-01-16-137-F-G.RPT	TBN-01-16-137-F-G	0.00	28-Oct-05	13:02:37	900.6	RED6264	RED_CONC_1M90D	dpm/m2	61700			79400			73700			7737689
TBN-01-16-138-F-G.RPT	TBN-01-16-138-F-G	0.00	28-Oct-05	11:17:14	900.9	RED6264	RED_CONC_1M90D	dpm/m2	57000			69400			72100			6824293
TBN-01-16-139-F-G.RPT	TBN-01-16-139-F-G	0.00	28-Oct-05	11:40:42	900.6	RED6264	RED_CONC_1M90D	dpm/m2	43900			72600			68300			6883642
TBN-01-16-140-F-G.RPT	TBN-01-16-140-F-G	0.00	28-Oct-05	13:28:41	900.6	RED6264	RED_CONC_1M90D	dpm/m2	55500			76800			74400			7825285
TBN-01-16-141-F-G.RPT	TBN-01-16-141-F-G	0.00	28-Oct-05	13:51:41	900.6	RED6264	RED_CONC_1M90D	dpm/m2	63100			77700			72700			7055482
TBN-01-16-142-F-G.RPT	TBN-01-16-142-F-G	0.00	28-Oct-05	15:08:06	900.6	RED6264	RED_CONC_1M90D	dpm/m2	60800			81100			73500			7357132
TBN-01-16-143-F-G.RPT	TBN-01-16-143-F-G	0.00	28-Oct-05	15:32:18	900.6	RED6264	RED_CONC_1M90D	dpm/m2	52300			72600			71500			7459090
TBN-01-16-144-F-G.RPT	TBN-01-16-144-F-G	0.00	28-Oct-05	15:59:09	900.6	RED6264	RED_CONC_1M90D	dpm/m2	54400			72300			76700			7213630
TBN-01-16-145-F-G.RPT	TBN-01-16-145-F-G	0.00	28-Oct-05	16:28:52	900.6	RED6264	RED_CONC_1M90D	dpm/m2	53900			81900			77600			7191755
TBN-01-16-146-F-G.RPT	TBN-01-16-146-F-G	0.00	28-Oct-05	16:57:45	900.6	RED6264	RED_CONC_1M90D	dpm/m2	48900			68100			66300			5278180
TBN-01-16-147-F-G.RPT	TBN-01-16-147-F-G	0.00	29-Oct-05	7:34:09	900.6	RED6264	RED_CONC_1M90D	dpm/m2	43200			65700			66300			5344067
TBN-01-16-148-F-G.RPT	TBN-01-16-148-F-G	0.00	29-Oct-05	7:53:10	900.6	RED6264	RED_CONC_1M90D	dpm/m2	45200			62100			69700			5591475
TBN-01-16-149-F-G.RPT	TBN-01-16-149-F-G	0.00	29-Oct-05	9:54:19	900.5	RED6264	RED_CONC_1M90D	dpm/m2	54400			68400			62300			6124571
TBN-01-16-150-F-G.RPT	TBN-01-16-150-F-G	0.00	29-Oct-05	8:14:10	900.5	RED6264	RED_CONC_1M90D	dpm/m2	42600			50600			55800			4905476
TBN-01-16-151-F-G.RPT	TBN-01-16-151-F-G	0.00	29-Oct-05	8:33:55	900.5	RED6264	RED_CONC_1M90D	dpm/m2	44600			68700			57800			5744474
TBN-01-16-132-F-G.RPT	TBN-01-16-132-F-G	0.00	28-Oct-05	9:39:27	900.6	RED6264	RED_CONC_1M90D	dpm/m2	45200			73200			69400			7461048
TBN-01-16-131-F-G.RPT	TBN-01-16-131-F-G	0.00	04-Nov-05	6:57:46	900.6	BLUE6279	BLUE_CONC_1M90D	dpm/m2	53500			68400			57700			5845952

Report Generated On 10/26/2005 9:07:26 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 8:52:26 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	291.59	72.85	0.71	9.57E+001	35.92	3.91E+002
m	2	284-	305	299.64	74.87	0.71	1.61E+002	42.33	4.09E+002
F	3	334-	345	338.49	84.58	1.18	1.12E+002	39.78	4.07E+002
F	4	432-	440	436.02	108.97	0.74	3.76E+001	27.86	2.00E+002
F	5	945-	962	953.76	238.41	1.26	9.00E+001	24.99	1.44E+002
F	6	1175-	1184	1180.05	294.99	0.95	2.82E+001	17.12	5.36E+001
F	7	1401-	1413	1405.76	351.42	0.94	3.95E+001	18.49	6.64E+001
F	8	2323-	2341	2331.57	582.89	1.52	7.10E+001	18.26	2.71E+001
F	9	2427-	2441	2434.86	608.72	1.54	5.03E+001	16.80	2.77E+001
F	10	3635-	3649	3642.00	910.53	1.44	5.56E+001	16.32	1.46E+001
F	11	5827-	5855	5841.36	1460.41	2.19	3.58E+002	36.47	1.08E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.995	1460.81*	10.67	5.43413E+006	7.07122E+005
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.70650E+004	2.80832E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.45173E+006	4.76319E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.66967E+005	5.32479E+004
Bi-214	0.411	609.31*	46.30	1.27413E+005	4.54238E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.562	74.82* @	6.21	2.50138E+006	8.40558E+005
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.30654E+005	8.22821E+004
		351.92*	37.20	1.00129E+005	4.97842E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.995	5.434126E+006	7.071220E+005
TL-208		0.469	9.706501E+004	2.808322E+004
Pb-212	@	0.497	1.669675E+005	5.324791E+004
Bi-214		0.411	1.274130E+005	4.542384E+004
PB-214	@	0.562	1.083089E+005	4.259458E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.85	1.0639E-001	37.51
F	3	84.58	1.2499E-001	35.36
F	4	108.97	4.1794E-002	74.07
F	10	910.53	6.1824E-002	29.34

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7195E+004	5.65E+004	3.6174E+004
	1332.49	100.00	5.6481E+004		-1.4724E+004
Nb-94	702.63	100.00	5.6851E+004	5.40E+004	3.2437E+002
	871.10	100.00	5.3950E+004		-4.1981E+004
Ag-108m	79.20	7.10	2.0688E+006	6.21E+004	-1.8886E+006
	433.93	89.90	6.2118E+004		2.1222E+004
	614.37	90.40	7.4214E+004		-5.6558E+004
	722.95	90.50	6.6464E+004		1.2710E+004
Sb-125	176.33	6.89	1.0388E+006	2.02E+005	-4.5880E+005
	427.89	29.33	2.0184E+005		4.0981E+004
	463.38	10.35	5.9117E+005		-2.4756E+004
	600.56	17.80	3.4893E+005		1.5891E+005
	606.64	5.02	1.4535E+006		1.1846E+006
	635.90	11.32	4.9968E+005		4.0849E+004
Cs-134	563.23	8.38	6.5420E+005	6.38E+004	1.6097E+005
	569.32	15.43	3.5691E+005		-2.8115E+005
	604.70	97.60	7.5311E+004		1.0012E+004
	795.84	85.40	6.3843E+004		-3.5438E+004
	801.93	8.73	6.8427E+005		4.8620E+004
Cs-137	661.65	85.12	7.2575E+004	7.26E+004	-1.4991E+004
Eu-152	121.78	28.40	3.2527E+005	2.24E+005	-1.7608E+005
	244.69	7.49	9.1180E+005		9.5298E+004
	344.27	26.50	2.3026E+005		-2.1433E+005
	778.89	12.74	4.1652E+005		-4.6079E+005
	867.32	4.16	1.2766E+006		-6.2069E+005
	964.01	14.40	4.9809E+005		3.7945E+005
	1085.78	10.00	6.2715E+005		4.9657E+005
	1112.02	13.30	4.6121E+005		-5.2102E+005
	1407.95	20.70	2.2441E+005		9.1568E+004
Eu-154	123.07	40.50	2.2732E+005	1.61E+005	-1.0763E+005
	247.94	6.60	9.7469E+005		-6.7378E+005
	591.81	4.83	1.1360E+006		-3.7853E+005
	723.30	19.70	2.9925E+005		-8.3816E+004
	756.87	4.33	1.2778E+006		-1.6992E+005
	873.19	11.50	4.7610E+005		-2.6208E+004
	996.32	10.30	4.8159E+005		1.2050E+005
	1004.76	17.90	2.8330E+005		1.4609E+005
	1274.45	35.50	1.6099E+005		1.3997E+005
Eu-155	86.54	30.90	4.3373E+005	4.34E+005	7.3694E+005
	105.31	20.70	4.9689E+005		1.2012E+004
Am-241	59.54	35.90	5.2639E+005	5.26E+005	-1.7268E+005
Cm-243	228.19	10.56	6.3376E+005	4.53E+005	1.3533E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.5306E+005	4.53E+005	-7.6826E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 10:05:25 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 9:50:26 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.73	72.89	0.66	1.28E+002	36.17	3.64E+002
m	2	282-	305	300.11	74.99	0.67	2.31E+002	46.31	4.34E+002
F	3	947-	960	953.38	238.32	1.13	1.43E+002	29.59	1.31E+002
F	4	1398-	1414	1405.64	351.39	1.02	7.95E+001	22.05	8.40E+001
F	5	2030-	2048	2040.76	510.18	1.68	6.93E+001	20.75	7.58E+001
F	6	2322-	2341	2331.12	582.78	1.62	8.66E+001	20.57	4.77E+001
F	7	2427-	2444	2435.02	608.76	1.57	1.09E+002	22.16	3.64E+001
F	8	2641-	2652	2646.11	661.53	0.57	1.66E+001	9.43	1.20E+001
F	9	2822-	2833	2827.11	706.79	0.69	1.25E+001	8.44	1.80E+001
F	10	3634-	3652	3641.94	910.51	1.74	6.03E+001	17.69	2.79E+001
F	11	4472-	4486	4479.13	1119.83	1.63	2.77E+001	13.34	1.49E+001
F	12	5827-	5855	5841.47	1460.44	2.08	4.87E+002	42.77	1.08E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.980	511.00*	100.00	7.54756E+004	2.49540E+004
K-40	0.996	1460.81*	10.67	7.38632E+006	8.82652E+005
Cs-137	1.000	661.65*	85.12	2.37642E+004	1.37476E+004
TL-208	0.748	277.35	6.80		
		510.84*	21.60	3.49424E+005	1.19000E+005
		583.14*	84.20	1.18397E+005	3.21986E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.08140E+006	5.83535E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.64681E+005	6.88211E+004
Bi-214	0.707	609.31*	46.30	2.75449E+005	6.58129E+004
		1120.29*	15.10	2.70716E+005	1.33641E+005
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.980	4.990194E+004	2.589169E+004
K-40	0.996	7.386320E+006	8.826517E+005
Cs-137	1.000	2.376415E+004	1.374761E+004
TL-208	0.748	1.183966E+005	3.196658E+004
Pb-212 @	0.496	2.646809E+005	6.882110E+004
Bi-214	0.707	2.745254E+005	5.904186E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.89	1.4167E-001	28.37
F 4	351.39	8.8281E-002	27.75
F 9	706.79	1.3898E-002	67.50
F 10	910.51	6.6954E-002	29.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.7583E+004	4.69E+004	4.8402E+004
		1332.49	100.00	4.6897E+004		-2.3577E+004
	Nb-94	702.63	100.00	6.0752E+004	6.08E+004	-1.3948E+004
		871.10	100.00	6.1074E+004		-1.2378E+004
	Ag-108m	79.20	7.10	2.2177E+006	6.87E+004	-7.9477E+004
		433.93	89.90	6.9818E+004		-8.4756E+004
		614.37	90.40	8.6415E+004		7.6424E+003
		722.95	90.50	6.8734E+004		-1.6414E+004
	Sb-125	176.33	6.89	1.1119E+006	2.05E+005	7.2887E+005
		427.89	29.33	2.0516E+005		-1.5846E+004
		463.38	10.35	5.8527E+005		-5.3312E+005
		600.56	17.80	3.4611E+005		-1.2504E+005
		606.64	5.02	1.6662E+006		1.9553E+006
		635.90	11.32	5.3186E+005		3.4183E+004
	Cs-134	563.23	8.38	7.6353E+005	6.79E+004	2.7770E+005
		569.32	15.43	3.9825E+005		-1.9967E+005
		604.70	97.60	8.5960E+004		1.9372E+004
		795.84	85.40	6.7857E+004		-7.8529E+003
		801.93	8.73	6.3820E+005		-6.9341E+005
+	Cs-137	661.65*	85.12	2.9682E+004	2.97E+004	2.3764E+004
	Eu-152	121.78	28.40	3.3902E+005	2.35E+005	-4.2952E+004
		244.69	7.49	9.9622E+005		1.7545E+005
		344.27	26.50	2.3451E+005		-1.4289E+005
		778.89	12.74	4.8401E+005		-7.6944E+004
		867.32	4.16	1.4820E+006		-4.7257E+005
		964.01	14.40	5.0652E+005		4.3312E+005
		1085.78	10.00	5.9906E+005		-7.1992E+005
		1112.02	13.30	4.3254E+005		-2.0909E+004
		1407.95	20.70	2.4267E+005		3.3519E+004
	Eu-154	123.07	40.50	2.3653E+005	1.73E+005	1.3117E+005
		247.94	6.60	1.0497E+006		-9.3941E+005
		591.81	4.83	1.2467E+006		8.5313E+005
		723.30	19.70	3.1581E+005		1.3811E+005
		756.87	4.33	1.3161E+006		-3.7317E+004
		873.19	11.50	5.2271E+005		-9.0778E+002
		996.32	10.30	5.8705E+005		-3.3963E+005
		1004.76	17.90	3.2824E+005		8.5148E+004
		1274.45	35.50	1.7294E+005		3.3416E+004
	Eu-155	86.54	30.90	4.3630E+005	4.36E+005	1.2131E+005
		105.31	20.70	5.3019E+005		5.2728E+003
	Am-241	59.54	35.90	4.8836E+005	4.88E+005	-1.0040E+005
	Cm-243	228.19	10.56	6.9013E+005	4.77E+005	2.0411E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7737E+005	4.77E+005	-3.3918E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 10:26:42 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 10:11:34 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	307	300.56	75.10	1.10	1.66E+002	50.13	6.66E+002
F	2	947-	963	953.53	238.36	1.42	1.14E+002	27.67	1.61E+002
F	3	1397-	1414	1406.76	351.67	1.42	7.98E+001	22.66	9.92E+001
F	4	2425-	2443	2435.06	608.77	1.78	6.47E+001	18.14	3.79E+001
F	5	3636-	3649	3642.78	910.72	1.43	3.34E+001	14.51	2.21E+001
F	6	3831-	3842	3836.47	959.15	1.10	1.82E+001	10.40	9.00E+000
F	7	5828-	5855	5841.59	1460.47	2.02	4.02E+002	38.94	7.19E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.997	1460.81*		10.67	6.10866E+006	7.70652E+005
Pb-212	0.496	74.81*	@	10.70	1.49753E+006	5.38113E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.10955E+005	6.10726E+004
Bi-214	0.412	609.31*		46.30	1.63915E+005	5.02999E+004
		1120.29		15.10		
		1764.49		15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.997	6.108660E+006	7.706518E+005
Pb-212	@	0.496	2.109550E+005	6.107262E+004
Bi-214		0.412	1.639146E+005	5.029986E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	351.67	8.8684E-002	28.39
F	5	910.72	3.7083E-002	43.47
F	6	959.15	2.0231E-002	57.14

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.5252E+004	5.75E+004	1.1366E+005
	1332.49	100.00	5.7495E+004		-6.2873E+003
Nb-94	702.63	100.00	6.1615E+004	5.32E+004	-2.4517E+004
	871.10	100.00	5.3182E+004		9.9531E+003
Ag-108m	79.20	7.10	2.2404E+006	6.86E+004	-2.3148E+006
	433.93	89.90	6.8562E+004		-8.6359E+003
	614.37	90.40	7.6767E+004		-2.5400E+004
	722.95	90.50	7.0307E+004		3.4515E+004
Sb-125	176.33	6.89	1.0893E+006	2.06E+005	2.2915E+005
	427.89	29.33	2.0647E+005		1.3471E+005
	463.38	10.35	6.1042E+005		2.6032E+005
	600.56	17.80	3.1334E+005		4.1590E+004
	606.64	5.02	1.4535E+006		1.9906E+006
	635.90	11.32	5.2462E+005		-3.4210E+005
Cs-134	563.23	8.38	7.1549E+005	6.63E+004	3.6341E+005
	569.32	15.43	3.4622E+005		-1.3697E+005
	604.70	97.60	7.3564E+004		-2.0479E+004
	795.84	85.40	6.6282E+004		-6.5584E+004
	801.93	8.73	7.0968E+005		7.0499E+004
Cs-137	661.65	85.12	7.1279E+004	7.13E+004	3.7840E+004
Eu-152	121.78	28.40	3.5427E+005	2.11E+005	8.8004E+004
	244.69	7.49	9.2542E+005		-9.4633E+005
	344.27	26.50	2.3390E+005		-3.5509E+005
	778.89	12.74	4.7429E+005		-5.8688E+005
	867.32	4.16	1.3399E+006		-3.0316E+005
	964.01	14.40	5.2296E+005		5.4647E+005
	1085.78	10.00	5.7809E+005		3.1010E+005
	1112.02	13.30	4.8519E+005		-1.6365E+005
	1407.95	20.70	2.1127E+005		-3.4653E+004
Eu-154	123.07	40.50	2.4495E+005	1.64E+005	1.1902E+005
	247.94	6.60	9.8210E+005		-4.4392E+005
	591.81	4.83	1.1704E+006		-6.1739E+005
	723.30	19.70	3.2161E+005		1.2868E+005
	756.87	4.33	1.2933E+006		1.5187E+005
	873.19	11.50	4.6282E+005		2.6859E+005
	996.32	10.30	5.4113E+005		1.3956E+005
	1004.76	17.90	2.9584E+005		8.0635E+004
	1274.45	35.50	1.6372E+005		8.5627E+004
Eu-155	86.54	30.90	4.5351E+005	4.54E+005	3.7624E+005
	105.31	20.70	5.2847E+005		6.3173E+005
Am-241	59.54	35.90	5.3743E+005	5.37E+005	1.4045E+005
Cm-243	228.19	10.56	6.6257E+005	4.85E+005	-4.3322E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8459E+005	4.85E+005	-9.4898E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 10:47:38 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 10:32:38 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	281-	306	291.03	72.71	1.01	1.52E+002	38.69	5.10E+002
m	2	281-	306	300.32	75.04	1.02	2.53E+002	46.58	5.42E+002
F	3	948-	962	953.92	238.45	1.17	1.13E+002	28.11	1.59E+002
F	4	1175-	1186	1180.38	295.07	0.93	3.61E+001	18.38	6.65E+001
F	5	1399-	1413	1406.36	351.57	1.23	7.29E+001	20.49	5.44E+001
F	6	2325-	2339	2331.72	582.93	1.26	4.66E+001	17.02	3.49E+001
F	7	2427-	2442	2434.52	608.63	1.38	7.78E+001	19.50	3.13E+001
F	8	3633-	3650	3641.49	910.40	1.39	4.93E+001	15.73	1.80E+001
F	9	3866-	3880	3873.47	968.40	1.19	2.62E+001	11.98	2.43E+001
F	10	4473-	4486	4479.59	1119.94	1.24	2.54E+001	13.16	1.83E+001
F	11	5828-	5854	5841.31	1460.40	2.06	3.90E+002	37.99	3.43E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.995	1460.81*		10.67	5.91242E+006	7.49478E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	6.37777E+004	2.47588E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.28012E+006	6.12887E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.10017E+005	6.16824E+004
Bi-214	0.704	609.31*		46.30	1.97139E+005	5.51831E+004
		1120.29*		15.10	2.48709E+005	1.31461E+005
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	3.92871E+006	1.09385E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.67346E+005	8.96665E+004
		351.92*		37.20	1.84892E+005	6.04667E+004
Ac-228	0.608	338.32		11.40		
		911.07*		27.70	2.40994E+005	8.17165E+004
		969.11*		16.60	2.19541E+005	1.02880E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.995	5.912420E+006	7.494782E+005
TL-208		0.470	6.377765E+004	2.475879E+004
Pb-212	@	0.497	2.100169E+005	6.168242E+004
Bi-214		0.704	2.048643E+005	5.088202E+004
PB-214	@	0.564	1.794070E+005	5.013281E+004
Ac-228		0.608	2.326952E+005	6.398764E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.71	1.6853E-001	25.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1052E+004	4.99E+004	3.5044E+004
	1332.49	100.00	4.9925E+004		4.5926E+004
Nb-94	702.63	100.00	5.4628E+004	5.04E+004	-6.1791E+004
	871.10	100.00	5.0392E+004		6.0544E+004
Ag-108m	79.20	7.10	2.1036E+006	5.95E+004	-1.3102E+006
	433.93	89.90	5.9481E+004		-4.0042E+004
	614.37	90.40	7.7763E+004		-4.9779E+003
	722.95	90.50	6.8734E+004		1.0719E+005
Sb-125	176.33	6.89	1.0514E+006	1.87E+005	1.0812E+006
	427.89	29.33	1.8725E+005		1.4181E+005
	463.38	10.35	5.6306E+005		-1.1316E+005
	600.56	17.80	3.0698E+005		-1.0809E+005
	606.64	5.02	1.4871E+006		1.5128E+006
	635.90	11.32	4.5393E+005		-9.8316E+004
Cs-134	563.23	8.38	6.7008E+005	6.00E+004	5.4836E+005
	569.32	15.43	3.2948E+005		-2.7007E+004
	604.70	97.60	7.5095E+004		-5.1293E+004
	795.84	85.40	5.9984E+004		-2.6466E+004
	801.93	8.73	5.9691E+005		-4.5216E+005
Cs-137	661.65	85.12	6.6881E+004	6.69E+004	-1.3956E+004
Eu-152	121.78	28.40	3.2904E+005	2.24E+005	-2.3662E+005
	244.69	7.49	9.6654E+005		-2.6622E+004
	344.27	26.50	2.3026E+005		6.4186E+004
	778.89	12.74	4.4902E+005		-4.8305E+005
	867.32	4.16	1.2483E+006		-1.4436E+006
	964.01	14.40	4.5580E+005		-2.2666E+005
	1085.78	10.00	5.5627E+005		-2.4989E+005
	1112.02	13.30	4.4232E+005		-4.7027E+005
	1407.95	20.70	2.2441E+005		-5.0737E+004
Eu-154	123.07	40.50	2.3228E+005	1.43E+005	1.8690E+005
	247.94	6.60	1.0058E+006		2.8835E+005
	591.81	4.83	1.1704E+006		-1.9016E+005
	723.30	19.70	3.1138E+005		2.0362E+005
	756.87	4.33	1.3236E+006		-2.3782E+005
	873.19	11.50	4.2399E+005		-2.5304E+005
	996.32	10.30	5.7594E+005		2.0678E+005
	1004.76	17.90	2.9828E+005		-1.7756E+005
	1274.45	35.50	1.4337E+005		-2.9451E+004
Eu-155	86.54	30.90	4.2631E+005	4.26E+005	4.4077E+005
	105.31	20.70	5.2761E+005		2.2916E+005
Am-241	59.54	35.90	5.2590E+005	5.26E+005	1.1001E+005
Cm-243	228.19	10.56	6.3586E+005	4.65E+005	-2.1872E+003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6538E+005	4.65E+005	-2.7186E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 11:05:41 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 10:50:25 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	304	291.42	72.81	0.96	1.07E+002	39.53	6.37E+002
m	2	283-	304	300.07	74.98	0.97	2.58E+002	48.74	5.55E+002
M	3	333-	358	339.58	84.85	0.99	1.19E+002	38.98	4.74E+002
m	4	333-	358	349.96	87.45	0.99	8.61E+001	35.64	4.81E+002
F	5	948-	963	954.29	238.54	1.36	1.28E+002	27.95	1.37E+002
F	6	1399-	1412	1405.99	351.48	1.02	5.12E+001	19.52	6.83E+001
F	7	2031-	2051	2041.26	510.31	1.86	1.09E+002	22.87	6.83E+001
F	8	2323-	2336	2329.75	582.44	1.25	5.84E+001	19.43	4.58E+001
F	9	2427-	2444	2434.64	608.66	1.44	8.62E+001	20.86	4.08E+001
F	10	3634-	3649	3642.69	910.70	1.68	4.14E+001	15.87	2.82E+001
F	11	3867-	3879	3873.49	968.40	1.51	2.88E+001	12.77	1.27E+001
F	12	5828-	5854	5841.18	1460.37	2.10	3.61E+002	36.95	1.35E+001
F	13	7051-	7064	7057.43	1764.45	1.92	2.73E+001	11.27	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*	100.00	1.18623E+005	2.99545E+004
K-40	0.994	1460.81*	10.67	5.47983E+006	7.15112E+005
Eu-155	0.328	86.54*	30.90	2.29415E+005	1.05051E+005
		105.31	20.70		
TL-208	0.742	277.35	6.80		
		510.84*	21.60	5.49179E+005	1.45750E+005
		583.14*	84.20	7.98589E+004	2.85993E+004
		860.37	12.46		
Pb-212	0.659	74.81* @	10.70	2.32580E+006	6.33039E+005
		77.11 @	18.00		
		87.30* @	8.00	8.86115E+005	4.05760E+005
		238.63*	44.60	2.37590E+005	6.38566E+004
Bi-214	0.697	609.31*	46.30	2.18376E+005	5.94334E+004
		1120.29	15.10		
		1764.49*	15.80	2.97597E+005	1.26426E+005
Ac-228	0.613	338.32	11.40		
		911.07*	27.70	2.02442E+005	8.09879E+004
		969.11*	16.60	2.41427E+005	1.09855E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	1.013732E+005	3.057964E+004
K-40		0.994	5.479832E+006	7.151116E+005
Eu-155		0.328	1.679030E+005	1.063441E+005
TL-208		0.742	7.985887E+004	2.848059E+004
Pb-212	@	0.659	2.375896E+005	6.385656E+004
Bi-214		0.697	2.327146E+005	5.378643E+004
Ac-228		0.613	2.161697E+005	6.518787E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	1.1855E-001	37.05
M 3	84.85	1.3273E-001	32.63
F 6	351.48	5.6919E-002	38.10

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	5.7025E+004	5.39E+004	2.1115E+004
		1332.49	100.00	5.3855E+004		2.7780E+004
	Nb-94	702.63	100.00	5.7776E+004	5.43E+004	-3.3914E+004
		871.10	100.00	5.4330E+004		-2.9635E+004
	Ag-108m	79.20	7.10	2.2144E+006	6.58E+004	-4.1926E+006
		433.93	89.90	6.5755E+004		3.3549E+004
		614.37	90.40	7.6263E+004		-3.9334E+004
		722.95	90.50	6.6464E+004		2.1055E+004
	Sb-125	176.33	6.89	1.0821E+006	1.81E+005	3.0949E+005
		427.89	29.33	1.8137E+005		-2.0429E+005
		463.38	10.35	5.7730E+005		5.3584E+005
		600.56	17.80	3.1956E+005		-7.4389E+003
		606.64	5.02	1.5754E+006		2.5185E+006
		635.90	11.32	5.2705E+005		3.4309E+005
	Cs-134	563.23	8.38	7.3567E+005	7.42E+004	2.9714E+005
		569.32	15.43	3.9668E+005		9.3567E+004
		604.70	97.60	8.1119E+004		-2.0826E+004
		795.84	85.40	7.4155E+004		4.4892E+004
		801.93	8.73	6.5005E+005		-5.4201E+005
	Cs-137	661.65	85.12	6.5465E+004	6.55E+004	7.7692E+003
	Eu-152	121.78	28.40	3.5077E+005	2.16E+005	-3.6936E+004
		244.69	7.49	9.2992E+005		-4.7602E+005
		344.27	26.50	2.1633E+005		-3.0279E+005
		778.89	12.74	4.5675E+005		-8.9119E+004
		867.32	4.16	1.3222E+006		-1.7761E+006
		964.01	14.40	4.8951E+005		8.1174E+005
		1085.78	10.00	5.7809E+005		3.1722E+005
		1112.02	13.30	4.9099E+005		8.8035E+004
		1407.95	20.70	2.3067E+005		4.0817E+004
	Eu-154	123.07	40.50	2.4262E+005	1.40E+005	-1.1722E+005
		247.94	6.60	1.0165E+006		-3.3960E+005
		591.81	4.83	1.1647E+006		-9.7411E+005
		723.30	19.70	3.0840E+005		1.8642E+005
		756.87	4.33	1.2856E+006		4.4386E+005
		873.19	11.50	4.6951E+005		1.0432E+005
		996.32	10.30	5.7967E+005		8.1727E+004
		1004.76	17.90	3.1708E+005		9.2334E+004
		1274.45	35.50	1.4020E+005		-6.7848E+004
+	Eu-155	86.54*	30.90	2.7909E+005	2.79E+005	2.2941E+005
		105.31	20.70	5.2098E+005		6.2702E+004
	Am-241	59.54	35.90	5.2881E+005	5.29E+005	3.5256E+005
	Cm-243	228.19	10.56	6.5038E+005	4.76E+005	-5.1374E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7555E+005	4.76E+005	3.3277E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 11:28:42 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 11:13:42 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.50	72.83	1.01	1.47E+002	41.69	6.23E+002
m	2	282-	305	299.71	74.89	1.02	2.59E+002	50.84	7.22E+002
F	3	944-	962	953.99	238.47	1.03	1.20E+002	29.52	2.26E+002
F	4	1400-	1413	1406.41	351.58	1.31	9.03E+001	22.78	6.59E+001
F	5	2318-	2340	2330.34	582.59	2.04	1.17E+002	22.38	4.76E+001
F	6	2425-	2445	2435.67	608.92	1.74	1.05E+002	21.10	3.40E+001
F	7	2729-	2740	2734.39	683.61	1.03	2.17E+001	11.18	1.14E+001
F	8	2900-	2912	2906.74	726.70	1.04	2.50E+001	13.97	2.74E+001
F	9	3635-	3650	3642.30	910.60	1.23	5.70E+001	18.86	4.00E+001
F	10	5830-	5854	5841.86	1460.54	2.08	4.11E+002	39.41	8.81E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	6.24378E+006	7.83242E+005
TL-208	0.464	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.59556E+005	3.71839E+004
		860.37	12.46		
Bi-212	0.993	727.17*	11.80	2.65596E+005	1.51738E+005
Pb-212	0.497	74.81* @	10.70	2.33584E+006	6.48085E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.22804E+005	6.49757E+004
Bi-214	0.415 *	609.31*	46.30	2.65277E+005	6.28560E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.998	6.243783E+006	7.832423E+005
TL-208	0.464	1.595562E+005	3.718386E+004
Bi-212	0.993	2.655962E+005	1.517378E+005
Pb-212	@ 0.497	2.228043E+005	6.497567E+004
Bi-214	0.415	2.652768E+005	6.285596E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.6278E-001	28.46
F 4	351.58	1.0028E-001	25.24
F 7	683.61	2.4089E-002	51.55
F 9	910.60	6.3342E-002	33.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0238E+004	5.60E+004	7.9885E+004
	1332.49	100.00	5.5966E+004		2.3978E+004
Nb-94	702.63	100.00	6.0752E+004	6.08E+004	-2.3294E+004
	871.10	100.00	6.1074E+004		1.2762E+004
Ag-108m	79.20	7.10	2.3097E+006	6.94E+004	-3.0628E+006
	433.93	89.90	7.3648E+004		8.2851E+004
	614.37	90.40	8.3940E+004		-6.5139E+002
	722.95	90.50	6.9368E+004		3.5734E+004
Sb-125	176.33	6.89	1.1670E+006	2.04E+005	4.1598E+004
	427.89	29.33	2.0384E+005		-7.5709E+004
	463.38	10.35	6.1419E+005		2.7406E+005
	600.56	17.80	3.2717E+005		-1.2963E+005
	606.64	5.02	1.5870E+006		2.3140E+006
	635.90	11.32	5.0730E+005		7.2868E+004
Cs-134	563.23	8.38	7.4414E+005	7.73E+004	1.1195E+005
	569.32	15.43	3.7403E+005		1.1825E+005
	604.70	97.60	8.2700E+004		-5.9930E+003
	795.84	85.40	7.7271E+004		6.6280E+004
	801.93	8.73	7.0968E+005		-3.1223E+005
Cs-137	661.65	85.12	7.4787E+004	7.48E+004	4.6118E+004
Eu-152	121.78	28.40	3.6750E+005	2.54E+005	1.9532E+004
	244.69	7.49	9.8361E+005		-2.6440E+005
	344.27	26.50	2.5410E+005		-3.5557E+004
	778.89	12.74	4.5675E+005		1.4119E+004
	867.32	4.16	1.4253E+006		-2.7096E+006
	964.01	14.40	5.1068E+005		2.6502E+005
	1085.78	10.00	5.7380E+005		-7.3513E+004
	1112.02	13.30	4.7036E+005		-7.4271E+005
	1407.95	20.70	2.7272E+005		2.7478E+005
Eu-154	123.07	40.50	2.5491E+005	1.65E+005	-1.2262E+004
	247.94	6.60	1.0803E+006		3.9600E+005
	591.81	4.83	1.2780E+006		-2.3838E+005
	723.30	19.70	3.2304E+005		3.6857E+005
	756.87	4.33	1.4519E+006		-1.7803E+006
	873.19	11.50	5.1072E+005		-4.1164E+005
	996.32	10.30	5.2898E+005		1.1627E+005
	1004.76	17.90	2.9828E+005		-1.2244E+005
	1274.45	35.50	1.6507E+005		1.4950E+005
Eu-155	86.54	30.90	4.6411E+005	4.64E+005	6.6681E+005
	105.31	20.70	5.5033E+005		-4.9136E+005
Am-241	59.54	35.90	5.2977E+005	5.30E+005	-1.9458E+005
Cm-243	228.19	10.56	7.0821E+005	5.07E+005	-6.0136E+002

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0734E+005	5.07E+005	8.0403E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 2:59:17 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 2:44:17 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title:
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	304	291.85	72.92	0.97	1.52E+002	41.64	5.80E+002
m	2	285-	304	300.25	75.02	0.98	3.10E+002	50.53	5.46E+002
F	3	334-	345	338.97	84.70	0.99	1.00E+002	42.40	5.34E+002
F	4	945-	960	954.56	238.61	0.82	1.06E+002	28.70	1.97E+002
F	5	1172-	1186	1179.30	294.80	0.62	3.80E+001	18.04	1.05E+002
F	6	1400-	1415	1406.75	351.67	1.17	9.25E+001	23.28	7.78E+001
F	7	2032-	2048	2040.75	510.18	1.56	8.08E+001	23.30	9.35E+001
F	8	2323-	2339	2330.81	582.70	1.16	7.41E+001	20.15	4.87E+001
F	9	2427-	2443	2434.47	608.62	1.68	9.34E+001	21.14	3.78E+001
F	10	3636-	3652	3642.78	910.72	1.38	6.73E+001	18.89	3.15E+001
F	11	3867-	3883	3874.75	968.72	1.90	5.10E+001	16.44	2.32E+001
F	12	4684-	4700	4692.29	1173.12	1.78	4.14E+001	15.89	2.09E+001
F	13	5323-	5337	5329.45	1332.42	1.29	2.50E+001	13.25	1.96E+001
F	14	5828-	5854	5841.93	1460.55	2.06	4.40E+002	40.82	1.71E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.980	511.00*		100.00	8.79747E+004	2.82150E+004
K-40	0.998	1460.81*		10.67	6.68033E+006	8.22424E+005
Co-60	1.000	1173.22*		100.00	6.23935E+004	2.44395E+004
		1332.49*		100.00	3.92318E+004	2.10490E+004
TL-208	0.747	277.35		6.80		
		510.84*		21.60	4.07290E+005	1.34794E+005
		583.14*		84.20	1.01359E+005	3.06456E+004
		860.37		12.46		
Pb-212	0.498	74.81*	@	10.70	2.78886E+006	7.11253E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.96426E+005	6.15242E+004
Bi-214	0.409	609.31*		46.30	2.36616E+005	6.11305E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	4.80528E+006	1.27419E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.75755E+005	8.86196E+004
		351.92*		37.20	2.34638E+005	7.08910E+004
Ac-228	0.617	338.32		11.40		
		911.07*		27.70	3.28654E+005	9.97386E+004
		969.11*		16.60	4.27179E+005	1.44681E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.980	6.608109E+004	2.897235E+004
K-40		0.998	6.680333E+006	8.224239E+005
Co-60		1.000	4.909584E+004	1.594902E+004
TL-208		0.747	1.013592E+005	3.046710E+004
Pb-212	@	0.498	1.964260E+005	6.152416E+004
Bi-214		0.409	2.366156E+005	6.113055E+004
PB-214	@	0.564	2.116611E+005	5.535800E+004
Ac-228		0.617	3.603925E+005	8.211706E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	1.6861E-001	27.44
F 3	84.70	1.1126E-001	42.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	4.4144E+004	4.32E+004	6.2393E+004
		1332.49*	100.00	4.3241E+004		3.9232E+004
	Nb-94	702.63	100.00	6.1329E+004	6.13E+004	-2.6623E+004
		871.10	100.00	6.3367E+004		4.9947E+003
	Ag-108m	79.20	7.10	2.2646E+006	6.94E+004	-5.8669E+006
		433.93	89.90	6.9402E+004		-4.2943E+004
		614.37	90.40	8.0676E+004		-1.8565E+004
		722.95	90.50	7.6831E+004		8.1987E+004
	Sb-125	176.33	6.89	1.1670E+006	2.14E+005	2.9018E+005
		427.89	29.33	2.1415E+005		2.4689E+005
		463.38	10.35	6.3271E+005		-4.7333E+005
		600.56	17.80	3.2566E+005		-2.1800E+005
		606.64	5.02	1.6101E+006		2.3521E+006
		635.90	11.32	5.5068E+005		-1.1682E+005
	Cs-134	563.23	8.38	7.6626E+005	7.62E+004	5.9998E+004
		569.32	15.43	4.2541E+005		-5.0777E+004
		604.70	97.60	8.2700E+004		-1.5968E+004
		795.84	85.40	7.6247E+004		4.2969E+004
		801.93	8.73	7.1677E+005		-1.7524E+005
	Cs-137	661.65	85.12	7.4476E+004	7.45E+004	3.7606E+004
	Eu-152	121.78	28.40	3.7644E+005	2.46E+005	1.1272E+005
		244.69	7.49	1.0114E+006		-2.6995E+004
		344.27	26.50	2.4850E+005		-2.3590E+005
		778.89	12.74	5.0285E+005		1.2883E+004
		867.32	4.16	1.6180E+006		-6.8738E+005
		964.01	14.40	5.6557E+005		-1.4435E+005
		1085.78	10.00	6.0316E+005		-4.8970E+005
		1112.02	13.30	4.9955E+005		-5.8823E+005
		1407.95	20.70	2.4557E+005		2.4730E+004
	Eu-154	123.07	40.50	2.6056E+005	1.73E+005	-3.7658E+004
		247.94	6.60	1.0819E+006		-2.7464E+005
		591.81	4.83	1.2361E+006		2.7300E+005
		723.30	19.70	3.4776E+005		3.0965E+005
		756.87	4.33	1.4722E+006		1.2041E+006
		873.19	11.50	5.3729E+005		3.2838E+005
		996.32	10.30	5.7967E+005		1.8365E+005
		1004.76	17.90	3.2383E+005		1.4493E+003
		1274.45	35.50	1.7294E+005		5.5509E+004
	Eu-155	86.54	30.90	4.8114E+005	4.81E+005	6.2820E+005
		105.31	20.70	5.6066E+005		-1.0700E+004
	Am-241	59.54	35.90	5.2127E+005	5.21E+005	-1.0577E+005
	Cm-243	228.19	10.56	7.0256E+005	5.06E+005	1.3706E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0648E+005	5.06E+005	-8.1974E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 10:30:26 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 10:15:23 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.91	72.94	0.99	1.44E+002	41.46	6.28E+002
m	2	282-	306	300.38	75.05	1.00	3.45E+002	53.27	6.76E+002
M	3	335-	375	339.42	84.81	0.79	1.66E+002	41.64	3.96E+002
m	4	335-	375	349.26	87.27	0.80	8.51E+001	34.30	4.15E+002
m	5	335-	375	371.79	92.91	0.80	5.87E+001	32.10	3.44E+002
F	6	949-	960	954.73	238.65	0.98	1.41E+002	30.89	1.40E+002
F	7	1347-	1359	1353.29	338.30	0.79	3.76E+001	17.23	6.09E+001
F	8	1400-	1416	1407.96	351.97	1.27	1.05E+002	23.55	7.32E+001
F	9	2325-	2341	2332.82	583.20	1.35	9.27E+001	22.18	5.33E+001
F	10	2428-	2446	2436.92	609.23	1.18	8.00E+001	21.11	5.63E+001
F	11	3636-	3653	3644.31	911.11	1.87	7.65E+001	19.30	2.80E+001
M	12	3855-	3884	3860.39	965.13	1.09	1.97E+001	10.78	1.30E+001
m	13	3855-	3884	3876.80	969.23	1.09	3.90E+001	14.43	1.88E+001
F	14	4686-	4700	4693.20	1173.35	1.34	2.25E+001	12.53	1.81E+001
F	15	5325-	5338	5332.02	1333.07	0.63	1.25E+001	9.35	2.08E+001
F	16	5834-	5860	5847.01	1461.82	2.04	4.99E+002	43.41	1.70E+001
F	17	7058-	7072	7065.14	1766.38	1.39	2.81E+001	12.14	5.89E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.969	1460.81*	10.67	7.57593E+006	9.00385E+005
Co-60	0.995	1173.22*	100.00	3.39288E+004	1.90778E+004
		1332.49*	100.00	1.96116E+004	1.47718E+004
Eu-155	0.333	86.54*	30.90	2.27227E+005	1.01818E+005
		105.31	20.70		
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.26857E+005	3.46788E+004
		860.37	12.46		
Pb-212	0.659	74.81* @	10.70	3.10176E+006	7.74276E+005
		77.11 @	18.00		
		87.30* @	8.00	8.77664E+005	3.93273E+005
		238.63*	44.60	2.62536E+005	7.05768E+004
Bi-214	0.682	609.31*	46.30	2.02837E+005	5.91768E+004
		1120.29	15.10		
		1764.49*	15.80	3.06665E+005	1.35909E+005
Ac-228	1.000	338.32*	11.40	3.07309E+005	1.48780E+005
		911.07*	27.70	3.74016E+005	1.03684E+005
		969.11*	16.60	3.26943E+005	1.25552E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.969	7.575932E+006	9.003851E+005
Co-60		0.995	2.497790E+004	1.167987E+004
Eu-155		0.333	1.592564E+005	1.034448E+005
TL-208		0.470	1.268569E+005	3.467882E+004
Pb-212	@	0.659	2.625363E+005	7.057677E+004
Bi-214		0.682	2.193842E+005	5.425674E+004
Ac-228		1.000	3.442603E+005	7.042346E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	1.5996E-001	28.80
M 3	84.81	1.8448E-001	25.08
m 5	92.91	6.5211E-002	54.69
F 8	351.97	1.1690E-001	22.38
M 12	965.13	2.1867E-002	54.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
+	Co-60	1173.22*	100.00	3.9931E+004	3.99E+004	3.3929E+004
		1332.49*	100.00	4.3455E+004		1.9612E+004
	Nb-94	702.63	100.00	6.3581E+004	6.01E+004	3.6254E+004
		871.10	100.00	6.0063E+004		1.6617E+004
	Ag-108m	79.20	7.10	2.2955E+006	7.00E+004	-2.1357E+006
		433.93	89.90	7.0025E+004		1.1983E+004
		614.37	90.40	8.9248E+004		-1.1756E+004
		722.95	90.50	7.7395E+004		4.4147E+004
	Sb-125	176.33	6.89	1.1759E+006	2.04E+005	1.8693E+005
		427.89	29.33	2.0450E+005		1.6844E+004
		463.38	10.35	6.5772E+005		1.1361E+005
		600.56	17.80	3.9115E+005		9.3216E+004
		606.64	5.02	1.7097E+006		2.7479E+006
		635.90	11.32	5.2946E+005		1.0556E+005
	Cs-134	563.23	8.38	7.5528E+005	8.19E+004	-1.8079E+005
		569.32	15.43	3.9194E+005		7.8864E+004
		604.70	97.60	8.6709E+004		2.3067E+004
		795.84	85.40	8.1869E+004		5.9375E+004
		801.93	8.73	6.9528E+005		-5.0166E+005
	Cs-137	661.65	85.12	7.5714E+004	7.57E+004	-7.0969E+004
	Eu-152	121.78	28.40	3.6985E+005	2.31E+005	3.9919E+003
		244.69	7.49	1.0828E+006		-5.9792E+005
		344.27	26.50	2.3985E+005		-1.3502E+004
		778.89	12.74	4.9588E+005		-1.4181E+005
		867.32	4.16	1.4899E+006		-1.5884E+006
		964.01	14.40	5.1890E+005		-1.6563E+005
		1085.78	10.00	6.6511E+005		2.2821E+005
		1112.02	13.30	4.6428E+005		-2.8202E+005
		1407.95	20.70	2.3067E+005		-4.0419E+004
	Eu-154	123.07	40.50	2.5713E+005	1.52E+005	4.5268E+004
		247.94	6.60	1.1592E+006		-5.7257E+005
		591.81	4.83	1.3430E+006		-2.4000E+005
		723.30	19.70	3.5560E+005		5.0971E+004
		756.87	4.33	1.3606E+006		-7.3406E+005
		873.19	11.50	5.3151E+005		3.2280E+004
		996.32	10.30	6.1565E+005		4.9021E+005
		1004.76	17.90	3.2159E+005		3.4125E+003
		1274.45	35.50	1.5246E+005		-6.5925E+004
+	Eu-155	86.54*	30.90	2.6013E+005	2.60E+005	2.2723E+005
		105.31	20.70	5.5252E+005		-1.2918E+005
	Am-241	59.54	35.90	5.3409E+005	5.34E+005	1.0382E+005
	Cm-243	228.19	10.56	7.3130E+005	5.06E+005	-2.1930E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0563E+005	5.06E+005	-1.2642E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 10:49:33 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 10:34:30 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	306	291.83	72.92	0.85	1.34E+002	40.03	5.01E+002
m	2	286-	306	300.45	75.07	0.85	3.42E+002	52.99	5.93E+002
F	3	333-	346	339.63	84.87	0.83	9.85E+001	41.55	6.33E+002
F	4	364-	376	371.26	92.77	0.82	7.05E+001	36.81	4.70E+002
F	5	833-	843	837.38	209.31	0.33	3.32E+001	5.18	1.17E+002
F	6	949-	961	954.88	238.69	0.87	1.58E+002	31.28	1.45E+002
F	7	1178-	1190	1182.56	295.62	0.70	3.47E+001	18.29	8.94E+001
F	8	1400-	1416	1407.85	351.94	1.37	8.51E+001	21.80	6.98E+001
F	9	2035-	2054	2043.98	510.99	1.75	9.99E+001	22.12	6.12E+001
F	10	2324-	2341	2332.57	583.14	1.31	8.36E+001	20.84	4.55E+001
F	11	2429-	2445	2437.17	609.30	1.28	1.03E+002	23.04	4.90E+001
F	12	3637-	3653	3645.07	911.30	1.57	7.82E+001	20.13	3.40E+001
F	13	3869-	3884	3876.31	969.11	1.45	3.67E+001	14.82	2.00E+001
F	14	4474-	4487	4479.70	1119.97	0.98	2.24E+001	11.48	1.60E+001
F	15	5834-	5860	5847.31	1461.90	2.00	4.58E+002	41.52	6.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.08823E+005	2.85233E+004
K-40	0.965	1460.81*		10.67	6.95056E+006	8.45053E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.03809E+005	1.38314E+005
		583.14*		84.20	1.14339E+005	3.22789E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	3.07398E+006	7.68394E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.92456E+005	7.39877E+004
Bi-214	0.713	609.31*		46.30	2.60449E+005	6.68063E+004
		1120.29*		15.10	2.19435E+005	1.14762E+005
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	5.29656E+006	1.37866E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.60853E+005	8.90002E+004
		351.92*		37.20	2.16003E+005	6.60461E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	3.82357E+005	1.07783E+005
		969.11*		16.60	3.07620E+005	1.28151E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	8.412556E+004	2.935207E+004
K-40		0.965	6.950557E+006	8.450528E+005
TL-208		0.753	1.143386E+005	3.206312E+004
Pb-212	@	0.497	2.924560E+005	7.398766E+004
Bi-214		0.713	2.500680E+005	5.773606E+004
PB-214	@	0.564	1.964177E+005	5.303760E+004
Ac-228		0.619	3.513929E+005	8.248667E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.92	1.4928E-001	29.79
F	3	84.87	1.0940E-001	42.20
F	4	92.77	7.8353E-002	52.19
F	5	209.31	3.6875E-002	15.61

