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Design Analysis Cover Sheet

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This is an approved SCOPING Design Analysis. The QAP-2-0 Activity Evaluation, "Perform Criticality, Thermal, Structural, and Shielding Scoping Analysis", DI#: BB0000000-01717-2200-00026 REV 01, lists the procedural controls which are required. Therefore, this design analysis is NOT subject to the QAP-3-series procedures and does not require QAP-3-9 signatures. All information contained in this analysis is TBV and has received a technical review only.

T. W. D. 1-18-96

Design Analysis Revision Record*Complete only applicable items.*

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Page: 2

Of: 24

2. DESIGN ANALYSIS TITLE

12 PWR Assembly MPC Waste Package Criticality Analysis (SCPB: N/A)

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SCOPING ANALYSIS

Page 3 of 24

Title: 12 PWR Assembly MPC Waste Package Criticality Analysis
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Table of Contents:

<u>Item</u>	<u>Page</u>
1. Purpose	5
2. Quality Assurance	5
3. Method	5
4. Design Inputs	6
4.1 Design Parameters	6
4.2 Criteria	7
4.3 Assumptions	8
4.4 Codes and Standards	10
5. References	10
6. Use of Computer Software	11
6.1 Scientific and Engineering Software	11
7. Design Analysis	12
7.1 Background	12
7.2 Design Details and Evaluation	13
7.3 Modeling	13
7.4 Standard Analysis	15
7.5 Time Effects	16
7.6 Criticality Control Methods	17
8. Conclusions	17
9. Attachments	17

1. Purpose

This analysis is prepared by the Mined Geologic Disposal System (MGDS) Waste Package Development Department (WPDD) to determine the viability of the MPC PWR-12 waste package concept with respect to criticality regulatory requirements in compliance with the goals of the Waste Package Implementation Plan^{5.1} for conceptual design. These design calculations are performed in sufficient detail to provide a comprehensive comparison base with other design alternatives. The objectives of this evaluation are 1) to show the reactivity worth of burnup credit, 2) to show to what extent the concept meets the regulatory requirements or indicate additional measures that are required for the intact waste package, 3) to demonstrate time effects on criticality potential, 4) to demonstrate the effects of varied boron concentration in the control panels on criticality potential, and 5) to provide input for separate shielding calculations.

2. Quality Assurance

The Quality Assurance (QA) Program applies to this analysis. The work reported in this document is part of the neutronic analysis for the License Application Design phase. This activity can affect the proper functioning of the Mined Geologic Disposal System (MGDS) waste package; the waste package has been identified as an MGDS Q-List item important to safety and waste isolation^{5.2}. The waste package is on the Q-List by direct inclusion by the Department of Energy (DOE), without conducting a QAP-2-3 evaluation. The work performed for this analysis is covered by a Waste Package Development (WPD) QAP-2-0 work control Activity Evaluation entitled "Perform Criticality, Thermal, Structural and Shielding Analyses"^{5.3}. The QAP-2-0 evaluation determined that such activities are subject to *Quality Assurance Requirements and Description* (QARD)^{5.4} controls. Applicable procedural controls are listed in the evaluation.

All design inputs which are identified in this document are for preliminary designs; some or all of these design inputs will require subsequent qualification (or superseding inputs) as the waste package design proceeds. This document will not directly support any construction, fabrication, or procurement activity and therefore does not require formal TBV (to be verified) tracking.

3. Method

The multiplication factor of the disposal packages is determined using the Monte Carlo neutron transport technique implemented in the MCNP^{5.5} computer program.

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4. Design Inputs

All design inputs are for preliminary designs; some or all of these design inputs will require subsequent qualification (or superseding inputs) as the waste package design proceeds. The [unqualified] design inputs identified and documented in Section 4 have been identified as TBV; but, will not be used to directly support any construction, fabrication, or procurement activity and therefore does not require formal TBV tracking.

4.1 Design Parameters

The fuel assembly upon which this calculation is based is the B&W 15 x 15 fuel assembly. The mechanical parameters for this assembly type are shown in the table below.

Table 4.1-1 Mechanical Parameters of B&W 15x15 Fuel Assembly

Parameter	Value	Units	Metric	Units	Radius (cm)	Ref
Fuel rods	208	/assbly	208	/assbly		LLNL
Fuel rods on a lattice side	15	/side	