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0609E+004	6.18E+004	2.9098E+004
	1332.49	100.00	6.1839E+004		3.9822E+004
Nb-94	702.63	100.00	6.7332E+004	5.94E+004	-1.3411E+004
	871.10	100.00	5.9379E+004		2.2976E+004
Ag-108m	79.20	7.10	2.3532E+006	7.21E+004	-1.7586E+006
	433.93	89.90	7.6530E+004		9.9872E+003
	614.37	90.40	9.4043E+004		-2.2147E+004
	722.95	90.50	7.2148E+004		2.6918E+004
Sb-125	176.33	6.89	1.1489E+006	2.11E+005	1.7516E+005
	427.89	29.33	2.1098E+005		-1.3972E+005
	463.38	10.35	6.2905E+005		-3.3911E+005
	600.56	17.80	3.4470E+005		1.6788E+005
	606.64	5.02	1.6989E+006		2.5552E+006
	635.90	11.32	5.6211E+005		-3.0348E+005
Cs-134	563.23	8.38	7.8241E+005	6.90E+004	4.5946E+005
	569.32	15.43	4.0291E+005		-2.4374E+005
	604.70	97.60	8.6709E+004		2.7816E+004
	795.84	85.40	6.9013E+004		-2.4530E+004
	801.93	8.73	6.5005E+005		-6.2674E+005
Cs-137	661.65	85.12	8.0181E+004	8.02E+004	3.7477E+004
Eu-152	121.78	28.40	3.7663E+005	2.46E+005	9.8048E+004
	244.69	7.49	9.9483E+005		-1.1207E+006
	344.27	26.50	2.6493E+005		-9.4042E+004
	778.89	12.74	5.0516E+005		-2.9456E+005
	867.32	4.16	1.4417E+006		-1.1990E+006
	964.01	14.40	5.3097E+005		-2.1482E+005
	1085.78	10.00	6.5397E+005		1.0289E+005
	1112.02	13.30	4.6121E+005		-2.4166E+005
	1407.95	20.70	2.4557E+005		-1.7009E+005
Eu-154	123.07	40.50	2.5864E+005	1.70E+005	-3.3498E+004
	247.94	6.60	1.0566E+006		-3.2859E+004
	591.81	4.83	1.3430E+006		2.7197E+005
	723.30	19.70	3.3150E+005		1.3945E+005
	756.87	4.33	1.4587E+006		-1.6935E+005
	873.19	11.50	4.9216E+005		-1.1079E+005
	996.32	10.30	6.3620E+005		4.7757E+005
	1004.76	17.90	3.4738E+005		4.1341E+004
	1274.45	35.50	1.7036E+005		-1.0338E+005
Eu-155	86.54	30.90	4.7964E+005	4.80E+005	7.3611E+005
	105.31	20.70	5.7081E+005		1.4439E+005
Am-241	59.54	35.90	5.3146E+005	5.31E+005	-5.5687E+005
Cm-243	228.19	10.56	7.0633E+005	5.10E+005	-2.9987E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0990E+005	5.10E+005	1.6354E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 3:22:25 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 3:07:25 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	291.45	72.82	0.99	1.14E+002	40.23	5.44E+002
m	2	286-	309	300.32	75.04	0.99	3.95E+002	52.91	5.97E+002
M	3	331-	354	339.51	84.84	1.11	1.21E+002	40.15	6.28E+002
m	4	331-	354	349.35	87.30	1.11	8.75E+001	37.65	5.59E+002
F	5	947-	959	953.78	238.42	1.04	1.35E+002	29.06	1.19E+002
F	6	1175-	1189	1180.33	295.06	1.61	6.30E+001	21.48	7.98E+001
F	7	1347-	1360	1352.42	338.09	1.14	5.34E+001	20.76	8.14E+001
F	8	1401-	1413	1406.71	351.66	1.05	8.45E+001	23.43	7.62E+001
F	9	2323-	2337	2330.61	582.65	1.07	8.78E+001	21.98	4.67E+001
F	10	2426-	2443	2434.66	608.67	1.75	1.06E+002	21.82	3.80E+001
F	11	3633-	3652	3641.99	910.52	1.53	7.64E+001	19.42	3.04E+001
F	12	3867-	3881	3873.75	968.47	1.48	4.01E+001	15.76	2.37E+001
F	13	4472-	4485	4478.28	1119.61	1.53	3.09E+001	14.19	1.72E+001
F	14	4682-	4695	4688.65	1172.21	1.01	2.35E+001	13.41	2.80E+001
F	15	4944-	4957	4950.65	1237.72	1.05	1.32E+001	10.76	1.73E+001
F	16	5829-	5854	5841.57	1460.47	1.87	4.55E+002	41.87	1.58E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	6.90894E+006	8.46625E+005
Eu-155	0.332	86.54*	30.90	2.33523E+005	1.10391E+005
		105.31	20.70		
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.20054E+005	3.40007E+004
		860.37	12.46		
Pb-212	0.658	74.81* @	10.70	3.55932E+006	8.44761E+005
		77.11 @	18.00		
		87.30* @	8.00	9.01984E+005	4.26385E+005
		238.63*	44.60	2.50988E+005	6.67520E+004
Bi-214	0.703	609.31*	46.30	2.67632E+005	6.45545E+004
		1120.29*	15.10	3.02650E+005	1.42554E+005
		1764.49	15.80		
PB-214	0.657	74.82* @	6.21	6.13280E+006	1.52211E+006
		77.11 @	10.50		
		87.30* @	4.67	1.54515E+006	7.39693E+005
		241.98	7.49		
		295.21*	19.20	2.91578E+005	1.10950E+005
		351.92*	37.20	2.14219E+005	6.93826E+004
Ac-228	0.992	338.32*	11.40	4.35919E+005	1.82861E+005
		911.07*	27.70	3.73341E+005	1.04194E+005
		969.11*	16.60	3.35939E+005	1.36505E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.996	6.908940E+006	8.466252E+005
Eu-155		0.332	1.328952E+005	1.120780E+005
TL-208		0.466	1.200537E+005	3.400070E+004
Pb-212	@	0.658	2.509883E+005	6.675201E+004
Bi-214		0.703	2.735910E+005	5.880594E+004
PB-214	@	0.657	2.358684E+005	5.792869E+004
Ac-228		0.992	3.725685E+005	7.544569E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	1.2640E-001	35.37
M 3	84.84	1.3396E-001	33.30
F 14	1172.21	2.6142E-002	56.99
F 15	1237.72	1.4678E-002	81.48

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	7.5940E+004	6.59E+004	7.3967E+004
		1332.49	100.00	6.5877E+004		3.2970E+004
	Nb-94	702.63	100.00	6.3581E+004	6.36E+004	-8.9859E+003
		871.10	100.00	6.3688E+004		3.3004E+004
	Ag-108m	79.20	7.10	2.3230E+006	7.02E+004	-1.4777E+006
		433.93	89.90	7.0232E+004		-3.6029E+004
		614.37	90.40	8.8386E+004		9.2065E+003
		722.95	90.50	7.8511E+004		2.6230E+004
	Sb-125	176.33	6.89	1.1294E+006	2.20E+005	-3.8336E+005
		427.89	29.33	2.1973E+005		8.0537E+004
		463.38	10.35	6.5068E+005		6.6623E+005
		600.56	17.80	3.7067E+005		-2.7333E+005
		606.64	5.02	1.6953E+006		3.5939E+006
		635.90	11.32	5.8643E+005		5.7686E+005
	Cs-134	563.23	8.38	7.9036E+005	7.45E+004	-2.6387E+005
		569.32	15.43	4.2976E+005		2.1144E+005
		604.70	97.60	8.8003E+004		-4.6781E+004
		795.84	85.40	7.4508E+004		-5.1515E+004
		801.93	8.73	6.9163E+005		-2.5548E+005
	Cs-137	661.65	85.12	8.1897E+004	8.19E+004	2.0026E+004
	Eu-152	121.78	28.40	3.7102E+005	2.31E+005	1.0561E+005
		244.69	7.49	1.0169E+006		-6.2040E+005
		344.27	26.50	2.4393E+005		-3.9350E+004
		778.89	12.74	5.3415E+005		-2.3417E+005
		867.32	4.16	1.3918E+006		-1.5139E+006
		964.01	14.40	5.1890E+005		-1.7907E+005
		1085.78	10.00	5.8235E+005		-3.0606E+005
		1112.02	13.30	4.6733E+005		-4.8127E+005
		1407.95	20.70	2.3067E+005		-3.1153E+004
	Eu-154	123.07	40.50	2.5351E+005	1.58E+005	-1.8532E+005
		247.94	6.60	1.0985E+006		-1.4915E+005
		591.81	4.83	1.3134E+006		-2.4048E+005
		723.30	19.70	3.6200E+005		1.6557E+005
		756.87	4.33	1.4383E+006		-1.0353E+006
		873.19	11.50	5.6253E+005		-6.2587E+004
		996.32	10.30	5.8705E+005		1.2515E+005
		1004.76	17.90	3.5553E+005		3.4391E+005
		1274.45	35.50	1.5820E+005		-1.1873E+005
+	Eu-155	86.54*	30.90	3.0068E+005	3.01E+005	2.3352E+005
		105.31	20.70	5.6762E+005		5.1395E+005
	Am-241	59.54	35.90	5.2929E+005	5.29E+005	2.1698E+003
	Cm-243	228.19	10.56	6.9494E+005	5.06E+005	-2.4322E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0648E+005	5.06E+005	7.0170E+002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 3:42:13 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 3:27:13 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.41	72.81	0.86	1.81E+002	41.69	5.03E+002
m	2	284-	306	300.18	75.00	0.86	3.17E+002	50.87	5.47E+002
F	3	332-	346	338.93	84.69	1.13	1.64E+002	44.11	6.07E+002
F	4	949-	959	953.57	238.36	1.16	1.36E+002	30.49	1.21E+002
F	5	1398-	1413	1405.91	351.46	1.40	1.03E+002	23.39	7.01E+001
F	6	2322-	2339	2330.55	582.64	1.41	7.90E+001	21.13	5.63E+001
F	7	2425-	2443	2434.37	608.59	1.38	8.35E+001	22.29	6.91E+001
F	8	2638-	2651	2643.87	660.97	0.79	2.77E+001	12.54	2.08E+001
F	9	3634-	3651	3641.59	910.42	1.31	5.83E+001	17.84	3.18E+001
F	10	3867-	3879	3873.37	968.37	1.28	3.06E+001	15.33	2.77E+001
F	11	4471-	4485	4478.34	1119.63	1.81	4.24E+001	16.15	2.45E+001
F	12	5828-	5854	5841.06	1460.34	1.96	4.67E+002	42.10	1.02E+001
F	13	7049-	7062	7055.49	1763.97	1.10	1.51E+001	10.68	1.59E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.993	1460.81*	10.67	7.08321E+006	8.58636E+005
Cs-137	0.986	661.65*	85.12	3.95410E+004	1.84953E+004
TL-208	0.465	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.08038E+005	3.22390E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.85818E+006	7.23731E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.52192E+005	6.90150E+004
Bi-214	0.987	609.31*	46.30	2.11625E+005	6.23218E+004
		1120.29*	15.10	4.15139E+005	1.64112E+005
		1764.49*	15.80	1.64400E+005	1.17603E+005
Ac-228	0.609	338.32	11.40		
		911.07*	27.70	2.84906E+005	9.31305E+004
		969.11*	16.60	2.56453E+005	1.31131E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.993	7.083212E+006	8.586363E+005
Cs-137		0.986	3.954099E+004	1.849525E+004
TL-208		0.465	1.080385E+005	3.223896E+004
Pb-212	@	0.496	2.521917E+005	6.901502E+004
Bi-214		0.987	2.229136E+005	5.220680E+004
Ac-228		0.609	2.753664E+005	7.592948E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.81	2.0084E-001	23.07
F 3	84.69	1.8185E-001	26.95
F 5	351.46	1.1417E-001	22.77

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	7.7964E+004	7.55E+004	6.0508E+004
		1332.49	100.00	7.5535E+004		5.9729E+004
	Nb-94	702.63	100.00	6.6018E+004	5.69E+004	-2.0042E+004
		871.10	100.00	5.6914E+004		6.9161E+003
	Ag-108m	79.20	7.10	2.3245E+006	7.19E+004	2.9780E+004
		433.93	89.90	7.1860E+004		3.1731E+004
		614.37	90.40	8.5971E+004		-1.0374E+004
		722.95	90.50	7.9611E+004		-3.9059E+004
	Sb-125	176.33	6.89	1.1968E+006	2.16E+005	9.7318E+004
		427.89	29.33	2.1603E+005		-3.3929E+004
		463.38	10.35	6.6469E+005		1.5423E+005
		600.56	17.80	3.5033E+005		1.6060E+005
		606.64	5.02	1.6917E+006		2.8787E+006
		635.90	11.32	5.6661E+005		-8.2253E+004
	Cs-134	563.23	8.38	7.6626E+005	8.06E+004	3.4515E+005
		569.32	15.43	4.1953E+005		-2.9488E+005
		604.70	97.60	8.5205E+004		-8.0489E+003
		795.84	85.40	8.0583E+004		6.2804E+004
		801.93	8.73	7.0611E+005		-7.7058E+005
+	Cs-137	661.65*	85.12	3.9698E+004	3.97E+004	3.9541E+004
	Eu-152	121.78	28.40	3.6314E+005	2.55E+005	-1.9004E+005
		244.69	7.49	1.0045E+006		-1.1006E+006
		344.27	26.50	2.5520E+005		-2.6521E+005
		778.89	12.74	4.9588E+005		-6.6475E+004
		867.32	4.16	1.3918E+006		-2.5432E+006
		964.01	14.40	5.3493E+005		4.5578E+005
		1085.78	10.00	6.9389E+005		7.5477E+005
		1112.02	13.30	5.2436E+005		-5.5237E+005
		1407.95	20.70	2.6489E+005		1.8832E+005
	Eu-154	123.07	40.50	2.5588E+005	1.66E+005	7.9822E+004
		247.94	6.60	1.1228E+006		-4.1940E+005
		591.81	4.83	1.3184E+006		-3.3677E+005
		723.30	19.70	3.6578E+005		-3.9680E+005
		756.87	4.33	1.5629E+006		-4.5160E+005
		873.19	11.50	4.9843E+005		2.7819E+005
		996.32	10.30	5.6840E+005		5.1196E+004
		1004.76	17.90	3.3260E+005		1.9529E+005
		1274.45	35.50	1.6641E+005		5.8790E+004
	Eu-155	86.54	30.90	4.8196E+005	4.82E+005	7.2838E+005
		105.31	20.70	5.5416E+005		-1.6261E+005
	Am-241	59.54	35.90	5.3194E+005	5.32E+005	-6.0620E+005
	Cm-243	228.19	10.56	7.1939E+005	5.15E+005	-4.7561E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1497E+005	5.15E+005	-2.8650E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 11:15:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 11:00:06 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	294-	310	301.01	75.21	1.05	1.96E+002	50.28	9.41E+002
F	2	947-	964	954.88	238.69	1.47	1.41E+002	29.79	1.91E+002
F	3	2034-	2054	2043.80	510.94	2.35	1.13E+002	22.62	6.48E+001
F	4	2325-	2344	2333.57	583.39	1.77	9.28E+001	22.14	6.37E+001
F	5	2430-	2447	2437.74	609.44	1.65	9.03E+001	21.88	5.34E+001
F	6	3638-	3655	3645.57	911.42	1.60	6.48E+001	18.07	2.50E+001
F	7	5834-	5861	5847.44	1461.93	2.36	4.87E+002	41.89	0.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.23603E+005	3.01281E+004
K-40	0.963	1460.81*	10.67	7.39012E+006	8.73211E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	5.72234E+005	1.47102E+005
		583.14*	84.20	1.27057E+005	3.46425E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.76031E+006	5.68330E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.61352E+005	6.88291E+004
Bi-214	0.417	609.31*	46.30	2.28913E+005	6.23491E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	9.615836E+004	3.103050E+004
K-40		0.963	7.390115E+006	8.732108E+005
TL-208		0.752	1.270567E+005	3.439412E+004
Pb-212	@	0.497	2.613523E+005	6.882913E+004
Bi-214		0.417	2.289127E+005	6.234906E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	6	911.42	7.2046E-002	27.86

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.2071E+004	5.70E+004	1.2587E+004
	1332.49	100.00	5.6991E+004		-9.2647E+003
Nb-94	702.63	100.00	6.9632E+004	5.76E+004	4.2784E+004
	871.10	100.00	5.7630E+004		-1.6553E+004
Ag-108m	79.20	7.10	2.3539E+006	7.33E+004	-1.7587E+006
	433.93	89.90	7.3254E+004		3.6344E+004
	614.37	90.40	9.1365E+004		4.9835E+003
	722.95	90.50	7.4235E+004		3.9861E+004
Sb-125	176.33	6.89	1.1443E+006	2.15E+005	4.5606E+005
	427.89	29.33	2.1478E+005		-9.5198E+004
	463.38	10.35	5.9117E+005		2.0874E+005
	600.56	17.80	3.7977E+005		-1.1748E+005
	606.64	5.02	1.7486E+006		2.2510E+006
	635.90	11.32	5.3186E+005		4.2603E+004
Cs-134	563.23	8.38	7.0070E+005	7.45E+004	-4.0407E+005
	569.32	15.43	4.1206E+005		2.8516E+005
	604.70	97.60	8.8003E+004		-1.8130E+004
	795.84	85.40	7.4508E+004		-2.2451E+004
	801.93	8.73	7.4440E+005		-6.4905E+005
Cs-137	661.65	85.12	7.3532E+004	7.35E+004	-1.3135E+004
Eu-152	121.78	28.40	3.6493E+005	2.67E+005	1.1819E+005
	244.69	7.49	1.0815E+006		4.2129E+005
	344.27	26.50	2.6704E+005		-4.8382E+005
	778.89	12.74	4.7918E+005		-2.1002E+005
	867.32	4.16	1.4499E+006		-1.7641E+006
	964.01	14.40	5.0652E+005		3.3109E+005
	1085.78	10.00	6.7242E+005		-1.6651E+005
	1112.02	13.30	3.7956E+005		-9.7401E+005
	1407.95	20.70	2.8280E+005		5.3973E+003
Eu-154	123.07	40.50	2.4970E+005	1.60E+005	-2.3103E+005
	247.94	6.60	1.1308E+006		-6.4962E+005
	591.81	4.83	1.2467E+006		-5.7623E+005
	723.30	19.70	3.3837E+005		1.6999E+005
	756.87	4.33	1.4987E+006		-2.0180E+004
	873.19	11.50	5.2859E+005		1.7796E+005
	996.32	10.30	5.9434E+005		4.2819E+005
	1004.76	17.90	3.5351E+005		2.7546E+004
	1274.45	35.50	1.5960E+005		-5.0609E+004
Eu-155	86.54	30.90	4.6342E+005	4.63E+005	5.6519E+005
	105.31	20.70	5.4785E+005		-2.1212E+005
Am-241	59.54	35.90	5.0585E+005	5.06E+005	1.1112E+005
Cm-243	228.19	10.56	7.2491E+005	5.00E+005	9.2674E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0045E+005	5.00E+005	-1.8227E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 2:49:18 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 2:34:17 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	1399-	1415	1408.22	352.04	1.45	5.69E+001	21.29	1.02E+002
F	2	2428-	2445	2436.83	609.21	1.71	9.23E+001	21.86	5.42E+001
F	3	3637-	3653	3645.23	911.34	1.66	5.98E+001	17.90	2.95E+001
F	4	5831-	5860	5845.84	1461.53	2.67	4.15E+002	38.81	2.65E+001
F	5	7058-	7071	7064.98	1766.34	1.55	1.91E+001	11.43	1.04E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.984	1460.81*	10.67	6.29706E+006	7.79212E+005
Bi-214	0.683	609.31*	46.30	2.33843E+005	6.25881E+004
		1120.29	15.10		
		1764.49*	15.80	2.08624E+005	1.26369E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.984	6.297062E+006	7.792120E+005
Bi-214	0.683	2.288753E+005	5.608598E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	352.04	6.3260E-002	37.40
F	3	911.34	6.6482E-002	29.92

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0619E+004	5.44E+004	1.2058E+004
	1332.49	100.00	5.4391E+004		-4.6988E+003
Nb-94	702.63	100.00	6.7332E+004	5.43E+004	5.4265E+004
	871.10	100.00	5.4330E+004		-4.6618E+004
Ag-108m	79.20	7.10	2.2226E+006	7.15E+004	-3.2017E+006
	433.93	89.90	7.1457E+004		-1.0937E+004
	614.37	90.40	8.9888E+004		-4.1150E+004
	722.95	90.50	7.3645E+004		8.3306E+004
Sb-125	176.33	6.89	1.1178E+006	2.12E+005	-1.6134E+005
	427.89	29.33	2.1226E+005		1.8020E+005
	463.38	10.35	6.1419E+005		-4.0453E+005
	600.56	17.80	3.5998E+005		1.6411E+005
	606.64	5.02	1.6989E+006		2.6646E+006
	635.90	11.32	5.5757E+005		1.0811E+005
Cs-134	563.23	8.38	7.9036E+005	7.83E+004	-6.4828E+005
	569.32	15.43	4.2976E+005		-3.1578E+005
	604.70	97.60	8.6148E+004		-4.1387E+004
	795.84	85.40	7.8280E+004		1.3958E+004
	801.93	8.73	7.3072E+005		6.8124E+004
Cs-137	661.65	85.12	7.9309E+004	7.93E+004	3.8307E+004
Eu-152	121.78	28.40	3.5467E+005	2.60E+005	9.6590E+003
	244.69	7.49	1.0879E+006		-1.0915E+006
	344.27	26.50	2.7172E+005		-5.8239E+004
	778.89	12.74	4.5419E+005		-9.0244E+005
	867.32	4.16	1.3661E+006		-1.7889E+006
	964.01	14.40	5.3690E+005		3.3757E+005
	1085.78	10.00	6.5397E+005		4.9037E+005
	1112.02	13.30	4.4871E+005		-1.0965E+005
	1407.95	20.70	2.5953E+005		-1.3530E+004
Eu-154	123.07	40.50	2.4611E+005	1.68E+005	-1.9206E+005
	247.94	6.60	1.1196E+006		-1.1789E+006
	591.81	4.83	1.3134E+006		-1.1789E+006
	723.30	19.70	3.4108E+005		3.0288E+005
	756.87	4.33	1.4987E+006		-7.7043E+005
	873.19	11.50	4.7281E+005		1.1232E+005
	996.32	10.30	5.9071E+005		4.3607E+004
	1004.76	17.90	3.5148E+005		1.5753E+005
	1274.45	35.50	1.6774E+005		1.0407E+005
Eu-155	86.54	30.90	4.5719E+005	4.57E+005	8.1665E+005
	105.31	20.70	5.6629E+005		1.2330E+005
Am-241	59.54	35.90	5.0433E+005	5.04E+005	3.2101E+005
Cm-243	228.19	10.56	6.9398E+005	5.05E+005	-3.9845E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0477E+005	5.05E+005	1.2912E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 3:10:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 2:55:03 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	307	300.58	75.10	1.00	2.19E+002	49.82	6.68E+002
F	2	367-	381	372.91	93.19	1.15	8.85E+001	37.79	4.93E+002
F	3	945-	961	954.21	238.53	1.38	1.25E+002	30.44	2.05E+002
F	4	1402-	1416	1407.69	351.90	1.28	6.19E+001	20.93	7.40E+001
F	5	2033-	2055	2043.64	510.90	2.33	1.34E+002	23.62	6.63E+001
F	6	2324-	2340	2332.78	583.19	1.30	7.22E+001	20.49	5.10E+001
F	7	2430-	2445	2437.00	609.25	1.47	7.10E+001	21.17	6.03E+001
F	8	3638-	3653	3645.56	911.42	1.72	5.54E+001	16.40	1.78E+001
F	9	3868-	3882	3875.66	968.95	1.54	4.01E+001	15.04	2.06E+001
F	10	5832-	5861	5846.38	1461.67	2.24	4.82E+002	42.02	3.56E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.46481E+005	3.29279E+004
K-40	0.978	1460.81*		10.67	7.31980E+006	8.70751E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	6.78154E+005	1.62192E+005
		583.14*		84.20	9.87192E+004	3.09251E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.96866E+006	5.91414E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.31732E+005	6.71668E+004
Bi-214	0.418	609.31*		46.30	1.79834E+005	5.81339E+004
		1120.29		15.10		
		1764.49		15.80		
Ac-228	0.618	338.32		11.40		
		911.07*		27.70	2.70717E+005	8.59947E+004
		969.11*		16.60	3.35395E+005	1.30711E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	1.251579E+005	3.359143E+004
K-40		0.978	7.319796E+006	8.707510E+005
TL-208		0.753	9.871917E+004	3.075731E+004
Pb-212	@	0.497	2.317325E+005	6.716677E+004
Bi-214		0.418	1.798341E+005	5.813390E+004
Ac-228		0.618	2.902549E+005	7.184132E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	93.19	9.8380E-002	42.68
F	4	351.90	6.8756E-002	33.83

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4812E+004	5.44E+004	5.7477E+003
	1332.49	100.00	5.4391E+004		1.8084E+004
Nb-94	702.63	100.00	6.3304E+004	5.94E+004	5.7962E+004
	871.10	100.00	5.9379E+004		-9.9730E+003
Ag-108m	79.20	7.10	2.2152E+006	7.36E+004	-2.5560E+006
	433.93	89.90	7.4814E+004		6.2558E+003
	614.37	90.40	9.1155E+004		-4.9791E+004
	722.95	90.50	7.3645E+004		8.2222E+003
Sb-125	176.33	6.89	1.1036E+006	2.09E+005	-4.7094E+005
	427.89	29.33	2.0906E+005		-2.0696E+005
	463.38	10.35	6.1981E+005		-3.8135E+005
	600.56	17.80	3.6133E+005		-1.6371E+005
	606.64	5.02	1.7311E+006		1.6079E+006
	635.90	11.32	5.2705E+005		4.1529E+005
Cs-134	563.23	8.38	7.7168E+005	7.49E+004	6.2313E+005
	569.32	15.43	3.9353E+005		-2.5552E+005
	604.70	97.60	8.6522E+004		-8.8396E+003
	795.84	85.40	7.4859E+004		-1.3748E+003
	801.93	8.73	7.3072E+005		-3.0533E+005
Cs-137	661.65	85.12	6.9622E+004	6.96E+004	-1.8975E+003
Eu-152	121.78	28.40	3.4599E+005	2.31E+005	4.1833E+004
	244.69	7.49	1.0331E+006		-6.6529E+005
	344.27	26.50	2.5132E+005		-4.7307E+005
	778.89	12.74	4.9821E+005		-6.8160E+004
	867.32	4.16	1.5440E+006		-7.7064E+005
	964.01	14.40	5.1686E+005		-3.2652E+005
	1085.78	10.00	5.5627E+005		-3.5733E+005
	1112.02	13.30	4.9386E+005		-5.3543E+005
	1407.95	20.70	2.3067E+005		1.4496E+005
Eu-154	123.07	40.50	2.4144E+005	1.58E+005	-1.0661E+005
	247.94	6.60	1.0685E+006		-1.5967E+006
	591.81	4.83	1.3430E+006		1.0472E+006
	723.30	19.70	3.4108E+005		-3.5944E+004
	756.87	4.33	1.3965E+006		-2.0760E+005
	873.19	11.50	5.1974E+005		-1.6309E+005
	996.32	10.30	5.8705E+005		-7.5589E+004
	1004.76	17.90	3.3260E+005		-5.9130E+004
	1274.45	35.50	1.5820E+005		-1.9425E+004
Eu-155	86.54	30.90	4.6906E+005	4.69E+005	7.2659E+005
	105.31	20.70	5.4314E+005		2.6889E+005
Am-241	59.54	35.90	5.0736E+005	5.07E+005	2.6131E+005
Cm-243	228.19	10.56	7.0821E+005	5.15E+005	-1.6322E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1497E+005	5.15E+005	6.0578E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 3:33:11 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 3:18:10 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	305	300.45	75.07	0.91	1.50E+002	48.93	6.54E+002
F	2	945-	960	954.46	238.59	1.29	1.39E+002	30.45	1.74E+002
M	3	1391-	1416	1395.95	348.97	1.49	2.85E+001	16.24	4.78E+001
m	4	1391-	1416	1407.07	351.75	1.49	9.54E+001	22.74	9.09E+001
F	5	2324-	2342	2333.14	583.29	1.84	7.39E+001	19.81	5.30E+001
F	6	2429-	2448	2436.78	609.20	1.95	1.01E+002	21.18	3.62E+001
F	7	5833-	5859	5846.35	1461.66	2.09	4.22E+002	39.76	6.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.978	1460.81*	10.67	6.40716E+006	7.95957E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.01155E+005	3.02327E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.34638E+006	5.13358E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.58717E+005	6.95691E+004
Bi-214	0.417	609.31*	46.30	2.56221E+005	6.24469E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.978	6.407163E+006	7.959572E+005
TL-208		0.470	1.011546E+005	3.023270E+004
Pb-212	@	0.497	2.587174E+005	6.956913E+004
Bi-214		0.417	2.562210E+005	6.244690E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 3	348.97	3.1712E-002	56.90
m 4	351.75	1.0597E-001	23.84

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2753E+004	5.28E+004	3.0603E+004
	1332.49	100.00	5.2765E+004		-7.4930E+003
Nb-94	702.63	100.00	6.0752E+004	5.87E+004	1.6850E+004
	871.10	100.00	5.8686E+004		-3.0879E+004
Ag-108m	79.20	7.10	2.2160E+006	6.92E+004	-3.8984E+006
	433.93	89.90	6.9193E+004		2.5149E+004
	614.37	90.40	8.7077E+004		2.2710E+003
	722.95	90.50	7.9063E+004		9.1030E+004
Sb-125	176.33	6.89	1.0989E+006	2.14E+005	-4.9227E+005
	427.89	29.33	2.1415E+005		3.2814E+004
	463.38	10.35	6.2537E+005		3.4139E+005
	600.56	17.80	3.5725E+005		3.1308E+005
	606.64	5.02	1.6735E+006		2.9734E+006
	635.90	11.32	5.3663E+005		-5.4980E+005
Cs-134	563.23	8.38	7.5251E+005	7.38E+004	5.6863E+004
	569.32	15.43	3.8875E+005		9.8230E+004
	604.70	97.60	8.5772E+004		1.2622E+004
	795.84	85.40	7.3801E+004		-1.8932E+004
	801.93	8.73	6.7682E+005		-6.6788E+004
Cs-137	661.65	85.12	8.0181E+004	8.02E+004	6.8842E+004
Eu-152	121.78	28.40	3.4390E+005	2.37E+005	-1.5907E+005
	244.69	7.49	1.0073E+006		-1.3615E+006
	344.27	26.50	2.4451E+005		-2.6529E+005
	778.89	12.74	4.6184E+005		-5.9506E+005
	867.32	4.16	1.4417E+006		-1.7261E+006
	964.01	14.40	5.1481E+005		2.2730E+005
	1085.78	10.00	6.1926E+005		6.1986E+004
	1112.02	13.30	5.1074E+005		-1.2160E+004
	1407.95	20.70	2.3675E+005		-1.7771E+004
Eu-154	123.07	40.50	2.4393E+005	1.82E+005	-9.7221E+004
	247.94	6.60	1.0819E+006		-3.3798E+004
	591.81	4.83	1.2146E+006		7.3031E+005
	723.30	19.70	3.6828E+005		2.1133E+005
	756.87	4.33	1.4587E+006		-1.3111E+006
	873.19	11.50	5.2859E+005		3.8957E+005
	996.32	10.30	5.5299E+005		1.8451E+005
	1004.76	17.90	3.3475E+005		4.6683E+004
	1274.45	35.50	1.8166E+005		2.5977E+004
Eu-155	86.54	30.90	4.4157E+005	4.42E+005	6.5787E+005
	105.31	20.70	5.3275E+005		7.2117E+004
Am-241	59.54	35.90	4.9409E+005	4.94E+005	1.1443E+005
Cm-243	228.19	10.56	7.2948E+005	5.27E+005	-6.6700E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2661E+005	5.27E+005	1.6957E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 2:29:41 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 2:14:40 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	291-	305	299.70	74.88	1.79	2.65E+002	51.41	7.64E+002
F	2	948-	963	954.53	238.60	1.36	1.32E+002	30.11	1.83E+002
F	3	1398-	1414	1407.66	351.90	1.40	6.45E+001	21.79	9.96E+001
F	4	2322-	2340	2332.37	583.09	2.06	7.25E+001	21.01	7.19E+001
F	5	3635-	3653	3644.49	911.15	2.27	6.10E+001	18.18	3.78E+001
F	6	3869-	3883	3875.79	968.98	1.25	3.31E+001	15.26	3.13E+001
F	7	5832-	5860	5846.99	1461.82	2.39	3.89E+002	37.92	1.82E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.970	1460.81*	10.67	5.90289E+006	7.48247E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	9.91755E+004	3.16015E+004
		860.37	12.46		
Pb-212	0.498	74.81* @	10.70	2.38757E+006	6.58895E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.44793E+005	6.78012E+004
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	2.97913E+005	9.52256E+004
		969.11*	16.60	2.77037E+005	1.31015E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.970	5.902885E+006	7.482474E+005
TL-208		0.470	9.917548E+004	3.160148E+004
Pb-212	@	0.498	2.447931E+005	6.780123E+004
Ac-228		0.619	2.906968E+005	7.702849E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	3	351.90	7.1665E-002	33.78

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9866E+004	6.18E+004	6.8203E+004
	1332.49	100.00	6.1839E+004		5.2656E+004
Nb-94	702.63	100.00	6.3304E+004	5.83E+004	1.2530E+004
	871.10	100.00	5.8336E+004		-3.1966E+004
Ag-108m	79.20	7.10	2.2364E+006	7.13E+004	-3.9848E+006
	433.93	89.90	7.1254E+004		-3.8931E+004
	614.37	90.40	8.9675E+004		-2.2994E+004
	722.95	90.50	7.1845E+004		2.4772E+004
Sb-125	176.33	6.89	1.1546E+006	2.15E+005	8.2803E+005
	427.89	29.33	2.1540E+005		-6.7183E+004
	463.38	10.35	6.2537E+005		2.1609E+005
	600.56	17.80	3.4893E+005		1.1604E+005
	606.64	5.02	1.7097E+006		1.9094E+006
	635.90	11.32	5.1480E+005		9.5628E+004
Cs-134	563.23	8.38	7.7438E+005	7.24E+004	-1.2760E+005
	569.32	15.43	4.2831E+005		6.1050E+004
	604.70	97.60	8.7266E+004		9.3365E+004
	795.84	85.40	7.2363E+004		3.6148E+004
	801.93	8.73	6.5782E+005		-1.1509E+006
Cs-137	661.65	85.12	7.6630E+004	7.66E+004	1.9987E+003
Eu-152	121.78	28.40	3.5994E+005	2.45E+005	-5.8134E+004
	244.69	7.49	1.0371E+006		-2.2220E+005
	344.27	26.50	2.4451E+005		-3.0382E+005
	778.89	12.74	5.0054E+005		1.1282E+005
	867.32	4.16	1.3833E+006		-2.4536E+005
	964.01	14.40	5.6370E+005		1.0241E+005
	1085.78	10.00	5.5627E+005		-4.3629E+005
	1112.02	13.30	4.9386E+005		2.0474E+005
	1407.95	20.70	2.6489E+005		5.8153E+004
Eu-154	123.07	40.50	2.5154E+005	1.55E+005	-6.4680E+003
	247.94	6.60	1.0985E+006		3.8329E+005
	591.81	4.83	1.3624E+006		3.8151E+005
	723.30	19.70	3.2870E+005		1.2635E+005
	756.87	4.33	1.3678E+006		-6.1359E+005
	873.19	11.50	4.9843E+005		-1.8476E+005
	996.32	10.30	5.9434E+005		-3.6835E+004
	1004.76	17.90	3.4738E+005		2.6077E+005
	1274.45	35.50	1.5536E+005		5.7180E+004
Eu-155	86.54	30.90	4.6394E+005	4.64E+005	3.6480E+005
	105.31	20.70	5.4231E+005		-1.0030E+005
Am-241	59.54	35.90	5.0610E+005	5.06E+005	1.5562E+005
Cm-243	228.19	10.56	6.9110E+005	5.10E+005	1.8947E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0990E+005	5.10E+005	1.9525E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 11:35:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 11:20:06 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	2325-	2340	2332.26	583.06	1.49	4.91E+001	20.45	7.87E+001
F	2	5832-	5864	5848.55	1462.21	3.04	4.74E+002	40.11	1.64E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.943	1460.81*	10.67	7.19772E+006	8.42938E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	6.71402E+004	2.93518E+004
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.943	7.197720E+006	8.429385E+005
TL-208	0.470	6.714022E+004	2.935184E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6411E+004	5.33E+004	2.4073E+004
	1332.49	100.00	5.3313E+004		3.5366E+003
Nb-94	702.63	100.00	6.1615E+004	5.80E+004	-4.3488E+004
	871.10	100.00	5.7984E+004		-7.6500E+003
Ag-108m	79.20	7.10	2.2749E+006	6.79E+004	-5.4023E+006
	433.93	89.90	6.7925E+004		4.5797E+004
	614.37	90.40	8.7516E+004		5.4501E+004
	722.95	90.50	7.2148E+004		7.1479E+004
Sb-125	176.33	6.89	1.1432E+006	2.01E+005	-5.9040E+005
	427.89	29.33	2.0117E+005		-1.9657E+004
	463.38	10.35	6.1042E+005		3.0152E+005
	600.56	17.80	3.2110E+005		-1.2123E+005
	606.64	5.02	1.5279E+006		5.8395E+005
	635.90	11.32	5.4604E+005		-3.1035E+005
Cs-134	563.23	8.38	7.9822E+005	7.62E+004	3.7767E+005
	569.32	15.43	4.2248E+005		2.7882E+005
	604.70	97.60	7.6594E+004		3.3739E+004
	795.84	85.40	7.6247E+004		3.3485E+004
	801.93	8.73	7.3759E+005		1.3791E+005
Cs-137	661.65	85.12	7.3215E+004	7.32E+004	3.8606E+003
Eu-152	121.78	28.40	3.4953E+005	2.40E+005	-2.0838E+005
	244.69	7.49	1.0477E+006		-2.5030E+006
	344.27	26.50	2.5244E+005		-4.3870E+005
	778.89	12.74	4.8401E+005		-1.2367E+005
	867.32	4.16	1.4899E+006		-4.5810E+005
	964.01	14.40	5.1481E+005		6.8185E+005
	1085.78	10.00	6.4262E+005		-1.9971E+005
	1112.02	13.30	4.9386E+005		5.8945E+004
	1407.95	20.70	2.3973E+005		-7.7731E+004
Eu-154	123.07	40.50	2.4481E+005	1.55E+005	-1.6435E+005
	247.94	6.60	1.0919E+006		-4.6559E+005
	591.81	4.83	1.2882E+006		-1.2845E+006
	723.30	19.70	3.2870E+005		1.9711E+005
	756.87	4.33	1.3459E+006		-3.5359E+005
	873.19	11.50	5.2566E+005		1.6414E+005
	996.32	10.30	5.6075E+005		6.1235E+003
	1004.76	17.90	3.0783E+005		6.3751E+004
	1274.45	35.50	1.5536E+005		-1.8352E+005
Eu-155	86.54	30.90	4.6376E+005	4.64E+005	4.9998E+005
	105.31	20.70	5.4675E+005		-1.4188E+005
Am-241	59.54	35.90	5.0026E+005	5.00E+005	2.9889E+005
Cm-243	228.19	10.56	7.2491E+005	4.79E+005	4.7506E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7919E+005	4.79E+005	-1.1201E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 1:05:16 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 12:50:14 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	332-	344	339.95	84.95	1.03	1.23E+002	40.58	4.86E+002
F	2	948-	962	954.05	238.48	1.29	1.18E+002	29.45	1.74E+002
F	3	1399-	1417	1408.56	352.12	1.65	1.10E+002	25.50	1.21E+002
F	4	2032-	2052	2043.28	510.81	2.27	1.04E+002	21.14	5.25E+001
F	5	2324-	2342	2333.61	583.40	1.81	8.35E+001	19.85	4.00E+001
F	6	3637-	3654	3645.18	911.32	1.91	7.38E+001	18.09	1.80E+001
F	7	5833-	5862	5846.55	1461.71	2.37	4.32E+002	40.08	2.09E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*	100.00	1.12757E+005	2.79413E+004
K-40	0.976	1460.81*	10.67	6.55403E+006	8.07397E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	5.22024E+005	1.36202E+005
		583.14*	84.20	1.14287E+005	3.10859E+004
		860.37	12.46		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.999	8.807121E+004	2.872546E+004
K-40	0.976	6.554025E+006	8.073967E+005
TL-208	0.752	1.142872E+005	3.086199E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 1	84.95	1.3694E-001	32.93
F 2	238.48	1.3067E-001	25.04
F 3	352.12	1.2228E-001	23.17
F 6	911.32	8.2004E-002	24.52

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7195E+004	5.65E+004	-3.6946E+004
	1332.49	100.00	5.6481E+004		-4.1376E+004
Nb-94	702.63	100.00	6.6810E+004	6.17E+004	6.6144E+004
	871.10	100.00	6.1739E+004		1.6316E+004
Ag-108m	79.20	7.10	2.2829E+006	7.18E+004	-3.6204E+006
	433.93	89.90	7.2261E+004		3.6358E+004
	614.37	90.40	8.7952E+004		7.8267E+004
	722.95	90.50	7.1845E+004		5.3248E+004
Sb-125	176.33	6.89	1.0881E+006	2.10E+005	-4.9490E+005
	427.89	29.33	2.1034E+005		5.0155E+004
	463.38	10.35	6.5421E+005		2.7298E+005
	600.56	17.80	3.3896E+005		-2.7267E+005
	606.64	5.02	1.6735E+006		2.2783E+006
	635.90	11.32	5.2462E+005		-8.7712E+004
Cs-134	563.23	8.38	7.3282E+005	7.79E+004	-2.3706E+004
	569.32	15.43	3.8391E+005		-8.5981E+004
	604.70	97.60	8.3091E+004		5.5391E+004
	795.84	85.40	7.7945E+004		4.2831E+004
	801.93	8.73	7.3072E+005		-7.7363E+004
Cs-137	661.65	85.12	7.1279E+004	7.13E+004	-1.7132E+004
Eu-152	121.78	28.40	3.6274E+005	2.37E+005	7.8525E+004
	244.69	7.49	1.0424E+006		-4.3833E+005
	344.27	26.50	2.5020E+005		-3.1405E+005
	778.89	12.74	4.6686E+005		1.1583E+005
	867.32	4.16	1.4417E+006		-7.9148E+005
	964.01	14.40	5.1068E+005		2.5926E+005
	1085.78	10.00	6.1528E+005		-3.5612E+005
	1112.02	13.30	4.9955E+005		2.3924E+004
	1407.95	20.70	2.3675E+005		1.6042E+005
Eu-154	123.07	40.50	2.5699E+005	1.61E+005	2.6451E+005
	247.94	6.60	1.1001E+006		-7.1099E+005
	591.81	4.83	1.2676E+006		9.5494E+005
	723.30	19.70	3.2446E+005		8.1876E+004
	756.87	4.33	1.3894E+006		-1.0664E+005
	873.19	11.50	5.5978E+005		1.2415E+005
	996.32	10.30	5.6075E+005		1.0229E+005
	1004.76	17.90	3.4943E+005		3.1447E+005
	1274.45	35.50	1.6099E+005		-7.5265E+004
Eu-155	86.54	30.90	4.5333E+005	4.53E+005	2.8203E+005
	105.31	20.70	5.5470E+005		-2.1977E+005
Am-241	59.54	35.90	5.0509E+005	5.05E+005	-1.2086E+004
Cm-243	228.19	10.56	6.7056E+005	5.03E+005	-7.6150E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0305E+005	5.03E+005	1.7566E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 2:08:41 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 1:53:39 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	309	300.43	75.07	1.18	1.99E+002	49.15	7.43E+002
F	2	946-	960	953.81	238.42	1.38	8.11E+001	27.59	1.84E+002
F	3	2323-	2343	2333.65	583.41	1.94	9.52E+001	21.71	6.30E+001
F	4	2426-	2448	2436.51	609.13	1.88	1.13E+002	22.13	4.60E+001
F	5	3634-	3654	3644.46	911.14	2.25	7.11E+001	17.45	2.10E+001
F	6	5833-	5859	5846.82	1461.78	2.32	4.00E+002	38.74	2.03E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.972	1460.81*	10.67	6.07259E+006	7.66650E+005
TL-208	0.469	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.30311E+005	3.43437E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.78763E+006	5.64330E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.50427E+005	5.63649E+004
Bi-214	0.417	609.31*	46.30	2.86900E+005	6.65067E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.972	6.072594E+006	7.666501E+005
TL-208		0.469	1.303114E+005	3.434375E+004
Pb-212	@	0.497	1.504271E+005	5.636491E+004
Bi-214		0.417	2.868995E+005	6.650672E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	5	911.14	7.8994E-002	24.54

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0182E+004	4.93E+004	5.0081E+004
	1332.49	100.00	4.9336E+004		1.4932E+004
Nb-94	702.63	100.00	6.1329E+004	6.13E+004	-1.0590E+005
	871.10	100.00	6.2721E+004		1.9061E+004
Ag-108m	79.20	7.10	2.2087E+006	7.06E+004	-2.4415E+006
	433.93	89.90	7.2660E+004		-1.1033E+003
	614.37	90.40	9.0313E+004		4.1624E+004
	722.95	90.50	7.0618E+004		7.2995E+002
Sb-125	176.33	6.89	1.1095E+006	2.21E+005	-1.1141E+006
	427.89	29.33	2.2095E+005		1.5764E+005
	463.38	10.35	5.9312E+005		5.0194E+005
	600.56	17.80	3.3016E+005		-1.1947E+005
	606.64	5.02	1.6514E+006		1.9216E+006
	635.90	11.32	5.9925E+005		3.0227E+005
Cs-134	563.23	8.38	7.4133E+005	7.38E+004	1.2002E+004
	569.32	15.43	4.2248E+005		2.6754E+005
	604.70	97.60	8.4251E+004		-7.7909E+003
	795.84	85.40	7.3801E+004		5.0875E+004
	801.93	8.73	6.6549E+005		-6.3078E+005
Cs-137	661.65	85.12	7.0951E+004	7.10E+004	-2.3137E+004
Eu-152	121.78	28.40	3.4620E+005	2.24E+005	7.1014E+004
	244.69	7.49	1.0250E+006		3.6699E+004
	344.27	26.50	2.4737E+005		-3.2084E+005
	778.89	12.74	4.7918E+005		1.0746E+005
	867.32	4.16	1.4499E+006		-9.4201E+005
	964.01	14.40	5.1068E+005		1.8802E+005
	1085.78	10.00	5.9077E+005		2.5352E+005
	1112.02	13.30	4.4232E+005		-8.3197E+005
	1407.95	20.70	2.2441E+005		-7.4897E+003
Eu-154	123.07	40.50	2.3848E+005	1.51E+005	-2.5294E+005
	247.94	6.60	1.0886E+006		2.7789E+004
	591.81	4.83	1.3084E+006		-6.3339E+005
	723.30	19.70	3.2730E+005		1.9769E+005
	756.87	4.33	1.5755E+006		5.0914E+005
	873.19	11.50	5.4300E+005		-6.4428E+004
	996.32	10.30	5.4511E+005		-1.1365E+005
	1004.76	17.90	3.6151E+005		2.0771E+005
	1274.45	35.50	1.5098E+005		-2.0075E+005
Eu-155	86.54	30.90	4.5614E+005	4.56E+005	5.8324E+005
	105.31	20.70	5.4035E+005		-2.9447E+005
Am-241	59.54	35.90	4.9383E+005	4.94E+005	-2.9392E+005
Cm-243	228.19	10.56	6.8820E+005	5.17E+005	-1.2618E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1665E+005	5.17E+005	-3.3081E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 4:00:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-120-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 3:45:13 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-120-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	950-	965	954.62	238.63	1.60	1.47E+002	33.09	1.93E+002
F	2	1401-	1415	1406.97	351.72	1.06	7.79E+001	23.45	9.76E+001
F	3	2324-	2340	2332.48	583.12	1.45	8.33E+001	21.77	5.96E+001
F	4	2425-	2445	2437.10	609.28	1.86	1.15E+002	22.14	3.88E+001
F	5	3636-	3653	3645.45	911.39	2.01	7.37E+001	18.91	2.92E+001
F	6	3870-	3884	3877.12	969.31	1.65	5.28E+001	17.47	2.73E+001
F	7	5831-	5860	5846.22	1461.63	2.41	5.24E+002	43.36	3.72E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.980	1460.81*	10.67	7.95077E+006	9.20780E+005
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.13926E+005	3.33839E+004
		860.37	12.46		
Bi-214	0.418	609.31*	46.30	2.91115E+005	6.68077E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.618	338.32	11.40		
		911.07*	27.70	3.60229E+005	1.01307E+005
		969.11*	16.60	4.42239E+005	1.53417E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.980	7.950771E+006	9.207800E+005
TL-208	0.471	1.139260E+005	3.338391E+004
Bi-214	0.418	2.911154E+005	6.680767E+004
Ac-228	0.618	3.851308E+005	8.453835E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	238.63	1.6325E-001	22.52
F	2	351.72	8.6527E-002	30.11

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.2791E+004	4.93E+004	2.4846E+004
	1332.49	100.00	4.9336E+004		3.6297E+004
Nb-94	702.63	100.00	6.7072E+004	5.97E+004	4.4939E+004
	871.10	100.00	5.9722E+004		-6.5654E+004
Ag-108m	79.20	7.10	2.2749E+006	7.02E+004	-4.8974E+006
	433.93	89.90	7.0232E+004		-6.8877E+004
	614.37	90.40	9.2197E+004		-4.4470E+004
	722.95	90.50	7.5976E+004		2.0554E+004
Sb-125	176.33	6.89	1.1455E+006	2.17E+005	-7.7021E+005
	427.89	29.33	2.1665E+005		-7.6098E+004
	463.38	10.35	6.7329E+005		1.4559E+005
	600.56	17.80	3.5450E+005		-4.1581E+005
	606.64	5.02	1.7097E+006		2.5126E+006
	635.90	11.32	5.1480E+005		-4.5393E+005
Cs-134	563.23	8.38	7.6079E+005	7.89E+004	-1.3723E+005
	569.32	15.43	4.5086E+005		3.5896E+005
	604.70	97.60	8.6148E+004		-1.5098E+003
	795.84	85.40	7.8945E+004		2.4944E+004
	801.93	8.73	7.4777E+005		-1.9492E+005
Cs-137	661.65	85.12	8.3298E+004	8.33E+004	1.1232E+004
Eu-152	121.78	28.40	3.5263E+005	2.64E+005	-2.3900E+005
	244.69	7.49	1.0530E+006		-1.0973E+006
	344.27	26.50	2.6440E+005		-1.8333E+005
	778.89	12.74	5.2761E+005		-1.3906E+005
	867.32	4.16	1.5666E+006		-8.7775E+005
	964.01	14.40	5.8386E+005		-1.5006E+005
	1085.78	10.00	5.7380E+005		-2.6459E+005
	1112.02	13.30	4.8226E+005		-1.3470E+005
	1407.95	20.70	2.8032E+005		2.2800E+005
Eu-154	123.07	40.50	2.4755E+005	1.78E+005	-3.8657E+004
	247.94	6.60	1.1212E+006		2.2235E+004
	591.81	4.83	1.3909E+006		4.4643E+005
	723.30	19.70	3.4644E+005		-1.0943E+005
	756.87	4.33	1.5118E+006		1.1913E+006
	873.19	11.50	5.1675E+005		-9.7238E+004
	996.32	10.30	5.9434E+005		6.8945E+005
	1004.76	17.90	3.1249E+005		-2.9950E+005
	1274.45	35.50	1.7798E+005		7.4435E+004
Eu-155	86.54	30.90	4.6014E+005	4.60E+005	6.5424E+005
	105.31	20.70	5.5005E+005		1.4178E+005
Am-241	59.54	35.90	5.0331E+005	5.03E+005	-2.5914E+005
Cm-243	228.19	10.56	7.2491E+005	5.22E+005	1.2650E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2166E+005	5.22E+005	1.3223E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 1:46:11 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-121-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 1:31:09 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-121-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	309	300.35	75.05	0.85	1.60E+002	48.86	7.73E+002
F	2	944-	964	954.44	238.58	1.68	1.85E+002	32.10	2.21E+002
F	3	1348-	1358	1353.03	338.24	1.08	3.18E+001	19.04	6.90E+001
F	4	2325-	2342	2332.96	583.24	1.71	1.03E+002	21.62	3.88E+001
F	5	2428-	2446	2437.12	609.28	1.83	1.07E+002	21.69	3.85E+001
F	6	3639-	3654	3646.13	911.56	1.85	5.84E+001	18.31	3.10E+001
F	7	3870-	3882	3875.79	968.98	1.44	3.31E+001	14.69	2.12E+001
F	8	4476-	4489	4481.70	1120.47	1.74	3.58E+001	15.63	2.55E+001
F	9	5832-	5860	5846.72	1461.75	2.32	4.83E+002	42.23	1.45E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.974	1460.81*	10.67	7.33853E+006	8.74146E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.41289E+005	3.49912E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	1.44466E+006	5.23121E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.42495E+005	8.02016E+004
Bi-214	0.713	609.31*	46.30	2.71528E+005	6.45507E+004
		1120.29*	15.10	3.50913E+005	1.57464E+005
		1764.49	15.80		
Ac-228	0.996	338.32*	11.40	2.59581E+005	1.60797E+005
		911.07*	27.70	2.85497E+005	9.53571E+004
		969.11*	16.60	2.76853E+005	1.26325E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.974	7.338532E+006	8.741464E+005
TL-208		0.470	1.412888E+005	3.499119E+004
Pb-212	@	0.497	3.424953E+005	8.020164E+004
Bi-214		0.713	2.829495E+005	5.972691E+004
Ac-228		0.996	2.781902E+005	6.879152E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2332E+004	5.28E+004	-1.4641E+004
	1332.49	100:00	5.2765E+004		-8.6093E+003
Nb-94	702.63	100.00	6.4947E+004	5.66E+004	2.7222E+004
	871.10	100.00	5.6553E+004		9.2414E+003
Ag-108m	79.20	7.10	2.3120E+006	6.97E+004	-1.8680E+006
	433.93	89.90	7.4814E+004		6.0123E+004
	614.37	90.40	8.6857E+004		-4.3825E+004
	722.95	90.50	6.9682E+004		-5.3429E+004
Sb-125	176.33	6.89	1.1670E+006	2.26E+005	8.8667E+005
	427.89	29.33	2.2576E+005		1.6582E+005
	463.38	10.35	6.0852E+005		9.3974E+004
	600.56	17.80	3.6935E+005		9.4759E+004
	606.64	5.02	1.6551E+006		9.6371E+005
	635.90	11.32	5.2946E+005		-8.9020E+004
Cs-134	563.23	8.38	7.5251E+005	7.42E+004	-3.9378E+003
	569.32	15.43	4.2541E+005		1.0597E+005
	604.70	97.60	8.5205E+004		-4.1112E+004
	795.84	85.40	7.4155E+004		-3.3741E+004
	801.93	8.73	7.3416E+005		-4.0510E+005
Cs-137	661.65	85.12	6.9957E+004	7.00E+004	-9.3513E+004
Eu-152	121.78	28.40	3.5772E+005	2.34E+005	2.4506E+004
	244.69	7.49	1.0751E+006		8.7130E+004
	344.27	26.50	2.4623E+005		-2.1910E+005
	778.89	12.74	4.5675E+005		-4.8867E+005
	867.32	4.16	1.4003E+006		-6.8287E+005
	964.01	14.40	5.6927E+005		1.7589E+005
	1085.78	10.00	6.8325E+005		7.1588E+005
	1112.02	13.30	4.6428E+005		-3.4622E+005
	1407.95	20.70	2.3373E+005		1.0382E+004
Eu-154	123.07	40.50	2.4553E+005	1.74E+005	-1.9347E+005
	247.94	6.60	1.1132E+006		-6.7921E+005
	591.81	4.83	1.3430E+006		-3.6074E+005
	723.30	19.70	3.2870E+005		5.9182E+004
	756.87	4.33	1.6425E+006		-6.6659E+004
	873.19	11.50	4.8259E+005		-7.5343E+004
	996.32	10.30	5.8338E+005		1.0940E+005
	1004.76	17.90	3.2383E+005		-5.2261E+004
	1274.45	35.50	1.7421E+005		-5.6398E+004
Eu-155	86.54	30.90	4.6872E+005	4.69E+005	6.0710E+005
	105.31	20.70	5.4481E+005		-6.6480E+004
Am-241	59.54	35.90	5.0736E+005	5.07E+005	-1.5589E+005
Cm-243	228.19	10.56	7.6241E+005	5.28E+005	3.2413E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2826E+005	5.28E+005	7.2340E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 1:26:26 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-122-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 1:11:24 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-122-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	245-	259	253.84	63.42	0.79	7.89E+001	35.44	4.97E+002
M	2	282-	305	291.71	72.88	0.83	1.86E+002	42.62	4.84E+002
m	3	282-	305	300.32	75.04	0.84	2.68E+002	51.01	6.48E+002
F	4	335-	344	339.90	84.94	0.87	9.70E+001	42.77	4.70E+002
F	5	950-	961	955.08	238.74	1.23	1.52E+002	31.58	1.38E+002
F	6	1176-	1185	1181.05	295.24	0.86	3.69E+001	21.82	9.85E+001
F	7	1349-	1359	1353.27	338.30	0.39	2.33E+001	13.45	6.42E+001
F	8	1399-	1415	1407.97	351.97	1.20	1.11E+002	23.84	6.99E+001
F	9	2031-	2052	2042.62	510.65	1.95	1.04E+002	23.13	8.25E+001
F	10	2326-	2341	2332.13	583.03	1.21	8.72E+001	21.79	4.96E+001
F	11	2429-	2447	2437.36	609.34	1.59	1.18E+002	23.56	4.64E+001
F	12	3070-	3081	3075.89	768.99	0.70	1.60E+001	10.28	1.80E+001
F	13	3638-	3654	3645.86	911.49	1.37	7.77E+001	19.71	2.98E+001
F	14	3870-	3884	3876.63	969.19	1.07	4.74E+001	16.91	3.14E+001
F	15	4476-	4490	4482.79	1120.74	1.42	2.99E+001	14.58	2.44E+001
F	16	5833-	5860	5846.50	1461.70	2.10	5.11E+002	43.73	1.00E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*		100.00	1.13577E+005	2.98054E+004
K-40	0.976	1460.81*		10.67	7.76533E+006	9.14382E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.25820E+005	1.44515E+005
		583.14*		84.20	1.19240E+005	3.37293E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.41093E+006	6.58949E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.81489E+005	7.33813E+004
Bi-214	0.712	609.31*		46.30	2.97874E+005	7.02974E+004
		1120.29*		15.10	2.93181E+005	1.46123E+005
		1764.49		15.80		
PB-214	0.566	74.82*	@	6.21	4.15410E+006	1.17475E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.70881E+005	1.05081E+005
		351.92*		37.20	2.80708E+005	7.65488E+004
Ac-228	0.997	338.32*		11.40	1.90519E+005	1.13854E+005
		911.07*		27.70	3.79837E+005	1.05767E+005
		969.11*		16.60	3.96787E+005	1.47547E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	8.782135E+004	3.067144E+004
K-40		0.976	7.765332E+006	9.143822E+005
TL-208		0.753	1.192399E+005	3.350474E+004
Pb-212	@	0.497	2.814890E+005	7.338126E+004
Bi-214		0.712	2.969915E+005	6.334789E+004
PB-214	@	0.566	2.426320E+005	6.187237E+004
Ac-228		0.997	3.147642E+005	6.860424E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	63.42	8.7662E-002	44.92
M	2	72.88	2.0662E-001	22.92
F	4	84.94	1.0774E-001	44.11
F	12	768.99	1.7820E-002	64.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9491E+004	5.44E+004	2.3077E+004
	1332.49	100.00	5.4391E+004		-6.1209E+004
Nb-94	702.63	100.00	6.0752E+004	5.62E+004	-6.5457E+004
	871.10	100.00	5.6189E+004		-6.9371E+003
Ag-108m	79.20	7.10	2.3547E+006	7.45E+004	-3.1314E+006
	433.93	89.90	7.8939E+004		-4.3679E+004
	614.37	90.40	9.5452E+004		7.6168E+003
	722.95	90.50	7.4528E+004		3.1810E+004
Sb-125	176.33	6.89	1.1990E+006	2.37E+005	4.5043E+004
	427.89	29.33	2.3734E+005		1.4594E+005
	463.38	10.35	6.9016E+005		5.5421E+005
	600.56	17.80	3.8614E+005		7.2677E+004
	606.64	5.02	1.8205E+006		4.1541E+006
	635.90	11.32	5.3900E+005		-1.2279E+005
Cs-134	563.23	8.38	7.2709E+005	7.27E+004	-7.3957E+005
	569.32	15.43	4.0751E+005		-2.0193E+004
	604.70	97.60	9.1947E+004		3.3325E+002
	795.84	85.40	7.2725E+004		2.6631E+004
	801.93	8.73	7.0611E+005		-3.2469E+005
Cs-137	661.65	85.12	7.3848E+004	7.38E+004	-5.8535E+004
Eu-152	121.78	28.40	3.7024E+005	2.48E+005	1.8010E+005
	244.69	7.49	1.0438E+006		-7.1341E+004
	344.27	26.50	2.5849E+005		1.2473E+004
	778.89	12.74	5.4061E+005		5.9298E+004
	867.32	4.16	1.4580E+006		-1.5042E+006
	964.01	14.40	5.9279E+005		5.0955E+005
	1085.78	10.00	6.2715E+005		5.9813E+005
	1112.02	13.30	4.5501E+005		-8.3084E+003
	1407.95	20.70	2.4843E+005		1.9135E+005
Eu-154	123.07	40.50	2.5740E+005	1.73E+005	-8.3524E+003
	247.94	6.60	1.1132E+006		-1.7148E+006
	591.81	4.83	1.4552E+006		1.9444E+005
	723.30	19.70	3.4108E+005		2.4946E+005
	756.87	4.33	1.4451E+006		-2.0866E+006
	873.19	11.50	4.9530E+005		2.6660E+005
	996.32	10.30	6.9094E+005		2.6757E+005
	1004.76	17.90	3.5553E+005		8.8529E+004
	1274.45	35.50	1.7294E+005		1.2459E+005
Eu-155	86.54	30.90	4.8739E+005	4.87E+005	4.2289E+005
	105.31	20.70	5.7239E+005		5.5368E+004
Am-241	59.54	35.90	5.1585E+005	5.16E+005	-8.4753E+004
Cm-243	228.19	10.56	7.2399E+005	5.26E+005	9.0220E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2579E+005	5.26E+005	-5.4072E+003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 9:59:46 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-123-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 9:44:35 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-123-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	294-	308	300.31	75.04	1.01	2.43E+002	53.05	8.81E+002
F	2	944-	963	954.66	238.64	1.40	1.68E+002	32.66	2.45E+002
F	3	2326-	2341	2332.68	583.17	1.37	8.65E+001	22.44	6.23E+001
F	4	2430-	2446	2437.28	609.32	1.51	1.01E+002	22.06	3.94E+001
F	5	2905-	2917	2910.78	727.71	0.98	2.61E+001	14.22	3.30E+001
F	6	3637-	3654	3645.08	911.30	1.83	8.24E+001	20.33	3.15E+001
F	7	3870-	3883	3875.99	969.03	1.52	3.60E+001	16.92	3.45E+001
F	8	5831-	5862	5846.77	1461.76	2.31	6.16E+002	47.53	1.58E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.973	1460.81*	10.67	9.35025E+006	1.04595E+006
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.18356E+005	3.44653E+004
		860.37	12.46		
Bi-212	0.991	727.17*	11.80	2.77338E+005	1.54658E+005
Pb-212	0.498	74.81* @	10.70	2.18374E+006	6.41329E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	3.11832E+005	7.78808E+004
Bi-214	0.418	609.31*	46.30	2.56600E+005	6.43970E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	4.03001E+005	1.09629E+005
		969.11*	16.60	3.01100E+005	1.45103E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.973	9.350248E+006	1.045950E+006
TL-208		0.470	1.183564E+005	3.446528E+004
Bi-212		0.991	2.773384E+005	1.546581E+005
Pb-212	@	0.498	3.118318E+005	7.788085E+004
Bi-214		0.418	2.565996E+005	6.439700E+004
Ac-228		0.619	3.659713E+005	8.747065E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty

All peaks were identified.

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.3856E+004	6.32E+004	3.9920E+004
	1332.49	100.00	6.3215E+004		3.3951E+004
Nb-94	702.63	100.00	6.7332E+004	6.17E+004	2.6029E+004
	871.10	100.00	6.1739E+004		-2.5753E+004
Ag-108m	79.20	7.10	2.3408E+006	7.91E+004	-1.7686E+006
	433.93	89.90	7.9121E+004		1.3407E+004
	614.37	90.40	9.4851E+004		-1.3427E+004
	722.95	90.50	8.0963E+004		-3.2246E+003
Sb-125	176.33	6.89	1.2501E+006	2.33E+005	2.7763E+005
	427.89	29.33	2.3335E+005		1.9565E+004
	463.38	10.35	6.7329E+005		-3.6103E+005
	600.56	17.80	3.7330E+005		-7.1685E+004
	606.64	5.02	1.7275E+006		2.1935E+006
	635.90	11.32	5.8426E+005		-1.3196E+004
Cs-134	563.23	8.38	7.8772E+005	8.06E+004	-2.8660E+005
	569.32	15.43	4.5631E+005		3.9997E+005
	604.70	97.60	8.9097E+004		-7.4803E+003
	795.84	85.40	8.0583E+004		7.1830E+004
	801.93	8.73	7.7098E+005		-1.2317E+005
Cs-137	661.65	85.12	8.0181E+004	8.02E+004	-7.4520E+003
Eu-152	121.78	28.40	3.8891E+005	2.68E+005	-6.7498E+004
	244.69	7.49	1.1616E+006		-1.0165E+006
	344.27	26.50	2.7327E+005		-4.7633E+005
	778.89	12.74	5.0745E+005		-6.5899E+004
	867.32	4.16	1.6608E+006		-8.4324E+005
	964.01	14.40	5.9279E+005		-3.8466E+005
	1085.78	10.00	7.2482E+005		2.5066E+005
	1112.02	13.30	5.2166E+005		-3.6280E+005
	1407.95	20.70	2.6753E+005		1.8724E+005
Eu-154	123.07	40.50	2.7045E+005	1.74E+005	3.2023E+003
	247.94	6.60	1.2211E+006		-6.7870E+005
	591.81	4.83	1.3862E+006		-1.9217E+005
	723.30	19.70	3.6953E+005		-1.9246E+005
	756.87	4.33	1.6245E+006		-1.9337E+005
	873.19	11.50	5.3729E+005		3.3700E+005
	996.32	10.30	6.5932E+005		1.4026E+005
	1004.76	17.90	3.8816E+005		1.7542E+005
	1274.45	35.50	1.7421E+005		-1.4923E+005
Eu-155	86.54	30.90	4.8295E+005	4.83E+005	7.9824E+005
	105.31	20.70	5.7738E+005		9.0937E+004
Am-241	59.54	35.90	5.3001E+005	5.30E+005	3.0823E+005
Cm-243	228.19	10.56	7.8892E+005	5.37E+005	7.8385E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3719E+005	5.37E+005	6.6886E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 11:48:18 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-124-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 11:33:17 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-124-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	295-	309	300.67	75.13	1.15	2.01E+002	46.36	6.31E+002
F	2	943-	961	953.36	238.31	1.73	1.28E+002	27.91	1.62E+002
F	3	1349-	1359	1353.66	338.40	0.71	2.39E+001	16.00	6.29E+001
F	4	1400-	1415	1406.27	351.55	1.42	6.80E+001	21.07	7.54E+001
F	5	2253-	2264	2258.92	564.73	0.57	1.34E+001	9.83	2.26E+001
F	6	2427-	2443	2435.47	608.87	1.65	7.75E+001	18.71	2.52E+001
F	7	3635-	3650	3641.91	910.51	1.68	6.03E+001	17.60	2.18E+001
F	8	5828-	5854	5841.53	1460.45	2.31	3.61E+002	36.66	1.01E+001
F	9	7053-	7066	7059.73	1765.03	1.57	1.98E+001	10.23	3.20E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.996	1460.81*		10.67	5.48342E+006	7.11822E+005
Pb-212	0.496	74.81*	@	10.70	1.80941E+006	5.47363E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.38204E+005	6.38413E+004
Bi-214	0.699	609.31*		46.30	1.96382E+005	5.33529E+004
		1120.29		15.10		
		1764.49*		15.80	2.16024E+005	1.13652E+005
Ac-228	0.542	338.32*		11.40	1.95017E+005	1.34254E+005
		911.07*		27.70	2.94764E+005	9.24610E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.996	5.483420E+006	7.118219E+005
Pb-212	@	0.496	2.382037E+005	6.384134E+004
Bi-214		0.699	1.999288E+005	4.829602E+004
Ac-228		0.542	2.626738E+005	7.614898E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	4	351.55	7.5515E-002	31.00
F	5	564.73	1.4920E-002	73.20

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1909E+004	5.05E+004	3.9144E+004
	1332.49	100.00	5.0507E+004		-3.1938E+004
Nb-94	702.63	100.00	5.7161E+004	5.69E+004	-2.8174E+004
	871.10	100.00	5.6914E+004		-1.0660E+004
Ag-108m	79.20	7.10	2.1182E+006	6.44E+004	-1.8481E+006
	433.93	89.90	6.4417E+004		4.4117E+004
	614.37	90.40	7.4214E+004		-1.9048E+004
	722.95	90.50	7.2751E+004		1.5199E+004
Sb-125	176.33	6.89	1.0223E+006	1.92E+005	-2.1229E+005
	427.89	29.33	1.9224E+005		-6.4955E+004
	463.38	10.35	5.7730E+005		-1.4897E+005
	600.56	17.80	3.0698E+005		-4.1120E+005
	606.64	5.02	1.3884E+006		6.3819E+005
	635.90	11.32	4.6513E+005		8.9730E+004
Cs-134	563.23	8.38	6.7632E+005	6.63E+004	-1.6154E+005
	569.32	15.43	3.7735E+005		5.6645E+004
	604.70	97.60	7.3785E+004		-3.2874E+004
	795.84	85.40	6.6282E+004		-9.8223E+003
	801.93	8.73	6.4612E+005		-7.7987E+005
Cs-137	661.65	85.12	7.6021E+004	7.60E+004	2.6031E+004
Eu-152	121.78	28.40	3.3101E+005	2.01E+005	5.8806E+004
	244.69	7.49	9.2090E+005		-8.9374E+005
	344.27	26.50	2.5520E+005		9.3635E+004
	778.89	12.74	4.6436E+005		-4.2105E+005
	867.32	4.16	1.3311E+006		-2.9117E+004
	964.01	14.40	4.7185E+005		2.0331E+005
	1085.78	10.00	5.1931E+005		2.2184E+005
	1112.02	13.30	4.5812E+005		-4.5865E+005
	1407.95	20.70	2.0078E+005		-1.5818E+005
Eu-154	123.07	40.50	2.2981E+005	1.52E+005	-1.2999E+005
	247.94	6.60	9.6535E+005		-1.9182E+005
	591.81	4.83	1.2624E+006		7.8601E+005
	723.30	19.70	3.3427E+005		1.8587E+005
	756.87	4.33	1.3965E+006		1.0482E+006
	873.19	11.50	5.0461E+005		2.2987E+005
	996.32	10.30	5.9071E+005		4.0710E+005
	1004.76	17.90	3.1479E+005		1.1038E+005
	1274.45	35.50	1.5246E+005		6.8311E+004
Eu-155	86.54	30.90	4.3867E+005	4.39E+005	2.8175E+005
	105.31	20.70	4.9842E+005		-6.5046E+005
Am-241	59.54	35.90	4.9795E+005	4.98E+005	-6.1793E+004
Cm-243	228.19	10.56	6.3796E+005	4.48E+005	-4.3512E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4823E+005	4.48E+005	-1.5921E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 1:12:21 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-125-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 12:57:18 PM
Live Time: 900.0 seconds
Real Time: 902.3 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-125-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	309	300.38	75.05	1.16	2.04E+002	52.27	7.56E+002
F	2	330-	345	339.69	84.88	0.74	7.48E+001	37.55	6.27E+002
F	3	947-	963	953.94	238.46	1.29	1.18E+002	26.94	1.42E+002
F	4	1397-	1413	1406.09	351.50	1.46	8.77E+001	21.75	6.58E+001
F	5	2033-	2050	2041.99	510.49	1.63	6.92E+001	19.38	5.15E+001
F	6	2324-	2339	2330.94	582.73	1.25	4.94E+001	18.05	4.76E+001
F	7	2426-	2444	2435.75	608.94	1.26	6.34E+001	18.44	4.06E+001
F	8	3869-	3880	3874.22	968.59	0.99	2.10E+001	12.08	1.79E+001
F	9	5828-	5855	5841.92	1460.55	2.21	3.68E+002	37.02	1.05E+001
F	10	7053-	7066	7059.91	1765.08	1.25	1.95E+001	9.52	3.13E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.992	511.00*		100.00	7.53300E+004	2.36073E+004
K-40	0.998	1460.81*		10.67	5.57902E+006	7.21019E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	3.48750E+005	1.12943E+005
		583.14*		84.20	6.75769E+004	2.62633E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	1.83731E+006	5.92485E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.18940E+005	6.06369E+004
Bi-214	0.700	609.31*		46.30	1.60564E+005	5.08237E+004
		1120.29		15.10		
		1764.49*		15.80	2.12209E+005	1.05975E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.992	6.073339E+004	2.427467E+004
K-40		0.998	5.579024E+006	7.210195E+005
TL-208		0.749	6.757688E+004	2.617082E+004
Pb-212	@	0.497	2.189397E+005	6.063692E+004
Bi-214		0.700	1.702212E+005	4.582615E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	2	84.88	8.3139E-002	50.18
F	4	351.50	9.7485E-002	24.79
F	8	968.59	2.3323E-002	57.57

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1052E+004	4.99E+004	-4.3956E+004
	1332.49	100.00	4.9925E+004		2.9290E+004
Nb-94	702.63	100.00	6.2466E+004	5.12E+004	1.4258E+004
	871.10	100.00	5.1206E+004		-2.8230E+004
Ag-108m	79.20	7.10	2.3230E+006	6.41E+004	-7.9360E+005
	433.93	89.90	6.6195E+004		2.0048E+004
	614.37	90.40	8.3021E+004		1.8689E+004
	722.95	90.50	6.4109E+004		4.4278E+004
Sb-125	176.33	6.89	1.0772E+006	1.98E+005	1.2964E+005
	427.89	29.33	1.9779E+005		-7.4450E+004
	463.38	10.35	6.0852E+005		6.1550E+003
	600.56	17.80	3.0698E+005		-1.3889E+005
	606.64	5.02	1.4746E+006		1.2018E+006
	635.90	11.32	4.9193E+005		-2.5107E+005
Cs-134	563.23	8.38	6.6693E+005	6.43E+004	1.0905E+005
	569.32	15.43	3.8228E+005		2.7858E+005
	604.70	97.60	7.4878E+004		-1.9440E+004
	795.84	85.40	6.4256E+004		5.0221E+003
	801.93	8.73	5.9261E+005		-2.6031E+005
Cs-137	661.65	85.12	5.8236E+004	5.82E+004	-4.7305E+003
Eu-152	121.78	28.40	3.4808E+005	2.37E+005	-7.6440E+004
	244.69	7.49	9.5788E+005		-3.8912E+005
	344.27	26.50	2.3927E+005		-1.3385E+005
	778.89	12.74	4.5419E+005		-3.8546E+005
	867.32	4.16	1.3311E+006		1.2286E+005
	964.01	14.40	4.7410E+005		6.5866E+005
	1085.78	10.00	6.0316E+005		-1.1272E+005
	1112.02	13.30	4.3582E+005		-1.7863E+005
	1407.95	20.70	2.3675E+005		1.6042E+005
Eu-154	123.07	40.50	2.4218E+005	1.73E+005	-8.6656E+004
	247.94	6.60	1.0094E+006		-1.6161E+006
	591.81	4.83	1.2200E+006		-3.8008E+005
	723.30	19.70	2.9769E+005		2.2125E+005
	756.87	4.33	1.3606E+006		1.0860E+006
	873.19	11.50	4.2399E+005		-1.2461E+005
	996.32	10.30	4.7703E+005		-8.7482E+005
	1004.76	17.90	3.1479E+005		1.8897E+005
	1274.45	35.50	1.7294E+005		1.8509E+005
Eu-155	86.54	30.90	4.5649E+005	4.56E+005	1.8446E+005
	105.31	20.70	5.3132E+005		3.8262E+005
Am-241	59.54	35.90	6.8237E+005	6.82E+005	1.3521E+004
Cm-243	228.19	10.56	6.5038E+005	4.81E+005	-3.4825E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8100E+005	4.81E+005	-3.6695E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 1:36:33 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-126-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 1:21:31 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-126-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.22	72.76	1.14	1.42E+002	41.02	6.12E+002
m	2	284-	306	299.86	74.92	1.15	2.34E+002	48.41	7.23E+002
F	3	947-	959	953.76	238.41	1.05	1.24E+002	29.86	1.54E+002
F	4	1174-	1187	1179.50	294.85	1.26	5.02E+001	20.69	8.63E+001
F	5	1400-	1414	1406.55	351.62	1.12	8.00E+001	22.67	8.25E+001
F	6	2325-	2338	2331.47	582.87	1.36	5.81E+001	18.32	3.51E+001
F	7	2427-	2444	2435.07	608.77	1.41	9.28E+001	21.85	4.84E+001
F	8	3634-	3651	3642.60	910.68	1.59	6.51E+001	18.44	2.94E+001
F	9	5829-	5856	5842.36	1460.66	2.08	4.43E+002	41.03	1.77E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	6.72033E+006	8.27011E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	7.94765E+004	2.71824E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.11142E+006	6.01519E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.29176E+005	6.60395E+004
Bi-214	0.412	609.31*		46.30	2.35104E+005	6.26263E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	3.63803E+006	1.06955E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.32613E+005	1.03490E+005
		351.92*		37.20	2.03028E+005	6.67630E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	6.720334E+006	8.270114E+005
TL-208		0.469	7.947647E+004	2.718238E+004
Pb-212	@	0.497	2.291758E+005	6.603947E+004
Bi-214		0.412	2.351040E+005	6.262629E+004
PB-214	@	0.564	2.117220E+005	5.610187E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.76	1.5797E-001	28.85
F 8	910.68	7.2355E-002	28.32

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.5617E+004	5.54E+004	6.6202E+004
	1332.49	100.00	5.5447E+004		5.7660E+003
Nb-94	702.63	100.00	6.2466E+004	5.32E+004	-3.4293E+004
	871.10	100.00	5.3182E+004		1.8064E+004
Ag-108m	79.20	7.10	2.1889E+006	6.98E+004	-2.2285E+006
	433.93	89.90	6.9818E+004		-2.9450E+004
	614.37	90.40	8.8170E+004		3.6191E+004
	722.95	90.50	7.4235E+004		3.2848E+004
Sb-125	176.33	6.89	1.1748E+006	2.11E+005	1.5311E+005
	427.89	29.33	2.1098E+005		1.0345E+005
	463.38	10.35	6.7500E+005		1.0249E+006
	600.56	17.80	3.6268E+005		-5.2475E+003
	606.64	5.02	1.6953E+006		1.7430E+006
	635.90	11.32	5.4136E+005		8.8302E+004
Cs-134	563.23	8.38	7.0070E+005	7.05E+004	4.4190E+005
	569.32	15.43	3.8553E+005		-2.0419E+005
	604.70	97.60	8.7635E+004		-7.4785E+003
	795.84	85.40	7.0523E+004		-3.7630E+004
	801.93	8.73	6.8056E+005		-8.9677E+005
Cs-137	661.65	85.12	6.7577E+004	6.76E+004	-1.0486E+004
Eu-152	121.78	28.40	3.5994E+005	2.50E+005	1.1606E+005
	244.69	7.49	1.0556E+006		-1.6074E+006
	344.27	26.50	2.4963E+005		-3.2099E+005
	778.89	12.74	4.9353E+005		-8.0436E+005
	867.32	4.16	1.2766E+006		-2.5978E+006
	964.01	14.40	5.2497E+005		3.5847E+005
	1085.78	10.00	5.8657E+005		1.5219E+005
	1112.02	13.30	5.1074E+005		-4.1867E+005
	1407.95	20.70	2.5953E+005		-5.6975E+004
Eu-154	123.07	40.50	2.4812E+005	1.69E+005	-1.7809E+005
	247.94	6.60	1.1498E+006		-5.5556E+005
	591.81	4.83	1.1982E+006		-6.3507E+005
	723.30	19.70	3.3837E+005		1.8722E+005
	756.87	4.33	1.4722E+006		-8.1283E+005
	873.19	11.50	4.6951E+005		2.4416E+005
	996.32	10.30	5.7594E+005		-4.2664E+002
	1004.76	17.90	2.9828E+005		-4.4140E+005
	1274.45	35.50	1.6906E+005		1.6631E+005
Eu-155	86.54	30.90	4.6957E+005	4.70E+005	6.4142E+005
	105.31	20.70	5.5877E+005		1.4299E+005
Am-241	59.54	35.90	5.1980E+005	5.20E+005	1.0858E+005
Cm-243	228.19	10.56	7.3583E+005	4.88E+005	5.9689E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8816E+005	4.88E+005	-1.7476E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 1:54:22 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-127-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 1:39:20 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-127-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	296-	309	300.36	75.05	0.80	2.37E+002	51.55	7.61E+002
F	2	946-	960	953.92	238.45	1.16	1.52E+002	30.47	1.54E+002
F	3	1174-	1184	1178.70	294.65	1.03	3.79E+001	20.99	8.55E+001
F	4	1347-	1358	1353.52	338.36	0.64	4.13E+001	17.24	5.88E+001
F	5	1396-	1413	1405.90	351.46	1.60	7.39E+001	22.31	1.01E+002
F	6	2034-	2051	2042.42	510.60	1.92	8.62E+001	21.48	6.51E+001
F	7	2322-	2340	2331.16	582.79	1.69	1.01E+002	22.54	5.89E+001
F	8	2425-	2443	2434.82	608.71	1.64	1.04E+002	21.99	4.51E+001
F	9	2842-	2853	2847.90	711.99	0.83	1.37E+001	10.19	1.62E+001
F	10	3066-	3078	3071.50	767.89	1.21	2.56E+001	12.97	1.80E+001
F	11	3632-	3651	3641.64	910.44	1.95	9.83E+001	20.52	2.27E+001
F	12	3868-	3880	3873.84	968.49	1.11	2.79E+001	12.96	2.93E+001
F	13	5830-	5855	5842.27	1460.64	2.09	5.02E+002	43.78	1.95E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*		100.00	9.38740E+004	2.68446E+004
K-40	0.999	1460.81*		10.67	7.62777E+006	9.07274E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	4.34602E+005	1.29249E+005
		583.14*		84.20	1.38485E+005	3.58654E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.13136E+006	6.24406E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.82027E+005	7.17732E+004
Bi-214	0.411	609.31*		46.30	2.62333E+005	6.45972E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.561	74.82*	@	6.21	3.67240E+006	1.10840E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.75394E+005	1.01553E+005
		351.92*		37.20	1.87430E+005	6.46850E+004
Ac-228	0.991	338.32*		11.40	3.37443E+005	1.50426E+005
		911.07*		27.70	4.80375E+005	1.14493E+005
		969.11*		16.60	2.33699E+005	1.11174E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	6.396132E+004	2.792304E+004
K-40		0.999	7.627768E+006	9.072745E+005
TL-208		0.750	1.384849E+005	3.558029E+004
Pb-212	@	0.497	2.820267E+005	7.177323E+004
Bi-214		0.411	2.623334E+005	6.459721E+004
PB-214	@	0.561	1.839565E+005	5.455751E+004
Ac-228		0.991	3.499062E+005	7.046686E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	9	711.99	1.5272E-002	74.15
F	10	767.89	2.8455E-002	50.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2332E+004	5.65E+004	-4.9477E+003
	1332.49	100.00	5.6481E+004		3.5366E+004
Nb-94	702.63	100.00	6.6283E+004	6.53E+004	-6.2773E+002
	871.10	100.00	6.5265E+004		4.6369E+004
Ag-108m	79.20	7.10	2.3269E+006	7.17E+004	-1.3240E+006
	433.93	89.90	7.1659E+004		-6.8692E+004
	614.37	90.40	8.4396E+004		-4.9275E+004
	722.95	90.50	8.0155E+004		9.4988E+004
Sb-125	176.33	6.89	1.1294E+006	2.22E+005	-7.4606E+005
	427.89	29.33	2.2155E+005		2.2355E+005
	463.38	10.35	7.0008E+005		1.3210E+005
	600.56	17.80	3.2415E+005		-3.3627E+005
	606.64	5.02	1.6699E+006		3.1911E+006
	635.90	11.32	5.5529E+005		-2.6391E+004
Cs-134	563.23	8.38	7.5528E+005	8.09E+004	-4.4494E+005
	569.32	15.43	4.1805E+005		-7.3905E+003
	604.70	97.60	8.4058E+004		-2.4836E+004
	795.84	85.40	8.0907E+004		8.7273E+003
	801.93	8.73	7.5448E+005		5.9697E+005
Cs-137	661.65	85.12	7.1930E+004	7.19E+004	3.9897E+004
Eu-152	121.78	28.40	3.6927E+005	2.51E+005	-2.7788E+005
	244.69	7.49	1.0583E+006		-1.1146E+004
	344.27	26.50	2.5957E+005		4.6991E+004
	778.89	12.74	4.6184E+005		-4.1517E+005
	867.32	4.16	1.5741E+006		-2.5145E+005
	964.01	14.40	5.7479E+005		8.2756E+005
	1085.78	10.00	6.9036E+005		-6.3571E+004
	1112.02	13.30	4.8519E+005		-1.1915E+006
	1407.95	20.70	2.5125E+005		-2.8111E+005
Eu-154	123.07	40.50	2.5823E+005	1.62E+005	-2.8791E+003
	247.94	6.60	1.1545E+006		-1.0565E+006
	591.81	4.83	1.3430E+006		4.9274E+005
	723.30	19.70	3.6578E+005		2.8241E+005
	756.87	4.33	1.5118E+006		1.5619E+006
	873.19	11.50	5.4300E+005		-1.8707E+005
	996.32	10.30	6.2943E+005		2.7532E+005
	1004.76	17.90	3.7126E+005		3.4974E+005
	1274.45	35.50	1.6236E+005		8.2722E+004
Eu-155	86.54	30.90	4.6668E+005	4.67E+005	2.2655E+005
	105.31	20.70	5.6815E+005		-3.8365E+005
Am-241	59.54	35.90	5.2225E+005	5.22E+005	-3.5691E+005
Cm-243	228.19	10.56	7.2123E+005	5.14E+005	-3.7754E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1413E+005	5.14E+005	-1.9944E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 2:16:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-128-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 2:01:42 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-128-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	292.22	73.01	1.01	1.16E+002	38.77	5.70E+002
m	2	285-	305	300.25	75.02	1.01	2.83E+002	49.31	5.73E+002
F	3	329-	345	338.89	84.68	1.28	1.63E+002	43.68	6.56E+002
F	4	947-	960	953.63	238.38	1.19	1.58E+002	30.91	1.42E+002
F	5	1173-	1185	1180.33	295.06	0.93	4.04E+001	19.74	8.61E+001
F	6	1401-	1413	1405.81	351.43	1.19	8.36E+001	22.97	6.97E+001
F	7	2322-	2338	2330.85	582.71	1.60	8.65E+001	21.87	5.73E+001
F	8	2428-	2445	2435.71	608.93	1.16	9.09E+001	21.46	4.44E+001
F	9	3631-	3652	3643.64	910.94	2.28	8.21E+001	18.36	1.90E+001
F	10	3865-	3880	3872.58	968.18	1.06	4.25E+001	15.68	2.79E+001
F	11	4652-	4665	4658.50	1164.67	0.65	1.03E+001	7.51	8.53E+000
F	12	5320-	5333	5326.53	1331.70	1.16	1.77E+001	10.76	1.05E+001
F	13	5830-	5855	5842.33	1460.66	1.95	4.23E+002	40.41	1.57E+001
F	14	6345-	6358	6351.09	1587.86	1.14	1.74E+001	9.56	5.36E+000
F	15	7052-	7065	7058.86	1764.81	2.19	2.89E+001	11.78	3.37E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	6.42299E+006	8.04236E+005
TL-208	0.467	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.18261E+005	3.37624E+004
		860.37	12.46		
Pb-212	0.497	74.81* @	10.70	2.54626E+006	6.68020E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.92737E+005	7.34556E+004
Bi-214	0.701	609.31*	46.30	2.30255E+005	6.14781E+004
		1120.29	15.10		
		1764.49*	15.80	3.14626E+005	1.32218E+005
PB-214	0.562	74.82* @	6.21	4.38727E+006	1.19427E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.87168E+005	9.67014E+004
		351.92*	37.20	2.12110E+005	6.81954E+004
Ac-228	0.612	338.32	11.40		
		911.07*	27.70	4.01287E+005	1.00911E+005
		969.11*	16.60	3.55901E+005	1.36408E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	6.422994E+006	8.042355E+005
TL-208		0.467	1.182613E+005	3.376239E+004
Pb-212	@	0.497	2.927368E+005	7.345560E+004
Bi-214		0.701	2.452537E+005	5.574648E+004
PB-214	@	0.562	2.038258E+005	5.573092E+004
Ac-228		0.612	3.852342E+005	8.112529E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	73.01	1.2848E-001	33.53
F	3	84.68	1.8164E-001	26.72
F	11	1164.67	1.1456E-002	72.87
F	12	1331.70	1.9651E-002	60.82
F	14	1587.86	1.9297E-002	55.02

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.1344E+004	6.09E+004	1.0145E+003
	1332.49	100.00	6.0902E+004		3.7567E+004
Nb-94	702.63	100.00	5.7776E+004	5.78E+004	3.7473E+003
	871.10	100.00	6.0402E+004		2.1485E+003
Ag-108m	79.20	7.10	2.2813E+006	7.33E+004	-2.0870E+006
	433.93	89.90	7.3254E+004		-3.3679E+004
	614.37	90.40	8.7952E+004		-4.1363E+004
	722.95	90.50	8.1764E+004		3.3092E+004
Sb-125	176.33	6.89	1.1189E+006	2.09E+005	-1.0723E+005
	427.89	29.33	2.0906E+005		1.2727E+005
	463.38	10.35	6.0088E+005		8.3314E+004
	600.56	17.80	3.5861E+005		8.7024E+003
	606.64	5.02	1.6735E+006		2.5117E+006
	635.90	11.32	5.8208E+005		4.0187E+005
Cs-134	563.23	8.38	7.7974E+005	7.52E+004	-3.3678E+005
	569.32	15.43	4.1055E+005		4.0480E+005
	604.70	97.60	8.5772E+004		2.5254E+004
	795.84	85.40	7.5209E+004		3.5846E+004
	801.93	8.73	6.3017E+005		-1.0020E+006
Cs-137	661.65	85.12	7.9016E+004	7.90E+004	1.0767E+005
Eu-152	121.78	28.40	3.6572E+005	2.46E+005	1.5823E+005
	244.69	7.49	1.0596E+006		1.2668E+005
	344.27	26.50	2.5465E+005		-1.5109E+005
	778.89	12.74	5.0054E+005		-6.1024E+004
	867.32	4.16	1.4417E+006		-5.9359E+005
	964.01	14.40	5.5047E+005		4.6158E+005
	1085.78	10.00	6.4643E+005		-2.2534E+005
	1112.02	13.30	5.0237E+005		-5.3362E+005
	1407.95	20.70	2.4557E+005		-5.6647E+004
Eu-154	123.07	40.50	2.5253E+005	1.74E+005	-1.6333E+003
	247.94	6.60	1.1731E+006		6.4787E+004
	591.81	4.83	1.4096E+006		6.2421E+005
	723.30	19.70	3.7323E+005		1.0270E+005
	756.87	4.33	1.4105E+006		-5.2703E+005
	873.19	11.50	5.3441E+005		4.1729E+005
	996.32	10.30	6.2258E+005		-1.2488E+004
	1004.76	17.90	3.6740E+005		2.8383E+005
	1274.45	35.50	1.7421E+005		3.2826E+004
Eu-155	86.54	30.90	4.6497E+005	4.65E+005	-8.4334E+004
	105.31	20.70	5.5279E+005		4.7186E+004
Am-241	59.54	35.90	5.1783E+005	5.18E+005	3.8271E+005
Cm-243	228.19	10.56	7.0539E+005	5.11E+005	-3.1727E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1074E+005	5.11E+005	2.0117E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/26/2005 2:36:05 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-129-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/26/2005 2:21:03 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-129-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.51	72.84	0.96	1.86E+002	42.32	5.75E+002
m	2	282-	304	300.07	74.98	0.96	3.05E+002	50.78	5.55E+002
F	3	334-	346	338.94	84.69	1.10	1.29E+002	42.10	5.18E+002
F	4	945-	959	954.07	238.49	1.06	1.51E+002	31.27	1.60E+002
F	5	1346-	1358	1352.54	338.11	0.62	3.33E+001	16.99	8.28E+001
F	6	1398-	1414	1406.01	351.48	1.17	1.02E+002	23.14	6.58E+001
F	7	2032-	2051	2041.56	510.38	1.81	1.02E+002	22.01	5.93E+001
F	8	2320-	2339	2330.73	582.68	1.38	1.14E+002	22.16	3.00E+001
F	9	2427-	2443	2435.41	608.86	1.33	1.08E+002	22.64	3.93E+001
F	10	3636-	3650	3643.43	910.88	1.48	5.72E+001	17.69	2.28E+001
F	11	3869-	3882	3874.54	968.67	1.34	2.89E+001	15.04	3.08E+001
F	12	5829-	5856	5842.56	1460.71	2.12	5.37E+002	44.81	1.08E+001
F	13	7051-	7064	7057.75	1764.53	1.86	2.73E+001	11.88	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.989	511.00*		100.00	1.11011E+005	2.85830E+004
K-40	1.000	1460.81*		10.67	8.15360E+006	9.47856E+005
TL-208	0.748	277.35		6.80		
		510.84*		21.60	5.13939E+005	1.38825E+005
		583.14*		84.20	1.55730E+005	3.66541E+004
		860.37		12.46		
Pb-212	0.497	74.81*	@	10.70	2.75113E+006	7.07230E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.79903E+005	7.27537E+004
Bi-214	0.700	609.31*		46.30	2.72745E+005	6.66758E+004
		1120.29		15.10		
		1764.49*		15.80	2.98044E+005	1.32878E+005
Ac-228	0.997	338.32*		11.40	2.71870E+005	1.45198E+005
		911.07*		27.70	2.79397E+005	9.22135E+004
		969.11*		16.60	2.41625E+005	1.28392E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.989	7.737320E+004	2.963895E+004
K-40		1.000	8.153604E+006	9.478558E+005
TL-208		0.748	1.557299E+005	3.630109E+004
Pb-212	@	0.497	2.799026E+005	7.275375E+004
Bi-214		0.700	2.778339E+005	5.959413E+004
Ac-228		0.997	2.676626E+005	6.656366E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.84	2.0624E-001	22.80
F 3	84.69	1.4387E-001	32.52
F 6	351.48	1.1387E-001	22.58

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.4208E+004	6.28E+004	1.2258E+004
	1332.49	100.00	6.2760E+004		7.0609E+002
Nb-94	702.63	100.00	6.7332E+004	6.43E+004	3.0197E+004
	871.10	100.00	6.4324E+004		8.9628E+003
Ag-108m	79.20	7.10	2.2940E+006	7.50E+004	-4.4837E+006
	433.93	89.90	7.5007E+004		2.2737E+004
	614.37	90.40	9.0313E+004		1.9542E+003
	722.95	90.50	7.9883E+004		6.7195E+004
Sb-125	176.33	6.89	1.1968E+006	2.17E+005	6.2183E+004
	427.89	29.33	2.1727E+005		-2.0934E+004
	463.38	10.35	6.6986E+005		-1.5884E+005
	600.56	17.80	3.7977E+005		-1.1212E+005
	606.64	5.02	1.7486E+006		2.1843E+006
	635.90	11.32	5.7108E+005		-4.5125E+005
Cs-134	563.23	8.38	7.3850E+005	7.69E+004	3.3866E+003
	569.32	15.43	4.1507E+005		-1.0856E+005
	604.70	97.60	9.1243E+004		-6.0541E+003
	795.84	85.40	7.6931E+004		5.6291E+004
	801.93	8.73	7.5781E+005		3.5112E+004
Cs-137	661.65	85.12	8.5489E+004	8.55E+004	8.1645E+004
Eu-152	121.78	28.40	3.5508E+005	2.11E+005	-1.8986E+005
	244.69	7.49	1.0726E+006		-1.0588E+006
	344.27	26.50	2.4963E+005		-1.3408E+005
	778.89	12.74	4.6935E+005		-1.0362E+006
	867.32	4.16	1.5666E+006		-1.1943E+006
	964.01	14.40	5.5807E+005		-2.0763E+005
	1085.78	10.00	6.9740E+005		7.7812E+004
	1112.02	13.30	4.7036E+005		-4.7536E+005
	1407.95	20.70	2.1127E+005		-5.0088E+005
Eu-154	123.07	40.50	2.5532E+005	1.75E+005	1.4207E+005
	247.94	6.60	1.1099E+006		-1.3418E+006
	591.81	4.83	1.3479E+006		8.8401E+005
	723.30	19.70	3.6704E+005		3.2289E+005
	756.87	4.33	1.5566E+006		-1.1772E+005
	873.19	11.50	5.6253E+005		3.8998E+005
	996.32	10.30	6.1565E+005		-3.4008E+004
	1004.76	17.90	3.6349E+005		8.8356E+003
	1274.45	35.50	1.7548E+005		1.6082E+005
Eu-155	86.54	30.90	4.6462E+005	4.65E+005	2.9211E+005
	105.31	20.70	5.6629E+005		-1.2382E+005
Am-241	59.54	35.90	5.0987E+005	5.10E+005	-3.0569E+005
Cm-243	228.19	10.56	7.4924E+005	5.36E+005	-2.9219E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3558E+005	5.36E+005	1.7701E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/27/2005 4:45:48 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-130-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/27/2005 4:30:44 PM
Live Time: 900.0 seconds
Real Time: 903.0 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-130-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	291-	310	300.65	75.12	2.13	3.58E+002	53.54	9.12E+002
F	2	944-	958	953.37	238.31	1.16	8.98E+001	28.27	1.82E+002
F	3	4948-	4961	4954.98	1238.80	1.26	1.81E+001	11.07	1.36E+001
F	4	5830-	5863	5846.59	1461.72	2.87	4.99E+002	42.26	4.65E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.976	1460.81*	10.67	7.51441E+006	8.80728E+005
Pb-212	0.494	74.81* @	10.70	3.15114E+006	7.76704E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.64671E+005	5.79126E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.976	7.514405E+006	8.807278E+005
Pb-212	@ 0.494	1.646710E+005	5.791257E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 3	1238.80	2.0155E-002	61.04

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2.)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9053E+004	5.34E+004	1.3510E+004
	1332.49	100.00	5.3372E+004		-1.1674E+004
Nb-94	702.63	100.00	5.9402E+004	5.87E+004	-1.5237E+003
	871.10	100.00	5.8657E+004		2.3261E+004
Ag-108m	79.20	7.10	2.2542E+006	6.85E+004	-1.2635E+006
	433.93	89.90	7.0941E+004		-2.5985E+004
	614.37	90.40	8.9027E+004		9.7415E+004
	722.95	90.50	6.8489E+004		2.0122E+003
Sb-125	176.33	6.89	1.1903E+006	2.10E+005	-9.9386E+004
	427.89	29.33	2.1005E+005		7.8132E+004
	463.38	10.35	6.2939E+005		1.0060E+005
	600.56	17.80	3.3929E+005		-7.7161E+005
	606.64	5.02	1.6754E+006		3.2303E+006
	635.90	11.32	5.0102E+005		-3.5824E+005
Cs-134	563.23	8.38	7.1928E+005	7.56E+004	-4.4315E+005
	569.32	15.43	3.9391E+005		2.3220E+005
	604.70	97.60	8.2311E+004		7.9718E+004
	795.84	85.40	7.5640E+004		3.5088E+004
	801.93	8.73	7.0090E+005		-7.6464E+005
Cs-137	661.65	85.12	6.9053E+004	6.91E+004	-3.1352E+004
Eu-152	121.78	28.40	3.6487E+005	2.55E+005	2.6531E+005
	244.69	7.49	9.9970E+005		-2.1803E+006
	344.27	26.50	2.5492E+005		-3.3567E+005
	778.89	12.74	5.1449E+005		-3.2483E+004
	867.32	4.16	1.3998E+006		-9.4500E+005
	964.01	14.40	5.1744E+005		2.6475E+005
	1085.78	10.00	6.1825E+005		3.1596E+005
	1112.02	13.30	4.6685E+005		-4.9283E+005
	1407.95	20.70	2.6011E+005		-6.4119E+004
Eu-154	123.07	40.50	2.5371E+005	1.75E+005	-1.5037E+004
	247.94	6.60	1.0662E+006		-9.7541E+005
	591.81	4.83	1.3751E+006		8.3636E+005
	723.30	19.70	3.1895E+005		-1.6070E+005
	756.87	4.33	1.4471E+006		7.6808E+005
	873.19	11.50	5.0452E+005		3.3953E+004
	996.32	10.30	5.7028E+005		1.8897E+005
	1004.76	17.90	3.1402E+005		-9.7600E+003
	1274.45	35.50	1.7531E+005		9.6956E+004
Eu-155	86.54	30.90	4.6397E+005	4.64E+005	5.3341E+005
	105.31	20.70	5.5198E+005		1.1943E+005
Am-241	59.54	35.90	5.5439E+005	5.54E+005	-1.4873E+005
Cm-243	228.19	10.56	7.2074E+005	5.23E+005	1.4698E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2333E+005	5.23E+005	1.7822E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 11/4/2005 7:12:49 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-16-131-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 11/4/2005 6:57:46 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-16-131-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	291.82	72.80	0.98	1.51E+002	40.24	4.89E+002
m	2	285-	306	300.17	74.90	0.98	2.76E+002	49.19	5.70E+002
F	3	334-	344	339.24	84.70	0.94	8.61E+001	40.23	4.15E+002
F	4	949-	963	954.83	239.03	1.11	1.09E+002	29.74	1.81E+002
F	5	1174-	1185	1180.31	295.51	0.94	3.54E+001	18.85	7.29E+001
F	6	1402-	1415	1408.14	352.56	1.09	8.08E+001	23.78	9.06E+001
F	7	2035-	2053	2043.46	511.53	2.01	1.03E+002	22.72	6.45E+001
F	8	2325-	2344	2333.32	584.02	1.69	8.41E+001	20.83	4.94E+001
F	9	2430-	2446	2437.47	610.05	1.11	7.82E+001	21.10	5.49E+001
F	10	3637-	3655	3645.27	911.77	1.53	7.07E+001	18.51	2.63E+001
F	11	3870-	3884	3877.21	969.68	1.27	4.06E+001	15.08	1.78E+001
F	12	5833-	5857	5845.62	1460.78	2.01	3.98E+002	38.87	1.86E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.991	511.00*		100.00	1.08452E+005	2.83362E+004
K-40	1.000	1460.81*		10.67	5.84595E+006	7.41357E+005
TL-208	0.735	277.35		6.80		
		510.84*		21.60	5.02094E+005	1.37445E+005
		583.14*		84.20	1.10830E+005	3.11089E+004
		860.37		12.46		
Pb-212	0.493	74.81*	@	10.70	2.37284E+006	6.28512E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.95035E+005	6.14850E+004
Bi-214	0.409	609.31*		46.30	1.90546E+005	5.66259E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.558	74.82*	@	6.21	4.08847E+006	1.12288E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.58831E+005	8.86293E+004
		351.92*		37.20	1.98656E+005	6.72367E+004
Ac-228	0.611	338.32		11.40		
		911.07*		27.70	3.30557E+005	9.45052E+004
		969.11*		16.60	3.25400E+005	1.25690E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.991	8.451308E+004	2.911158E+004
K-40		1.000	5.845952E+006	7.413570E+005
TL-208		0.735	1.108298E+005	3.089854E+004
Pb-212	@	0.493	1.950354E+005	6.148500E+004
Bi-214		0.409	1.905462E+005	5.662586E+004
PB-214	@	0.558	1.841087E+005	5.356669E+004
Ac-228		0.611	3.286948E+005	7.553563E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.80	1.6771E-001	26.66
F	3	84.70	9.5684E-002	46.71

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.8351E+004	5.35E+004	3.8345E+004
	1332.49	100.00	5.3526E+004		-1.6405E+004
Nb-94	702.63	100.00	5.3290E+004	5.33E+004	1.2175E+004
	871.10	100.00	5.4085E+004		4.4265E+004
Ag-108m	79.20	7.10	1.9995E+006	5.77E+004	-1.6183E+006
	433.93	89.90	5.7673E+004		-5.6218E+004
	614.37	90.40	8.5563E+004		-3.5682E+004
	722.95	90.50	7.1139E+004		5.3802E+004
Sb-125	176.33	6.89	1.0985E+006	1.87E+005	-2.5130E+005
	427.89	29.33	1.8707E+005		1.9807E+005
	463.38	10.35	5.9088E+005		1.2852E+005
	600.56	17.80	3.0431E+005		-2.5599E+003
	606.64	5.02	1.5441E+006		2.9884E+006
	635.90	11.32	5.0373E+005		2.7390E+005
Cs-134	563.23	8.38	7.0031E+005	6.96E+004	1.7342E+005
	569.32	15.43	3.7740E+005		-1.0779E+005
	604.70	97.60	7.4651E+004		-4.1182E+004
	795.84	85.40	6.9620E+004		1.8380E+004
	801.93	8.73	6.8947E+005		-2.1885E+005
Cs-137	661.65	85.12	6.8371E+004	6.84E+004	-2.2569E+003
Eu-152	121.78	28.40	3.2966E+005	2.20E+005	-1.4905E+005
	244.69	7.49	9.7693E+005		-3.9942E+005
	344.27	26.50	2.4277E+005		-2.8365E+005
	778.89	12.74	4.1984E+005		-5.2582E+005
	867.32	4.16	1.3312E+006		6.9494E+003
	964.01	14.40	5.0670E+005		-1.1914E+005
	1085.78	10.00	5.5141E+005		4.7326E+005
	1112.02	13.30	4.4351E+005		-7.3160E+005
	1407.95	20.70	2.1990E+005		1.8395E+004
Eu-154	123.07	40.50	2.2919E+005	1.50E+005	9.1700E+004
	247.94	6.60	1.0190E+006		-1.6071E+006
	591.81	4.83	1.0928E+006		-3.5859E+005
	723.30	19.70	3.2164E+005		7.3626E+004
	756.87	4.33	1.3644E+006		-5.3438E+005
	873.19	11.50	4.6152E+005		6.9283E+004
	996.32	10.30	5.2642E+005		-1.2863E+005
	1004.76	17.90	3.1054E+005		-2.8730E+005
	1274.45	35.50	1.4984E+005		-5.5004E+004
Eu-155	86.54	30.90	4.3118E+005	4.31E+005	3.7319E+005
	105.31	20.70	5.1737E+005		4.5189E+004
Am-241	59.54	35.90	4.7004E+005	4.70E+005	2.8796E+004
Cm-243	228.19	10.56	6.5880E+005	4.87E+005	-8.5477E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8714E+005	4.87E+005	9.8022E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/31/2005 12:39:15 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-16-132-F-G.CNF
Sample ID:
Sample Title: TBN-01-16-132-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 9:39:27 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: C:\GENIE2K\CAMFILES\TBN-01-16-132-F-G.CNF
Log Number:
Title: TBN-01-16-132-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	306	292.23	73.02	1.02	1.09E+002	39.88	4.82E+002
m	2	288-	306	300.45	75.07	1.02	2.84E+002	50.98	6.65E+002
F	3	336-	346	339.89	84.93	0.76	9.21E+001	38.84	4.47E+002
F	4	943-	959	954.51	238.60	1.17	1.59E+002	30.67	1.73E+002
F	5	1403-	1414	1407.31	351.81	1.11	7.96E+001	23.20	6.66E+001
F	6	2034-	2054	2042.30	510.57	1.87	9.53E+001	21.76	6.30E+001
F	7	2325-	2340	2332.66	583.17	1.49	7.77E+001	20.35	4.46E+001
F	8	2428-	2445	2436.18	609.05	1.42	1.05E+002	22.12	3.81E+001
F	9	2903-	2915	2908.16	727.05	0.56	2.25E+001	11.35	2.28E+001
F	10	3635-	3652	3642.93	910.76	1.60	6.64E+001	19.14	3.63E+001
F	11	3868-	3881	3875.20	968.83	1.52	4.28E+001	15.09	1.57E+001
F	12	4475-	4488	4482.00	1120.54	1.14	2.58E+001	13.30	2.45E+001
F	13	5831-	5857	5844.65	1461.23	2.00	4.95E+002	43.16	1.01E+001

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

Errors quoted at 1.960 sigma

\ YANKEE ROWE PORTABLE ISOCS
(RED ROVER SYSTEM)

NUCLIDE IDENTIFICATION REPORT

Spectrum File: C:\GENIE2K\CAMFILES\TBN-01-16-132-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*	100.00	1.02800E+005	2.75539E+004
K-40	0.995	1460.81*	10.67	7.46105E+006	8.87598E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	4.75928E+005	1.33354E+005
		583.14*	84.20	1.05177E+005	3.08471E+004
		860.37	12.46		
Bi-212	1.000	727.17*	11.80	2.36228E+005	1.22321E+005
Pb-212	0.496	74.81* @	10.70	2.49984E+006	6.64395E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.91137E+005	7.24547E+004
Bi-214	0.712	609.31*	46.30	2.62157E+005	6.43032E+004
		1120.29*	15.10	2.50729E+005	1.31995E+005
		1764.49	15.80		
Ac-228	0.618	338.32	11.40		
		911.07*	27.70	3.20582E+005	9.95338E+004
		969.11*	16.60	3.54705E+005	1.30373E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-16-132-F-G.CNF

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.994	8.008234E+004	2.833837E+004
K-40		0.995	7.461048E+006	8.875981E+005
TL-208		0.752	1.051766E+005	3.065611E+004
Bi-212		1.000	2.362276E+005	1.223207E+005
Pb-212	@	0.496	2.911371E+005	7.245472E+004
Bi-214		0.712	2.599647E+005	5.780828E+004
Ac-228		0.618	3.331474E+005	7.911318E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.02	1.2103E-001	36.61
F 3	84.93	1.0237E-001	42.15
F 5	351.81	8.8486E-002	29.13

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:C:\GENIE2K\CAMFILES\TBN-01-16-132-F-G.CNF
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.1257E+004	4.52E+004	5.3919E+004
	1332.49	100.00	4.5214E+004		-5.0991E+003
Nb-94	702.63	100.00	6.0263E+004	5.18E+004	-5.1685E+003
	871.10	100.00	5.1764E+004		-2.5466E+003
Ag-108m	79.20	7.10	2.2426E+006	6.94E+004	-2.5959E+006
	433.93	89.90	6.9520E+004		-4.6239E+003
	614.37	90.40	8.6689E+004		-6.6467E+003
	722.95	90.50	6.9417E+004		-1.3823E+004
Sb-125	176.33	6.89	1.1323E+006	2.08E+005	3.9468E+005
	427.89	29.33	2.0814E+005		-6.2962E+004
	463.38	10.35	6.1848E+005		3.1172E+005
	600.56	17.80	3.3215E+005		2.1050E+004
	606.64	5.02	1.6210E+006		2.1562E+006
	635.90	11.32	5.5292E+005		5.0859E+004
Cs-134	563.23	8.38	7.5803E+005	6.55E+004	2.5732E+005
	569.32	15.43	3.8133E+005		-2.8438E+005
	604.70	97.60	8.3832E+004		2.8966E+004
	795.84	85.40	6.5460E+004		-2.5101E+004
	801.93	8.73	6.9383E+005		-2.5341E+005
Cs-137	661.65	85.12	7.3205E+004	7.32E+004	3.4250E+004
Eu-152	121.78	28.40	3.5458E+005	2.64E+005	-2.4650E+004
	244.69	7.49	1.0356E+006		-1.1028E+006
	344.27	26.50	2.6394E+005		-3.7540E+005
	778.89	12.74	5.0562E+005		3.1375E+005
	867.32	4.16	1.2972E+006		-1.4765E+006
	964.01	14.40	5.4467E+005		2.2024E+005
	1085.78	10.00	5.8189E+005		-5.4257E+004
	1112.02	13.30	5.1238E+005		-2.0857E+005
	1407.95	20.70	2.6796E+005		1.9228E+005
Eu-154	123.07	40.50	2.4893E+005	1.62E+005	7.9227E+004
	247.94	6.60	1.0545E+006		-1.5923E+006
	591.81	4.83	1.2885E+006		1.6712E+006
	723.30	19.70	3.2176E+005		3.7645E+005
	756.87	4.33	1.4270E+006		-7.3547E+005
	873.19	11.50	4.5720E+005		-3.5192E+005
	996.32	10.30	6.1986E+005		7.9694E+004
	1004.76	17.90	3.4606E+005		1.3559E+005
	1274.45	35.50	1.6241E+005		-6.6003E+004
Eu-155	86.54	30.90	4.4872E+005	4.49E+005	3.6375E+005
	105.31	20.70	5.3485E+005		-4.1013E+004
Am-241	59.54	35.90	4.9070E+005	4.91E+005	2.3240E+005
Cm-243	228.19	10.56	6.6839E+005	5.04E+005	-1.7245E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0351E+005	5.04E+005	-1.6511E+002

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 8:57:42 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-133-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 8:42:40 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-133-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.50	72.83	0.97	1.55E+002	41.55	5.98E+002
m	2	283-	306	300.27	75.03	0.98	2.74E+002	50.88	7.00E+002
F	3	346-	354	350.01	87.46	0.60	5.80E+001	33.50	3.46E+002
F	4	948-	961	954.10	238.50	1.01	1.58E+002	31.84	1.65E+002
F	5	1171-	1185	1180.27	295.04	1.06	4.32E+001	20.94	1.06E+002
F	6	1348-	1358	1353.43	338.34	0.98	3.19E+001	17.92	5.76E+001
F	7	1397-	1417	1406.64	351.64	1.70	1.03E+002	24.11	1.13E+002
F	8	2325-	2341	2332.03	583.01	1.28	1.07E+002	22.21	3.45E+001
F	9	2428-	2442	2435.97	609.00	0.93	1.07E+002	22.78	3.76E+001
F	10	3636-	3650	3644.13	911.06	1.39	6.90E+001	18.38	2.05E+001
F	11	3869-	3881	3874.07	968.55	1.18	4.27E+001	15.72	2.35E+001
F	12	5831-	5855	5843.56	1460.96	2.04	4.83E+002	42.66	9.34E+000
F	13	7053-	7068	7060.34	1765.18	1.83	3.63E+001	12.50	2.07E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*		10.67	7.27108E+006	8.71614E+005
TL-208	0.470	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.44360E+005	3.56011E+004
		860.37		12.46		
Pb-212	0.658	74.81*	@	10.70	2.41366E+006	6.51638E+005
		77.11	@	18.00		
		87.30*	@	8.00	5.84295E+005	3.56522E+005
		238.63*		44.60	2.89767E+005	7.39854E+004
Bi-214	0.700	609.31*		46.30	2.68295E+005	6.61187E+004
		1120.29		15.10		
		1764.49*		15.80	3.94368E+005	1.41297E+005
PB-214	0.656	74.82*	@	6.21	4.15879E+006	1.16267E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.00093E+006	6.15408E+005
		241.98		7.49		
		295.21*		19.20	1.97817E+005	1.01591E+005
		351.92*		37.20	2.57638E+005	7.43278E+004
Ac-228	0.997	338.32*		11.40	2.57723E+005	1.50491E+005
		911.07*		27.70	3.33347E+005	9.67034E+004
		969.11*		16.60	3.53687E+005	1.35344E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	K-40		0.999	7.271076E+006	8.716136E+005
X	Eu-155		0.328		
	TL-208		0.470	1.443597E+005	3.560106E+004
	Pb-212	@	0.658	2.897670E+005	7.398543E+004
	Bi-214		0.700	2.909418E+005	5.988639E+004
	PB-214	@	0.656	2.367809E+005	5.998682E+004
	Ac-228		0.997	3.225108E+005	6.972752E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.7173E-001	26.88

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6771E+004	5.60E+004	-2.2476E+004
	1332.49	100.00	5.5974E+004		3.5049E+004
Nb-94	702.63	100.00	6.3314E+004	5.76E+004	5.3876E+004
	871.10	100.00	5.7627E+004		-6.3932E+003
Ag-108m	79.20	7.10	2.2672E+006	7.18E+004	4.4750E+004
	433.93	89.90	7.7275E+004		2.4698E+004
	614.37	90.40	9.3123E+004		-5.2066E+004
	722.95	90.50	7.1829E+004		1.5425E+004
Sb-125	176.33	6.89	1.1501E+006	2.25E+005	-1.4884E+005
	427.89	29.33	2.2467E+005		6.8292E+004
	463.38	10.35	6.3119E+005		7.8445E+005
	600.56	17.80	3.5175E+005		-4.1863E+004
	606.64	5.02	1.7177E+006		1.8968E+006
	635.90	11.32	5.1087E+005		-1.0563E+005
Cs-134	563.23	8.38	6.9612E+005	7.22E+004	-6.0974E+005
	569.32	15.43	3.8768E+005		7.5944E+004
	604.70	97.60	8.8233E+004		-3.0625E+004
	795.84	85.40	7.2179E+004		1.9297E+004
	801.93	8.73	7.0441E+005		-1.0501E+006
Cs-137	661.65	85.12	7.6532E+004	7.65E+004	-1.5906E+004
Eu-152	121.78	28.40	3.6886E+005	2.41E+005	-1.4031E+005
	244.69	7.49	1.0304E+006		2.8721E+005
	344.27	26.50	2.5111E+005		-1.7887E+005
	778.89	12.74	4.7798E+005		-5.7304E+005
	867.32	4.16	1.3495E+006		-2.6015E+006
	964.01	14.40	6.0209E+005		-2.7463E+004
	1085.78	10.00	5.7770E+005		-2.6767E+005
	1112.02	13.30	4.9583E+005		-4.0186E+005
	1407.95	20.70	2.4070E+005		1.7446E+005
Eu-154	123.07	40.50	2.6064E+005	1.65E+005	2.0736E+005
	247.94	6.60	1.0987E+006		-5.5413E+005
	591.81	4.83	1.3277E+006		1.1567E+006
	723.30	19.70	3.3274E+005		5.4939E+004
	756.87	4.33	1.3998E+006		-3.5981E+005
	873.19	11.50	4.8305E+005		-4.2085E+005
	996.32	10.30	5.8850E+005		3.2957E+005
	1004.76	17.90	3.5998E+005		1.1526E+005
	1274.45	35.50	1.6508E+005		-2.5651E+004
Eu-155	86.54*	30.90	2.4174E+005	2.42E+005	1.5127E+005
	105.31	20.70	5.5066E+005		1.3154E+005
Am-241	59.54	35.90	5.1227E+005	5.12E+005	-1.0917E+005
Cm-243	228.19	10.56	6.9132E+005	4.94E+005	-3.0542E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9416E+005	4.94E+005	5.5137E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 10:18:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-134-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 10:03:48 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-134-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	291.60	72.86	0.82	1.36E+002	38.47	4.00E+002
m	2	287-	306	300.32	75.04	0.82	2.53E+002	48.13	5.52E+002
F	3	330-	345	339.21	84.76	1.24	1.32E+002	42.41	6.16E+002
F	4	949-	961	954.49	238.59	0.95	1.56E+002	31.09	1.38E+002
F	5	1343-	1360	1352.51	338.11	1.64	8.13E+001	20.46	6.07E+001
F	6	1399-	1414	1407.70	351.91	1.20	1.03E+002	22.86	6.04E+001
F	7	1746-	1755	1750.81	437.69	0.57	1.36E+001	10.37	2.27E+001
F	8	2032-	2052	2041.83	510.45	1.69	9.04E+001	23.00	9.73E+001
F	9	2323-	2343	2331.86	582.97	1.72	1.03E+002	21.28	3.90E+001
F	10	2429-	2445	2436.19	609.05	1.39	9.21E+001	22.10	4.80E+001
F	11	3633-	3652	3643.82	910.98	1.83	9.35E+001	19.40	1.24E+001
F	12	3869-	3883	3875.72	968.96	1.29	2.83E+001	13.78	2.20E+001
F	13	4271-	4282	4276.92	1069.27	0.77	1.28E+001	9.30	1.34E+001
F	14	5833-	5859	5844.82	1461.28	1.96	4.36E+002	41.11	2.32E+001
F	15	7054-	7067	7061.01	1765.35	1.26	2.61E+001	11.97	9.90E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.991	511.00*	100.00	9.74561E+004	2.83314E+004
K-40	0.994	1460.81*	10.67	6.56334E+006	8.16112E+005
TL-208	0.751	277.35	6.80		
		510.84*	21.60	4.51186E+005	1.36241E+005
		583.14*	84.20	1.39547E+005	3.41907E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.23186E+006	6.09102E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.85580E+005	7.25118E+004
Bi-214	0.699	609.31*	46.30	2.30702E+005	6.23594E+004
		1120.29	15.10		
		1764.49*	15.80	2.83425E+005	1.33060E+005
Ac-228	0.999	338.32*	11.40	6.57941E+005	1.94996E+005
		911.07*	27.70	4.51433E+005	1.07132E+005
		969.11*	16.60	2.34180E+005	1.16738E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.991	6.731386E+004	2.926162E+004
K-40		0.994	6.563344E+006	8.161124E+005
TL-208		0.751	1.395473E+005	3.388690E+004
Pb-212	@	0.496	2.855798E+005	7.251180E+004
Bi-214		0.699	2.401965E+005	5.646591E+004
Ac-228		0.999	3.951682E+005	7.316488E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.86	1.5106E-001	28.30
F	3	84.76	1.4703E-001	32.05
F	6	351.91	1.1437E-001	22.21
F	7	437.69	1.5091E-002	76.32
F	13	1069.27	1.4187E-002	72.81

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.7803E+004	6.70E+004	1.0299E+005
	1332.49	100.00	6.6982E+004		5.9318E+004
Nb-94	702.63	100.00	5.8234E+004	5.66E+004	1.9950E+004
	871.10	100.00	5.6577E+004		-3.4341E+003
Ag-108m	79.20	7.10	2.1996E+006	6.99E+004	-9.1194E+005
	433.93	89.90	6.9929E+004		1.6778E+004
	614.37	90.40	8.9862E+004		3.7652E+004
	722.95	90.50	7.3584E+004		3.4912E+004
Sb-125	176.33	6.89	1.1644E+006	2.19E+005	4.3180E+005
	427.89	29.33	2.1930E+005		-3.8196E+004
	463.38	10.35	6.3299E+005		2.8849E+005
	600.56	17.80	3.2188E+005		-1.1600E+005
	606.64	5.02	1.6539E+006		3.6540E+006
	635.90	11.32	4.9852E+005		-4.3245E+005
Cs-134	563.23	8.38	7.1928E+005	6.82E+004	3.9683E+005
	569.32	15.43	4.0157E+005		-3.9306E+005
	604.70	97.60	8.3265E+004		3.2205E+003
	795.84	85.40	6.8157E+004		-5.2025E+004
	801.93	8.73	7.3183E+005		-1.7223E+005
Cs-137	661.65	85.12	7.4737E+004	7.47E+004	5.8375E+004
Eu-152	121.78	28.40	3.5537E+005	2.33E+005	-6.7163E+004
	244.69	7.49	9.6942E+005		6.2984E+005
	344.27	26.50	2.3284E+005		6.4493E+004
	778.89	12.74	4.3301E+005		-7.2144E+004
	867.32	4.16	1.3749E+006		-1.9766E+006
	964.01	14.40	5.1944E+005		1.0942E+005
	1085.78	10.00	6.4875E+005		2.8505E+005
	1112.02	13.30	4.5470E+005		-6.9079E+004
	1407.95	20.70	2.4070E+005		-4.6921E+004
Eu-154	123.07	40.50	2.4907E+005	1.61E+005	-1.6015E+005
	247.94	6.60	1.0343E+006		-6.7752E+005
	591.81	4.83	1.2785E+006		1.3443E+006
	723.30	19.70	3.3543E+005		1.7155E+005
	756.87	4.33	1.3859E+006		-7.9861E+005
	873.19	11.50	4.8929E+005		-2.5400E+005
	996.32	10.30	6.3658E+005		4.2378E+005
	1004.76	17.90	3.5803E+005		3.0994E+005
	1274.45	35.50	1.6106E+005		-2.4916E+005
Eu-155	86.54	30.90	4.5498E+005	4.55E+005	2.2801E+004
	105.31	20.70	5.3864E+005		-8.7251E+004
Am-241	59.54	35.90	4.8672E+005	4.87E+005	-9.7766E+003
Cm-243	228.19	10.56	6.9320E+005	5.17E+005	3.1877E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1681E+005	5.17E+005	5.0788E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 10:41:35 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-135-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 10:26:33 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-135-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	291.94	72.94	0.97	1.99E+002	42.18	4.99E+002
m	2	284-	306	300.27	75.03	0.97	2.98E+002	49.85	6.20E+002
F	3	329-	345	338.34	84.54	1.27	1.40E+002	41.65	6.09E+002
F	4	949-	961	954.35	238.56	1.13	1.42E+002	30.56	1.44E+002
F	5	1175-	1187	1180.61	295.13	0.93	5.98E+001	21.65	8.78E+001
F	6	1348-	1358	1353.26	338.29	0.76	2.87E+001	16.49	5.64E+001
F	7	1402-	1416	1407.43	351.84	1.29	7.21E+001	22.84	8.86E+001
F	8	2035-	2053	2043.08	510.77	1.50	8.02E+001	22.13	8.35E+001
F	9	2323-	2338	2331.65	582.91	1.24	4.79E+001	19.03	5.71E+001
F	10	2428-	2444	2435.91	608.98	1.60	9.66E+001	21.60	4.07E+001
F	11	3637-	3653	3644.00	911.03	1.79	5.80E+001	18.03	2.98E+001
F	12	3869-	3882	3874.66	968.70	1.36	3.08E+001	15.32	3.04E+001
F	13	4475-	4488	4481.41	1120.40	1.19	2.40E+001	12.37	1.57E+001
F	14	5832-	5857	5845.22	1461.38	1.92	4.42E+002	41.13	1.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	8.65104E+004	2.67838E+004
K-40	0.990	1460.81*	10.67	6.66235E+006	8.21682E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	4.00511E+005	1.28240E+005
		583.14*	84.20	6.48058E+004	2.71317E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.62659E+006	6.76567E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.60759E+005	6.93843E+004
Bi-214	0.712	609.31*	46.30	2.41801E+005	6.19120E+004
		1120.29*	15.10	2.33018E+005	1.22675E+005
		1764.49	15.80		
PB-214	0.564	74.82* @	6.21	4.52569E+006	1.21115E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.73970E+005	1.09416E+005
		351.92*	37.20	1.81175E+005	6.49039E+004
Ac-228	0.998	338.32*	11.40	2.31876E+005	1.38241E+005
		911.07*	27.70	2.80064E+005	9.28300E+004
		969.11*	16.60	2.55090E+005	1.29661E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	7.251234E+004	2.741362E+004
K-40		0.990	6.662351E+006	8.216823E+005
TL-208		0.752	6.480581E+004	2.704935E+004
Pb-212	@	0.496	2.607586E+005	6.938433E+004
Bi-214		0.712	2.400179E+005	5.527190E+004
PB-214	@	0.564	2.053276E+005	5.582183E+004
Ac-228		0.998	2.624780E+005	6.624807E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	2.2154E-001	21.16
F 3	84.54	1.5518E-001	29.82

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6383E+004	6.17E+004	-2.0313E+004
	1332.49	100.00	6.1742E+004		4.3437E+004
Nb-94	702.63	100.00	6.0547E+004	5.51E+004	3.4573E+004
	871.10	100.00	5.5144E+004		-4.0788E+004
Ag-108m	79.20	7.10	2.1719E+006	6.68E+004	-2.7879E+006
	433.93	89.90	6.6797E+004		8.6439E+003
	614.37	90.40	8.8185E+004		-3.0908E+004
	722.95	90.50	7.6137E+004		2.6969E+004
Sb-125	176.33	6.89	1.1435E+006	1.98E+005	9.2428E+005
	427.89	29.33	1.9834E+005		-2.1917E+004
	463.38	10.35	6.1294E+005		6.0130E+005
	600.56	17.80	3.6112E+005		1.8210E+005
	606.64	5.02	1.6320E+006		1.6834E+006
	635.90	11.32	5.1813E+005		-2.4010E+005
Cs-134	563.23	8.38	6.7212E+005	6.96E+004	-3.4607E+005
	569.32	15.43	4.0458E+005		1.9223E+005
	604.70	97.60	8.3454E+004		-1.4999E+004
	795.84	85.40	6.9648E+004		8.4503E+004
	801.93	8.73	6.7213E+005		-4.1247E+004
Cs-137	661.65	85.12	7.4128E+004	7.41E+004	6.2711E+004
Eu-152	121.78	28.40	3.4982E+005	2.37E+005	-1.7198E+005
	244.69	7.49	1.0185E+006		-3.7557E+005
	344.27	26.50	2.3696E+005		-3.2241E+005
	778.89	12.74	4.8970E+005		-2.9118E+005
	867.32	4.16	1.4242E+006		1.1406E+005
	964.01	14.40	5.3511E+005		-2.3999E+005
	1085.78	10.00	6.4127E+005		-5.8254E+005
	1112.02	13.30	4.1599E+005		-2.1310E+005
	1407.95	20.70	2.4922E+005		1.9747E+005
Eu-154	123.07	40.50	2.4052E+005	1.60E+005	-3.4718E+005
	247.94	6.60	1.0939E+006		-4.6624E+005
	591.81	4.83	1.3180E+006		-1.0244E+006
	723.30	19.70	3.4074E+005		-1.9184E+005
	756.87	4.33	1.3998E+006		-1.7089E+006
	873.19	11.50	4.6381E+005		-4.6375E+005
	996.32	10.30	6.5284E+005		6.7228E+005
	1004.76	17.90	3.2290E+005		-1.1050E+005
	1274.45	35.50	1.5969E+005		1.5729E+004
Eu-155	86.54	30.90	4.4357E+005	4.44E+005	1.7044E+005
	105.31	20.70	5.2828E+005		-2.6109E+005
Am-241	59.54	35.90	4.8271E+005	4.83E+005	1.1029E+005
Cm-243	228.19	10.56	7.0342E+005	5.00E+005	9.6497E+003

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0013E+005	5.00E+005	-9.8268E+003

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 11:09:46 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-136-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 10:54:45 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

YANKEE ROWE PORTABLE ISOCS
(RED ROVER SYSTEM)

PEAK ANALYSIS REPORT

Filename: RED6264
Log Number:
Title: TBN-01-16-136-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	313	291.96	72.95	0.83	1.59E+002	39.47	4.45E+002
m	2	284-	313	300.52	75.09	0.83	3.45E+002	49.63	4.37E+002
m	3	284-	313	308.04	76.97	0.84	8.19E+001	35.07	4.69E+002
F	4	332-	345	339.38	84.81	1.11	1.44E+002	42.56	5.39E+002
F	5	949-	960	954.18	238.52	1.20	1.42E+002	29.51	1.12E+002
F	6	1176-	1185	1180.65	295.14	0.75	3.49E+001	19.35	7.87E+001
F	7	1402-	1416	1407.73	351.91	1.34	1.05E+002	23.18	5.42E+001
F	8	2034-	2055	2043.58	510.89	1.89	1.08E+002	21.71	5.15E+001
F	9	2326-	2342	2332.42	583.11	1.01	6.57E+001	19.05	4.30E+001
F	10	2429-	2445	2436.92	609.23	1.23	8.78E+001	21.90	5.10E+001
F	11	3634-	3651	3643.79	910.97	1.58	7.32E+001	18.42	1.96E+001
F	12	3869-	3883	3875.62	968.94	1.29	3.86E+001	15.13	2.28E+001
F	13	5832-	5857	5845.37	1461.42	2.03	4.10E+002	39.23	6.63E+000
F	14	7054-	7068	7061.67	1765.51	1.31	2.73E+001	12.32	1.13E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*	100.00	1.15997E+005	2.85227E+004
K-40	0.989	1460.81*	10.67	6.17270E+006	7.74060E+005
TL-208	0.753	277.35	6.80		
		510.84*	21.60	5.37021E+005	1.39142E+005
		583.14*	84.20	8.88494E+004	2.83223E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.03757E+006	7.38360E+005
		77.11* @	18.00	4.17922E+005	1.96770E+005
		87.30 @	8.00		
		238.63*	44.60	2.59961E+005	6.77515E+004
Bi-214	0.698	609.31*	46.30	2.19915E+005	6.13004E+004
		1120.29	15.10		
		1764.49*	15.80	2.96389E+005	1.37011E+005
PB-214	0.760	74.82* @	6.21	5.23382E+006	1.32774E+006
		77.11* @	10.50	7.16439E+005	3.41536E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.59950E+005	9.26746E+004
		351.92*	37.20	2.63557E+005	7.30337E+004
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	3.53336E+005	9.78164E+004
		969.11*	16.60	3.19620E+005	1.29727E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	9.680503E+004	2.916466E+004
K-40		0.989	6.172702E+006	7.740596E+005
TL-208		0.753	8.884944E+004	2.817390E+004
Pb-212	@	0.838	2.599614E+005	6.775154E+004
Bi-214		0.698	2.326699E+005	5.595524E+004
PB-214	@	0.760	2.238632E+005	5.736215E+004
Ac-228		0.620	3.411153E+005	7.810228E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	1.7679E-001	24.80
F 4	84.81	1.5967E-001	29.61

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.4404E+004	5.01E+004	3.7614E+004
	1332.49	100.00	5.0054E+004		8.4701E+003
Nb-94	702.63	100.00	6.4119E+004	5.80E+004	3.5228E+004
	871.10	100.00	5.7973E+004		9.7224E+003
Ag-108m	79.20	7.10	2.2263E+006	6.66E+004	-5.0246E+005
	433.93	89.90	6.9520E+004		-1.4152E+004
	614.37	90.40	8.5386E+004		2.7551E+004
	722.95	90.50	6.6592E+004		2.0546E+004
Sb-125	176.33	6.89	1.0876E+006	2.00E+005	1.1345E+005
	427.89	29.33	2.0034E+005		7.2962E+004
	463.38	10.35	6.3656E+005		7.3414E+004
	600.56	17.80	3.2925E+005		-3.0069E+004
	606.64	5.02	1.5949E+006		1.8777E+006
	635.90	11.32	5.3698E+005		-8.1511E+004
Cs-134	563.23	8.38	6.8723E+005	7.07E+004	-9.8447E+004
	569.32	15.43	4.0005E+005		-1.0521E+005
	604.70	97.60	8.2118E+004		-5.9228E+003
	795.84	85.40	7.0745E+004		-1.4126E+004
	801.93	8.73	6.9026E+005		-9.1609E+005
Cs-137	661.65	85.12	7.4433E+004	7.44E+004	6.4120E+004
Eu-152	121.78	28.40	3.5261E+005	2.43E+005	1.3297E+003
	244.69	7.49	1.0011E+006		-3.2158E+005
	344.27	26.50	2.4272E+005		-4.3126E+005
	778.89	12.74	4.7321E+005		-2.8123E+005
	867.32	4.16	1.4795E+006		2.5968E+005
	964.01	14.40	5.5776E+005		3.2883E+005
	1085.78	10.00	6.1037E+005		-2.7309E+005
	1112.02	13.30	4.6082E+005		-3.2726E+005
	1407.95	20.70	2.6796E+005		-7.1974E+004
Eu-154	123.07	40.50	2.4686E+005	1.53E+005	-5.1988E+004
	247.94	6.60	1.0858E+006		-6.4805E+005
	591.81	4.83	1.2429E+006		-3.5059E+005
	723.30	19.70	3.0890E+005		4.6680E+004
	756.87	4.33	1.4404E+006		-7.4450E+005
	873.19	11.50	4.8618E+005		1.2039E+005
	996.32	10.30	5.6281E+005		1.3866E+005
	1004.76	17.90	3.0948E+005		-2.2308E+004
	1274.45	35.50	1.5268E+005		-8.2411E+004
Eu-155	86.54	30.90	4.5883E+005	4.59E+005	7.5851E+005
	105.31	20.70	5.4214E+005		1.4111E+005
Am-241	59.54	35.90	4.9342E+005	4.93E+005	-4.5517E+005
Cm-243	228.19	10.56	7.1622E+005	4.80E+005	7.4071E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8021E+005	4.80E+005	1.7193E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 1:17:39 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-137-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 1:02:37 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-137-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.80	72.91	0.97	2.19E+002	44.55	5.42E+002
m	2	285-	305	300.44	75.07	0.98	3.69E+002	52.35	5.66E+002
M	3	330-	356	339.68	84.88	1.32	2.21E+002	43.93	6.55E+002
m	4	330-	356	349.64	87.37	1.32	1.15E+002	38.19	6.40E+002
F	5	947-	960	954.54	238.61	0.89	1.63E+002	32.06	1.64E+002
F	6	1176-	1187	1180.77	295.17	0.72	3.34E+001	20.59	1.26E+002
F	7	1346-	1359	1353.42	338.34	1.01	3.48E+001	18.49	7.73E+001
F	8	1396-	1415	1407.58	351.88	1.56	1.10E+002	24.12	9.41E+001
F	9	2324-	2341	2332.40	583.10	1.26	1.15E+002	24.20	6.12E+001
F	10	2428-	2445	2437.07	609.27	1.45	1.11E+002	21.91	2.71E+001
F	11	3638-	3653	3645.02	911.28	1.31	6.35E+001	19.27	3.33E+001
F	12	3868-	3885	3875.65	968.94	1.69	4.53E+001	17.43	3.87E+001
F	13	5832-	5860	5845.87	1461.54	2.06	5.13E+002	44.04	1.80E+001
F	14	7056-	7069	7061.84	1765.56	2.62	3.39E+001	12.46	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.984	1460.81*	10.67	7.73769E+006	9.12608E+005
Eu-155	0.331	86.54*	30.90	2.99426E+005	1.15737E+005
		105.31	20.70		
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.54945E+005	3.86204E+004
		860.37	12.46		
Pb-212	0.658	74.81* @	10.70	3.24755E+006	7.85824E+005
		77.11 @	18.00		
		87.30* @	8.00	1.15653E+006	4.47035E+005
		238.63*	44.60	2.98793E+005	7.51831E+004
Bi-214	0.698	609.31*	46.30	2.77049E+005	6.48259E+004
		1120.29	15.10		
		1764.49*	15.80	3.68151E+005	1.40206E+005
PB-214	0.657	74.82* @	6.21	5.59561E+006	1.41361E+006
		77.11 @	10.50		
		87.30* @	4.67	1.98121E+006	7.80287E+005
		241.98	7.49		
		295.21*	19.20	1.53169E+005	9.78163E+004
		351.92*	37.20	2.75222E+005	7.60978E+004
Ac-228	0.999	338.32*	11.40	2.81149E+005	1.55985E+005
		911.07*	27.70	3.06958E+005	9.95334E+004
		969.11*	16.60	3.75418E+005	1.49633E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.984	7.737689E+006	9.126079E+005
Eu-155		0.331	1.872745E+005	1.177021E+005
TL-208		0.471	1.549454E+005	3.862038E+004
Pb-212	@	0.658	2.987935E+005	7.518306E+004
Bi-214		0.698	2.930949E+005	5.884086E+004
PB-214	@	0.657	2.302223E+005	5.912022E+004
Ac-228		0.999	3.176536E+005	7.318558E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	2.4319E-001	20.36
M 3	84.88	2.4502E-001	19.92

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.7157E+004	6.17E+004	4.8586E+003
		1332.49	100.00	6.1742E+004		2.2439E+004
	Nb-94	702.63	100.00	6.1947E+004	5.93E+004	6.9769E+004
		871.10	100.00	5.9333E+004		6.3885E+003
	Ag-108m	79.20	7.10	2.2418E+006	7.37E+004	-3.2512E+006
		433.93	89.90	7.3698E+004		-2.7458E+004
		614.37	90.40	8.8185E+004		-2.8540E+004
		722.95	90.50	7.6415E+004		3.6359E+004
	Sb-125	176.33	6.89	1.1108E+006	2.24E+005	-1.0810E+006
		427.89	29.33	2.2408E+005		2.0600E+004
		463.38	10.35	6.6953E+005		3.5639E+004
		600.56	17.80	3.4627E+005		-2.4806E+004
		606.64	5.02	1.6247E+006		3.0927E+006
		635.90	11.32	5.1572E+005		3.7979E+005
	Cs-134	563.23	8.38	8.0244E+005	7.07E+004	2.3161E+005
		569.32	15.43	4.0758E+005		-4.8436E+005
		604.70	97.60	8.1733E+004		2.3527E+003
		795.84	85.40	7.0745E+004		-5.1986E+003
		801.93	8.73	6.9737E+005		-1.0265E+006
	Cs-137	661.65	85.12	7.9431E+004	7.94E+004	3.0524E+004
	Eu-152	121.78	28.40	3.5221E+005	2.43E+005	-1.7420E+005
		244.69	7.49	1.0952E+006		4.8108E+004
		344.27	26.50	2.4272E+005		-5.8465E+004
		778.89	12.74	5.2103E+005		-1.0130E+005
		867.32	4.16	1.4482E+006		-1.7042E+006
		964.01	14.40	5.8478E+005		-1.6777E+005
		1085.78	10.00	5.7348E+005		-2.1209E+005
		1112.02	13.30	4.9018E+005		2.0718E+005
		1407.95	20.70	2.6537E+005		1.5268E+005
	Eu-154	123.07	40.50	2.4630E+005	1.72E+005	-9.8998E+004
		247.94	6.60	1.1489E+006		-2.0851E+006
		591.81	4.83	1.4027E+006		1.6870E+006
		723.30	19.70	3.4982E+005		1.9633E+005
		756.87	4.33	1.3929E+006		-2.0312E+005
		873.19	11.50	5.3360E+005		3.5690E+005
		996.32	10.30	6.0265E+005		-2.4708E+005
		1004.76	17.90	3.3783E+005		-2.9999E+004
		1274.45	35.50	1.7155E+005		-1.1820E+005
+	Eu-155	86.54*	30.90	3.1442E+005	3.14E+005	2.9943E+005
		105.31	20.70	5.3048E+005		-3.6233E+005
	Am-241	59.54	35.90	4.9045E+005	4.90E+005	-9.7830E+004
	Cm-243	228.19	10.56	7.1983E+005	5.37E+005	5.8248E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3690E+005	5.37E+005	3.8284E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 11:32:18 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-138-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 11:17:14 AM
Live Time: 900.0 seconds
Real Time: 900.9 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-138-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.86	72.92	0.87	1.94E+002	41.78	4.75E+002
m	2	285-	305	300.48	75.08	0.88	3.01E+002	49.81	5.37E+002
F	3	334-	348	339.47	84.83	0.97	1.11E+002	41.03	6.18E+002
F	4	944-	959	954.49	238.60	0.94	1.29E+002	29.53	1.55E+002
F	5	1349-	1358	1352.98	338.23	0.77	2.86E+001	15.90	4.39E+001
F	6	1402-	1415	1407.97	351.97	1.19	8.56E+001	22.05	5.75E+001
F	7	2244-	2256	2249.64	562.41	1.16	2.07E+001	12.74	2.46E+001
F	8	2324-	2343	2332.91	583.23	1.39	8.04E+001	21.11	6.14E+001
F	9	2428-	2447	2437.15	609.29	1.49	1.13E+002	22.75	4.20E+001
F	10	2904-	2916	2909.64	727.42	1.15	2.84E+001	13.98	2.33E+001
F	11	3638-	3654	3645.07	911.29	1.25	6.33E+001	17.83	2.13E+001
F	12	3868-	3886	3876.38	969.13	1.71	5.97E+001	17.12	2.08E+001
F	13	5833-	5859	5846.39	1461.67	1.96	4.53E+002	41.69	1.66E+001
F	14	7055-	7068	7061.32	1765.43	2.04	2.64E+001	10.84	3.67E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.978	1460.81*	10.67	6.82429E+006	8.36641E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.08748E+005	3.19745E+004
		860.37	12.46		
Bi-212	0.998	727.17*	11.80	2.97940E+005	1.50869E+005
Pb-212	0.496	74.81* @	10.70	2.65000E+006	6.79692E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.36419E+005	6.56305E+004
Bi-214	0.699	609.31*	46.30	2.82644E+005	6.69661E+004
		1120.29	15.10		
		1764.49*	15.80	2.86443E+005	1.21086E+005
Ac-228	0.999	338.32*	11.40	2.31504E+005	1.33640E+005
		911.07*	27.70	3.05882E+005	9.30331E+004
		969.11*	16.60	4.94776E+005	1.51045E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.978	6.824293E+006	8.366408E+005
TL-208		0.470	1.087479E+005	3.197445E+004
Bi-212		0.998	2.979402E+005	1.508687E+005
Pb-212	@	0.496	2.364187E+005	6.563055E+004
Bi-214		0.699	2.835337E+005	5.860128E+004
Ac-228		0.999	3.249894E+005	6.814209E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.92	2.1566E-001	21.53
F	3	84.83	1.2294E-001	37.08
F	6	351.97	9.5086E-002	25.77
F	7	562.41	2.2979E-002	61.59

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7157E+004	5.70E+004	1.7160E+004
	1332.49	100.00	5.6979E+004		7.1332E+004
Nb-94	702.63	100.00	6.3584E+004	5.48E+004	2.8032E+004
	871.10	100.00	5.4780E+004		-3.4562E+004
Ag-108m	79.20	7.10	2.2449E+006	7.21E+004	-2.8505E+006
	433.93	89.90	7.2136E+004		2.6252E+004
	614.37	90.40	9.0894E+004		7.0757E+003
	722.95	90.50	7.9406E+004		-6.7702E+003
Sb-125	176.33	6.89	1.1233E+006	2.09E+005	-7.7168E+004
	427.89	29.33	2.0878E+005		6.2882E+004
	463.38	10.35	6.1848E+005		1.2017E+005
	600.56	17.80	3.8041E+005		2.1837E+005
	606.64	5.02	1.7453E+006		2.4882E+006
	635.90	11.32	5.4158E+005		-4.1978E+005
Cs-134	563.23	8.38	7.3337E+005	7.50E+004	-9.2332E+004
	569.32	15.43	3.7973E+005		-9.4516E+004
	604.70	97.60	8.9122E+004		2.9859E+004
	795.84	85.40	7.4961E+004		4.8894E+004
	801.93	8.73	6.9737E+005		-5.3652E+005
Cs-137	661.65	85.12	6.9382E+004	6.94E+004	1.7157E+004
Eu-152	121.78	28.40	3.4540E+005	2.35E+005	-2.0303E+005
	244.69	7.49	1.0317E+006		-1.5206E+006
	344.27	26.50	2.3638E+005		-3.3976E+004
	778.89	12.74	5.0785E+005		-7.3355E+004
	867.32	4.16	1.4402E+006		-1.2887E+006
	964.01	14.40	5.5032E+005		1.2336E+005
	1085.78	10.00	6.2602E+005		-1.9490E+005
	1112.02	13.30	4.3257E+005		-4.5657E+005
	1407.95	20.70	2.3484E+005		-9.6232E+004
Eu-154	123.07	40.50	2.4392E+005	1.45E+005	1.3646E+005
	247.94	6.60	1.1641E+006		7.2291E+005
	591.81	4.83	1.3469E+006		1.3643E+005
	723.30	19.70	3.6239E+005		4.5685E+005
	756.87	4.33	1.2996E+006		1.5941E+005
	873.19	11.50	4.5386E+005		-7.3856E+005
	996.32	10.30	5.7397E+005		4.5008E+005
	1004.76	17.90	3.0718E+005		-3.3184E+004
	1274.45	35.50	1.4529E+005		-1.0958E+005
Eu-155	86.54	30.90	4.5649E+005	4.56E+005	5.7757E+005
	105.31	20.70	5.4348E+005		-8.2196E+004
Am-241	59.54	35.90	4.7866E+005	4.79E+005	-5.2121E+005
Cm-243	228.19	10.56	6.7900E+005	5.14E+005	-6.4490E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1352E+005	5.14E+005	9.3540E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 11:55:44 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-139-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 11:40:42 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-139-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	249-	260	253.07	63.23	1.03	8.10E+001	36.09	3.71E+002
M	2	282-	305	291.26	72.77	0.81	1.53E+002	39.52	4.39E+002
m	3	282-	305	300.38	75.05	0.81	2.17E+002	47.51	5.47E+002
M	4	333-	354	339.40	84.81	1.30	2.05E+002	43.00	5.22E+002
m	5	333-	354	349.91	87.44	1.31	8.69E+001	36.17	5.61E+002
F	6	948-	962	954.40	238.57	1.13	1.31E+002	30.79	1.90E+002
F	7	1346-	1359	1353.55	338.37	1.28	4.40E+001	19.08	7.00E+001
F	8	1400-	1413	1407.28	351.80	1.25	8.14E+001	21.95	6.30E+001
F	9	2035-	2052	2042.33	510.58	1.32	6.91E+001	21.49	7.87E+001
F	10	2325-	2341	2332.60	583.15	1.49	7.05E+001	19.27	3.87E+001
F	11	2427-	2446	2437.18	609.30	1.63	1.22E+002	22.92	3.75E+001
F	12	3636-	3653	3644.64	911.19	1.69	6.72E+001	17.29	1.33E+001
F	13	3868-	3882	3875.28	968.85	1.49	3.50E+001	14.24	1.88E+001
F	14	4475-	4488	4481.59	1120.44	0.96	1.64E+001	9.80	1.93E+001
F	15	5834-	5859	5846.30	1461.65	2.00	4.57E+002	42.19	2.56E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*		100.00	7.45054E+004	2.54326E+004
K-40	0.979	1460.81*		10.67	6.88364E+006	8.45500E+005
Eu-155	0.329	86.54*		30.90	2.26853E+005	1.04353E+005
		105.31		20.70		
TL-208	0.752	277.35		6.80		
		510.84*		21.60	3.44932E+005	1.21066E+005
		583.14*		84.20	9.53289E+004	2.89588E+004
		860.37		12.46		
Pb-212	0.658	74.81*	@	10.70	1.90994E+006	5.61316E+005
		77.11	@	18.00		
		87.30*	@	8.00	8.76218E+005	4.03063E+005
		238.63*		44.60	2.39689E+005	6.78295E+004
Bi-214	0.714	609.31*		46.30	3.06166E+005	6.89087E+004
		1120.29*		15.10	1.59753E+005	9.67546E+004
		1764.49		15.80		
Ac-228	0.999	338.32*		11.40	3.55615E+005	1.64124E+005
		911.07*		27.70	3.24647E+005	9.14941E+004
		969.11*		16.60	2.89629E+005	1.21814E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	5.391432E+004	2.618191E+004
K-40		0.979	6.883642E+006	8.455003E+005
Eu-155		0.329	1.647973E+005	1.058202E+005
TL-208		0.752	9.532890E+004	2.879171E+004
Pb-212	@	0.658	2.396886E+005	6.782952E+004
Bi-214		0.714	2.568936E+005	5.612858E+004
Ac-228		0.999	3.192434E+005	6.681926E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	63.23	9.0014E-002	44.55
M	2	72.77	1.7041E-001	25.77
M	4	84.81	2.2757E-001	21.00
F	8	351.80	9.0445E-002	26.96

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.8301E+004	4.39E+004	4.1937E+004
		1332.49	100.00	4.3913E+004		2.5988E+004
	Nb-94	702.63	100.00	5.9402E+004	5.66E+004	-4.0150E+004
		871.10	100.00	5.6577E+004		-1.9736E+003
	Ag-108m	79.20	7.10	2.2364E+006	6.83E+004	-1.8274E+006
		433.93	89.90	6.8277E+004		-7.1255E+004
		614.37	90.40	8.6689E+004		-1.8977E+004
		722.95	90.50	7.3872E+004		9.8319E+004
	Sb-125	176.33	6.89	1.1446E+006	2.01E+005	-1.1287E+005
		427.89	29.33	2.0100E+005		7.5887E+004
		463.38	10.35	5.9982E+005		1.0455E+005
		600.56	17.80	3.2632E+005		1.5094E+005
		606.64	5.02	1.6284E+006		2.3053E+006
		635.90	11.32	5.1087E+005		1.7790E+005
	Cs-134	563.23	8.38	7.3615E+005	7.39E+004	1.1138E+005
		569.32	15.43	3.8452E+005		-4.7687E+005
		604.70	97.60	8.3454E+004		-1.8727E+002
		795.84	85.40	7.3931E+004		4.8637E+004
		801.93	8.73	6.7945E+005		-1.0198E+006
	Cs-137	661.65	85.12	7.2582E+004	7.26E+004	4.4455E+003
	Eu-152	121.78	28.40	3.4459E+005	2.38E+005	7.5320E+004
		244.69	7.49	9.5249E+005		-1.1824E+006
		344.27	26.50	2.3754E+005		-7.6700E+004
		778.89	12.74	4.5358E+005		-1.0836E+005
		867.32	4.16	1.3998E+006		-1.0051E+006
		964.01	14.40	5.1744E+005		1.8932E+005
		1085.78	10.00	5.6060E+005		-7.1173E+005
		1112.02	13.30	4.6384E+005		-3.7338E+004
		1407.95	20.70	2.4070E+005		-1.3218E+005
	Eu-154	123.07	40.50	2.3923E+005	1.84E+005	6.5855E+004
		247.94	6.60	1.0428E+006		-1.5243E+006
		591.81	4.83	1.2167E+006		9.2664E+005
		723.30	19.70	3.3809E+005		2.2900E+005
		756.87	4.33	1.5056E+006		2.8945E+005
		873.19	11.50	4.8618E+005		-5.4806E+005
		996.32	10.30	5.4367E+005		2.8024E+005
		1004.76	17.90	3.2070E+005		2.1702E+004
		1274.45	35.50	1.8377E+005		9.6196E+003
+	Eu-155	86.54*	30.90	2.9479E+005	2.95E+005	2.2685E+005
		105.31	20.70	5.4748E+005		3.8105E+005
	Am-241	59.54	35.90	5.0511E+005	5.05E+005	-6.2996E+004
	Cm-243	228.19	10.56	6.8755E+005	5.07E+005	-2.2284E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0687E+005	5.07E+005	-2.2272E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 1:43:42 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-140-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 1:28:41 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-140-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	305	292.37	73.05	0.92	1.50E+002	40.26	5.09E+002
m	2	283-	305	300.17	75.00	0.92	3.38E+002	52.33	6.04E+002
F	3	334-	344	339.39	84.81	0.89	1.77E+002	43.21	4.22E+002
F	4	947-	959	954.46	238.59	1.07	1.42E+002	30.03	1.28E+002
F	5	1171-	1187	1180.57	295.12	1.23	4.55E+001	20.86	1.17E+002
F	6	1402-	1414	1407.17	351.77	0.98	7.17E+001	22.46	8.02E+001
F	7	2325-	2341	2332.70	583.17	1.22	7.92E+001	20.44	4.25E+001
F	8	2428-	2445	2436.07	609.02	1.57	7.27E+001	19.74	4.54E+001
F	9	2902-	2915	2908.33	727.09	1.35	3.17E+001	14.01	1.97E+001
F	10	3638-	3651	3644.88	911.25	1.25	6.34E+001	18.12	2.23E+001
F	11	3869-	3882	3875.86	969.00	1.10	4.77E+001	16.15	2.27E+001
F	12	4476-	4489	4482.63	1120.70	1.36	3.16E+001	15.03	2.56E+001
F	13	5830-	5859	5845.86	1461.54	2.22	5.19E+002	43.81	7.11E+000
F	14	7058-	7071	7064.48	1766.22	0.99	1.96E+001	11.05	1.52E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.984	1460.81*		10.67	7.82529E+006	9.14953E+005
TL-208	0.471	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	1.07141E+005	3.10669E+004
		860.37		12.46		
Bi-212	1.000	727.17*		11.80	3.33145E+005	1.52138E+005
Pb-212	0.496	74.81*	@	10.70	2.97416E+006	7.43201E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.60047E+005	6.85317E+004
Bi-214	0.980	609.31*		46.30	1.81987E+005	5.43783E+004
		1120.29*		15.10	3.07189E+005	1.49638E+005
		1764.49*		15.80	2.13229E+005	1.21864E+005
PB-214	0.564	74.82*	@	6.21	5.12455E+006	1.33350E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.08543E+005	1.01850E+005
		351.92*		37.20	1.80046E+005	6.39677E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	3.06028E+005	9.43351E+004
		969.11*		16.60	3.95242E+005	1.40083E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.984	7.825285E+006	9.149530E+005
TL-208		0.471	1.071414E+005	3.106685E+004
Bi-212		1.000	3.331450E+005	1.521376E+005
Pb-212	@	0.496	2.600466E+005	6.853171E+004
Bi-214		0.980	1.990806E+005	4.713119E+004
PB-214	@	0.564	1.881070E+005	5.416994E+004
Ac-228		0.619	3.338634E+005	7.824664E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.05	1.6658E-001	26.86
F 3	84.81	1.9642E-001	24.45

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9796E+004	5.55E+004	-5.4819E+003
	1332.49	100.00	5.5464E+004		-1.2540E+004
Nb-94	702.63	100.00	6.0263E+004	5.93E+004	1.7136E+003
	871.10	100.00	5.9333E+004		1.6792E+004
Ag-108m	79.20	7.10	2.2067E+006	7.44E+004	-3.0783E+006
	433.93	89.90	7.5226E+004		8.0142E+003
	614.37	90.40	8.1113E+004		-1.8900E+004
	722.95	90.50	7.4445E+004		4.1412E+003
Sb-125	176.33	6.89	1.1557E+006	2.11E+005	3.3240E+005
	427.89	29.33	2.1130E+005		-9.9710E+004
	463.38	10.35	5.9601E+005		4.4310E+005
	600.56	17.80	3.6637E+005		2.9719E+005
	606.64	5.02	1.5949E+006		1.7420E+006
	635.90	11.32	5.2528E+005		-1.7925E+005
Cs-134	563.23	8.38	7.0490E+005	7.11E+004	-1.1726E+005
	569.32	15.43	4.0157E+005		5.3694E+004
	604.70	97.60	8.2502E+004		2.4245E+004
	795.84	85.40	7.1106E+004		-2.3347E+004
	801.93	8.73	6.7580E+005		-7.6315E+005
Cs-137	661.65	85.12	7.6827E+004	7.68E+004	4.6312E+002
Eu-152	121.78	28.40	3.5102E+005	2.54E+005	-7.1096E+005
	244.69	7.49	1.0238E+006		-1.6281E+006
	344.27	26.50	2.5438E+005		-2.9017E+005
	778.89	12.74	5.0113E+005		3.2279E+004
	867.32	4.16	1.4080E+006		-1.4541E+006
	964.01	14.40	5.2537E+005		-5.2929E+004
	1085.78	10.00	6.0639E+005		2.5753E+005
	1112.02	13.30	4.8733E+005		-1.6582E+005
	1407.95	20.70	2.7052E+005		-3.1418E+004
Eu-154	123.07	40.50	2.4644E+005	1.62E+005	-1.7419E+005
	247.94	6.60	1.0777E+006		-2.1646E+006
	591.81	4.83	1.3132E+006		1.4060E+005
	723.30	19.70	3.3809E+005		1.0101E+005
	756.87	4.33	1.3998E+006		1.7738E+004
	873.19	11.50	5.1047E+005		-8.5879E+003
	996.32	10.30	4.9448E+005		-2.0398E+005
	1004.76	17.90	3.4606E+005		1.6199E+005
	1274.45	35.50	1.6241E+005		-1.3568E+005
Eu-155	86.54	30.90	4.5966E+005	4.60E+005	8.6569E+005
	105.31	20.70	5.3864E+005		-2.7124E+005
Am-241	59.54	35.90	4.9342E+005	4.93E+005	5.8982E+004
Cm-243	228.19	10.56	7.3587E+005	4.93E+005	-4.5885E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9330E+005	4.93E+005	1.9452E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 2:06:43 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-141-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 1:51:41 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-141-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	306	291.37	72.80	0.93	1.37E+002	40.16	5.11E+002
m	2	283-	306	300.40	75.06	0.93	3.01E+002	51.45	5.68E+002
M	3	946-	971	954.63	238.63	0.97	1.47E+002	29.67	1.26E+002
m	4	946-	971	965.19	241.27	0.98	4.24E+001	20.04	1.19E+002
F	5	1344-	1360	1352.85	338.19	1.49	6.48E+001	21.49	9.88E+001
F	6	1400-	1413	1407.07	351.75	1.18	7.89E+001	22.70	7.80E+001
F	7	2034-	2055	2044.02	511.00	2.28	1.42E+002	23.80	5.40E+001
F	8	2322-	2340	2332.49	583.12	1.41	1.03E+002	22.43	4.76E+001
F	9	2427-	2446	2436.58	609.15	1.44	8.98E+001	21.80	5.97E+001
F	10	3636-	3653	3645.78	911.47	1.53	8.34E+001	19.70	2.48E+001
F	11	3870-	3884	3876.93	969.26	1.32	3.21E+001	15.57	3.00E+001
F	12	4476-	4491	4482.80	1120.74	1.53	5.08E+001	15.47	1.13E+001
F	13	5832-	5858	5845.51	1461.45	2.02	4.68E+002	42.23	1.69E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.53347E+005	3.34998E+004
K-40	0.988	1460.81*		10.67	7.05548E+006	8.55099E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	7.09938E+005	1.65574E+005
		583.14*		84.20	1.39820E+005	3.55379E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.64971E+006	6.89082E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.69521E+005	6.89004E+004
Bi-214	0.712	609.31*		46.30	2.24875E+005	6.13538E+004
		1120.29*		15.10	4.93633E+005	1.59251E+005
		1764.49		15.80		
PB-214	0.345	74.82*	@	6.21	4.56552E+006	1.23270E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	4.64615E+005	2.32852E+005
		295.21		19.20		
		351.92*		37.20	1.98209E+005	6.59548E+004
Ac-228	0.997	338.32*		11.40	5.24313E+005	1.92285E+005
		911.07*		27.70	4.02982E+005	1.05849E+005
		969.11*		16.60	2.65870E+005	1.31938E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	1.231454E+005	3.435388E+004
K-40		0.988	7.055482E+006	8.550990E+005
TL-208		0.753	1.398202E+005	3.524461E+004
Pb-212	@	0.496	2.695214E+005	6.890035E+004
Bi-214		0.712	2.596108E+005	5.725184E+004
PB-214	@	0.345	2.179946E+005	6.345828E+004
Ac-228		0.997	3.765353E+005	7.586532E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.80	1.5181E-001	29.39

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9796E+004	6.31E+004	-6.2308E+003
	1332.49	100.00	6.3096E+004		-3.2216E+004
Nb-94	702.63	100.00	6.6474E+004	5.90E+004	-1.4382E+004
	871.10	100.00	5.8996E+004		-6.9013E+004
Ag-108m	79.20	7.10	2.2185E+006	7.27E+004	-2.6492E+006
	433.93	89.90	7.2726E+004		-1.4875E+004
	614.37	90.40	9.0689E+004		8.5951E+003
	722.95	90.50	8.3305E+004		9.9567E+004
Sb-125	176.33	6.89	1.1312E+006	2.08E+005	1.2318E+004
	427.89	29.33	2.0814E+005		-1.5487E+005
	463.38	10.35	6.2578E+005		-4.3741E+004
	600.56	17.80	3.7282E+005		-1.3110E+005
	606.64	5.02	1.6357E+006		1.5999E+006
	635.90	11.32	5.4158E+005		3.1184E+005
Cs-134	563.23	8.38	7.0780E+005	7.39E+004	-4.3709E+005
	569.32	15.43	3.8293E+005		-4.0023E+005
	604.70	97.60	8.3832E+004		-2.5410E+004
	795.84	85.40	7.3931E+004		4.7561E+004
	801.93	8.73	7.4184E+005		-5.9393E+004
Cs-137	661.65	85.12	7.7705E+004	7.77E+004	-1.5421E+004
Eu-152	121.78	28.40	3.5694E+005	2.38E+005	-1.9840E+005
	244.69	7.49	1.0251E+006		-1.4773E+005
	344.27	26.50	2.5220E+005		-7.6786E+004
	778.89	12.74	5.3808E+005		-6.1904E+005
	867.32	4.16	1.4482E+006		-9.1240E+005
	964.01	14.40	5.4277E+005		1.3812E+005
	1085.78	10.00	6.1825E+005		7.5960E+004
	1112.02	13.30	4.4850E+005		-1.6279E+005
	1407.95	20.70	2.3779E+005		-1.8405E+005
Eu-154	123.07	40.50	2.4893E+005	1.60E+005	-2.1398E+005
	247.94	6.60	1.0629E+006		-7.5985E+005
	591.81	4.83	1.3563E+006		-3.1719E+005
	723.30	19.70	3.8276E+005		3.7018E+005
	756.87	4.33	1.5120E+006		-1.8442E+005
	873.19	11.50	5.1047E+005		-6.8162E+005
	996.32	10.30	6.0265E+005		-1.5884E+005
	1004.76	17.90	3.8623E+005		6.4416E+004
	1274.45	35.50	1.5969E+005		1.9777E+004
Eu-155	86.54	30.90	4.5733E+005	4.57E+005	5.0767E+005
	105.31	20.70	5.5251E+005		-1.3762E+005
Am-241	59.54	35.90	4.8447E+005	4.84E+005	-1.0459E+004
Cm-243	228.19	10.56	7.3851E+005	4.78E+005	4.3877E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7844E+005	4.78E+005	-1.4919E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 3:23:07 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-142-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 3:08:06 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-142-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	305	291.83	72.92	1.01	2.07E+002	42.91	5.53E+002
m	2	282-	305	300.16	75.00	1.01	3.24E+002	50.95	6.24E+002
F	3	949-	959	954.34	238.56	1.03	1.23E+002	29.02	1.13E+002
F	4	1176-	1188	1180.63	295.13	0.88	4.23E+001	20.28	9.28E+001
F	5	1349-	1360	1353.58	338.37	0.84	3.72E+001	19.16	7.80E+001
F	6	1399-	1413	1407.65	351.89	1.32	1.19E+002	25.04	7.30E+001
F	7	2035-	2054	2044.08	511.01	2.02	9.85E+001	22.52	7.54E+001
F	8	2325-	2341	2332.90	583.23	1.70	9.87E+001	21.08	3.20E+001
F	9	2429-	2446	2437.09	609.28	1.30	1.14E+002	23.58	4.76E+001
F	10	2904-	2917	2909.78	727.46	1.34	2.96E+001	14.23	2.39E+001
F	11	3636-	3652	3644.56	911.17	1.33	7.14E+001	19.26	2.76E+001
F	12	3871-	3882	3876.28	969.10	0.79	2.25E+001	12.93	2.83E+001
F	13	4476-	4491	4482.73	1120.73	1.70	4.72E+001	15.83	1.42E+001
F	14	5834-	5860	5846.17	1461.61	2.04	4.88E+002	42.52	3.05E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	1.06336E+005	2.85110E+004
K-40	0.981	1460.81*		10.67	7.35713E+006	8.74877E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	4.92298E+005	1.37982E+005
		583.14*		84.20	1.33511E+005	3.35430E+004
		860.37		12.46		
Bi-212	0.998	727.17*		11.80	3.11073E+005	1.53796E+005
Pb-212	0.496	74.81*	@	10.70	2.85491E+006	7.17342E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.26053E+005	6.39508E+004
Bi-214	0.713	609.31*		46.30	2.86730E+005	6.90194E+004
		1120.29*		15.10	4.58861E+005	1.61407E+005
		1764.49		15.80		
PB-214	0.564	74.82*	@	6.21	4.91908E+006	1.28655E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.93808E+005	9.85338E+004
		351.92*		37.20	2.98878E+005	8.03562E+004
Ac-228	1.000	338.32*		11.40	3.01199E+005	1.62059E+005
		911.07*		27.70	3.44989E+005	1.01142E+005
		969.11*		16.60	1.86628E+005	1.08888E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	7.749808E+004	2.940214E+004
K-40		0.981	7.357132E+006	8.748770E+005
TL-208		0.753	1.335109E+005	3.325963E+004
Bi-212		0.998	3.110731E+005	1.537964E+005
Pb-212	@	0.496	2.260532E+005	6.395081E+004
Bi-214		0.713	3.133385E+005	6.346086E+004
PB-214	@	0.564	2.569105E+005	6.227346E+004
Ac-228		1.000	2.767532E+005	6.739364E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.92	2.2992E-001	20.74

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.1617E+004	6.08E+004	1.7607E+004
	1332.49	100.00	6.0822E+004		4.9624E+004
Nb-94	702.63	100.00	6.1947E+004	5.44E+004	3.9798E+004
	871.10	100.00	5.4413E+004		-1.6018E+003
Ag-108m	79.20	7.10	2.2216E+006	7.35E+004	-2.1732E+006
	433.93	89.90	7.3505E+004		-4.8730E+004
	614.37	90.40	8.8817E+004		-5.6029E+004
	722.95	90.50	7.5296E+004		-3.9146E+003
Sb-125	176.33	6.89	1.1142E+006	2.16E+005	-1.2078E+006
	427.89	29.33	2.1626E+005		-6.2736E+004
	463.38	10.35	6.4541E+005		1.4446E+005
	600.56	17.80	3.4627E+005		-2.5982E+005
	606.64	5.02	1.7107E+006		2.7235E+006
	635.90	11.32	5.2528E+005		-1.8176E+005
Cs-134	563.23	8.38	6.9612E+005	6.78E+004	2.1540E+005
	569.32	15.43	3.9699E+005		3.2658E+004
	604.70	97.60	8.7696E+004		-4.0101E+003
	795.84	85.40	6.7779E+004		1.1209E+004
	801.93	8.73	6.5347E+005		-5.2882E+005
Cs-137	661.65	85.12	8.1118E+004	8.11E+004	7.2082E+004
Eu-152	121.78	28.40	3.5458E+005	2.52E+005	-1.1976E+005
	244.69	7.49	1.0382E+006		-1.7023E+006
	344.27	26.50	2.5165E+005		5.7806E+004
	778.89	12.74	5.2320E+005		-6.0273E+005
	867.32	4.16	1.4161E+006		-9.6403E+005
	964.01	14.40	5.0119E+005		-1.8043E+005
	1085.78	10.00	6.2215E+005		-2.2142E+005
	1112.02	13.30	4.2271E+005		-4.0957E+005
	1407.95	20.70	2.5743E+005		-1.1442E+005
Eu-154	123.07	40.50	2.4824E+005	1.72E+005	-1.1382E+005
	247.94	6.60	1.0907E+006		-8.6925E+005
	591.81	4.83	1.2935E+006		1.4284E+006
	723.30	19.70	3.4336E+005		-6.8384E+004
	756.87	4.33	1.5495E+006		3.1736E+005
	873.19	11.50	4.7990E+005		2.9912E+005
	996.32	10.30	5.8128E+005		3.5404E+005
	1004.76	17.90	3.2290E+005		-2.0343E+005
	1274.45	35.50	1.7155E+005		1.1956E+005
Eu-155	86.54	30.90	4.6430E+005	4.64E+005	7.2932E+005
	105.31	20.70	5.5356E+005		-3.0505E+005
Am-241	59.54	35.90	5.1156E+005	5.12E+005	-5.5372E+005
Cm-243	228.19	10.56	7.0802E+005	4.95E+005	-3.5085E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9502E+005	4.95E+005	3.0576E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 3:47:20 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-143-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 3:32:18 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-143-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	314	291.83	72.92	1.00	2.07E+002	41.89	5.11E+002
m	2	282-	314	300.40	75.06	1.00	4.24E+002	52.18	5.21E+002
m	3	282-	314	309.55	77.35	1.01	1.18E+002	38.57	4.93E+002
F	4	333-	346	338.92	84.69	1.21	1.32E+002	43.18	5.79E+002
F	5	949-	961	954.56	238.61	1.06	1.41E+002	30.73	1.50E+002
F	6	1345-	1357	1353.13	338.26	0.65	2.79E+001	16.22	7.64E+001
F	7	1401-	1418	1408.32	352.06	1.91	7.63E+001	21.71	8.72E+001
F	8	1835-	1846	1841.22	460.29	0.85	1.78E+001	12.48	2.87E+001
F	9	2034-	2055	2043.29	510.82	1.91	1.11E+002	22.74	6.43E+001
F	10	2324-	2340	2332.19	583.05	1.18	6.59E+001	20.17	5.74E+001
F	11	2429-	2445	2436.91	609.23	1.12	1.07E+002	22.71	4.22E+001
F	12	3638-	3654	3645.26	911.34	1.55	6.20E+001	18.72	3.36E+001
F	13	5833-	5860	5846.19	1461.62	2.01	4.95E+002	43.24	1.31E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	1.19969E+005	2.97524E+004
K-40	0.981	1460.81*		10.67	7.45909E+006	8.88392E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.55413E+005	1.45019E+005
		583.14*		84.20	8.91898E+004	2.97251E+004
		860.37		12.46		
Pb-212	0.838	74.81*	@	10.70	3.73047E+006	8.63474E+005
		77.11*	@	18.00	5.98849E+005	2.28251E+005
		87.30	@	8.00		
		238.63*		44.60	2.58215E+005	6.94073E+004
Bi-214	0.419	609.31*		46.30	2.68236E+005	6.59552E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.395	74.82*	@	6.21	6.42771E+006	1.55924E+006
		77.11*	@	10.50	1.02660E+006	3.98725E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	1.91857E+005	6.32844E+004
Ac-228	0.546	338.32*		11.40	2.25746E+005	1.35875E+005
		911.07*		27.70	2.99627E+005	9.67898E+004
		969.11		16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	1.007042E+005	3.043080E+004
K-40		0.981	7.459090E+006	8.883915E+005
TL-208		0.753	8.918976E+004	2.958263E+004
Pb-212	@	0.838	2.582150E+005	6.940727E+004
Bi-214		0.419	2.682359E+005	6.595519E+004
PB-214	@	0.395	1.918567E+005	6.234319E+004
Ac-228		0.546	2.747572E+005	7.883340E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.92	2.2996E-001	20.24
F	4	84.69	1.4688E-001	32.66
F	8	460.29	1.9779E-002	70.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3184E+004	5.23E+004	3.0475E+003
	1332.49	100.00	5.2291E+004		1.9471E+003
Nb-94	702.63	100.00	6.5177E+004	6.20E+004	1.4678E+003
	871.10	100.00	6.1959E+004		4.3763E+004
Ag-108m	79.20	7.10	2.2741E+006	7.15E+004	-5.4569E+005
	433.93	89.90	7.1541E+004		4.1511E+003
	614.37	90.40	9.1303E+004		-4.4519E+004
	722.95	90.50	8.0989E+004		6.7225E+004
Sb-125	176.33	6.89	1.1612E+006	2.09E+005	6.4140E+005
	427.89	29.33	2.0941E+005		-1.0677E+005
	463.38	10.35	5.9218E+005		-2.1787E+005
	600.56	17.80	3.6767E+005		3.7242E+004
	606.64	5.02	1.7002E+006		1.3636E+006
	635.90	11.32	5.3466E+005		3.3243E+005
Cs-134	563.23	8.38	7.6071E+005	7.86E+004	3.0152E+005
	569.32	15.43	3.9236E+005		-2.9176E+005
	604.70	97.60	8.9298E+004		1.0566E+004
	795.84	85.40	7.8618E+004		5.5417E+004
	801.93	8.73	7.1826E+005		-5.9499E+005
Cs-137	661.65	85.12	7.2582E+004	7.26E+004	4.8385E+004
Eu-152	121.78	28.40	3.5772E+005	2.44E+005	-1.2118E+005
	244.69	7.49	1.0185E+006		-7.8454E+005
	344.27	26.50	2.4442E+005		-2.3203E+005
	778.89	12.74	4.6838E+005		-3.7351E+005
	867.32	4.16	1.5476E+006		-2.6941E+005
	964.01	14.40	5.3896E+005		3.2001E+005
	1085.78	10.00	6.1037E+005		-1.4629E+005
	1112.02	13.30	4.8157E+005		5.2016E+004
	1407.95	20.70	2.5199E+005		-2.8548E+005
Eu-154	123.07	40.50	2.4824E+005	1.68E+005	-7.8479E+004
	247.94	6.60	1.1225E+006		2.8481E+005
	591.81	4.83	1.3180E+006		-2.1060E+004
	723.30	19.70	3.7092E+005		4.1699E+005
	756.87	4.33	1.4270E+006		2.1013E+004
	873.19	11.50	5.4200E+005		2.2005E+005
	996.32	10.30	5.8490E+005		-3.1812E+005
	1004.76	17.90	3.3364E+005		1.0973E+005
	1274.45	35.50	1.6770E+005		2.1063E+004
Eu-155	86.54	30.90	4.6016E+005	4.60E+005	7.0467E+005
	105.31	20.70	5.4695E+005		-2.8791E+003
Am-241	59.54	35.90	4.9563E+005	4.96E+005	-3.8274E+005
Cm-243	228.19	10.56	7.1893E+005	5.05E+005	-4.7336E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0520E+005	5.05E+005	-4.2933E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:14:11 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-144-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 3:59:09 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-144-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	314	291.79	72.91	1.13	1.79E+002	42.70	5.20E+002
m	2	286-	314	300.49	75.08	1.14	4.47E+002	53.81	6.80E+002
m	3	286-	314	309.14	77.24	1.14	7.25E+001	38.16	6.00E+002
F	4	329-	343	338.85	84.67	0.88	9.34E+001	41.13	5.97E+002
F	5	948-	962	954.62	238.63	1.08	1.09E+002	29.13	1.84E+002
F	6	1400-	1415	1407.42	351.84	1.27	8.59E+001	22.37	7.43E+001
F	7	2034-	2054	2043.07	510.76	2.15	1.15E+002	22.34	5.45E+001
F	8	2325-	2340	2332.50	583.12	1.28	8.69E+001	21.93	5.41E+001
F	9	2428-	2446	2437.20	609.30	1.23	9.35E+001	22.75	6.17E+001
F	10	3638-	3653	3644.97	911.27	1.48	8.07E+001	19.74	2.18E+001
F	11	3871-	3885	3876.64	969.19	1.38	3.52E+001	15.23	2.63E+001
F	12	4477-	4490	4483.12	1120.82	0.86	1.76E+001	11.28	2.19E+001
F	13	4948-	4961	4955.03	1238.81	0.89	1.53E+001	10.95	2.03E+001
F	14	5833-	5858	5845.94	1461.56	1.96	4.79E+002	42.52	6.50E+000
F	15	7057-	7070	7063.20	1765.90	1.08	1.72E+001	9.62	7.00E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*		100.00	1.23990E+005	2.97242E+004
K-40	0.984	1460.81*		10.67	7.21363E+006	8.67002E+005
TL-208	0.753	277.35		6.80		
		510.84*		21.60	5.74029E+005	1.45378E+005
		583.14*		84.20	1.17582E+005	3.34989E+004
		860.37		12.46		
Pb-212	0.838	74.81*	@	10.70	3.93225E+006	9.04566E+005
		77.11*	@	18.00	3.68703E+005	2.06990E+005
		87.30	@	8.00		
		238.63*		44.60	2.00461E+005	6.19890E+004
Bi-214	0.986	609.31*		46.30	2.34084E+005	6.40133E+004
		1120.29*		15.10	1.71193E+005	1.11098E+005
		1764.49*		15.80	1.86641E+005	1.06120E+005
PB-214	0.395	74.82*	@	6.21	6.77538E+006	1.63436E+006
		77.11*	@	10.50	6.32062E+005	3.57965E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	2.15747E+005	6.67932E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	3.89670E+005	1.05373E+005
		969.11*		16.60	2.91819E+005	1.29802E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	9.859256E+004	3.058101E+004
K-40		0.984	7.213630E+006	8.670019E+005
TL-208		0.753	1.175821E+005	3.327902E+004
Pb-212	@	0.838	2.004613E+005	6.198900E+004
Bi-214		0.986	2.115928E+005	4.915572E+004
PB-214	@	0.395	2.157471E+005	6.566444E+004
Ac-228		0.619	3.507999E+005	8.180956E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	1.9881E-001	23.86
F 4	84.67	1.0376E-001	44.05
F 13	1238.81	1.6945E-002	71.82

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.7541E+004	5.44E+004	2.7736E+004
	1332.49	100.00	5.4429E+004		-3.6769E+004
Nb-94	702.63	100.00	6.4914E+004	5.87E+004	1.8316E+004
	871.10	100.00	5.8657E+004		-9.6001E+003
Ag-108m	79.20	7.10	2.2534E+006	7.67E+004	-2.5105E+005
	433.93	89.90	7.6722E+004		8.5918E+003
	614.37	90.40	9.7039E+004		-1.6599E+004
	722.95	90.50	7.8871E+004		-1.2595E+004
Sb-125	176.33	6.89	1.1633E+006	2.12E+005	6.4625E+005
	427.89	29.33	2.1193E+005		-7.5502E+004
	463.38	10.35	6.2578E+005		1.2473E+005
	600.56	17.80	3.6507E+005		-9.9150E+004
	606.64	5.02	1.7281E+006		1.5433E+006
	635.90	11.32	5.8764E+005		-2.0720E+005
Cs-134	563.23	8.38	7.2495E+005	7.50E+004	-1.1414E+006
	569.32	15.43	4.1350E+005		2.0131E+005
	604.70	97.60	8.6973E+004		7.8542E+002
	795.84	85.40	7.4961E+004		5.3636E+004
	801.93	8.73	6.7580E+005		-2.9645E+005
Cs-137	661.65	85.12	7.2269E+004	7.23E+004	-1.9264E+004
Eu-152	121.78	28.40	3.5869E+005	2.60E+005	-9.1591E+004
	244.69	7.49	1.0421E+006		-7.0241E+005
	344.27	26.50	2.6859E+005		-2.4286E+005
	778.89	12.74	5.0785E+005		-1.3301E+005
	867.32	4.16	1.4717E+006		-5.4577E+005
	964.01	14.40	5.3124E+005		-1.7271E+005
	1085.78	10.00	6.4127E+005		-7.6163E+005
	1112.02	13.30	4.9018E+005		-1.6768E+005
	1407.95	20.70	2.6011E+005		1.7472E+005
Eu-154	123.07	40.50	2.5330E+005	1.68E+005	2.7792E+005
	247.94	6.60	1.1131E+006		-1.0833E+006
	591.81	4.83	1.3325E+006		-6.4326E+005
	723.30	19.70	3.6729E+005		-3.2961E+004
	756.87	4.33	1.5433E+006		-1.5631E+006
	873.19	11.50	4.9237E+005		-8.1566E+004
	996.32	10.30	6.6555E+005		6.3535E+005
	1004.76	17.90	3.2939E+005		-1.3696E+005
	1274.45	35.50	1.6770E+005		-2.0614E+005
Eu-155	86.54	30.90	4.6578E+005	4.66E+005	-1.6315E+005
	105.31	20.70	5.4482E+005		-1.5675E+002
Am-241	59.54	35.90	5.0583E+005	5.06E+005	-1.4368E+005
Cm-243	228.19	10.56	7.2074E+005	5.31E+005	-4.9442E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.3136E+005	5.31E+005	3.4998E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:43:54 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-145-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 4:28:52 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-145-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.68	72.88	0.89	1.91E+002	43.05	5.16E+002
m	2	285-	305	300.64	75.12	0.89	2.97E+002	51.55	6.04E+002
F	3	330-	346	339.05	84.72	1.01	1.38E+002	42.80	6.77E+002
F	4	949-	961	954.82	238.68	0.95	1.53E+002	30.92	1.41E+002
F	5	1176-	1187	1180.72	295.16	0.67	3.68E+001	18.79	9.30E+001
F	6	1347-	1357	1352.42	338.09	0.79	2.50E+001	17.21	6.78E+001
F	7	1402-	1416	1406.44	351.59	1.14	6.24E+001	22.69	1.00E+002
F	8	2035-	2050	2042.58	510.64	1.30	7.46E+001	23.19	9.32E+001
F	9	2326-	2340	2332.39	583.10	1.16	8.67E+001	22.55	5.58E+001
F	10	2427-	2445	2436.83	609.21	1.33	9.25E+001	22.69	6.67E+001
F	11	3636-	3653	3644.62	911.18	1.39	6.39E+001	18.17	2.72E+001
F	12	5833-	5858	5845.82	1461.53	1.92	4.77E+002	42.52	6.50E+000
F	13	7056-	7070	7063.48	1765.97	0.94	3.16E+001	11.70	5.09E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*	100.00	8.04352E+004	2.74460E+004
K-40	0.985	1460.81*	10.67	7.19176E+006	8.65760E+005
TL-208	0.753	277.35	6.80		
		510.84*	21.60	3.72385E+005	1.30654E+005
		583.14*	84.20	1.17339E+005	3.42272E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.61627E+006	6.84502E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.80456E+005	7.17660E+004
Bi-214	0.691	609.31*	46.30	2.31659E+005	6.37363E+004
		1120.29	15.10		
		1764.49*	15.80	3.43377E+005	1.31612E+005
PB-214	0.563	74.82* @	6.21	4.50790E+006	1.22397E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.68505E+005	9.06910E+004
		351.92*	37.20	1.56690E+005	6.27440E+004
Ac-228	0.546	338.32*	11.40	2.02357E+005	1.42740E+005
		911.07*	27.70	3.08631E+005	9.46859E+004
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	5.508999E+004	2.841231E+004
K-40		0.985	7.191755E+006	8.657601E+005
TL-208		0.753	1.173390E+005	3.401287E+004
Pb-212	@	0.496	2.804564E+005	7.176599E+004
Bi-214		0.691	2.528817E+005	5.736375E+004
PB-214	@	0.563	1.605147E+005	5.159883E+004
Ac-228		0.546	2.761567E+005	7.890418E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	2.1246E-001	22.51
F 3	84.72	1.5313E-001	31.05

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9425E+004	5.39E+004	1.5220E+004
	1332.49	100.00	5.3903E+004		3.1594E+004
Nb-94	702.63	100.00	6.4385E+004	6.35E+004	1.3188E+004
	871.10	100.00	6.3542E+004		2.4081E+004
Ag-108m	79.20	7.10	2.2565E+006	7.76E+004	-2.4194E+006
	433.93	89.90	7.7642E+004		-1.6779E+004
	614.37	90.40	9.0689E+004		3.3101E+003
	722.95	90.50	7.8332E+004		-3.0458E+004
Sb-125	176.33	6.89	1.2282E+006	2.27E+005	5.8773E+005
	427.89	29.33	2.2701E+005		3.8089E+004
	463.38	10.35	6.7793E+005		-2.1999E+004
	600.56	17.80	3.6767E+005		-3.4397E+005
	606.64	5.02	1.7623E+006		3.9703E+006
	635.90	11.32	5.5292E+005		-5.3265E+004
Cs-134	563.23	8.38	7.7664E+005	7.76E+004	-4.4772E+005
	569.32	15.43	4.3075E+005		-9.7884E+003
	604.70	97.60	8.9826E+004		1.1602E+002
	795.84	85.40	7.7638E+004		6.2910E+004
	801.93	8.73	7.2846E+005		-6.3357E+005
Cs-137	661.65	85.12	8.1947E+004	8.19E+004	6.7857E+004
Eu-152	121.78	28.40	3.7449E+005	2.32E+005	2.7637E+004
	244.69	7.49	1.0264E+006		-3.2931E+005
	344.27	26.50	2.7165E+005		-9.4535E+004
	778.89	12.74	5.0785E+005		-2.7256E+005
	867.32	4.16	1.5102E+006		-8.0073E+005
	964.01	14.40	5.4844E+005		4.9258E+005
	1085.78	10.00	6.6706E+005		-4.7285E+005
	1112.02	13.30	5.2575E+005		2.9395E+005
	1407.95	20.70	2.3184E+005		8.1070E+004
Eu-154	123.07	40.50	2.6287E+005	1.73E+005	-3.2381E+004
	247.94	6.60	1.1210E+006		-9.3539E+005
	591.81	4.83	1.3034E+006		9.2269E+003
	723.30	19.70	3.6115E+005		2.1395E+004
	756.87	4.33	1.5433E+006		2.8966E+005
	873.19	11.50	5.6108E+005		-4.1222E+005
	996.32	10.30	6.2661E+005		-3.5401E+005
	1004.76	17.90	3.6768E+005		-3.7909E+005
	1274.45	35.50	1.7281E+005		-4.3788E+004
Eu-155	86.54	30.90	4.6594E+005	4.66E+005	1.6606E+005
	105.31	20.70	5.4881E+005		-3.8168E+005
Am-241	59.54	35.90	4.9954E+005	5.00E+005	-1.2807E+005
Cm-243	228.19	10.56	7.4026E+005	5.28E+005	-3.3076E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2816E+005	5.28E+005	-2.2723E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 5:12:46 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-146-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 4:57:45 PM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-146-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	316	292.44	73.07	1.08	2.03E+002	45.67	5.31E+002
m	2	287-	316	300.61	75.11	1.08	3.81E+002	52.07	6.87E+002
m	3	287-	316	308.17	77.00	1.08	1.26E+002	40.41	6.24E+002
F	4	948-	960	954.34	238.56	1.19	1.64E+002	30.51	1.19E+002
F	5	1176-	1187	1180.87	295.19	1.01	4.05E+001	21.39	9.75E+001
F	6	1398-	1413	1407.33	351.81	0.96	5.52E+001	20.29	8.60E+001
F	7	2033-	2053	2042.39	510.59	2.24	1.09E+002	21.33	5.08E+001
F	8	2325-	2341	2333.32	583.33	1.29	5.90E+001	18.20	4.00E+001
F	9	2429-	2444	2436.34	609.09	1.37	1.10E+002	22.27	2.59E+001
F	10	3638-	3652	3643.99	911.03	1.48	5.17E+001	17.81	2.97E+001
F	11	3869-	3884	3876.41	969.13	2.00	4.90E+001	15.20	1.24E+001
F	12	3979-	3990	3984.56	996.18	1.03	1.12E+001	8.28	1.07E+001
F	13	5833-	5858	5846.15	1461.61	1.88	3.50E+002	37.08	2.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*	100.00	1.17206E+005	2.82880E+004
K-40	0.981	1460.81*	10.67	5.27818E+006	7.03450E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	5.42622E+005	1.38257E+005
		583.14*	84.20	7.97714E+004	2.67894E+004
		860.37	12.46		
Pb-212	0.838	74.81* @	10.70	3.34951E+006	8.00506E+005
		77.11* @	18.00	6.40691E+005	2.41299E+005
		87.30 @	8.00		
		238.63*	44.60	3.00030E+005	7.31105E+004
Bi-214	0.418	609.31*	46.30	2.74760E+005	6.54301E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.760	74.82* @	6.21	5.77130E+006	1.44152E+006
		77.11* @	10.50	1.09833E+006	4.21706E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.85580E+005	1.02916E+005
		351.92*	37.20	1.38625E+005	5.60009E+004
Ac-228	0.620	338.32	11.40		
		911.07*	27.70	2.49505E+005	9.06877E+004
		969.11*	16.60	4.05624E+005	1.32900E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	9.997563E+004	2.886832E+004
K-40		0.981	5.278180E+006	7.034500E+005
TL-208		0.752	7.977142E+004	2.666300E+004
Pb-212	@	0.838	3.000297E+005	7.311047E+004
Bi-214		0.418	2.747603E+005	6.543013E+004
PB-214	@	0.760	1.493523E+005	4.919002E+004
Ac-228		0.620	2.991045E+005	7.490923E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.07	2.2546E-001	22.51
F 12	996.18	1.2476E-002	73.76

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6771E+004	4.89E+004	2.6072E+004
	1332.49	100.00	4.8893E+004		5.9747E+003
Nb-94	702.63	100.00	5.8821E+004	5.66E+004	4.1311E+004
	871.10	100.00	5.6577E+004		4.8244E+003
Ag-108m	79.20	7.10	2.4009E+006	6.63E+004	1.6346E+005
	433.93	89.90	7.2333E+004		3.4119E+004
	614.37	90.40	8.7760E+004		-1.2873E+004
	722.95	90.50	6.6270E+004		1.6890E+004
Sb-125	176.33	6.89	1.1882E+006	2.03E+005	-1.1831E+005
	427.89	29.33	2.0298E+005		1.5897E+003
	463.38	10.35	6.3656E+005		4.8012E+005
	600.56	17.80	3.3787E+005		1.6659E+005
	606.64	5.02	1.6247E+006		2.5848E+006
	635.90	11.32	4.9601E+005		1.0022E+005
Cs-134	563.23	8.38	7.0780E+005	7.00E+004	2.7769E+005
	569.32	15.43	3.8610E+005		1.1400E+005
	604.70	97.60	8.3832E+004		-3.7219E+003
	795.84	85.40	7.0016E+004		6.7369E+004
	801.93	8.73	6.4200E+005		-6.8799E+005
Cs-137	661.65	85.12	6.8057E+004	6.81E+004	4.2431E+004
Eu-152	121.78	28.40	3.7449E+005	2.35E+005	1.1925E+005
	244.69	7.49	1.0627E+006		-7.2879E+005
	344.27	26.50	2.3928E+005		-2.7141E+005
	778.89	12.74	4.9201E+005		-6.8640E+004
	867.32	4.16	1.3749E+006		-2.2569E+006
	964.01	14.40	5.1141E+005		-4.7377E+005
	1085.78	10.00	5.3384E+005		-7.9416E+005
	1112.02	13.30	4.3257E+005		-9.5942E+004
	1407.95	20.70	2.3484E+005		8.8404E+003
Eu-154	123.07	40.50	2.6234E+005	1.44E+005	8.8481E+004
	247.94	6.60	1.1731E+006		-3.0467E+005
	591.81	4.83	1.1402E+006		-5.3478E+005
	723.30	19.70	2.9850E+005		-6.3720E+004
	756.87	4.33	1.2385E+006		-8.1156E+005
	873.19	11.50	4.7673E+005		-3.6396E+004
	996.32	10.30	5.8490E+005		4.8292E+004
	1004.76	17.90	3.3152E+005		1.4808E+005
	1274.45	35.50	1.4376E+005		2.7730E+004
Eu-155	86.54	30.90	4.8159E+005	4.82E+005	7.3242E+005
	105.31	20.70	5.7545E+005		-6.2189E+003
Am-241	59.54	35.90	5.5570E+005	5.56E+005	3.4356E+004
Cm-243	228.19	10.56	7.5327E+005	4.98E+005	3.9027E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9758E+005	4.98E+005	1.7516E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 7:49:12 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-147-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 7:34:09 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-147-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	306	290.81	72.66	0.88	1.62E+002	39.86	4.55E+002
m	2	285-	306	300.50	75.08	0.89	2.84E+002	48.77	5.14E+002
F	3	331-	346	339.49	84.83	0.90	1.30E+002	40.41	5.82E+002
F	4	947-	959	953.77	238.41	1.20	1.16E+002	28.43	1.30E+002
F	5	1173-	1185	1179.83	294.93	1.24	5.41E+001	19.59	5.98E+001
F	6	1401-	1413	1406.97	351.72	1.36	7.98E+001	21.79	5.70E+001
F	7	2323-	2339	2331.28	582.82	1.39	5.04E+001	18.48	5.32E+001
F	8	2429-	2444	2436.39	609.10	1.37	7.16E+001	19.22	3.34E+001
F	9	3134-	3145	3138.90	784.74	0.44	1.24E+001	5.02	2.10E+001
F	10	3634-	3650	3642.37	910.62	1.85	5.18E+001	17.32	3.20E+001
F	11	3869-	3881	3874.31	968.61	1.39	3.38E+001	13.59	1.30E+001
F	12	5831-	5855	5843.34	1460.91	2.01	3.55E+002	36.65	9.42E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	1.000	1460.81*		10.67	5.34407E+006	7.01537E+005
TL-208	0.469	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	6.81268E+004	2.65656E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.49963E+006	6.51327E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.13411E+005	6.19433E+004
Bi-214	0.418	609.31*		46.30	1.79232E+005	5.30547E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.563	74.82*	@	6.21	4.30693E+006	1.16499E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.48114E+005	9.90225E+004
		351.92*		37.20	2.00500E+005	6.41952E+004
Ac-228	0.615	338.32		11.40		
		911.07*		27.70	2.50327E+005	8.84672E+004
		969.11*		16.60	2.80064E+005	1.16361E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		1.000	5.344067E+006	7.015366E+005
TL-208		0.469	6.812680E+004	2.656561E+004
Pb-212	@	0.495	2.134112E+005	6.194330E+004
Bi-214		0.418	1.792325E+005	5.305472E+004
PB-214	@	0.563	2.145900E+005	5.386612E+004
Ac-228		0.615	2.612197E+005	7.042472E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	1.8045E-001	24.55
F 3	84.83	1.4415E-001	31.15
F 9	784.74	1.3799E-002	40.41

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4786E+004	4.32E+004	-3.3120E+004
	1332.49	100.00	4.3245E+004		-8.6077E+003
Nb-94	702.63	100.00	6.1111E+004	5.55E+004	3.6147E+004
	871.10	100.00	5.5506E+004		5.0894E+003
Ag-108m	79.20	7.10	2.2012E+006	6.63E+004	-1.3326E+006
	433.93	89.90	6.6797E+004		3.5073E+003
	614.37	90.40	7.7808E+004		2.3017E+004
	722.95	90.50	6.6270E+004		1.0991E+004
Sb-125	176.33	6.89	1.1390E+006	1.95E+005	-1.4885E+005
	427.89	29.33	1.9496E+005		-1.4838E+005
	463.38	10.35	6.0360E+005		4.1608E+005
	600.56	17.80	3.2188E+005		-7.0595E+004
	606.64	5.02	1.4899E+006		2.2592E+006
	635.90	11.32	4.8067E+005		1.7050E+005
Cs-134	563.23	8.38	6.5351E+005	6.70E+004	-4.9200E+005
	569.32	15.43	3.7488E+005		-1.1471E+005
	604.70	97.60	7.7355E+004		8.3249E+003
	795.84	85.40	6.7015E+004		1.9553E+004
	801.93	8.73	6.1027E+005		-1.0527E+006
Cs-137	661.65	85.12	6.5671E+004	6.57E+004	9.5124E+003
Eu-152	121.78	28.40	3.4882E+005	2.36E+005	-6.3184E+004
	244.69	7.49	1.0051E+006		-1.5319E+006
	344.27	26.50	2.3579E+005		8.2784E+004
	778.89	12.74	4.4084E+005		-1.9893E+005
	867.32	4.16	1.3236E+006		-1.7939E+006
	964.01	14.40	4.6240E+005		-3.9327E+005
	1085.78	10.00	5.6493E+005		-5.2033E+005
	1112.02	13.30	4.5470E+005		-8.5484E+005
	1407.95	20.70	2.4642E+005		1.2663E+005
Eu-154	123.07	40.50	2.4392E+005	1.66E+005	-8.4624E+004
	247.94	6.60	1.0711E+006		-4.6614E+005
	591.81	4.83	1.1900E+006		1.0916E+005
	723.30	19.70	2.9546E+005		2.3545E+004
	756.87	4.33	1.3217E+006		-3.0391E+005
	873.19	11.50	5.1343E+005		4.2667E+005
	996.32	10.30	5.5904E+005		5.7859E+005
	1004.76	17.90	2.9299E+005		-1.8893E+004
	1274.45	35.50	1.6639E+005		1.0000E+005
Eu-155	86.54	30.90	4.4254E+005	4.43E+005	-1.9376E+004
	105.31	20.70	5.3539E+005		9.7394E+003
Am-241	59.54	35.90	5.3204E+005	5.32E+005	6.2743E+005
Cm-243	228.19	10.56	6.8566E+005	4.44E+005	1.0389E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4432E+005	4.44E+005	-1.4785E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 8:08:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-148-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 7:53:10 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-148-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	304	291.46	72.82	0.99	2.16E+002	46.10	6.64E+002
m	2	282-	304	300.19	75.01	1.00	3.21E+002	52.24	5.99E+002
F	3	330-	344	339.60	84.86	1.14	1.45E+002	43.43	6.15E+002
F	4	949-	960	953.77	238.41	0.94	1.04E+002	28.24	1.35E+002
F	5	1401-	1415	1407.04	351.74	1.49	7.00E+001	20.88	6.54E+001
F	6	2034-	2052	2041.71	510.42	1.89	7.71E+001	19.69	5.31E+001
F	7	2323-	2339	2331.20	582.80	1.37	7.21E+001	19.11	3.37E+001
F	8	2427-	2444	2435.74	608.94	1.53	9.49E+001	20.24	2.48E+001
F	9	3636-	3653	3644.23	911.08	1.65	5.77E+001	17.13	2.33E+001
F	10	5831-	5856	5843.40	1460.92	1.99	3.71E+002	37.77	1.64E+001
F	11	7052-	7065	7058.11	1764.63	2.08	2.69E+001	11.26	5.42E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.990	511.00*		100.00	8.31333E+004	2.42325E+004
K-40	1.000	1460.81*		10.67	5.59148E+006	7.27158E+005
TL-208	0.750	277.35		6.80		
		510.84*		21.60	3.84877E+005	1.16507E+005
		583.14*		84.20	9.74543E+004	2.88875E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.82363E+006	7.19774E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.91538E+005	5.98641E+004
Bi-214	0.702	609.31*		46.30	2.37622E+005	5.86957E+004
		1120.29		15.10		
		1764.49*		15.80	2.91622E+005	1.25637E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.990	6.208321E+004	2.501351E+004
K-40	1.000	5.591475E+006	7.271585E+005
TL-208	0.750	9.745430E+004	2.871238E+004
Pb-212 @	0.496	1.915384E+005	5.986406E+004
Bi-214	0.702	2.472961E+005	5.317850E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.82	2.3964E-001	21.38
F 3	84.86	1.6064E-001	30.04
F 5	351.74	7.7743E-002	29.84
F 9	911.08	6.4150E-002	29.67

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.4305E+004	4.52E+004	9.9658E+003
	1332.49	100.00	4.5214E+004		-4.0647E+004
Nb-94	702.63	100.00	6.1111E+004	6.00E+004	2.9748E+004
	871.10	100.00	6.0001E+004		7.0168E+004
Ag-108m	79.20	7.10	2.3156E+006	6.97E+004	-5.6850E+006
	433.93	89.90	7.0941E+004		3.8507E+004
	614.37	90.40	7.7567E+004		-7.9690E+003
	722.95	90.50	6.9723E+004		-5.3256E+004
Sb-125	176.33	6.89	1.2125E+006	2.10E+005	1.4809E+005
	427.89	29.33	2.1005E+005		3.3147E+004
	463.38	10.35	6.0360E+005		1.6155E+004
	600.56	17.80	3.3359E+005		-1.2574E+005
	606.64	5.02	1.5218E+006		1.0533E+006
	635.90	11.32	4.8327E+005		-5.6098E+004
Cs-134	563.23	8.38	7.0780E+005	6.96E+004	-3.6205E+005
	569.32	15.43	3.7324E+005		-8.1172E+004
	604.70	97.60	7.9774E+004		-9.1298E+003
	795.84	85.40	6.9648E+004		3.5094E+004
	801.93	8.73	7.0441E+005		9.4429E+004
Cs-137	661.65	85.12	6.2092E+004	6.21E+004	-8.1147E+004
Eu-152	121.78	28.40	3.7801E+005	2.31E+005	2.6152E+005
	244.69	7.49	1.0078E+006		3.4163E+004
	344.27	26.50	2.3105E+005		-3.7922E+005
	778.89	12.74	4.3825E+005		2.4866E+004
	867.32	4.16	1.4161E+006		-2.0504E+006
	964.01	14.40	4.9911E+005		2.0560E+004
	1085.78	10.00	5.6922E+005		-2.2479E+005
	1112.02	13.30	4.4536E+005		-7.8449E+005
	1407.95	20.70	2.6796E+005		2.5379E+005
Eu-154	123.07	40.50	2.6247E+005	1.57E+005	1.2391E+005
	247.94	6.60	1.0987E+006		6.2797E+003
	591.81	4.83	1.2167E+006		5.0010E+004
	723.30	19.70	3.2454E+005		-7.8795E+004
	756.87	4.33	1.2695E+006		-6.7184E+005
	873.19	11.50	5.1343E+005		1.2767E+005
	996.32	10.30	5.2378E+005		9.4627E+004
	1004.76	17.90	3.2508E+005		1.7317E+005
	1274.45	35.50	1.5693E+005		-2.2723E+004
Eu-155	86.54	30.90	4.8365E+005	4.84E+005	-6.1131E+004
	105.31	20.70	5.7063E+005		1.8728E+005
Am-241	59.54	35.90	5.5395E+005	5.54E+005	-5.5783E+004
Cm-243	228.19	10.56	7.2253E+005	5.13E+005	-4.5335E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.1269E+005	5.13E+005	1.5423E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 10:09:19 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-149-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 9:54:19 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-149-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	309	291.95	72.95	1.00	1.93E+002	40.99	5.01E+002
m	2	284-	309	300.33	75.04	1.01	3.63E+002	50.02	5.20E+002
F	3	950-	961	954.15	238.51	0.84	9.27E+001	28.20	1.62E+002
F	4	1401-	1413	1406.81	351.68	0.99	6.25E+001	20.83	6.72E+001
F	5	2324-	2341	2332.35	583.09	1.63	9.02E+001	20.47	3.41E+001
F	6	2427-	2444	2436.25	609.06	1.36	9.16E+001	21.10	3.53E+001
F	7	3637-	3652	3643.83	910.98	1.46	5.67E+001	16.17	1.30E+001
F	8	5832-	5856	5844.39	1461.17	1.98	4.06E+002	39.40	1.23E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.996	1460.81*	10.67	6.12457E+006	7.73536E+005
TL-208	0.471	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.21988E+005	3.20527E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	3.19719E+006	7.65968E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.70087E+005	5.81959E+004
Bi-214	0.418	609.31*	46.30	2.29463E+005	6.00709E+004
		1120.29	15.10		
		1764.49	15.80		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.996	6.124571E+006	7.735363E+005
TL-208		0.471	1.219885E+005	3.205271E+004
Pb-212	@	0.496	1.700871E+005	5.819590E+004
Bi-214		0.418	2.294633E+005	6.007085E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.95	2.1431E-001	21.25
F 4	351.68	6.9460E-002	33.33
F 7	910.98	6.3012E-002	28.51

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.9053E+004	5.44E+004	-8.8359E+003
	1332.49	100.00	5.4429E+004		-2.4558E+004
Nb-94	702.63	100.00	5.7040E+004	5.59E+004	-3.4727E+003
	871.10	100.00	5.5866E+004		2.9654E+004
Ag-108m	79.20	7.10	2.1894E+006	6.23E+004	-8.4242E+005
	433.93	89.90	6.5500E+004		2.7895E+004
	614.37	90.40	8.5822E+004		-5.1134E+004
	722.95	90.50	6.2272E+004		-9.6873E+003
Sb-125	176.33	6.89	1.1633E+006	1.97E+005	-1.5038E+005
	427.89	29.33	1.9699E+005		-1.0975E+004
	463.38	10.35	5.8249E+005		5.8008E+005
	600.56	17.80	3.0342E+005		-1.9420E+005
	606.64	5.02	1.5798E+006		2.7798E+006
	635.90	11.32	5.2764E+005		1.8289E+005
Cs-134	563.23	8.38	7.2777E+005	7.29E+004	-1.3570E+005
	569.32	15.43	3.5129E+005		-4.5844E+005
	604.70	97.60	7.8976E+004		-3.8654E+004
	795.84	85.40	7.2885E+004		-1.2998E+004
	801.93	8.73	6.4967E+005		-8.5329E+005
Cs-137	661.65	85.12	6.8391E+004	6.84E+004	-3.8133E+004
Eu-152	121.78	28.40	3.4398E+005	2.42E+005	1.1969E+004
	244.69	7.49	1.0171E+006		-2.4795E+005
	344.27	26.50	2.4215E+005		-2.3384E+005
	778.89	12.74	4.6838E+005		-8.0356E+005
	867.32	4.16	1.3749E+006		-1.0775E+006
	964.01	14.40	5.1944E+005		4.2315E+005
	1085.78	10.00	6.1432E+005		2.4532E+005
	1112.02	13.30	4.7280E+005		-7.1579E+005
	1407.95	20.70	2.5199E+005		1.4849E+005
Eu-154	123.07	40.50	2.4152E+005	1.62E+005	9.1309E+004
	247.94	6.60	1.0875E+006		-7.4191E+005
	591.81	4.83	1.1570E+006		5.0110E+005
	723.30	19.70	2.8770E+005		1.1270E+005
	756.87	4.33	1.2067E+006		-2.0020E+005
	873.19	11.50	4.9237E+005		3.5531E+005
	996.32	10.30	5.7028E+005		-1.3237E+004
	1004.76	17.90	3.1849E+005		-6.8116E+004
	1274.45	35.50	1.6241E+005		-1.3618E+005
Eu-155	86.54	30.90	4.5110E+005	4.51E+005	2.8686E+005
	105.31	20.70	5.2938E+005		4.0372E+005
Am-241	59.54	35.90	4.7329E+005	4.73E+005	-4.3982E+004
Cm-243	228.19	10.56	7.3411E+005	4.78E+005	8.7630E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7844E+005	4.78E+005	4.0009E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 8:29:09 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-150-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 8:14:10 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-150-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	283-	308	291.68	72.88	0.88	1.57E+002	38.63	4.19E+002
m	2	283-	308	300.52	75.09	0.89	2.41E+002	44.56	4.51E+002
F	3	950-	960	954.46	238.59	0.97	4.44E+001	21.39	8.74E+001
F	4	1176-	1187	1180.35	295.06	0.71	2.67E+001	14.76	4.63E+001
F	5	1402-	1413	1406.29	351.55	0.78	2.68E+001	13.87	5.57E+001
F	6	2323-	2341	2332.02	583.01	1.79	5.48E+001	15.57	1.90E+001
F	7	2428-	2444	2435.85	608.96	1.49	6.46E+001	16.65	1.43E+001
F	8	5831-	5857	5843.62	1460.98	1.95	3.26E+002	35.39	9.44E+000
F	9	7054-	7067	7061.24	1765.41	1.77	2.14E+001	10.00	1.69E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	4.90548E+006	6.64858E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	7.41639E+004	2.32335E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	2.11937E+006	5.71237E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	8.15268E+004	4.12631E+004
Bi-214	0.697	609.31*	46.30	1.61888E+005	4.63055E+004
		1120.29	15.10		
		1764.49*	15.80	2.32648E+005	1.10993E+005
PB-214	0.563	74.82* @	6.21	3.65173E+006	1.01933E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.22536E+005	7.07134E+004
		351.92*	37.20	6.72653E+004	3.66048E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	4.905476E+006	6.648583E+005
TL-208		0.470	7.416391E+004	2.323347E+004
Pb-212	@	0.496	8.152679E+004	4.126314E+004
Bi-214		0.697	1.723779E+005	4.273553E+004
PB-214	@	0.563	7.894584E+004	3.250760E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.88	1.7476E-001	24.56

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.1317E+004	4.26E+004	2.6211E+004
	1332.49	100.00	4.2566E+004		-6.6759E+002
Nb-94	702.63	100.00	4.8873E+004	4.55E+004	-3.2929E+004
	871.10	100.00	4.5530E+004		1.1086E+004
Ag-108m	79.20	7.10	2.0813E+006	5.58E+004	-4.3931E+005
	433.93	89.90	5.5791E+004		-2.7345E+004
	614.37	90.40	6.6299E+004		5.1490E+003
	722.95	90.50	6.0877E+004		8.5835E+004
Sb-125	176.33	6.89	1.0248E+006	1.58E+005	-3.8364E+005
	427.89	29.33	1.5778E+005		-3.4253E+004
	463.38	10.35	4.5680E+005		-2.8380E+005
	600.56	17.80	2.8368E+005		2.0078E+005
	606.64	5.02	1.2952E+006		1.7165E+006
	635.90	11.32	4.3982E+005		-8.7461E+004
Cs-134	563.23	8.38	5.9742E+005	5.70E+004	-2.8406E+005
	569.32	15.43	3.1824E+005		6.9446E+004
	604.70	97.60	6.7951E+004		2.3691E+002
	795.84	85.40	5.7004E+004		1.0501E+004
	801.93	8.73	5.8099E+005		-1.0994E+004
Cs-137	661.65	85.12	5.0639E+004	5.06E+004	-6.9308E+004
Eu-152	121.78	28.40	3.3262E+005	1.99E+005	3.0811E+005
	244.69	7.49	8.5157E+005		-7.0268E+004
	344.27	26.50	1.9946E+005		-1.6981E+005
	778.89	12.74	3.8836E+005		-1.0354E+004
	867.32	4.16	1.1451E+006		-1.0021E+004
	964.01	14.40	4.1479E+005		1.7766E+005
	1085.78	10.00	5.3840E+005		1.5988E+005
	1112.02	13.30	4.1259E+005		-1.8952E+005
	1407.95	20.70	2.3484E+005		3.9622E+004
Eu-154	123.07	40.50	2.3209E+005	1.12E+005	2.0932E+005
	247.94	6.60	8.9282E+005		-1.1488E+006
	591.81	4.83	1.0009E+006		3.2624E+005
	723.30	19.70	2.7147E+005		1.3320E+005
	756.87	4.33	1.2463E+006		3.6868E+005
	873.19	11.50	3.9232E+005		8.1025E+004
	996.32	10.30	5.1144E+005		-3.0416E+005
	1004.76	17.90	3.1402E+005		2.4622E+005
	1274.45	35.50	1.1240E+005		-1.3201E+004
Eu-155	86.54	30.90	4.2507E+005	4.25E+005	3.2872E+005
	105.31	20.70	5.0112E+005		1.1308E+005
Am-241	59.54	35.90	4.8672E+005	4.87E+005	-4.7756E+005
Cm-243	228.19	10.56	5.9957E+005	4.06E+005	4.6734E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.0618E+005	4.06E+005	-1.1953E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 8:48:55 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-16-151-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 8:33:55 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-16-151-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	286-	309	290.89	72.68	1.02	1.95E+002	40.61	4.02E+002
m	2	286-	309	300.27	75.03	1.02	3.52E+002	49.52	5.30E+002
F	3	948-	959	954.14	238.51	0.97	6.87E+001	24.65	1.18E+002
F	4	1401-	1413	1407.01	351.73	0.94	4.58E+001	18.51	5.87E+001
F	5	2324-	2338	2331.63	582.91	1.46	5.67E+001	16.66	2.05E+001
F	6	2428-	2443	2434.94	608.74	1.18	5.33E+001	18.24	4.33E+001
F	7	3637-	3653	3643.82	910.98	1.47	4.00E+001	14.56	1.45E+001
F	8	5830-	5857	5843.52	1460.95	2.26	3.81E+002	37.29	3.63E+000
F	9	7055-	7068	7061.29	1765.42	1.62	1.56E+001	9.03	3.50E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	5.74447E+006	7.29340E+005
TL-208	0.470	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	7.66535E+004	2.47130E+004
		860.37	12.46		
Pb-212	0.496	74.81* @	10.70	3.09937E+006	7.47841E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	1.25930E+005	4.93317E+004
Bi-214	0.694	609.31*	46.30	1.33527E+005	4.86028E+004
		1120.29	15.10		
		1764.49*	15.80	1.69781E+005	9.94983E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40	0.999	5.744474E+006	7.293399E+005
TL-208	0.470	7.665346E+004	2.471304E+004
Pb-212	@ 0.496	1.259300E+005	4.933168E+004
Bi-214	0.694	1.405108E+005	4.367106E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.68	2.1714E-001	20.78
F 4	351.73	5.0839E-002	40.46
F 7	910.98	4.4484E-002	36.36

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.2334E+004	4.46E+004	-1.4603E+004
	1332.49	100.00	4.4569E+004		-1.4949E+003
Nb-94	702.63	100.00	5.2303E+004	5.14E+004	6.0292E+003
	871.10	100.00	5.1374E+004		1.3152E+004
Ag-108m	79.20	7.10	2.1679E+006	5.78E+004	-6.7009E+005
	433.93	89.90	5.7821E+004		1.5954E+004
	614.37	90.40	7.3841E+004		2.2318E+004
	722.95	90.50	6.2616E+004		1.6934E+004
Sb-125	176.33	6.89	1.1187E+006	1.68E+005	3.9705E+005
	427.89	29.33	1.6849E+005		-1.6051E+005
	463.38	10.35	5.4609E+005		-1.2206E+005
	600.56	17.80	2.8707E+005		9.6466E+004
	606.64	5.02	1.3633E+006		2.7863E+006
	635.90	11.32	4.5110E+005		4.1017E+004
Cs-134	563.23	8.38	6.3105E+005	6.43E+004	-7.2158E+004
	569.32	15.43	3.3151E+005		1.2571E+005
	604.70	97.60	6.7480E+004		-1.1550E+004
	795.84	85.40	6.4268E+004		5.4712E+004
	801.93	8.73	6.1434E+005		-2.5311E+005
Cs-137	661.65	85.12	6.8723E+004	6.87E+004	8.7215E+003
Eu-152	121.78	28.40	3.3907E+005	2.07E+005	2.8711E+005
	244.69	7.49	9.3669E+005		-3.5266E+005
	344.27	26.50	2.0699E+005		-2.7954E+005
	778.89	12.74	4.3301E+005		-1.2853E+005
	867.32	4.16	1.2702E+006		-4.0195E+005
	964.01	14.40	4.3690E+005		4.9233E+005
	1085.78	10.00	4.8569E+005		-6.2100E+005
	1112.02	13.30	3.7672E+005		-5.3040E+005
	1407.95	20.70	2.0956E+005		6.3746E+004
Eu-154	123.07	40.50	2.3765E+005	1.37E+005	1.2177E+005
	247.94	6.60	9.9419E+005		-1.3644E+006
	591.81	4.83	1.0998E+006		4.2667E+005
	723.30	19.70	2.8927E+005		1.5009E+005
	756.87	4.33	1.2385E+006		-1.4355E+005
	873.19	11.50	4.3321E+005		-8.3167E+004
	996.32	10.30	4.9448E+005		2.0602E+005
	1004.76	17.90	2.8310E+005		5.0789E+004
	1274.45	35.50	1.3747E+005		-2.2029E+004
Eu-155	86.54	30.90	4.3097E+005	4.31E+005	2.3166E+005
	105.31	20.70	5.0834E+005		-1.3219E+005
Am-241	59.54	35.90	5.0894E+005	5.09E+005	-1.5326E+005
Cm-243	228.19	10.56	6.5859E+005	4.66E+005	6.8700E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6584E+005	4.66E+005	3.1281E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

This page intentionally left blank.

FileName	SampleTitle	Unity	AcquisitionStartedDate	Acquisition	RealTime	DetectorID	CalibrationEfficiency	Units	Co-60 MDA	Co-60 Activity	Co-60 U	Cs-0137 MDA	Cs-0137 Activit	Cs-0137 Uncertai	Ag-108m MDA	Ag-108m	Ag-108m Unce	K-40 Activity
TBN-01-17-101-F-G.RPT	TBN-01-17-101-F-G	0.00	28-Oct-05	16:08:31	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	49600			74000			65500			6362091
TBN-01-17-102-F-G.RPT	TBN-01-17-102-F-G	0.05	28-Oct-05	16:37:47	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	52700			36400	20318.71	13347.06	63600			6248623
TBN-01-17-103-F-G.RPT	TBN-01-17-103-F-G	0.00	28-Oct-05	16:58:11	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	60700			69200			66800			6987921
TBN-01-17-104-F-G.RPT	TBN-01-17-104-F-G	0.00	29-Oct-05	7:31:07	900.6	BLUE6279	BLUE_CONC_2M90D	dpm/m2	60700			71600			68400			7941993
TBN-01-17-105-F-G.RPT	TBN-01-17-105-F-G	0.00	29-Oct-05	10:37:29	900.6	RED6264	RED_CONC_2M90D	dpm/m2	49900			70300			70200			6754808
TBN-01-17-106-F-G.RPT	TBN-01-17-106-F-G	0.00	29-Oct-05	8:40:12	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	46800			68300			62800			6001714
TBN-01-17-107-F-G.RPT	TBN-01-17-107-F-G	0.00	29-Oct-05	8:10:48	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	47400			65100			66600			7234062
TBN-01-17-108-F-G.RPT	TBN-01-17-108-F-G	0.00	29-Oct-05	7:50:30	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	51200			70700			63800			6189515
TBN-01-17-109-F-G.RPT	TBN-01-17-109-F-G	0.00	28-Oct-05	14:50:29	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	51200			68600			61900			7206168
TBN-01-17-110-F-G.RPT	TBN-01-17-110-F-G	0.00	28-Oct-05	14:32:17	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	46800			70100			67800			6011878
TBN-01-17-111-F-G.RPT	TBN-01-17-111-F-G	0.00	29-Oct-05	11:01:22	900.5	RED6264	RED_CONC_1M90D	dpm/m2	47100			71300			65300			5794753
TBN-01-17-112-F-G.RPT	TBN-01-17-112-F-G	0.00	28-Oct-05	14:13:09	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	49000			67700			69800			6866035
TBN-01-17-113-F-G.RPT	TBN-01-17-113-F-G	0.00	28-Oct-05	13:55:18	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	47900			62500			65700			6391556
TBN-01-17-114-F-G.RPT	TBN-01-17-114-F-G	0.00	28-Oct-05	13:36:43	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	42500			68000			61400			6981166
TBN-01-17-115-F-G.RPT	TBN-01-17-115-F-G	0.00	28-Oct-05	13:11:34	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	50700			72800			68600			6780310
TBN-01-17-116-F-G.RPT	TBN-01-17-116-F-G	0.00	28-Oct-05	12:51:36	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	54700			69800			62500			6690266
TBN-01-17-117-F-G.RPT	TBN-01-17-117-F-G	0.00	28-Oct-05	15:48:35	900.5	BLUE6279	BLUE_CONC_2M90D	dpm/m2	51200			66700			68000			8073086
TBN-01-17-118-F-G.RPT	TBN-01-17-118-F-G	0.00	29-Oct-05	11:23:58	900.6	RED6264	RED_CONC_1M90D	dpm/m2	48300			68400			65500			5718529
TBN-01-17-119-F-G.RPT	TBN-01-17-119-F-G	0.00	29-Oct-05	11:44:59	900.6	RED6264	RED_CONC_2M90D	dpm/m2	60000			72900			74800			8616364

Report Generated On 10/28/2005 4:23:30 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-101-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 4:08:31 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-101-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	292.03	72.86	0.96	1.11E+002	36.99	4.58E+002
m	2	284-	305	300.37	74.95	0.97	2.89E+002	49.55	5.20E+002
M	3	331-	353	339.95	84.88	0.94	1.64E+002	39.24	3.81E+002
m	4	331-	353	349.02	87.15	0.94	7.33E+001	32.13	3.34E+002
F	5	949-	961	954.91	239.05	0.85	1.04E+002	28.17	1.50E+002
F	6	1346-	1358	1352.71	338.68	1.01	4.21E+001	19.10	6.41E+001
F	7	1400-	1413	1406.77	352.22	1.33	9.65E+001	23.25	5.96E+001
F	8	1559-	1568	1563.59	391.47	0.84	2.26E+001	14.42	3.50E+001
F	9	2033-	2050	2042.36	511.26	1.91	6.73E+001	19.72	5.79E+001
F	10	2324-	2342	2332.23	583.74	1.47	6.99E+001	19.96	5.39E+001
F	11	2428-	2446	2436.40	609.79	1.21	1.01E+002	21.97	3.86E+001
F	12	3636-	3655	3645.70	911.88	1.85	7.24E+001	18.08	2.15E+001
F	13	5832-	5857	5845.11	1460.65	1.87	4.36E+002	40.89	1.30E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	7.06936E+004	2.29727E+004
K-40	0.999	1460.81*	10.67	6.36209E+006	7.87984E+005
Eu-155	0.336	86.54*	30.90	1.90272E+005	9.13909E+004
		105.31	20.70		
TL-208	0.744	277.35	6.80		
		510.84*	21.60	3.27285E+005	1.09662E+005
		583.14*	84.20	9.17673E+004	2.88681E+004
		860.37	12.46		
Pb-212	0.656	74.81* @	10.70	2.52992E+006	6.58400E+005
		77.11 @	18.00		
		87.30* @	8.00	7.34927E+005	3.52997E+005
		238.63*	44.60	1.88308E+005	5.87886E+004
Bi-214	0.414	609.31*	46.30	2.46239E+005	6.15049E+004
		1120.29	15.10		
		1764.49	15.80		
Ac-228	0.535	338.32*	11.40	3.34100E+005	1.60402E+005
		911.07*	27.70	3.36620E+005	9.25830E+004
		969.11	16.60		

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN	0.998	5.087189E+004	2.379520E+004
K-40	0.999	6.362091E+006	7.879838E+005
Eu-155	0.336	1.415193E+005	9.264965E+004
TL-208	0.744	9.176729E+004	2.871281E+004
Pb-212 @	0.656	1.883083E+005	5.878855E+004
Bi-214	0.414	2.462386E+005	6.150494E+004
Ac-228	0.535	3.359899E+005	8.018466E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	1.2324E-001	33.35
M 3	84.88	1.8219E-001	23.93
F 7	352.22	1.0717E-001	24.11
F 8	391.47	2.5142E-002	63.71

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.3999E+004	4.96E+004	1.7887E+004
		1332.49	100.00	4.9592E+004		-2.2638E+004
	Nb-94	702.63	100.00	5.3606E+004	5.35E+004	2.2691E+004
		871.10	100.00	5.3457E+004		-4.6529E+004
	Ag-108m	79.20	7.10	2.0077E+006	6.55E+004	-3.1912E+006
		433.93	89.90	6.5534E+004		5.6536E+004
		614.37	90.40	8.8028E+004		-1.7453E+004
		722.95	90.50	6.9627E+004		1.1586E+004
	Sb-125	176.33	6.89	1.0669E+006	1.93E+005	-6.3783E+005
		427.89	29.33	1.9335E+005		-1.8328E+005
		463.38	10.35	6.2659E+005		3.7393E+005
		600.56	17.80	2.9094E+005		-1.5870E+004
		606.64	5.02	1.5669E+006		3.2109E+006
		635.90	11.32	5.0593E+005		-2.5422E+005
	Cs-134	563.23	8.38	6.4954E+005	7.36E+004	-2.6159E+005
		569.32	15.43	3.6855E+005		1.1352E+005
		604.70	97.60	7.8058E+004		-3.6220E+004
		795.84	85.40	7.3579E+004		5.6142E+004
		801.93	8.73	6.7233E+005		-3.8616E+005
	Cs-137	661.65	85.12	7.3966E+004	7.40E+004	8.1046E+004
	Eu-152	121.78	28.40	3.3728E+005	2.09E+005	1.0956E+005
		244.69	7.49	9.6919E+005		-4.0502E+004
		344.27	26.50	2.3574E+005		-3.3826E+004
		778.89	12.74	4.3746E+005		2.7791E+004
		867.32	4.16	1.3639E+006		-9.1718E+005
		964.01	14.40	5.0786E+005		8.9423E+005
		1085.78	10.00	5.3604E+005		-3.2329E+005
		1112.02	13.30	4.5568E+005		-8.0815E+005
		1407.95	20.70	2.0935E+005		-9.9016E+003
	Eu-154	123.07	40.50	2.3565E+005	1.78E+005	1.1193E+005
		247.94	6.60	1.0495E+006		-5.1437E+005
		591.81	4.83	1.0944E+006		-4.0143E+005
		723.30	19.70	3.2122E+005		-1.0095E+003
		756.87	4.33	1.2962E+006		8.4734E+005
		873.19	11.50	4.8007E+005		7.5688E+004
		996.32	10.30	5.9708E+005		1.7477E+005
		1004.76	17.90	3.4488E+005		-2.4991E+005
		1274.45	35.50	1.7774E+005		1.0014E+005
+	Eu-155	86.54*	30.90	2.2773E+005	2.28E+005	1.9027E+005
		105.31	20.70	5.0787E+005		2.3546E+005
	Am-241	59.54	35.90	4.6642E+005	4.66E+005	-5.1598E+004
	Cm-243	228.19	10.56	6.3687E+005	4.46E+005	-9.2457E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.4564E+005	4.46E+005	-4.3872E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:52:49 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-102-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 4:37:47 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-102-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	285-	305	291.71	72.78	0.85	1.22E+002	37.23	3.97E+002
m	2	285-	305	299.92	74.84	0.86	2.25E+002	47.39	5.22E+002
F	3	335-	344	339.38	84.74	1.07	1.29E+002	42.21	3.59E+002
F	4	737-	751	744.65	186.35	1.06	5.06E+001	24.87	1.72E+002
F	5	944-	960	954.50	238.94	1.20	1.72E+002	31.75	1.48E+002
F	6	1176-	1187	1181.18	295.73	0.81	3.73E+001	18.88	7.76E+001
F	7	1400-	1413	1407.51	352.40	1.22	1.02E+002	23.93	6.31E+001
F	8	2034-	2055	2044.06	511.68	2.28	1.03E+002	21.86	6.40E+001
F	9	2324-	2342	2332.85	583.90	1.51	8.27E+001	21.22	5.74E+001
F	10	2427-	2446	2436.75	609.87	1.51	7.70E+001	20.81	5.78E+001
F	11	2639-	2650	2644.14	661.71	0.51	1.49E+001	9.64	2.10E+001
F	12	3638-	3654	3645.36	911.80	1.77	6.40E+001	17.70	2.07E+001
F	13	5832-	5858	5845.34	1460.71	1.87	4.28E+002	40.75	2.33E+001
F	14	7055-	7069	7061.51	1764.08	0.96	2.84E+001	11.64	9.17E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.986	511.00*		100.00	1.08309E+005	2.75367E+004
K-40	1.000	1460.81*		10.67	6.24862E+006	7.80457E+005
Cs-137	1.000	661.65*		85.12	2.03187E+004	1.33471E+004
TL-208	0.737	277.35		6.80		
		510.84*		21.60	5.01432E+005	1.33900E+005
		583.14*		84.20	1.08618E+005	3.13333E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	1.96976E+006	5.66783E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.10285E+005	7.51546E+004
Bi-214	0.697	609.31*		46.30	1.86978E+005	5.56039E+004
		1120.29		15.10		
		1764.49*		15.80	2.98290E+005	1.25655E+005
PB-214	0.561	74.82*	@	6.21	3.39394E+006	1.00718E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.67950E+005	8.95600E+004
		351.92*		37.20	2.50253E+005	7.23087E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.986	8.484785E+004	2.834595E+004
K-40		1.000	6.248623E+006	7.804565E+005
Cs-137		1.000	2.031871E+004	1.334706E+004
TL-208		0.737	1.086176E+005	3.113274E+004
Pb-212	@	0.496	3.102854E+005	7.515463E+004
Bi-214		0.697	2.052053E+005	5.084781E+004
PB-214	@	0.561	2.177743E+005	5.626058E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.78	1.3526E-001	30.58
F 3	84.74	1.4307E-001	32.78
F 4	186.35	5.6267E-002	49.12
F 12	911.80	7.1117E-002	27.65

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	5.9715E+004	5.27E+004	-9.5427E+003
		1332.49	100.00	5.2734E+004		1.7427E+004
	Nb-94	702.63	100.00	5.9556E+004	5.75E+004	-4.9166E+004
		871.10	100.00	5.7465E+004		2.5660E+004
	Ag-108m	79.20	7.10	2.0589E+006	6.36E+004	-1.5134E+006
		433.93	89.90	6.3628E+004		2.2267E+004
		614.37	90.40	8.3747E+004		-1.0198E+004
		722.95	90.50	6.9342E+004		4.0241E+004
	Sb-125	176.33	6.89	1.0657E+006	2.07E+005	-3.1906E+005
		427.89	29.33	2.0731E+005		-1.9838E+004
		463.38	10.35	5.5114E+005		-2.8998E+005
		600.56	17.80	3.0163E+005		-1.4592E+005
		606.64	5.02	1.5158E+006		1.3438E+006
		635.90	11.32	5.0593E+005		-3.7323E+005
	Cs-134	563.23	8.38	7.3853E+005	7.23E+004	-2.1895E+005
		569.32	15.43	3.9267E+005		-1.6565E+005
		604.70	97.60	7.3951E+004		2.4303E+004
		795.84	85.40	7.2277E+004		3.9602E+004
		801.93	8.73	6.5505E+005		-2.1712E+005
+	Cs-137	661.65*	85.12	3.6364E+004	3.64E+004	2.0319E+004
	Eu-152	121.78	28.40	3.3484E+005	2.16E+005	-6.5097E+004
		244.69	7.49	9.5969E+005		-9.7226E+005
		344.27	26.50	2.2179E+005		-3.6081E+005
		778.89	12.74	4.2517E+005		-2.0535E+005
		867.32	4.16	1.3717E+006		-1.6201E+006
		964.01	14.40	5.0786E+005		2.1121E+005
		1085.78	10.00	5.9580E+005		5.8034E+004
		1112.02	13.30	4.7517E+005		-6.2789E+005
		1407.95	20.70	2.1555E+005		-1.7382E+005
	Eu-154	123.07	40.50	2.3307E+005	1.72E+005	1.0067E+005
		247.94	6.60	1.0413E+006		-3.3601E+005
		591.81	4.83	1.1378E+006		1.1046E+004
		723.30	19.70	3.1728E+005		1.2961E+005
		756.87	4.33	1.2248E+006		-7.1201E+005
		873.19	11.50	5.2464E+005		5.9868E+005
		996.32	10.30	5.4573E+005		3.1613E+005
		1004.76	17.90	2.9812E+005		3.8233E+004
		1274.45	35.50	1.7194E+005		1.5038E+005
	Eu-155	86.54	30.90	4.4247E+005	4.42E+005	7.7990E+005
		105.31	20.70	4.9735E+005		-1.4975E+004
	Am-241	59.54	35.90	4.6152E+005	4.62E+005	-2.8574E+005
	Cm-243	228.19	10.56	6.7799E+005	4.87E+005	4.4209E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8695E+005	4.87E+005	2.8797E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 5:13:12 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-103-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 4:58:11 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-103-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	308	291.36	72.69	0.95	1.41E+002	39.01	4.69E+002
m	2	282-	308	300.49	74.98	0.96	2.80E+002	49.91	5.50E+002
F	3	945-	961	954.85	239.03	1.15	1.66E+002	30.93	1.55E+002
F	4	1176-	1186	1181.00	295.68	0.94	3.31E+001	19.48	7.80E+001
F	5	1400-	1414	1407.14	352.31	1.41	1.13E+002	24.62	6.75E+001
F	6	2030-	2053	2042.52	511.30	2.14	1.04E+002	22.41	7.50E+001
F	7	2324-	2338	2332.40	583.79	1.29	9.26E+001	21.19	2.97E+001
F	8	2430-	2445	2437.03	609.94	1.11	8.41E+001	20.85	4.10E+001
F	9	2904-	2915	2908.65	727.81	1.34	2.85E+001	13.53	1.91E+001
F	10	3636-	3652	3644.82	911.66	1.51	7.26E+001	18.55	2.05E+001
F	11	3870-	3884	3876.38	969.47	1.42	4.03E+001	16.03	2.63E+001
F	12	4688-	4701	4694.43	1173.61	1.26	3.13E+001	14.19	1.92E+001
F	13	5832-	5858	5844.98	1460.62	1.91	4.79E+002	42.40	6.43E+000
F	14	7051-	7069	7059.64	1763.62	1.64	4.25E+001	13.32	2.19E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.997	511.00*		100.00	1.09514E+005	2.81114E+004
K-40	0.999	1460.81*		10.67	6.98792E+006	8.38171E+005
TL-208	0.743	277.35		6.80		
		510.84*		21.60	5.07010E+005	1.36573E+005
		583.14*		84.20	1.21517E+005	3.21133E+004
		860.37		12.46		
Bi-212	0.988	727.17*		11.80	2.88914E+005	1.41257E+005
Pb-212	0.495	74.81*	@	10.70	2.44371E+006	6.47770E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.99935E+005	7.29805E+004
Bi-214	0.692	609.31*		46.30	2.04240E+005	5.66317E+004
		1120.29		15.10		
		1764.49*		15.80	4.45269E+005	1.46668E+005
PB-214	0.562	74.82*	@	6.21	4.21059E+006	1.15722E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.49086E+005	9.11962E+004
		351.92*		37.20	2.78531E+005	7.64844E+004
Ac-228	0.616	338.32		11.40		
		911.07*		27.70	3.37902E+005	9.46265E+004
		969.11*		16.60	3.21340E+005	1.32256E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.997	8.326658E+004	2.894190E+004
K-40		0.999	6.987921E+006	8.381711E+005
TL-208		0.743	1.215168E+005	3.186824E+004
Bi-212		0.988	2.889138E+005	1.412575E+005
Pb-212	@	0.495	2.999347E+005	7.298047E+004
Bi-214		0.692	2.355128E+005	5.283026E+004
PB-214	@	0.562	2.250789E+005	5.860257E+004
Ac-228		0.616	3.322942E+005	7.695723E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.69	1.5638E-001	27.72
F 12	1173.61	3.4746E-002	45.36

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.5009E+004	6.07E+004	3.0381E+004
	1332.49	100.00	6.0697E+004		4.1468E+004
Nb-94	702.63	100.00	5.9823E+004	5.41E+004	5.6817E+004
	871.10	100.00	5.4147E+004		-3.1679E+003
Ag-108m	79.20	7.10	2.0473E+006	6.68E+004	-1.4742E+006
	433.93	89.90	6.6773E+004		-2.0473E+004
	614.37	90.40	8.6017E+004		-1.1904E+004
	722.95	90.50	7.2416E+004		-2.9611E+004
Sb-125	176.33	6.89	1.1299E+006	2.06E+005	-1.2981E+005
	427.89	29.33	2.0608E+005		9.9383E+003
	463.38	10.35	5.8737E+005		-2.7405E+005
	600.56	17.80	3.2467E+005		5.4101E+004
	606.64	5.02	1.5195E+006		1.2065E+006
	635.90	11.32	5.3497E+005		1.6929E+005
Cs-134	563.23	8.38	6.8434E+005	7.09E+004	-4.0656E+005
	569.32	15.43	3.7626E+005		-1.7197E+005
	604.70	97.60	7.6908E+004		-4.0903E+004
	795.84	85.40	7.0949E+004		-3.1956E+004
	801.93	8.73	6.7911E+005		3.5404E+005
Cs-137	661.65	85.12	6.9235E+004	6.92E+004	3.9262E+004
Eu-152	121.78	28.40	3.3402E+005	2.00E+005	-4.1575E+004
	244.69	7.49	9.7189E+005		-1.4284E+005
	344.27	26.50	2.4512E+005		-1.8213E+005
	778.89	12.74	4.7452E+005		2.1798E+004
	867.32	4.16	1.3323E+006		-6.7232E+005
	964.01	14.40	5.2090E+005		-9.6889E+004
	1085.78	10.00	6.1435E+005		1.5982E+005
	1112.02	13.30	5.1178E+005		-5.7672E+005
	1407.95	20.70	1.9964E+005		-7.0480E+004
Eu-154	123.07	40.50	2.3177E+005	1.39E+005	-1.4383E+005
	247.94	6.60	1.0640E+006		5.8315E+005
	591.81	4.83	1.2731E+006		6.1532E+005
	723.30	19.70	3.3522E+005		2.6896E+005
	756.87	4.33	1.4588E+006		-4.4650E+005
	873.19	11.50	4.6520E+005		-1.9313E+005
	996.32	10.30	5.4932E+005		-1.6263E+005
	1004.76	17.90	2.9590E+005		-8.1309E+004
	1274.45	35.50	1.3905E+005		-1.1599E+005
Eu-155	86.54	30.90	4.3249E+005	4.32E+005	4.4906E+005
	105.31	20.70	5.1403E+005		-2.1186E+005
Am-241	59.54	35.90	4.6101E+005	4.61E+005	7.8183E+004
Cm-243	228.19	10.56	6.8444E+005	4.88E+005	1.5269E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8779E+005	4.88E+005	4.0234E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 7:46:08 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-104-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 7:31:07 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-104-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	306	292.00	72.85	0.89	1.74E+002	43.15	4.97E+002
m	2	284-	306	300.42	74.96	0.89	2.37E+002	48.81	5.72E+002
F	3	334-	345	339.83	84.85	0.45	6.02E+001	30.55	4.66E+002
F	4	949-	959	954.46	238.93	1.04	1.39E+002	31.19	1.27E+002
F	5	1175-	1189	1181.23	295.74	1.03	5.11E+001	20.55	9.00E+001
F	6	1347-	1361	1352.59	338.65	1.04	4.40E+001	18.42	6.54E+001
F	7	1398-	1415	1406.28	352.09	1.44	9.81E+001	22.52	6.34E+001
F	8	2325-	2339	2332.07	583.70	1.26	7.31E+001	20.03	3.95E+001
F	9	2430-	2444	2436.91	609.91	1.35	8.69E+001	20.27	2.45E+001
F	10	3636-	3651	3643.20	911.26	1.53	7.43E+001	19.64	3.06E+001
F	11	3869-	3881	3875.08	969.14	1.14	3.79E+001	15.59	2.35E+001
F	12	4474-	4486	4480.52	1120.24	1.38	2.52E+001	12.99	1.61E+001
F	13	5830-	5856	5843.72	1460.31	2.00	5.45E+002	44.97	6.81E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.992	1460.81*		10.67	7.94199E+006	9.18406E+005
TL-208	0.465	277.35		6.80		
		510.84		21.60		
		583.14*		84.20	9.59937E+004	2.91948E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.06794E+006	5.88446E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.50953E+005	6.86596E+004
Bi-214	0.707	609.31*		46.30	2.10826E+005	5.57618E+004
		1120.29*		15.10	2.35670E+005	1.24237E+005
		1764.49		15.80		
PB-214	0.563	74.82*	@	6.21	3.56311E+006	1.04638E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.30256E+005	1.00308E+005
		351.92*		37.20	2.41739E+005	6.86521E+004
Ac-228	0.999	338.32*		11.40	3.49021E+005	1.56090E+005
		911.07*		27.70	3.45463E+005	9.96038E+004
		969.11*		16.60	3.02599E+005	1.28360E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.992	7.941993E+006	9.184057E+005
TL-208		0.465	9.599367E+004	2.919481E+004
Pb-212	@	0.496	2.509532E+005	6.865962E+004
Bi-214		0.707	2.149920E+005	5.087251E+004
PB-214	@	0.563	2.380759E+005	5.665378E+004
Ac-228		0.999	3.333388E+005	7.026689E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.85	1.9283E-001	24.86
F	3	84.85	6.6921E-002	50.72

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.3622E+004	6.07E+004	1.4801E+004
	1332.49	100.00	6.0697E+004		5.5086E+004
Nb-94	702.63	100.00	5.4792E+004	5.48E+004	-2.1129E+004
	871.10	100.00	5.6492E+004		-4.0995E+004
Ag-108m	79.20	7.10	2.1138E+006	6.84E+004	-7.8179E+005
	433.93	89.90	6.8388E+004		3.3760E+004
	614.37	90.40	8.1841E+004		-4.3270E+004
	722.95	90.50	7.4036E+004		1.0014E+004
Sb-125	176.33	6.89	1.0830E+006	2.01E+005	2.7369E+005
	427.89	29.33	2.0109E+005		1.6571E+005
	463.38	10.35	6.4359E+005		2.0577E+005
	600.56	17.80	3.1481E+005		8.7874E+004
	606.64	5.02	1.4705E+006		1.7482E+006
	635.90	11.32	5.1505E+005		-1.5909E+005
Cs-134	563.23	8.38	6.8434E+005	7.06E+004	2.9075E+004
	569.32	15.43	3.9267E+005		-2.7714E+003
	604.70	97.60	7.4152E+004		-1.0586E+004
	795.84	85.40	7.0613E+004		-4.3232E+003
	801.93	8.73	6.6891E+005		-3.1635E+005
Cs-137	661.65	85.12	7.1642E+004	7.16E+004	2.0684E+004
Eu-152	121.78	28.40	3.4272E+005	2.33E+005	7.3269E+004
	244.69	7.49	1.0192E+006		-2.1876E+006
	344.27	26.50	2.4350E+005		1.2494E+005
	778.89	12.74	4.3259E+005		-2.6340E+005
	867.32	4.16	1.4175E+006		-1.4357E+006
	964.01	14.40	5.2819E+005		7.4017E+005
	1085.78	10.00	6.2160E+005		2.6303E+005
	1112.02	13.30	4.5568E+005		8.6292E+004
	1407.95	20.70	2.3309E+005		1.9689E+004
Eu-154	123.07	40.50	2.3807E+005	1.53E+005	5.8141E+004
	247.94	6.60	1.1017E+006		-4.1106E+005
	591.81	4.83	1.1537E+006		-3.2956E+004
	723.30	19.70	3.3894E+005		4.3843E+004
	756.87	4.33	1.3637E+006		8.7573E+005
	873.19	11.50	4.8298E+005		-1.8853E+005
	996.32	10.30	5.3849E+005		4.5589E+005
	1004.76	17.90	2.9812E+005		-2.0102E+005
	1274.45	35.50	1.5312E+005		-4.4823E+004
Eu-155	86.54	30.90	4.3578E+005	4.36E+005	5.7342E+005
	105.31	20.70	5.1928E+005		-2.8256E+005
Am-241	59.54	35.90	4.6796E+005	4.68E+005	-5.3800E+004
Cm-243	228.19	10.56	6.9446E+005	4.82E+005	-4.2373E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8188E+005	4.82E+005	-3.4431E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 10:52:30 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-17-105-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 10:37:29 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-17-105-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	314	291.62	72.86	1.13	1.93E+002	41.37	4.06E+002
m	2	287-	314	300.36	75.05	1.14	3.88E+002	49.30	5.66E+002
m	3	287-	314	309.72	77.39	1.14	1.22E+002	37.42	4.90E+002
F	4	331-	345	339.39	84.81	0.94	9.53E+001	38.31	5.15E+002
F	5	947-	962	953.85	238.43	0.97	1.46E+002	30.64	1.79E+002
M	6	1150-	1188	1154.55	288.61	1.06	1.97E+001	16.01	6.17E+001
m	7	1150-	1188	1180.39	295.07	1.07	6.32E+001	20.71	7.01E+001
F	8	1346-	1359	1352.85	338.19	0.83	3.41E+001	17.74	7.66E+001
F	9	1401-	1414	1406.76	351.67	1.02	1.10E+002	25.01	7.55E+001
F	10	2036-	2051	2043.04	510.75	1.27	6.27E+001	19.31	4.88E+001
F	11	2324-	2341	2331.77	582.94	1.58	9.06E+001	20.78	3.85E+001
F	12	2428-	2445	2436.53	609.13	1.44	1.29E+002	23.49	2.94E+001
F	13	3634-	3653	3643.67	910.94	1.80	7.52E+001	19.23	3.03E+001
F	14	3868-	3883	3875.33	968.86	1.88	5.32E+001	16.28	1.74E+001
F	15	5830-	5858	5844.13	1461.10	1.98	4.45E+002	40.89	7.02E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.998	511.00*	100.00	6.83160E+004	2.31145E+004
K-40	0.997	1460.81*	10.67	6.75481E+006	8.27327E+005
TL-208	0.752	277.35	6.80		
		510.84*	21.60	3.16278E+005	1.10085E+005
		583.14*	84.20	1.23899E+005	3.28094E+004
		860.37	12.46		
Pb-212	0.837	74.81* @	10.70	3.48989E+006	8.15398E+005
		77.11* @	18.00	6.35119E+005	2.30537E+005
		87.30 @	8.00		
		238.63*	44.60	2.70593E+005	7.09385E+004
Bi-214	0.417	609.31*	46.30	3.26225E+005	7.20827E+004
		1120.29	15.10		
		1764.49	15.80		
PB-214	0.759	74.82* @	6.21	6.01318E+006	1.47120E+006
		77.11* @	10.50	1.08878E+006	4.03481E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.92733E+005	1.07841E+005
		351.92*	37.20	2.79356E+005	7.87679E+004
Ac-228	0.999	338.32*	11.40	2.78179E+005	1.51339E+005
		911.07*	27.70	3.67439E+005	1.03072E+005
		969.11*	16.60	4.45620E+005	1.44026E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.998	4.155382E+004	2.416076E+004
K-40		0.997	6.754808E+006	8.273269E+005
TL-208		0.752	1.238991E+005	3.256003E+004
Pb-212	@	0.837	2.705933E+005	7.093854E+004
Bi-214		0.417	3.262247E+005	7.208272E+004
PB-214	@	0.759	2.840097E+005	6.360745E+004
Ac-228		0.999	3.667491E+005	7.332435E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	2.1462E-001	21.42
F 4	84.81	1.0591E-001	40.20
M 6	288.61	2.1867E-002	81.36

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6804E+004	4.99E+004	-4.1638E+004
	1332.49	100.00	4.9925E+004		-1.4912E+004
Nb-94	702.63	100.00	6.1615E+004	5.51E+004	9.8791E+003
	871.10	100.00	5.5082E+004		-8.2715E+003
Ag-108m	79.20	7.10	2.2193E+006	7.02E+004	-5.5739E+005
	433.93	89.90	7.0232E+004		-1.8873E+004
	614.37	90.40	9.2197E+004		-3.0289E+004
	722.95	90.50	7.0927E+004		4.9099E+004
Sb-125	176.33	6.89	1.1236E+006	2.08E+005	-3.6805E+005
	427.89	29.33	2.0777E+005		3.1615E+005
	463.38	10.35	6.3635E+005		4.5580E+004
	600.56	17.80	3.3459E+005		-2.9488E+004
	606.64	5.02	1.6625E+006		2.8027E+006
	635.90	11.32	5.3425E+005		2.7885E+003
Cs-134	563.23	8.38	7.2131E+005	7.31E+004	-1.0676E+004
	569.32	15.43	3.9825E+005		-1.6262E+004
	604.70	97.60	8.6335E+004		-2.3796E+004
	795.84	85.40	7.3086E+004		-9.0802E+003
	801.93	8.73	6.9163E+005		-7.0111E+005
Cs-137	661.65	85.12	7.0290E+004	7.03E+004	-4.2002E+004
Eu-152	121.78	28.40	3.5160E+005	2.49E+005	-9.8769E+004
	244.69	7.49	1.0304E+006		4.9378E+005
	344.27	26.50	2.4850E+005		1.2149E+005
	778.89	12.74	5.0285E+005		1.8139E+004
	867.32	4.16	1.4003E+006		-2.0007E+006
	964.01	14.40	5.3886E+005		-1.2143E+005
	1085.78	10.00	5.2881E+005		-3.4190E+005
	1112.02	13.30	4.4553E+005		-5.2424E+005
	1407.95	20.70	2.5953E+005		1.0437E+005
Eu-154	123.07	40.50	2.4262E+005	1.65E+005	-1.0960E+005
	247.94	6.60	1.0324E+006		-9.2305E+005
	591.81	4.83	1.2933E+006		7.6141E+005
	723.30	19.70	3.2446E+005		-1.0709E+004
	756.87	4.33	1.3086E+006		-1.9115E+005
	873.19	11.50	4.8259E+005		9.5297E+004
	996.32	10.30	5.6459E+005		1.9999E+005
	1004.76	17.90	3.2604E+005		-2.3998E+005
	1274.45	35.50	1.6507E+005		1.5501E+004
Eu-155	86.54	30.90	4.4247E+005	4.42E+005	6.6028E+004
	105.31	20.70	5.3104E+005		-4.7672E+004
Am-241	59.54	35.90	4.8652E+005	4.87E+005	-4.8792E+005
Cm-243	228.19	10.56	7.1754E+005	4.85E+005	-7.0819E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8549E+005	4.85E+005	4.5317E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 8:55:13 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-106-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 8:40:12 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-106-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	314	291.76	72.79	0.84	1.36E+002	38.69	3.84E+002
m	2	287-	314	300.37	74.95	0.85	2.70E+002	47.20	4.30E+002
M	3	947-	973	954.64	238.98	1.05	1.80E+002	31.39	1.19E+002
m	4	947-	973	966.61	241.98	1.06	5.09E+001	20.23	9.86E+001
F	5	1175-	1186	1181.18	295.73	0.59	3.56E+001	16.72	7.22E+001
F	6	1347-	1360	1352.78	338.70	1.27	5.24E+001	18.88	5.25E+001
F	7	1401-	1418	1407.48	352.39	1.10	9.44E+001	22.74	6.52E+001
F	8	2033-	2050	2041.84	511.13	1.58	7.35E+001	20.76	6.22E+001
F	9	2324-	2340	2331.38	583.53	1.37	7.84E+001	20.17	4.12E+001
F	10	2429-	2445	2436.30	609.76	1.28	1.07E+002	22.75	3.31E+001
F	11	3635-	3650	3643.26	911.27	1.40	5.11E+001	17.56	3.40E+001
F	12	3867-	3883	3875.01	969.12	1.54	4.41E+001	15.60	1.89E+001
F	13	5830-	5856	5843.86	1460.34	2.02	4.12E+002	39.29	1.33E+001
F	14	7051-	7065	7058.14	1763.24	0.99	2.49E+001	10.93	7.27E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	1.000	511.00*		100.00	7.72716E+004	2.43542E+004
K-40	0.993	1460.81*		10.67	6.00171E+006	7.51263E+005
TL-208	0.749	277.35		6.80		
		510.84*		21.60	3.57739E+005	1.16474E+005
		583.14*		84.20	1.02890E+005	2.97622E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.36068E+006	6.19961E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.24812E+005	7.61618E+004
Bi-214	0.691	609.31*		46.30	2.60852E+005	6.40486E+004
		1120.29		15.10		
		1764.49*		15.80	2.61420E+005	1.17539E+005
PB-214	0.708	74.82*	@	6.21	4.06751E+006	1.10827E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98*		7.49	5.48617E+005	2.36565E+005
		295.21*		19.20	1.60412E+005	7.99741E+004
		351.92*		37.20	2.32724E+005	6.82296E+004
Ac-228	0.999	338.32*		11.40	4.16049E+005	1.63422E+005
		911.07*		27.70	2.37737E+005	8.61120E+004
		969.11*		16.60	3.51907E+005	1.29825E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		1.000	5.504741E+004	2.517796E+004
K-40		0.993	6.001714E+006	7.512629E+005
TL-208		0.749	1.028897E+005	2.957272E+004
Pb-212	@	0.495	3.248123E+005	7.616178E+004
Bi-214		0.691	2.609817E+005	5.624079E+004
PB-214	@	0.708	2.181711E+005	5.070004E+004
Ac-228		0.999	2.958054E+005	6.570541E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.79	1.5117E-001	28.44

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.9309E+004	4.68E+004	2.1022E+003
	1332.49	100.00	4.6797E+004		-2.0181E+004
Nb-94	702.63	100.00	5.4498E+004	5.13E+004	-3.5425E+004
	871.10	100.00	5.1327E+004		-3.7180E+004
Ag-108m	79.20	7.10	2.0465E+006	6.28E+004	-3.9345E+005
	433.93	89.90	6.2761E+004		-1.1005E+004
	614.37	90.40	9.0380E+004		1.7695E+004
	722.95	90.50	7.4036E+004		4.4821E+004
Sb-125	176.33	6.89	1.1145E+006	2.04E+005	-4.8464E+004
	427.89	29.33	2.0422E+005		1.3294E+005
	463.38	10.35	5.8921E+005		2.2119E+005
	600.56	17.80	3.3152E+005		1.2345E+005
	606.64	5.02	1.5704E+006		1.8553E+006
	635.90	11.32	4.9429E+005		-3.1668E+005
Cs-134	563.23	8.38	7.4113E+005	6.82E+004	1.4962E+005
	569.32	15.43	3.8231E+005		-2.1037E+005
	604.70	97.60	8.0676E+004		8.6418E+003
	795.84	85.40	6.8211E+004		1.6243E+004
	801.93	8.73	6.6548E+005		-3.9092E+005
Cs-137	661.65	85.12	6.8310E+004	6.83E+004	-5.0393E+004
Eu-152	121.78	28.40	3.4132E+005	2.03E+005	-2.3167E+004
	244.69	7.49	9.5969E+005		-3.4527E+005
	344.27	26.50	2.3965E+005		-1.1191E+005
	778.89	12.74	4.2517E+005		-4.8240E+005
	867.32	4.16	1.2748E+006		1.8818E+005
	964.01	14.40	4.8068E+005		1.2587E+005
	1085.78	10.00	5.8051E+005		5.1689E+005
	1112.02	13.30	4.6969E+005		-7.4568E+005
	1407.95	20.70	2.0293E+005		-3.7131E+003
Eu-154	123.07	40.50	2.3877E+005	1.66E+005	1.0373E+005
	247.94	6.60	9.9270E+005		-7.7064E+005
	591.81	4.83	1.1641E+006		-1.2630E+005
	723.30	19.70	3.4383E+005		1.1771E+005
	756.87	4.33	1.2962E+006		7.6266E+003
	873.19	11.50	4.4981E+005		-3.3535E+004
	996.32	10.30	5.4932E+005		6.7548E+004
	1004.76	17.90	3.2342E+005		2.1007E+005
	1274.45	35.50	1.6592E+005		-7.2459E+004
Eu-155	86.54	30.90	4.3475E+005	4.35E+005	4.9257E+005
	105.31	20.70	5.3339E+005		1.6195E+004
Am-241	59.54	35.90	4.6591E+005	4.66E+005	-3.2379E+005
Cm-243	228.19	10.56	6.7334E+005	4.98E+005	5.5382E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9775E+005	4.98E+005	2.6780E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 8:25:50 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-107-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 8:10:48 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-107-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	305	292.08	72.87	0.90	1.80E+002	40.54	3.92E+002
m	2	287-	305	300.45	74.97	0.90	3.07E+002	50.42	4.97E+002
M	3	331-	356	339.58	84.79	1.04	1.32E+002	40.87	4.90E+002
m	4	331-	356	349.79	87.35	1.05	6.03E+001	35.35	5.25E+002
F	5	948-	961	954.23	238.88	1.20	1.74E+002	30.78	1.07E+002
F	6	1174-	1186	1180.72	295.61	1.00	4.27E+001	20.08	8.30E+001
F	7	1401-	1412	1407.36	352.36	1.06	5.79E+001	21.10	7.00E+001
F	8	1647-	1657	1652.35	413.69	0.58	2.08E+001	12.80	3.74E+001
F	9	2323-	2339	2332.30	583.76	1.46	7.99E+001	20.74	4.63E+001
F	10	2428-	2446	2436.13	609.72	1.74	9.85E+001	21.84	4.75E+001
F	11	2666-	2677	2671.15	668.46	0.89	1.40E+001	10.97	2.10E+001
F	12	2903-	2916	2909.07	727.91	1.22	2.89E+001	14.51	2.90E+001
F	13	3636-	3648	3641.96	910.95	1.45	3.81E+001	15.65	2.31E+001
F	14	4474-	4486	4480.01	1120.11	1.38	3.33E+001	14.35	1.79E+001
F	15	5504-	5517	5509.94	1377.05	1.54	1.68E+001	8.60	0.00E+000
F	16	5829-	5856	5843.87	1460.34	2.03	4.96E+002	42.78	3.67E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.993	1460.81*	10.67	7.23406E+006	8.55729E+005
TL-208	0.463	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.04939E+005	3.05482E+004
		860.37	12.46		
Bi-212	0.984	727.17*	11.80	2.92864E+005	1.51027E+005
Pb-212	0.658	74.81* @	10.70	2.68672E+006	6.86676E+005
		77.11 @	18.00		
		87.30* @	8.00	6.03906E+005	3.73095E+005
		238.63*	44.60	3.13989E+005	7.42081E+004
Bi-214	0.711	609.31*	46.30	2.38993E+005	6.07785E+004
		1120.29*	15.10	3.11391E+005	1.38430E+005
		1764.49	15.80		
PB-214	0.654	74.82* @	6.21	4.62929E+006	1.22996E+006
		77.11 @	10.50		
		87.30* @	4.67	1.03453E+006	6.43896E+005
		241.98	7.49		
		295.21*	19.20	1.92288E+005	9.59973E+004
		351.92*	37.20	1.42664E+005	5.72177E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	K-40		0.993	7.234062E+006	8.557290E+005
X	Eu-155		0.331		
	TL-208		0.463	1.049393E+005	3.054819E+004
	Bi-212		0.984	2.928643E+005	1.510273E+005
	Pb-212	@	0.658	3.139889E+005	7.420812E+004
	Bi-214		0.711	2.506937E+005	5.565082E+004
	PB-214	@	0.654	1.556723E+005	4.914953E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.87	2.0016E-001	22.51
M 3	84.79	1.4644E-001	31.01
F 8	413.69	2.3107E-002	61.54
F 11	668.46	1.5611E-002	78.10
F 13	910.95	4.2366E-002	41.03
F 15	1377.05	1.8671E-002	51.17

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.6380E+004	4.74E+004	-5.5309E+004
	1332.49	100.00	4.7370E+004		1.9858E+004
Nb-94	702.63	100.00	5.6805E+004	5.68E+004	-4.6496E+004
	871.10	100.00	5.7465E+004		-3.5586E+004
Ag-108m	79.20	7.10	2.0681E+006	6.66E+004	-3.1629E+006
	433.93	89.90	6.6568E+004		3.0677E+004
	614.37	90.40	8.4165E+004		-1.0834E+004
	722.95	90.50	7.1314E+004		2.2210E+003
Sb-125	176.33	6.89	1.0622E+006	1.97E+005	-9.4836E+005
	427.89	29.33	1.9726E+005		6.4133E+004
	463.38	10.35	6.0552E+005		3.7251E+005
	600.56	17.80	3.2467E+005		2.5093E+004
	606.64	5.02	1.6023E+006		2.7134E+006
	635.90	11.32	4.9664E+005		-4.2024E+005
Cs-134	563.23	8.38	7.4372E+005	6.99E+004	8.4879E+005
	569.32	15.43	3.8826E+005		-1.4242E+005
	604.70	97.60	7.9003E+004		-4.9395E+004
	795.84	85.40	6.9936E+004		7.6180E+004
	801.93	8.73	6.2266E+005		-4.3375E+005
Cs-137	661.65	85.12	6.5125E+004	6.51E+004	-1.9336E+004
Eu-152	121.78	28.40	3.4570E+005	2.25E+005	-2.0159E+004
	244.69	7.49	9.4039E+005		2.5536E+005
	344.27	26.50	2.3910E+005		-4.0481E+005
	778.89	12.74	4.2267E+005		-2.4058E+005
	867.32	4.16	1.4398E+006		-1.1017E+006
	964.01	14.40	5.2638E+005		7.1371E+005
	1085.78	10.00	5.1446E+005		-7.6055E+005
	1112.02	13.30	4.6969E+005		-5.3407E+005
	1407.95	20.70	2.2451E+005		2.7053E+003
Eu-154	123.07	40.50	2.3451E+005	1.62E+005	-3.2194E+005
	247.94	6.60	1.0148E+006		-6.9720E+005
	591.81	4.83	1.1796E+006		-6.4375E+005
	723.30	19.70	3.2638E+005		-9.9578E+004
	756.87	4.33	1.3031E+006		2.6676E+005
	873.19	11.50	5.0288E+005		3.3017E+004
	996.32	10.30	5.2743E+005		-3.4309E+005
	1004.76	17.90	3.0249E+005		-8.7073E+004
	1274.45	35.50	1.6219E+005		1.6022E+005
Eu-155	86.54*	30.90	2.8325E+005	2.83E+005	1.5635E+005
	105.31	20.70	5.1040E+005		-5.1718E+004
Am-241	59.54	35.90	4.7657E+005	4.77E+005	1.1212E+004
Cm-243	228.19	10.56	6.7147E+005	4.89E+005	4.0503E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8946E+005	4.89E+005	8.8365E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 8:05:32 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-108-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 7:50:30 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-108-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	305	291.99	72.85	0.92	1.54E+002	40.00	3.71E+002
m	2	288-	305	300.79	75.06	0.92	2.57E+002	49.30	5.10E+002
F	3	331-	345	338.84	84.60	0.80	1.13E+002	39.94	5.57E+002
F	4	948-	960	954.70	238.99	1.02	1.21E+002	29.14	1.37E+002
F	5	1175-	1185	1180.68	295.60	0.90	3.83E+001	20.23	7.89E+001
F	6	1400-	1413	1407.18	352.32	1.06	7.77E+001	22.33	7.14E+001
F	7	2034-	2052	2041.92	511.15	1.66	7.55E+001	20.32	5.55E+001
F	8	2323-	2341	2331.76	583.63	1.39	1.03E+002	22.51	4.77E+001
F	9	2429-	2445	2436.71	609.86	1.34	1.15E+002	23.20	3.91E+001
F	10	3635-	3651	3643.25	911.27	1.48	6.70E+001	17.52	1.71E+001
F	11	3867-	3881	3875.13	969.16	1.49	4.26E+001	15.24	1.68E+001
F	12	5830-	5856	5843.70	1460.30	2.01	4.24E+002	39.82	1.01E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.999	511.00*		100.00	7.92876E+004	2.40682E+004
K-40	0.992	1460.81*		10.67	6.18951E+006	7.66993E+005
TL-208	0.748	277.35		6.80		
		510.84*		21.60	3.67072E+005	1.15389E+005
		583.14*		84.20	1.35560E+005	3.45531E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.24297E+006	6.15212E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.19153E+005	6.28072E+004
Bi-214	0.413	609.31*		46.30	2.78833E+005	6.61367E+004
		1120.29		15.10		
		1764.49		15.80		
PB-214	0.562	74.82*	@	6.21	3.86471E+006	1.09652E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.72291E+005	9.55685E+004
		351.92*		37.20	1.91438E+005	6.36689E+004
Ac-228	0.622	338.32		11.40		
		911.07*		27.70	3.11765E+005	8.90352E+004
		969.11*		16.60	3.40119E+005	1.26686E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.999	5.000664E+004	2.518077E+004
K-40		0.992	6.189515E+006	7.669930E+005
TL-208		0.748	1.355598E+005	3.426949E+004
Pb-212	@	0.495	2.191533E+005	6.280723E+004
Bi-214		0.413	2.788326E+005	6.613669E+004
PB-214	@	0.562	1.855522E+005	5.298686E+004
Ac-228		0.622	3.211394E+005	7.284449E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M	1	72.85	1.7103E-001	25.98
F	3	84.60	1.2549E-001	35.37

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.9309E+004	5.12E+004	3.6205E+004
	1332.49	100.00	5.1189E+004		-1.8110E+004
Nb-94	702.63	100.00	5.5375E+004	4.55E+004	1.6165E+004
	871.10	100.00	4.5534E+004		3.3102E+004
Ag-108m	79.20	7.10	2.0440E+006	6.38E+004	-3.8955E+006
	433.93	89.90	6.3842E+004		-5.5478E+004
	614.37	90.40	8.8028E+004		-1.6830E+004
	722.95	90.50	6.4286E+004		0.0000E+000
Sb-125	176.33	6.89	1.0875E+006	1.99E+005	1.0184E+006
	427.89	29.33	1.9855E+005		1.1800E+005
	463.38	10.35	6.1439E+005		3.6604E+005
	600.56	17.80	3.2048E+005		-2.1175E+005
	606.64	5.02	1.6163E+006		2.1169E+006
	635.90	11.32	4.8475E+005		-1.6219E+005
Cs-134	563.23	8.38	7.0654E+005	6.64E+004	9.7364E+004
	569.32	15.43	3.6066E+005		-3.4985E+005
	604.70	97.60	8.2672E+004		-7.9849E+004
	795.84	85.40	6.6439E+004		-3.2424E+003
	801.93	8.73	6.8248E+005		-9.8923E+004
Cs-137	661.65	85.12	7.0750E+004	7.07E+004	1.6563E+004
Eu-152	121.78	28.40	3.3381E+005	2.29E+005	-8.6723E+004
	244.69	7.49	9.2210E+005		-1.1363E+006
	344.27	26.50	2.2946E+005		-3.4965E+005
	778.89	12.74	4.5407E+005		-3.5655E+005
	867.32	4.16	1.0422E+006		-2.7875E+006
	964.01	14.40	5.1535E+005		2.3031E+005
	1085.78	10.00	5.0555E+005		-5.7918E+004
	1112.02	13.30	4.8326E+005		-5.2083E+005
	1407.95	20.70	2.3588E+005		1.4681E+005
Eu-154	123.07	40.50	2.3537E+005	1.39E+005	9.0413E+003
	247.94	6.60	9.9784E+005		-1.0263E+006
	591.81	4.83	1.1898E+006		-9.4264E+005
	723.30	19.70	2.9537E+005		1.4846E+005
	756.87	4.33	1.3031E+006		4.3431E+005
	873.19	11.50	3.9625E+005		-1.4060E+005
	996.32	10.30	5.5992E+005		1.4193E+004
	1004.76	17.90	3.3139E+005		-9.1636E+003
	1274.45	35.50	1.3905E+005		-1.9434E+005
Eu-155	86.54	30.90	4.3249E+005	4.32E+005	1.8009E+005
	105.31	20.70	5.1124E+005		3.6145E+004
Am-241	59.54	35.90	4.5788E+005	4.58E+005	-1.2655E+005
Cm-243	228.19	10.56	6.5920E+005	4.78E+005	-1.8764E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7761E+005	4.78E+005	4.1505E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 3:05:29 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-109-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 2:50:29 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-109-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	318	291.91	72.83	0.87	9.47E+001	36.68	4.36E+002
m	2	287-	318	300.55	74.99	0.87	2.77E+002	47.50	4.14E+002
m	3	287-	318	308.90	77.09	0.87	5.70E+001	32.82	4.28E+002
F	4	365-	374	370.93	92.65	0.85	6.08E+001	33.89	2.85E+002
F	5	740-	749	744.29	186.27	1.13	5.78E+001	26.70	1.25E+002
F	6	950-	962	955.01	239.07	0.87	1.11E+002	29.40	1.67E+002
F	7	1307-	1316	1311.70	328.41	0.94	3.03E+001	16.01	3.79E+001
F	8	1400-	1414	1407.10	352.30	1.02	9.52E+001	23.06	6.35E+001
F	9	2033-	2052	2042.85	511.38	1.99	9.77E+001	21.88	6.26E+001
F	10	2326-	2339	2333.14	583.97	1.21	8.05E+001	21.37	4.46E+001
F	11	2429-	2445	2437.18	609.98	1.25	1.03E+002	22.62	4.06E+001
F	12	3438-	3449	3443.34	861.35	1.16	1.88E+001	10.59	9.29E+000
F	13	3639-	3654	3646.37	912.05	1.41	6.10E+001	17.21	1.71E+001
F	14	3869-	3883	3876.33	969.46	1.21	3.20E+001	16.11	3.93E+001
F	15	4476-	4489	4482.36	1120.70	1.12	2.67E+001	14.21	2.90E+001
F	16	5833-	5858	5845.24	1460.69	1.98	4.94E+002	43.02	1.26E+001
F	17	7056-	7069	7063.66	1764.62	1.88	3.06E+001	12.55	8.40E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*		100.00	1.02672E+005	2.71220E+004
K-40	1.000	1460.81*		10.67	7.20617E+006	8.56783E+005
TL-208	0.883	277.35		6.80		
		510.84*		21.60	4.75334E+005	1.31428E+005
		583.14*		84.20	1.05684E+005	3.13382E+004
		860.37*		12.46	1.90043E+005	1.09759E+005
Pb-212	0.835	74.81*	@	10.70	2.41691E+006	6.29787E+005
		77.11*	@	18.00	2.88075E+005	1.75116E+005
		87.30	@	8.00		
		238.63*		44.60	2.00764E+005	6.16885E+004
Bi-214	0.991	609.31*		46.30	2.49405E+005	6.30644E+004
		1120.29*		15.10	2.49983E+005	1.35736E+005
		1764.49*		15.80	3.20711E+005	1.35524E+005
PB-214	0.393	74.82*	@	6.21	4.16439E+006	1.12646E+006
		77.11*	@	10.50	4.93843E+005	3.02454E+005
		87.30	@	4.67		
		241.98		7.49		
		295.21		19.20		
		351.92*		37.20	2.34559E+005	6.90456E+004
Ac-228	0.607	338.32		11.40		
		911.07*		27.70	2.83787E+005	8.64406E+004
		969.11*		16.60	2.54983E+005	1.31284E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	7.848217E+004	2.788341E+004
K-40		1.000	7.206168E+006	8.567833E+005
TL-208		0.883	1.119903E+005	2.996142E+004
Pb-212	@	0.835	2.007644E+005	6.168848E+004
Bi-214		0.991	2.602714E+005	5.269280E+004
PB-214	@	0.393	2.345593E+005	6.775378E+004
Ac-228		0.607	2.750759E+005	7.219632E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.83	1.0518E-001	38.75
F 4	92.65	6.7593E-002	55.70
F 5	186.27	6.4270E-002	46.17
F 7	328.41	3.3654E-002	52.87

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8900E+004	5.12E+004	-1.1913E+004
	1332.49	100.00	5.1189E+004		-8.9714E+003
Nb-94	702.63	100.00	5.9556E+004	5.31E+004	4.7665E+004
	871.10	100.00	5.3108E+004		-2.4821E+004
Ag-108m	79.20	7.10	2.0565E+006	6.19E+004	5.0574E+005
	433.93	89.90	6.1882E+004		-6.2021E+004
	614.37	90.40	8.9212E+004		-1.6313E+004
	722.95	90.50	7.2142E+004		9.1732E+004
Sb-125	176.33	6.89	1.0727E+006	2.00E+005	-1.3456E+005
	427.89	29.33	2.0046E+005		-1.3512E+005
	463.38	10.35	6.4191E+005		8.4223E+004
	600.56	17.80	3.1907E+005		1.7707E+005
	606.64	5.02	1.5776E+006		1.5910E+006
	635.90	11.32	5.1730E+005		5.0941E+005
Cs-134	563.23	8.38	6.3138E+005	7.09E+004	-2.8525E+005
	569.32	15.43	3.7473E+005		-1.0301E+005
	604.70	97.60	7.9003E+004		2.1926E+004
	795.84	85.40	7.0949E+004		1.8853E+004
	801.93	8.73	7.0878E+005		-3.2422E+005
Cs-137	661.65	85.12	6.8620E+004	6.86E+004	-6.4363E+004
Eu-152	121.78	28.40	3.3951E+005	2.44E+005	2.5779E+005
	244.69	7.49	1.0037E+006		6.6659E+005
	344.27	26.50	2.4674E+005		-3.4860E+005
	778.89	12.74	4.4703E+005		3.2174E+004
	867.32	4.16	1.3561E+006		2.0316E+004
	964.01	14.40	5.0786E+005		8.2585E+004
	1085.78	10.00	5.8051E+005		6.8077E+005
	1112.02	13.30	5.0417E+005		-1.9748E+005
	1407.95	20.70	2.4402E+005		3.1190E+005
Eu-154	123.07	40.50	2.3565E+005	1.58E+005	-4.8097E+004
	247.94	6.60	1.0495E+006		-4.5926E+005
	591.81	4.83	1.2298E+006		1.1246E+006
	723.30	19.70	3.2894E+005		1.8906E+005
	756.87	4.33	1.2962E+006		2.1640E+005
	873.19	11.50	4.6217E+005		1.3516E+005
	996.32	10.30	5.9380E+005		4.1695E+005
	1004.76	17.90	3.2342E+005		-3.0511E+004
	1274.45	35.50	1.5837E+005		0.0000E+000
Eu-155	86.54	30.90	4.2334E+005	4.23E+005	4.7050E+005
	105.31	20.70	5.1235E+005		1.3153E+005
Am-241	59.54	35.90	4.6924E+005	4.69E+005	1.3558E+005
Cm-243	228.19	10.56	6.8993E+005	4.92E+005	-3.6682E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9196E+005	4.92E+005	-2.2003E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 2:47:18 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-110-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 2:32:17 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-110-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.25	72.66	1.02	1.50E+002	39.62	4.91E+002
m	2	282-	306	300.17	74.90	1.03	2.57E+002	47.54	5.44E+002
M	3	335-	356	339.90	84.86	0.99	1.03E+002	38.36	3.74E+002
m	4	335-	356	349.17	87.19	1.00	6.87E+001	34.55	4.56E+002
F	5	949-	960	954.48	238.94	0.96	1.27E+002	30.05	1.34E+002
F	6	1176-	1186	1181.65	295.84	1.15	5.57E+001	20.26	5.49E+001
F	7	1402-	1413	1406.76	352.21	0.84	7.64E+001	22.23	6.76E+001
F	8	2036-	2053	2044.19	511.72	1.91	6.23E+001	20.15	6.80E+001
F	9	2323-	2341	2332.54	583.82	1.67	9.59E+001	20.56	3.08E+001
F	10	2428-	2445	2437.39	610.03	1.41	1.25E+002	23.32	3.14E+001
F	11	2902-	2913	2907.59	727.54	0.68	2.88E+001	12.65	1.96E+001
F	12	3638-	3654	3645.17	911.75	1.89	7.65E+001	17.87	1.09E+001
F	13	5834-	5858	5845.38	1460.72	1.92	4.12E+002	39.81	1.82E+001
F	14	7058-	7071	7064.32	1764.78	1.39	2.21E+001	11.04	6.31E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.985	511.00*		100.00	6.55276E+004	2.30848E+004
K-40	1.000	1460.81*		10.67	6.01188E+006	7.57702E+005
Eu-155	0.335	86.54*		30.90	1.78319E+005	9.62520E+004
		105.31		20.70		
TL-208	0.739	277.35		6.80		
		510.84*		21.60	3.03368E+005	1.09708E+005
		583.14*		84.20	1.25849E+005	3.17041E+004
		860.37		12.46		
Bi-212	0.996	727.17*		11.80	2.92250E+005	1.32707E+005
Pb-212	0.657	74.81*	@	10.70	2.24989E+006	6.06144E+005
		77.11	@	18.00		
		87.30*	@	8.00	6.88758E+005	3.71773E+005
		238.63*		44.60	2.28430E+005	6.49825E+004
Bi-214	0.694	609.31*		46.30	3.04562E+005	6.81143E+004
		1120.29		15.10		
		1764.49*		15.80	2.32064E+005	1.18124E+005
PB-214	0.654	74.82*	@	6.21	3.87663E+006	1.08165E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.17989E+006	6.43078E+005
		241.98		7.49		
		295.21*		19.20	2.51008E+005	1.00533E+005
		351.92*		37.20	1.88340E+005	6.31859E+004

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.985	3.834431E+004	2.406286E+004
K-40		1.000	6.011878E+006	7.577022E+005
Eu-155		0.335	8.804523E+004	9.803585E+004
TL-208		0.739	1.258485E+005	3.143766E+004
Bi-212		0.996	2.922503E+005	1.327066E+005
Pb-212	@	0.657	2.284303E+005	6.498253E+004
Bi-214		0.694	2.864708E+005	5.900702E+004
PB-214	@	0.654	2.060012E+005	5.274204E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.66	1.6645E-001	26.45
M 3	84.86	1.1425E-001	37.31
F 12	911.75	8.5019E-002	23.35

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	5.8488E+004	4.68E+004	-3.3649E+004
		1332.49	100.00	4.6797E+004		1.4490E+004
	Nb-94	702.63	100.00	5.5952E+004	5.28E+004	3.3760E+003
		871.10	100.00	5.2757E+004		7.8202E+003
	Ag-108m	79.20	7.10	2.0204E+006	6.78E+004	9.4450E+004
		433.93	89.90	6.7787E+004		-1.2138E+004
		614.37	90.40	9.1723E+004		3.2361E+004
		722.95	90.50	6.8188E+004		6.6239E+003
	Sb-125	176.33	6.89	1.0576E+006	2.13E+005	1.4483E+005
		427.89	29.33	2.1333E+005		4.5398E+004
		463.38	10.35	5.6091E+005		1.4090E+005
		600.56	17.80	3.0903E+005		-6.0288E+004
		606.64	5.02	1.6540E+006		3.8986E+006
		635.90	11.32	5.1051E+005		5.8450E+005
	Cs-134	563.23	8.38	7.0654E+005	6.64E+004	-2.3074E+005
		569.32	15.43	3.6541E+005		8.5943E+004
		604.70	97.60	8.1589E+004		-1.7646E+004
		795.84	85.40	6.6439E+004		-2.8101E+004
		801.93	8.73	6.6202E+005		-3.4411E+005
	Cs-137	661.65	85.12	7.0148E+004	7.01E+004	2.9895E+004
	Eu-152	121.78	28.40	3.2968E+005	2.00E+005	1.0584E+005
		244.69	7.49	9.7993E+005		1.5200E+005
		344.27	26.50	2.4240E+005		-2.7315E+005
		778.89	12.74	4.2766E+005		-2.8204E+005
		867.32	4.16	1.2408E+006		-1.4705E+006
		964.01	14.40	4.8068E+005		3.4411E+005
		1085.78	10.00	5.4855E+005		-4.7755E+005
		1112.02	13.30	4.3527E+005		-8.3695E+005
		1407.95	20.70	1.9964E+005		-6.8211E+004
	Eu-154	123.07	40.50	2.3089E+005	1.50E+005	1.8749E+005
		247.94	6.60	1.0265E+006		-1.1232E+006
		591.81	4.83	1.0719E+006		-3.9725E+005
		723.30	19.70	3.1860E+005		1.7716E+005
		756.87	4.33	1.2752E+006		-2.2963E+005
		873.19	11.50	4.8875E+005		4.4723E+005
		996.32	10.30	5.4213E+005		1.3417E+005
		1004.76	17.90	3.0893E+005		-3.7026E+004
		1274.45	35.50	1.5042E+005		8.9877E+003
+	Eu-155	86.54*	30.90	2.6501E+005	2.65E+005	1.7832E+005
		105.31	20.70	5.0900E+005		7.7532E+003
	Am-241	59.54	35.90	4.6974E+005	4.70E+005	-4.8321E+003
	Cm-243	228.19	10.56	6.6772E+005	4.81E+005	4.2951E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8103E+005	4.81E+005	2.2695E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 11:16:23 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-17-111-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 11:01:22 AM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-17-111-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	307	291.89	72.93	0.85	1.52E+002	38.38	4.01E+002
m	2	287-	307	300.30	75.03	0.86	3.00E+002	47.96	4.71E+002
F	3	950-	960	953.99	238.47	0.81	1.07E+002	27.49	1.19E+002
F	4	1177-	1188	1181.49	295.35	1.21	6.01E+001	21.63	6.92E+001
F	5	1347-	1360	1353.90	338.45	1.14	5.71E+001	18.69	4.72E+001
F	6	1401-	1433	1407.67	351.90	0.97	9.19E+001	22.13	1.31E+002
F	7	2030-	2050	2041.73	510.43	2.54	9.22E+001	19.85	4.27E+001
F	8	2323-	2339	2331.75	582.94	1.22	8.09E+001	20.41	4.03E+001
F	9	2428-	2444	2436.27	609.07	1.25	8.01E+001	20.46	4.03E+001
F	10	3636-	3652	3644.10	911.05	1.47	6.87E+001	17.46	1.23E+001
F	11	3868-	3882	3875.29	968.85	0.95	3.17E+001	13.46	2.05E+001
F	12	4475-	4488	4481.35	1120.38	1.46	3.09E+001	12.90	1.05E+001
F	13	5831-	5857	5844.55	1461.21	1.93	3.85E+002	38.15	3.40E+000
F	14	7057-	7070	7064.05	1766.11	1.11	2.22E+001	10.26	5.80E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.990	511.00*		100.00	9.94509E+004	2.55599E+004
K-40	0.995	1460.81*		10.67	5.79475E+006	7.42027E+005
TL-208	0.751	277.35		6.80		
		510.84*		21.60	4.60421E+005	1.24163E+005
		583.14*		84.20	1.09421E+005	3.11770E+004
		860.37		12.46		
Pb-212	0.496	74.81*	@	10.70	2.63942E+006	6.67821E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	1.95396E+005	5.89881E+004
Bi-214	0.983	609.31*		46.30	2.00498E+005	5.70071E+004
		1120.29*		15.10	2.99882E+005	1.29341E+005
		1764.49*		15.80	2.40858E+005	1.14039E+005
PB-214	0.564	74.82*	@	6.21	4.54779E+006	1.19710E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	2.75688E+005	1.09480E+005
		351.92*		37.20	2.31049E+005	6.77008E+004
Ac-228	0.999	338.32*		11.40	4.62335E+005	1.67689E+005
		911.07*		27.70	3.32027E+005	9.25625E+004
		969.11*		16.60	2.62406E+005	1.14814E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.990	7.581595E+004	2.642093E+004
K-40		0.995	5.794753E+006	7.420266E+005
TL-208		0.751	1.094212E+005	3.097236E+004
Pb-212	@	0.496	1.953963E+005	5.898813E+004
Bi-214		0.983	2.208503E+005	4.743760E+004
PB-214	@	0.564	2.433973E+005	5.758063E+004
Ac-228		0.999	3.291893E+005	6.620670E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.93	1.6923E-001	25.20

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.1094E+004	4.71E+004	-1.7817E+004
	1332.49	100.00	4.7093E+004		-1.2072E+004
Nb-94	702.63	100.00	6.1670E+004	5.29E+004	-6.4261E+003
	871.10	100.00	5.2917E+004		-1.5339E+004
Ag-108m	79.20	7.10	2.0829E+006	6.53E+004	-1.7334E+004
	433.93	89.90	6.7223E+004		-1.3693E+004
	614.37	90.40	8.3614E+004		1.3353E+004
	722.95	90.50	6.5295E+004		1.1266E+004
Sb-125	176.33	6.89	1.1108E+006	1.98E+005	5.6817E+005
	427.89	29.33	1.9834E+005		9.8635E+004
	463.38	10.35	5.7262E+005		1.3272E+005
	600.56	17.80	3.1433E+005		-1.3278E+005
	606.64	5.02	1.5059E+006		1.8401E+006
	635.90	11.32	4.8327E+005		-8.6487E+003
Cs-134	563.23	8.38	6.2778E+005	7.66E+004	-4.0206E+005
	569.32	15.43	3.6329E+005		-3.4203E+004
	604.70	97.60	7.8170E+004		2.3667E+004
	795.84	85.40	7.6646E+004		1.9018E+004
	801.93	8.73	7.0090E+005		-7.9559E+005
Cs-137	661.65	85.12	7.1320E+004	7.13E+004	1.6911E+004
Eu-152	121.78	28.40	3.3763E+005	2.26E+005	1.2165E+005
	244.69	7.49	9.7916E+005		-6.6871E+005
	344.27	26.50	2.2621E+005		4.6611E+004
	778.89	12.74	4.5608E+005		-5.3959E+005
	867.32	4.16	1.3495E+006		-1.7329E+006
	964.01	14.40	5.0119E+005		8.9041E+004
	1085.78	10.00	6.0639E+005		-2.9671E+005
	1112.02	13.30	4.1936E+005		-2.7327E+005
	1407.95	20.70	2.6796E+005		3.1897E+005
Eu-154	123.07	40.50	2.3489E+005	1.51E+005	2.7146E+004
	247.94	6.60	1.0512E+006		-5.3792E+005
	591.81	4.83	1.1736E+006		-2.5852E+005
	723.30	19.70	3.0300E+005		1.8445E+005
	756.87	4.33	1.4337E+006		5.2050E+005
	873.19	11.50	4.7673E+005		2.9162E+005
	996.32	10.30	5.5904E+005		-9.1640E+004
	1004.76	17.90	3.1402E+005		-1.8502E+005
	1274.45	35.50	1.5123E+005		5.2523E+004
Eu-155	86.54	30.90	4.1926E+005	4.19E+005	1.9939E+005
	105.31	20.70	5.2552E+005		1.2247E+005
Am-241	59.54	35.90	4.5946E+005	4.59E+005	-2.0594E+005
Cm-243	228.19	10.56	6.5164E+005	4.73E+005	-6.5334E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7308E+005	4.73E+005	-4.8832E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 2:28:10 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-112-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 2:13:09 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-112-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	287-	306	292.37	72.94	0.80	6.15E+001	33.86	4.48E+002
m	2	287-	306	300.59	75.01	0.81	2.60E+002	49.54	4.96E+002
F	3	332-	345	339.48	84.76	0.74	8.46E+001	36.62	4.80E+002
F	4	367-	377	370.33	92.50	0.90	6.31E+001	34.19	3.19E+002
F	5	949-	962	954.95	239.06	0.98	1.23E+002	29.51	1.51E+002
F	6	1400-	1416	1408.39	352.62	1.11	8.46E+001	23.48	9.92E+001
F	7	2035-	2053	2042.93	511.40	1.89	8.94E+001	20.94	4.59E+001
F	8	2324-	2339	2331.98	583.68	1.10	6.44E+001	19.35	4.41E+001
F	9	2429-	2444	2436.64	609.85	1.13	1.02E+002	22.87	4.56E+001
F	10	3637-	3654	3645.54	911.84	1.84	7.60E+001	18.83	2.42E+001
M	11	3851-	3883	3859.06	965.14	1.13	2.32E+001	11.83	1.75E+001
m	12	3851-	3883	3876.88	969.59	1.13	3.59E+001	13.89	1.75E+001
F	13	4479-	4491	4484.35	1121.20	0.68	2.13E+001	11.18	1.87E+001
F	14	5833-	5857	5845.55	1460.76	1.89	4.71E+002	42.47	1.87E+001
F	15	7055-	7068	7062.09	1764.23	2.10	2.67E+001	11.53	5.26E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.995	511.00*	100.00	9.39390E+004	2.56464E+004
K-40	1.000	1460.81*	10.67	6.86604E+006	8.32301E+005
TL-208	0.745	277.35	6.80		
		510.84*	21.60	4.34903E+005	1.23931E+005
		583.14*	84.20	8.45286E+004	2.77430E+004
		860.37	12.46		
Pb-212	0.494	74.81* @	10.70	2.27234E+006	6.21023E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.21771E+005	6.35947E+004
Bi-214	0.989	609.31*	46.30	2.48427E+005	6.35385E+004
		1120.29*	15.10	1.99107E+005	1.06825E+005
		1764.49*	15.80	2.80160E+005	1.24159E+005
Ac-228	0.612	338.32	11.40		
		911.07*	27.70	3.53676E+005	9.65555E+004
		969.11*	16.60	2.86708E+005	1.14852E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.995	7.568084E+004	2.633042E+004
K-40		1.000	6.866035E+006	8.323010E+005
TL-208		0.745	8.452863E+004	2.760588E+004
Pb-212	@	0.494	2.217712E+005	6.359473E+004
Bi-214		0.989	2.427712E+005	4.998754E+004
Ac-228		0.612	3.259447E+005	7.390763E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.94	6.8366E-002	55.04
F 3	84.76	9.3956E-002	43.31
F 4	92.50	7.0151E-002	54.15
F 6	352.62	9.3957E-002	27.76
M 11	965.14	2.5807E-002	50.92

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.8073E+004	4.90E+004	6.5034E+003
	1332.49	100.00	4.9047E+004		8.6411E+003
Nb-94	702.63	100.00	5.7086E+004	5.71E+004	-4.6461E+004
	871.10	100.00	5.7465E+004		-1.3686E+004
Ag-108m	79.20	7.10	2.0381E+006	6.98E+004	-1.6463E+006
	433.93	89.90	6.9770E+004		2.2844E+004
	614.37	90.40	8.7630E+004		-3.1602E+004
	722.95	90.50	7.2960E+004		7.6536E+004
Sb-125	176.33	6.89	1.0517E+006	2.08E+005	-1.5927E+005
	427.89	29.33	2.0792E+005		-1.0939E+005
	463.38	10.35	6.0373E+005		2.5309E+005
	600.56	17.80	3.1766E+005		2.9814E+004
	606.64	5.02	1.6058E+006		2.5378E+006
	635.90	11.32	4.9898E+005		-9.5755E+004
Cs-134	563.23	8.38	6.8716E+005	7.26E+004	-1.0795E+005
	569.32	15.43	3.7165E+005		8.6506E+003
	604.70	97.60	8.0676E+004		-4.6577E+003
	795.84	85.40	7.2605E+004		8.8399E+004
	801.93	8.73	7.0555E+005		-9.9060E+004
Cs-137	661.65	85.12	6.7686E+004	6.77E+004	1.3740E+004
Eu-152	121.78	28.40	3.3238E+005	2.06E+005	-2.4895E+005
	244.69	7.49	9.9845E+005		-3.6776E+005
	344.27	26.50	2.3461E+005		-4.7186E+005
	778.89	12.74	4.0991E+005		-1.2646E+005
	867.32	4.16	1.4976E+006		9.4091E+005
	964.01	14.40	4.9641E+005		6.3435E+004
	1085.78	10.00	5.3180E+005		-6.3405E+004
	1112.02	13.30	4.2313E+005		-2.4656E+005
	1407.95	20.70	2.0617E+005		1.0954E+005
Eu-154	123.07	40.50	2.3278E+005	1.61E+005	-1.3480E+005
	247.94	6.60	1.0462E+006		-7.3450E+005
	591.81	4.83	1.1163E+006		-8.5738E+005
	723.30	19.70	3.3398E+005		4.3171E+005
	756.87	4.33	1.2893E+006		3.6482E+004
	873.19	11.50	4.8298E+005		5.8954E+004
	996.32	10.30	4.7630E+005		-2.3033E+005
	1004.76	17.90	2.6280E+005		6.6046E+004
	1274.45	35.50	1.6093E+005		-6.0538E+004
Eu-155	86.54	30.90	4.2066E+005	4.21E+005	5.0380E+005
	105.31	20.70	5.1068E+005		-1.6549E+005
Am-241	59.54	35.90	4.6334E+005	4.63E+005	-8.9478E+004
Cm-243	228.19	10.56	6.8993E+005	4.87E+005	5.6124E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8695E+005	4.87E+005	3.1416E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 2:10:19 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-113-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 1:55:18 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-113-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	306	291.59	72.75	0.71	1.18E+002	34.69	3.13E+002
m	2	282-	306	300.48	74.98	0.72	2.32E+002	45.48	3.67E+002
F	3	948-	960	954.27	238.89	1.11	1.55E+002	30.96	1.22E+002
F	4	1176-	1186	1180.78	295.63	1.01	4.07E+001	17.64	6.94E+001
F	5	1348-	1357	1352.38	338.60	0.60	2.41E+001	13.13	5.50E+001
F	6	1400-	1415	1407.70	352.45	1.20	9.17E+001	23.03	7.18E+001
F	7	2032-	2055	2043.75	511.61	2.44	1.25E+002	22.50	5.69E+001
F	8	2324-	2339	2332.33	583.77	1.25	7.57E+001	20.83	4.83E+001
F	9	2430-	2444	2437.34	610.02	1.16	8.24E+001	21.19	4.48E+001
F	10	2904-	2916	2910.23	728.20	1.12	2.62E+001	13.78	2.56E+001
F	11	3637-	3654	3645.32	911.78	1.68	7.03E+001	17.65	1.51E+001
F	12	3869-	3886	3877.23	969.68	2.22	5.78E+001	15.63	1.10E+001
F	13	4476-	4487	4481.82	1120.56	0.47	1.50E+001	2.00	3.17E+001
F	14	5833-	5857	5845.36	1460.71	1.98	4.38E+002	40.31	3.06E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.989	511.00*		100.00	1.31081E+005	2.99409E+004
K-40	1.000	1460.81*		10.67	6.39156E+006	7.83258E+005
TL-208	0.742	277.35		6.80		
		510.84*		21.60	6.06858E+005	1.47209E+005
		583.14*		84.20	9.93357E+004	3.03343E+004
		860.37		12.46		
Bi-212	0.968	727.17*		11.80	2.65741E+005	1.43130E+005
Pb-212	0.496	74.81*	@	10.70	2.02814E+006	5.62133E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	2.80014E+005	7.10466E+004
Bi-214	0.704	609.31*		46.30	1.99990E+005	5.71481E+004
		1120.29*		15.10	1.40875E+005	2.39851E+004
		1764.49		15.80		
PB-214	0.561	74.82*	@	6.21	3.49455E+006	1.00124E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	1.83157E+005	8.51639E+004
		351.92*		37.20	2.26143E+005	6.81980E+004
Ac-228	0.989	338.32*		11.40	1.91497E+005	1.08451E+005
		911.07*		27.70	3.26828E+005	9.02875E+004
		969.11*		16.60	4.61082E+005	1.33732E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.989	1.096249E+005	3.064149E+004
K-40		1.000	6.391556E+006	7.832581E+005
TL-208		0.742	9.933565E+004	3.016109E+004
Bi-212		0.968	2.657409E+005	1.431295E+005
Pb-212	@	0.496	2.800139E+005	7.104658E+004
Bi-214		0.704	1.497283E+005	2.211624E+004
PB-214	@	0.561	2.093477E+005	5.323329E+004
Ac-228		0.989	3.116565E+005	6.159139E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.75	1.3143E-001	29.32

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	5.9715E+004	4.79E+004	3.0292E+004
	1332.49	100.00	4.7936E+004		-4.0632E+003
Nb-94	702.63	100.00	5.1772E+004	4.95E+004	-4.7427E+004
	871.10	100.00	4.9477E+004		5.0479E+003
Ag-108m	79.20	7.10	2.0000E+006	6.57E+004	-1.5837E+006
	433.93	89.90	6.5742E+004		-5.9493E+004
	614.37	90.40	8.6017E+004		9.8565E+003
	722.95	90.50	7.1591E+004		-2.3025E+004
Sb-125	176.33	6.89	1.0423E+006	2.02E+005	-7.5836E+005
	427.89	29.33	2.0235E+005		1.8151E+003
	463.38	10.35	5.8180E+005		1.3765E+005
	600.56	17.80	3.1337E+005		-2.6402E+005
	606.64	5.02	1.5379E+006		1.9541E+006
	635.90	11.32	5.1730E+005		1.5131E+005
Cs-134	563.23	8.38	7.0106E+005	6.68E+004	-1.8553E+005
	569.32	15.43	4.0698E+005		2.9306E+005
	604.70	97.60	7.9191E+004		-1.9749E+004
	795.84	85.40	6.6798E+004		2.3610E+004
	801.93	8.73	6.2635E+005		-4.7571E+005
Cs-137	661.65	85.12	6.2452E+004	6.25E+004	-5.1498E+004
Eu-152	121.78	28.40	3.3238E+005	2.09E+005	-1.8658E+005
	244.69	7.49	9.6513E+005		-4.0819E+005
	344.27	26.50	2.4131E+005		-6.1053E+004
	778.89	12.74	4.2267E+005		-2.8651E+005
	867.32	4.16	1.2145E+006		-1.7790E+006
	964.01	14.40	4.7667E+005		-2.4959E+005
	1085.78	10.00	5.6076E+005		-4.3572E+005
	1112.02	13.30	4.5568E+005		1.5820E+005
	1407.95	20.70	2.0935E+005		-9.0847E+004
Eu-154	123.07	40.50	2.3206E+005	1.31E+005	-1.0088E+005
	247.94	6.60	1.0064E+006		-1.7128E+006
	591.81	4.83	1.2298E+006		9.2952E+005
	723.30	19.70	3.2510E+005		-1.0532E+005
	756.87	4.33	1.2099E+006		-1.1586E+006
	873.19	11.50	4.3384E+005		1.1979E+005
	996.32	10.30	5.3483E+005		1.5989E+005
	1004.76	17.90	3.2543E+005		7.0562E+004
	1274.45	35.50	1.3139E+005		7.1163E+004
Eu-155	86.54	30.90	4.2811E+005	4.28E+005	4.2658E+005
	105.31	20.70	5.0477E+005		-7.8101E+004
Am-241	59.54	35.90	4.5236E+005	4.52E+005	-3.6648E+005
Cm-243	228.19	10.56	6.7241E+005	4.80E+005	-1.0286E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8018E+005	4.80E+005	-1.2391E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 1:51:44 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-114-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 1:36:43 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-114-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	305	292.23	72.91	0.98	1.51E+002	39.48	4.95E+002
m	2	284-	305	300.11	74.88	0.98	2.37E+002	47.13	5.26E+002
F	3	950-	959	954.62	238.97	0.93	1.33E+002	29.94	1.04E+002
F	4	1174-	1186	1180.44	295.54	0.95	3.81E+001	20.34	9.46E+001
F	5	1399-	1414	1407.72	352.45	1.29	7.46E+001	22.40	8.20E+001
F	6	2324-	2339	2331.72	583.62	1.36	8.29E+001	21.06	4.02E+001
F	7	2430-	2444	2437.28	610.01	1.21	9.26E+001	22.09	4.30E+001
F	8	2902-	2914	2908.08	727.66	1.30	3.20E+001	14.14	1.92E+001
F	9	3635-	3652	3644.22	911.51	1.59	7.28E+001	19.65	3.37E+001
F	10	3868-	3885	3877.17	969.66	1.76	4.44E+001	15.87	2.70E+001
F	11	4476-	4490	4483.33	1120.94	1.35	3.45E+001	13.98	1.67E+001
F	12	5833-	5857	5845.21	1460.68	1.98	4.79E+002	42.40	1.25E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
K-40	0.999	1460.81*	10.67	6.98117E+006	8.37751E+005
TL-208	0.466	277.35	6.80		
		510.84	21.60		
		583.14*	84.20	1.08791E+005	3.11580E+004
		860.37	12.46		
Bi-212	0.993	727.17*	11.80	3.24332E+005	1.48260E+005
Pb-212	0.496	74.81* @	10.70	2.07293E+006	5.78924E+005
		77.11 @	18.00		
		87.30 @	8.00		
		238.63*	44.60	2.39425E+005	6.57762E+004
Bi-214	0.703	609.31*	46.30	2.24798E+005	6.04854E+004
		1120.29*	15.10	3.23480E+005	1.35356E+005
		1764.49	15.80		
PB-214	0.561	74.82* @	6.21	3.57172E+006	1.03065E+006
		77.11 @	10.50		
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	1.71473E+005	9.59956E+004
		351.92*	37.20	1.83832E+005	6.31985E+004
Ac-228	0.617	338.32	11.40		
		911.07*	27.70	3.38805E+005	9.93512E+004
		969.11*	16.60	3.54216E+005	1.31997E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
K-40		0.999	6.981166E+006	8.377514E+005
TL-208		0.466	1.087913E+005	3.115798E+004
Bi-212		0.993	3.243321E+005	1.482602E+005
Pb-212	@	0.496	2.394251E+005	6.577620E+004
Bi-214		0.703	2.412235E+005	5.522261E+004
PB-214	@	0.561	1.800948E+005	5.278611E+004
Ac-228		0.617	3.443781E+005	7.937876E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.91	1.6820E-001	26.08

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.0118E+004	4.25E+004	3.9410E+004
	1332.49	100.00	4.2545E+004		-4.2761E+002
Nb-94	702.63	100.00	5.6238E+004	5.38E+004	1.8761E+004
	871.10	100.00	5.3803E+004		-2.7986E+004
Ag-108m	79.20	7.10	2.0187E+006	6.14E+004	-3.2609E+006
	433.93	89.90	6.1437E+004		1.8993E+004
	614.37	90.40	8.8227E+004		9.6652E+003
	722.95	90.50	7.1314E+004		-5.2730E+004
Sb-125	176.33	6.89	1.0517E+006	2.04E+005	-7.1625E+005
	427.89	29.33	2.0422E+005		1.3144E+005
	463.38	10.35	6.0194E+005		3.6454E+004
	600.56	17.80	3.3690E+005		8.6305E+003
	606.64	5.02	1.6301E+006		2.7191E+006
	635.90	11.32	4.9192E+005		2.1518E+005
Cs-134	563.23	8.38	6.9554E+005	6.89E+004	3.0513E+005
	569.32	15.43	3.8678E+005		-1.1636E+005
	604.70	97.60	7.9565E+004		-6.9420E+004
	795.84	85.40	6.8907E+004		-1.4150E+004
	801.93	8.73	7.1200E+005		5.8294E+005
Cs-137	661.65	85.12	6.7999E+004	6.80E+004	-3.4291E+004
Eu-152	121.78	28.40	3.2760E+005	2.33E+005	-1.7020E+005
	244.69	7.49	9.1209E+005		-2.6540E+006
	344.27	26.50	2.4835E+005		-3.8605E+004
	778.89	12.74	4.0991E+005		-4.6577E+005
	867.32	4.16	1.3080E+006		-1.5124E+006
	964.01	14.40	4.9641E+005		-8.4879E+004
	1085.78	10.00	5.5265E+005		-8.0173E+004
	1112.02	13.30	4.7788E+005		-2.2052E+005
	1407.95	20.70	2.3309E+005		-2.3256E+004
Eu-154	123.07	40.50	2.3060E+005	1.65E+005	-2.7336E+004
	247.94	6.60	1.0148E+006		-8.3657E+004
	591.81	4.83	1.2346E+006		-1.2019E+005
	723.30	19.70	3.3020E+005		1.6595E+005
	756.87	4.33	1.3168E+006		-5.4761E+005
	873.19	11.50	4.8588E+005		3.3815E+004
	996.32	10.30	5.0452E+005		2.6270E+005
	1004.76	17.90	3.2743E+005		1.3548E+005
	1274.45	35.50	1.6469E+005		-4.8444E+003
Eu-155	86.54	30.90	4.3249E+005	4.32E+005	9.0942E+005
	105.31	20.70	4.8216E+005		-2.1444E+005
Am-241	59.54	35.90	4.5788E+005	4.58E+005	-1.3831E+005
Cm-243	228.19	10.56	6.9174E+005	4.91E+005	6.3582E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.9113E+005	4.91E+005	2.3143E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 1:26:35 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-115-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 1:11:34 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-115-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	250-	257	253.97	63.31	0.57	3.74E+001	28.89	2.44E+002
M	2	284-	304	292.01	72.85	0.81	1.26E+002	37.13	4.12E+002
m	3	284-	304	300.45	74.97	0.81	2.69E+002	48.50	4.23E+002
F	4	332-	345	339.77	84.83	0.86	8.94E+001	40.06	5.48E+002
F	5	947-	961	954.88	239.04	0.93	1.66E+002	32.52	1.67E+002
F	6	1173-	1187	1180.82	295.64	1.24	7.02E+001	22.87	9.59E+001
F	7	1347-	1361	1353.41	338.86	1.22	4.74E+001	19.29	7.05E+001
F	8	1401-	1415	1407.55	352.41	1.17	7.42E+001	23.37	9.50E+001
F	9	1867-	1876	1870.92	468.37	0.96	2.00E+001	12.85	2.43E+001
F	10	2035-	2050	2042.71	511.35	1.33	6.49E+001	20.24	5.72E+001
F	11	2325-	2341	2332.59	583.83	1.34	8.32E+001	21.91	5.65E+001
F	12	2428-	2443	2436.76	609.88	1.27	1.01E+002	21.71	2.95E+001
F	13	3638-	3654	3645.56	911.85	1.62	7.43E+001	19.93	3.59E+001
F	14	3871-	3885	3876.80	969.57	1.58	4.60E+001	15.63	1.64E+001
F	15	4477-	4489	4483.66	1121.02	1.44	3.09E+001	13.76	1.62E+001
F	16	5831-	5858	5845.00	1460.63	1.93	4.65E+002	41.83	1.40E+001
F	17	7057-	7071	7063.97	1764.70	1.05	2.48E+001	10.95	6.16E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*		100.00	6.82221E+004	2.33194E+004
K-40	0.999	1460.81*		10.67	6.78031E+006	8.20650E+005
TL-208	0.742	277.35		6.80		
		510.84*		21.60	3.15843E+005	1.10999E+005
		583.14*		84.20	1.09243E+005	3.21844E+004
		860.37		12.46		
Pb-212	0.495	74.81*	@	10.70	2.35336E+006	6.26466E+005
		77.11	@	18.00		
		87.30	@	8.00		
		238.63*		44.60	3.00013E+005	7.52064E+004
Bi-214	0.991	609.31*		46.30	2.44208E+005	6.08351E+004
		1120.29*		15.10	2.89737E+005	1.32538E+005
		1764.49*		15.80	2.59716E+005	1.17750E+005
PB-214	0.561	74.82*	@	6.21	4.05491E+006	1.11883E+006
		77.11	@	10.50		
		87.30	@	4.67		
		241.98		7.49		
		295.21*		19.20	3.16144E+005	1.15885E+005
		351.92*		37.20	1.82798E+005	6.52169E+004
Ac-228	0.987	338.32*		11.40	3.76099E+005	1.64107E+005
		911.07*		27.70	3.45497E+005	1.00863E+005
		969.11*		16.60	3.66979E+005	1.30549E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	4.462552E+004	2.432145E+004
K-40		0.999	6.780310E+006	8.206504E+005
TL-208		0.742	1.092434E+005	3.198688E+004
Pb-212	@	0.495	3.000132E+005	7.520643E+004
Bi-214		0.991	2.535013E+005	5.004665E+004
PB-214	@	0.561	2.148718E+005	5.683482E+004
Ac-228		0.987	3.578448E+005	7.177680E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

	Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F	1	63.31	4.1585E-002	77.18
M	2	72.85	1.4016E-001	29.43
F	4	84.83	9.9303E-002	44.82
F	9	468.37	2.2238E-002	64.21

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.2861E+004	5.07E+004	-7.0089E+004
	1332.49	100.00	5.0662E+004		-3.2585E+004
Nb-94	702.63	100.00	5.2083E+004	5.21E+004	2.3937E+004
	871.10	100.00	5.6163E+004		-2.6238E+004
Ag-108m	79.20	7.10	2.0788E+006	6.86E+004	-5.5002E+006
	433.93	89.90	6.8587E+004		6.2201E+004
	614.37	90.40	8.6626E+004		-4.7750E+004
	722.95	90.50	7.4832E+004		9.1465E+004
Sb-125	176.33	6.89	1.1123E+006	2.10E+005	3.1798E+005
	427.89	29.33	2.0974E+005		-9.6991E+004
	463.38	10.35	6.4359E+005		6.3558E+004
	600.56	17.80	3.2328E+005		-1.5692E+004
	606.64	5.02	1.5452E+006		1.5395E+006
	635.90	11.32	5.2842E+005		-8.9304E+004
Cs-134	563.23	8.38	7.8883E+005	7.06E+004	1.0608E+006
	569.32	15.43	4.2751E+005		4.8825E+005
	604.70	97.60	7.7101E+004		1.4235E+004
	795.84	85.40	7.0613E+004		1.3421E+004
	801.93	8.73	7.2471E+005		-1.0161E+005
Cs-137	661.65	85.12	7.2814E+004	7.28E+004	-6.0107E+004
Eu-152	121.78	28.40	3.4011E+005	2.41E+005	1.0085E+005
	244.69	7.49	9.5285E+005		2.8725E+005
	344.27	26.50	2.5258E+005		-5.3570E+004
	778.89	12.74	4.1761E+005		8.2661E+004
	867.32	4.16	1.4618E+006		-1.0654E+006
	964.01	14.40	5.2456E+005		1.4583E+005
	1085.78	10.00	6.0329E+005		5.7511E+005
	1112.02	13.30	4.3527E+005		-2.9937E+005
	1407.95	20.70	2.4134E+005		-6.8013E+004
Eu-154	123.07	40.50	2.3976E+005	1.66E+005	7.1633E+004
	247.94	6.60	1.0114E+006		-1.6464E+006
	591.81	4.83	1.2684E+006		7.4758E+004
	723.30	19.70	3.4383E+005		3.3784E+005
	756.87	4.33	1.4089E+006		2.1849E+006
	873.19	11.50	4.9161E+005		-2.3603E+005
	996.32	10.30	5.7712E+005		-3.3855E+005
	1004.76	17.90	3.3139E+005		-1.5026E+005
	1274.45	35.50	1.6592E+005		-4.1528E+002
Eu-155	86.54	30.90	4.3405E+005	4.34E+005	3.6730E+005
	105.31	20.70	5.0731E+005		3.8884E+005
Am-241	59.54	35.90	4.6308E+005	4.63E+005	4.5248E+003
Cm-243	228.19	10.56	6.9716E+005	4.84E+005	2.9648E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.8358E+005	4.84E+005	-2.1952E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 1:06:37 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-116-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 12:51:36 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-116-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	199-	207	202.41	50.37	0.27	3.67E+001	12.14	1.84E+002
M	2	283-	305	292.19	72.90	0.91	1.26E+002	38.70	4.70E+002
m	3	283-	305	300.30	74.93	0.91	2.49E+002	48.88	5.25E+002
M	4	335-	357	340.39	84.99	0.89	1.40E+002	40.56	3.92E+002
m	5	335-	357	349.68	87.32	0.89	6.64E+001	34.10	4.27E+002
F	6	948-	960	955.09	239.09	1.00	1.27E+002	30.28	1.48E+002
F	7	1174-	1186	1180.61	295.59	1.15	4.13E+001	21.67	9.76E+001
F	8	1347-	1360	1353.45	338.86	1.25	4.47E+001	19.80	7.51E+001
F	9	1403-	1414	1408.05	352.54	1.15	7.45E+001	22.27	6.03E+001
F	10	2033-	2050	2042.74	511.35	1.55	7.66E+001	21.92	7.48E+001
F	11	2325-	2341	2332.88	583.91	1.34	1.06E+002	22.62	4.05E+001
F	12	2429-	2446	2437.07	609.95	1.31	8.69E+001	21.03	3.88E+001
F	13	3636-	3654	3644.74	911.64	1.84	9.67E+001	19.49	9.83E+000
M	14	3855-	3882	3859.59	965.28	1.79	1.97E+001	11.93	1.99E+001
m	15	3855-	3882	3876.59	969.52	1.80	4.66E+001	14.70	1.84E+001
F	16	4946-	4959	4952.16	1237.91	0.93	1.65E+001	10.63	1.59E+001
F	17	5833-	5858	5845.31	1460.70	1.90	4.59E+002	41.64	1.26E+001
F	18	7056-	7069	7062.10	1764.23	1.78	2.48E+001	11.03	3.03E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.996	511.00*		100.00	8.05188E+004	2.56513E+004
K-40	1.000	1460.81*		10.67	6.69027E+006	8.13746E+005
Eu-155	0.332	86.54*		30.90	1.71987E+005	9.45855E+004
		105.31		20.70		
TL-208	0.739	277.35		6.80		
		510.84*		21.60	3.72772E+005	1.22596E+005
		583.14*		84.20	1.38990E+005	3.49139E+004
		860.37		12.46		
Pb-212	0.655	74.81*	@	10.70	2.17398E+006	6.03510E+005
		77.11	@	18.00		
		87.30*	@	8.00	6.64299E+005	3.65337E+005
		238.63*		44.60	2.28669E+005	6.53554E+004
Bi-214	0.696	609.31*		46.30	2.10887E+005	5.73983E+004
		1120.29		15.10		
		1764.49*		15.80	2.60047E+005	1.18584E+005
PB-214	0.652	74.82*	@	6.21	3.74582E+006	1.07483E+006
		77.11	@	10.50		
		87.30*	@	4.67	1.13799E+006	6.31721E+005
		241.98		7.49		
		295.21*		19.20	1.86090E+005	1.02458E+005
		351.92*		37.20	1.83732E+005	6.29105E+004
Ac-228	0.992	338.32*		11.40	3.54603E+005	1.66717E+005
		911.07*		27.70	4.49895E+005	1.04388E+005
		969.11*		16.60	3.71939E+005	1.23607E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.996	5.049689E+004	2.671895E+004
K-40		1.000	6.690266E+006	8.137458E+005
Eu-155		0.332	8.492018E+004	9.641981E+004
TL-208		0.739	1.389903E+005	3.461883E+004
Pb-212	@	0.655	2.286690E+005	6.535545E+004
Bi-214		0.696	2.202179E+005	5.166434E+004
PB-214	@	0.652	1.843701E+005	5.295713E+004
Ac-228		0.992	4.057394E+005	7.194484E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 1	50.37	4.0738E-002	33.10
M 2	72.90	1.4006E-001	30.70
M 4	84.99	1.5559E-001	28.97
M 14	965.28	2.1841E-002	60.68
F 16	1237.91	1.8380E-002	64.29

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.6573E+004	5.47E+004	-5.1481E+004
		1332.49	100.00	5.4720E+004		6.0165E+004
	Nb-94	702.63	100.00	5.7366E+004	5.74E+004	2.3644E+004
		871.10	100.00	6.1496E+004		6.7405E+004
	Ag-108m	79.20	7.10	2.0556E+006	6.25E+004	-2.9644E+006
		433.93	89.90	6.2543E+004		-4.0307E+004
		614.37	90.40	8.3537E+004		6.9109E+003
		722.95	90.50	6.7013E+004		-2.0784E+004
	Sb-125	176.33	6.89	1.0646E+006	2.09E+005	1.2465E+006
		427.89	29.33	2.0913E+005		1.9127E+004
		463.38	10.35	6.4527E+005		6.5471E+005
		600.56	17.80	3.4739E+005		4.1681E+003
		606.64	5.02	1.5269E+006		1.8209E+006
		635.90	11.32	5.3279E+005		-5.2437E+004
	Cs-134	563.23	8.38	7.6160E+005	6.79E+004	1.1479E+005
		569.32	15.43	4.0416E+005		-1.9054E+004
		604.70	97.60	7.7293E+004		1.6579E+002
		795.84	85.40	6.7861E+004		-6.7065E+003
		801.93	8.73	6.0767E+005		-1.0959E+006
	Cs-137	661.65	85.12	6.9845E+004	6.98E+004	3.0545E+004
	Eu-152	121.78	28.40	3.3217E+005	2.25E+005	-3.5651E+005
		244.69	7.49	9.8260E+005		-1.5196E+006
		344.27	26.50	2.4404E+005		-3.4330E+003
		778.89	12.74	4.7673E+005		2.1563E+005
		867.32	4.16	1.4250E+006		-1.3343E+006
		964.01	14.40	5.2638E+005		6.8133E+005
		1085.78	10.00	5.9956E+005		1.6932E+005
		1112.02	13.30	4.5283E+005		-6.5202E+005
		1407.95	20.70	2.2451E+005		4.8270E+004
	Eu-154	123.07	40.50	2.3594E+005	1.54E+005	1.2201E+005
		247.94	6.60	1.0640E+006		-3.4205E+005
		591.81	4.83	1.3286E+006		3.8825E+005
		723.30	19.70	3.1596E+005		1.3318E+005
		756.87	4.33	1.4950E+006		6.8083E+005
		873.19	11.50	5.2729E+005		1.8794E+005
		996.32	10.30	5.2743E+005		-8.9551E+005
		1004.76	17.90	3.2543E+005		2.4692E+004
		1274.45	35.50	1.5445E+005		1.0674E+005
+	Eu-155	86.54*	30.90	2.5617E+005	2.56E+005	1.7199E+005
		105.31	20.70	5.1818E+005		3.3909E+005
	Am-241	59.54	35.90	4.6462E+005	4.65E+005	-1.0583E+004
	Cm-243	228.19	10.56	6.6395E+005	4.70E+005	-4.7137E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.6983E+005	4.70E+005	6.8122E+004

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/28/2005 4:03:36 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: BLUE6279

Spectrum File: BLUE6279
Sample ID:
Sample Title: TBN-01-17-117-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/28/2005 3:48:35 PM
Live Time: 900.0 seconds
Real Time: 900.5 seconds

Energy Calibration Date: 4/11/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: BLUE_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: BLUE6279
Log Number:
Title: TBN-01-17-117-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	284-	313	292.04	72.86	0.94	1.53E+002	38.90	4.48E+002
m	2	284-	313	300.31	74.93	0.95	3.00E+002	48.02	4.39E+002
m	3	284-	313	308.90	77.09	0.95	6.08E+001	35.64	4.63E+002
F	4	949-	959	954.61	238.97	1.20	1.54E+002	31.05	1.06E+002
F	5	1176-	1188	1181.71	295.86	1.15	5.12E+001	21.64	8.65E+001
F	6	1348-	1359	1351.90	338.48	0.88	3.45E+001	17.22	6.43E+001
F	7	1401-	1418	1407.54	352.41	1.21	9.01E+001	23.59	9.11E+001
F	8	2033-	2053	2043.52	511.55	1.61	8.89E+001	23.10	9.21E+001
F	9	2323-	2342	2331.92	583.67	1.35	1.22E+002	23.00	3.29E+001
F	10	2427-	2443	2436.69	609.86	1.19	8.93E+001	22.74	6.15E+001
F	11	3636-	3653	3645.25	911.77	1.74	9.58E+001	20.42	2.00E+001
F	12	3870-	3884	3876.39	969.47	1.61	5.54E+001	16.35	1.38E+001
F	13	5831-	5859	5845.22	1460.68	2.21	5.54E+002	44.72	0.00E+000
F	14	7054-	7068	7061.92	1764.19	1.96	3.28E+001	12.48	3.75E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.991	511.00*	100.00	9.33875E+004	2.75780E+004
K-40	0.999	1460.81*	10.67	8.07309E+006	9.23349E+005
TL-208	0.745	277.35	6.80		
		510.84*	21.60	4.32350E+005	1.32468E+005
		583.14*	84.20	1.59652E+005	3.68371E+004
		860.37	12.46		
Pb-212	0.837	74.81* @	10.70	2.62547E+006	6.64155E+005
		77.11* @	18.00	3.07267E+005	1.89822E+005
		87.30 @	8.00		
		238.63*	44.60	2.78568E+005	7.10304E+004
Bi-214	0.698	609.31*	46.30	2.16657E+005	6.14316E+004
		1120.29	15.10		
		1764.49*	15.80	3.44467E+005	1.35323E+005
PB-214	0.754	74.82* @	6.21	4.52375E+006	1.19054E+006
		77.11* @	10.50	5.26744E+005	3.27778E+005
		87.30 @	4.67		
		241.98	7.49		
		295.21*	19.20	2.30543E+005	1.04870E+005
		351.92*	37.20	2.22071E+005	6.89953E+004
Ac-228	0.991	338.32*	11.40	2.73486E+005	1.43225E+005
		911.07*	27.70	4.45687E+005	1.07932E+005
		969.11*	16.60	4.42385E+005	1.38452E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:BLUE6279

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.991	5.890274E+004	2.868090E+004
K-40		0.999	8.073086E+006	9.233492E+005
TL-208		0.745	1.596518E+005	3.646785E+004
Pb-212	@	0.837	2.785675E+005	7.103039E+004
Bi-214		0.698	2.384954E+005	5.593757E+004
PB-214	@	0.754	2.246301E+005	5.763936E+004
Ac-228		0.991	3.998160E+005	7.317455E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.86	1.7026E-001	25.39

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(B L U E R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:BLUE6279
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	6.6573E+004	5.12E+004	2.8630E+004
	1332.49	100.00	5.1189E+004		-1.5017E+004
Nb-94	702.63	100.00	5.7086E+004	5.17E+004	2.9336E+004
	871.10	100.00	5.1689E+004		-5.7978E+004
Ag-108m	79.20	7.10	2.0664E+006	6.80E+004	-7.9197E+005
	433.93	89.90	6.7988E+004		-1.1413E+004
	614.37	90.40	9.2293E+004		-2.0672E+004
	722.95	90.50	6.8188E+004		5.8823E+004
Sb-125	176.33	6.89	1.1100E+006	2.08E+005	-4.4581E+005
	427.89	29.33	2.0792E+005		-2.5861E+005
	463.38	10.35	6.0909E+005		1.8367E+005
	600.56	17.80	3.3823E+005		5.3352E+004
	606.64	5.02	1.7074E+006		2.5112E+006
	635.90	11.32	4.8954E+005		-3.8751E+005
Cs-134	563.23	8.38	7.5144E+005	7.23E+004	-1.6030E+003
	569.32	15.43	4.0557E+005		-4.0070E+004
	604.70	97.60	8.2851E+004		1.8813E+004
	795.84	85.40	7.2277E+004		-2.3785E+004
	801.93	8.73	7.3410E+005		1.7179E+005
Cs-137	661.65	85.12	6.6737E+004	6.67E+004	2.2813E+004
Eu-152	121.78	28.40	3.4768E+005	2.36E+005	-2.9746E+003
	244.69	7.49	1.0037E+006		-2.0396E+006
	344.27	26.50	2.4020E+005		-5.1533E+004
	778.89	12.74	4.5869E+005		-7.0008E+004
	867.32	4.16	1.3794E+006		-6.1488E+005
	964.01	14.40	5.4247E+005		-8.5262E+004
	1085.78	10.00	6.3584E+005		-6.2170E+004
	1112.02	13.30	4.6414E+005		-5.0313E+005
	1407.95	20.70	2.3588E+005		7.7975E+004
Eu-154	123.07	40.50	2.4157E+005	1.74E+005	2.7479E+004
	247.94	6.60	1.0397E+006		-7.1857E+005
	591.81	4.83	1.1271E+006		-8.1316E+005
	723.30	19.70	3.0790E+005		1.0234E+005
	756.87	4.33	1.4341E+006		3.2396E+005
	873.19	11.50	4.6217E+005		2.9261E+005
	996.32	10.30	5.7373E+005		-1.8836E+005
	1004.76	17.90	3.4863E+005		1.3162E+005
	1274.45	35.50	1.7428E+005		4.7602E+004
Eu-155	86.54	30.90	4.2298E+005	4.23E+005	1.4460E+005
	105.31	20.70	5.0815E+005		-4.7685E+004
Am-241	59.54	35.90	4.5500E+005	4.55E+005	-2.5705E+005
Cm-243	228.19	10.56	6.8444E+005	4.76E+005	-8.3432E+004

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	4.7590E+005	4.76E+005	-1.2143E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 11:39:02 AM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-17-118-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 11:23:58 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_1M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8192
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-17-118-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	282-	313	291.76	72.90	0.95	1.61E+002	38.89	4.54E+002
m	2	282-	313	300.67	75.13	0.96	3.34E+002	47.88	4.49E+002
m	3	282-	313	308.99	77.21	0.96	8.02E+001	34.68	4.10E+002
M	4	333-	356	339.73	84.89	1.26	2.32E+002	42.59	4.64E+002
m	5	333-	356	349.80	87.41	1.26	7.55E+001	34.86	5.48E+002
F	6	945-	959	954.24	238.53	1.14	1.45E+002	28.87	1.26E+002
F	7	1176-	1187	1180.23	295.03	0.65	3.72E+001	17.88	7.80E+001
F	8	1399-	1415	1406.91	351.71	1.49	6.64E+001	20.68	7.68E+001
F	9	2032-	2054	2042.28	510.57	2.29	1.07E+002	22.00	7.00E+001
F	10	2323-	2340	2332.54	583.13	1.31	7.13E+001	18.21	2.68E+001
F	11	2429-	2444	2436.34	609.09	1.20	8.82E+001	20.89	3.39E+001
F	12	3636-	3654	3644.44	911.14	1.85	4.86E+001	16.26	2.36E+001
F	13	3868-	3882	3874.77	968.72	0.99	2.60E+001	13.19	2.43E+001
F	14	4475-	4489	4482.47	1120.66	1.30	2.35E+001	12.06	1.48E+001
F	15	5832-	5857	5845.13	1461.36	1.85	3.79E+002	38.39	1.63E+001

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)	Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*	100.00	1.15569E+005	2.87484E+004
K-40	0.991	1460.81*	10.67	5.71853E+006	7.40897E+005
Eu-155	0.329	86.54*	30.90	1.97236E+005	9.88771E+004
		105.31	20.70		
TL-208	0.752	277.35	6.80		
		510.84*	21.60	5.35043E+005	1.40084E+005
		583.14*	84.20	9.64681E+004	2.77417E+004
		860.37	12.46		
Pb-212	0.999	74.81* @	10.70	2.93936E+006	7.13595E+005
		77.11* @	18.00	4.07617E+005	1.93621E+005
		87.30* @	8.00	7.61825E+005	3.81913E+005
		238.63*	44.60	2.66111E+005	6.74213E+004
Bi-214	0.712	609.31*	46.30	2.20852E+005	5.90970E+004
		1120.29*	15.10	2.28018E+005	1.19683E+005
		1764.49	15.80		
PB-214	0.852	74.82* @	6.21	5.06459E+006	1.28333E+006
		77.11* @	10.50	6.98772E+005	3.35997E+005
		87.30* @	4.67	1.30505E+006	6.61627E+005
		241.98	7.49		
		295.21*	19.20	1.70495E+005	8.68232E+004
		351.92*	37.20	1.66804E+005	5.89646E+004
Ac-228	0.619	338.32	11.40		
		911.07*	27.70	2.34948E+005	8.30749E+004
		969.11*	16.60	2.15161E+005	1.11534E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
ANN		0.994	9.473228E+004	2.935842E+004
K-40		0.991	5.718529E+006	7.408969E+005
Eu-155		0.329	1.029560E+005	1.006701E+005
TL-208		0.752	9.646808E+004	2.756304E+004
Pb-212	@	0.999	2.661113E+005	6.742130E+004
Bi-214		0.712	2.222568E+005	5.298915E+004
PB-214	@	0.852	1.679590E+005	4.821488E+004
Ac-228		0.619	2.278878E+005	6.662464E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	72.90	1.7907E-001	24.13
M 4	84.89	2.5735E-001	18.39

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
	Co-60	1173.22	100.00	6.5599E+004	4.83E+004	2.9408E+004
		1332.49	100.00	4.8301E+004		-3.2649E+004
	Nb-94	702.63	100.00	5.7640E+004	5.62E+004	-9.3551E+003
		871.10	100.00	5.6223E+004		-3.2894E+003
	Ag-108m	79.20	7.10	2.1526E+006	6.55E+004	-8.7895E+005
		433.93	89.90	6.5500E+004		-4.1431E+004
		614.37	90.40	8.3390E+004		-1.2193E+004
		722.95	90.50	6.8489E+004		3.7076E+004
	Sb-125	176.33	6.89	1.1108E+006	1.88E+005	7.9349E+005
		427.89	29.33	1.8800E+005		8.0425E+004
		463.38	10.35	5.9025E+005		-1.4847E+005
		600.56	17.80	3.3359E+005		9.2031E+004
		606.64	5.02	1.5257E+006		2.4446E+006
		635.90	11.32	5.1330E+005		4.3006E+003
	Cs-134	563.23	8.38	7.2212E+005	7.25E+004	3.5072E+005
		569.32	15.43	3.6497E+005		-2.9950E+004
		604.70	97.60	7.8170E+004		-1.0069E+004
		795.84	85.40	7.2533E+004		9.1447E+003
		801.93	8.73	7.2508E+005		7.3073E+004
	Cs-137	661.65	85.12	6.8391E+004	6.84E+004	7.0894E+004
	Eu-152	121.78	28.40	3.5062E+005	2.32E+005	2.1124E+005
		244.69	7.49	9.4103E+005		-2.4245E+006
		344.27	26.50	2.3165E+005		-3.1111E+005
		778.89	12.74	4.4853E+005		-8.9802E+005
		867.32	4.16	1.3749E+006		-9.9987E+005
		964.01	14.40	5.1343E+005		1.5210E+005
		1085.78	10.00	5.6493E+005		-3.5021E+005
		1112.02	13.30	4.8446E+005		1.9440E+005
		1407.95	20.70	2.4070E+005		-5.2369E+004
	Eu-154	123.07	40.50	2.4490E+005	1.70E+005	7.6943E+004
		247.94	6.60	1.0923E+006		5.0755E+005
		591.81	4.83	1.2480E+006		9.5241E+005
		723.30	19.70	3.1468E+005		1.5702E+005
		756.87	4.33	1.2996E+006		3.3137E+005
		873.19	11.50	4.7990E+005		-9.6967E+004
		996.32	10.30	5.5141E+005		3.0128E+005
		1004.76	17.90	3.0017E+005		-5.3862E+004
		1274.45	35.50	1.7028E+005		-6.9983E+003
+	Eu-155	86.54*	30.90	2.9147E+005	2.91E+005	1.9724E+005
		105.31	20.70	5.1658E+005		-2.0775E+005
	Am-241	59.54	35.90	4.7071E+005	4.71E+005	-3.1741E+005
	Cm-243	228.19	10.56	6.7033E+005	5.08E+005	3.0063E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.0771E+005	5.08E+005	2.7015E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Report Generated On 10/29/2005 12:00:01 PM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

G A M M A S P E C T R U M A N A L Y S I S

Detector ID: RED6264

Spectrum File: RED6264
Sample ID:
Sample Title: TBN-01-17-119-F-G
Description:

Sample Type:
Geometry:

Acquisition Started: 10/29/2005 11:44:59 AM
Live Time: 900.0 seconds
Real Time: 900.6 seconds

Energy Calibration Date: 6/13/2005
Eff Calibration Date: 8/23/2005
Calibration Efficiency: RED_CONC_2M90D
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Peak Locate Threshold: 3.00
Peak Locate Range (in channels): 200 - 8000
Identification Energy Tolerance: 1.250 FWHM

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

P E A K A N A L Y S I S R E P O R T

Filename: RED6264
Log Number:
Title: TBN-01-17-119-F-G
Description:

Geometry:

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
M	1	288-	304	292.31	73.03	0.84	1.34E+002	40.00	4.62E+002
m	2	288-	304	300.27	75.02	0.84	3.29E+002	52.49	5.46E+002
M	3	333-	353	340.04	84.97	0.72	7.25E+001	36.52	4.22E+002
m	4	333-	353	349.98	87.45	0.72	4.70E+001	32.83	3.62E+002
F	5	949-	964	954.28	238.54	1.32	2.10E+002	34.15	1.86E+002
F	6	1175-	1186	1181.15	295.26	0.80	4.79E+001	20.45	8.58E+001
F	7	1401-	1413	1407.16	351.77	1.15	5.92E+001	21.18	7.23E+001
F	8	2032-	2052	2042.17	510.54	2.15	1.22E+002	22.61	5.25E+001
F	9	2323-	2341	2332.50	583.13	1.46	9.46E+001	22.77	6.88E+001
F	10	2428-	2445	2436.19	609.05	1.32	8.43E+001	21.19	4.98E+001
F	11	3636-	3652	3643.75	910.96	1.31	8.29E+001	19.88	2.37E+001
F	12	3867-	3884	3875.80	968.98	1.74	5.59E+001	16.16	1.58E+001
F	13	5749-	5762	5755.45	1438.93	1.12	1.34E+001	8.23	3.50E+000
F	14	5832-	5857	5844.96	1461.31	1.94	5.68E+002	46.44	1.29E+001
F	15	7056-	7069	7061.30	1765.42	2.35	2.74E+001	11.18	4.01E+000

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

N U C L I D E I D E N T I F I C A T I O N R E P O R T

Spectrum File: RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Conf	Energy (keV)		Yield (%)	Activity (dpm/M^2)	Activity Uncertainty
ANN	0.994	511.00*		100.00	1.32416E+005	3.08466E+004
K-40	0.992	1460.81*		10.67	8.61636E+006	9.91823E+005
TL-208	0.752	277.35		6.80		
		510.84*		21.60	6.13039E+005	1.51330E+005
		583.14*		84.20	1.29393E+005	3.55449E+004
		860.37		12.46		
Pb-212	0.659	74.81*	@	10.70	2.96327E+006	7.48828E+005
		77.11	@	18.00		
		87.30*	@	8.00	4.83233E+005	3.50796E+005
		238.63*		44.60	3.89410E+005	8.80058E+004
Bi-214	0.698	609.31*		46.30	2.13738E+005	5.99285E+004
		1120.29		15.10		
		1764.49*		15.80	2.99094E+005	1.25589E+005
PB-214	0.658	74.82*	@	6.21	5.10579E+006	1.34243E+006
		77.11	@	10.50		
		87.30*	@	4.67	8.27809E+005	6.04181E+005
		241.98		7.49		
		295.21*		19.20	2.21786E+005	1.01829E+005
		351.92*		37.20	1.50248E+005	5.93011E+004
Ac-228	0.619	338.32		11.40		
		911.07*		27.70	4.05370E+005	1.07752E+005
		969.11*		16.60	4.68088E+005	1.43894E+005

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy Tolerance : 1.250 FWHM
Nuclide confidence index threshold = 0.30
Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)

I N T E R F E R E N C E C O R R E C T E D R E P O R T

Spectrum File:RED6264

Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (dpm/M^2)	Wt mean Activity Uncertainty
	ANN		0.994	1.044675E+005	3.177467E+004
	K-40		0.992	8.616364E+006	9.918226E+005
X	Eu-155		0.327		
	TL-208		0.752	1.293934E+005	3.529390E+004
	Pb-212	@	0.659	3.894101E+005	8.800575E+004
	Bi-214		0.698	2.295687E+005	5.408633E+004
	PB-214	@	0.658	1.683655E+005	5.124480E+004
	Ac-228		0.619	4.279036E+005	8.624990E+004

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.960 sigma

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

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
M 1	73.03	1.4880E-001	29.87
M 3	84.97	8.0524E-002	50.39
F 13	1438.93	1.4855E-002	61.58

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

Errors quoted at 1.960 sigma

Y A N K E E R O W E P O R T A B L E I S O C S
(R E D R O V E R S Y S T E M)
N U C L I D E M D A R E P O R T

Spectrum File:RED6264
Nuclide Library: C:\GENIE2K\CAMFILES\YAEC-FSS-OpenLand-rev1.NLB

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Co-60	1173.22	100.00	7.0978E+004	6.00E+004	-6.7437E+004
	1332.49	100.00	5.9950E+004		3.4194E+004
Nb-94	702.63	100.00	6.4405E+004	6.43E+004	3.2546E+004
	871.10	100.00	6.4324E+004		1.8356E+004
Ag-108m	79.20	7.10	2.3167E+006	7.48E+004	-6.3552E+006
	433.93	89.90	7.4814E+004		-8.2684E+004
	614.37	90.40	8.8170E+004		-2.0161E+004
	722.95	90.50	7.6262E+004		3.2034E+004
Sb-125	176.33	6.89	1.2291E+006	2.15E+005	-1.5091E+005
	427.89	29.33	2.1478E+005		-1.5820E+005
	463.38	10.35	6.8682E+005		1.8711E+004
	600.56	17.80	3.6537E+005		1.6269E+005
	606.64	5.02	1.6514E+006		2.5930E+006
	635.90	11.32	5.6885E+005		-3.1994E+005
Cs-134	563.23	8.38	7.9822E+005	7.66E+004	2.2391E+005
	569.32	15.43	4.2976E+005		1.0189E+005
	604.70	97.60	8.4251E+004		8.4168E+003
	795.84	85.40	7.6590E+004		4.5786E+004
	801.93	8.73	7.3416E+005		-5.2597E+005
Cs-137	661.65	85.12	7.2896E+004	7.29E+004	-3.9195E+003
Eu-152	121.78	28.40	3.7893E+005	2.57E+005	1.2658E+005
	244.69	7.49	1.0828E+006		-5.2078E+005
	344.27	26.50	2.5903E+005		-2.1765E+005
	778.89	12.74	4.9117E+005		-4.6421E+005
	867.32	4.16	1.4820E+006		-1.2907E+006
	964.01	14.40	5.5807E+005		1.9212E+005
	1085.78	10.00	6.5397E+005		1.9325E+005
	1112.02	13.30	5.3499E+005		2.5609E+005
	1407.95	20.70	2.5680E+005		-7.6189E+004
Eu-154	123.07	40.50	2.6408E+005	1.88E+005	3.4037E+005
	247.94	6.60	1.1529E+006		-5.8986E+005
	591.81	4.83	1.3862E+006		-5.0615E+005
	723.30	19.70	3.5040E+005		1.0303E+005
	756.87	4.33	1.5566E+006		-9.6712E+004
	873.19	11.50	5.5978E+005		1.5135E+005
	996.32	10.30	6.3620E+005		4.9260E+005
	1004.76	17.90	3.4738E+005		-5.5563E+004
	1274.45	35.50	1.8762E+005		4.4519E+004
Eu-155	86.54*	30.90	2.4308E+005	2.43E+005	1.2511E+005
	105.31	20.70	5.8284E+005		5.8027E+004
Am-241	59.54	35.90	5.3576E+005	5.36E+005	3.4385E+005
Cm-243	228.19	10.56	7.2857E+005	5.21E+005	1.0823E+005

Nuclide Name	Energy (keV)	Yield (%)	Line MDA (dpm/M^2)	Nuclide MDA (dpm/M^2)	Activity (dpm/M^2)
Cm-243	277.60	14.00	5.2083E+005	5.21E+005	-1.9902E+005

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction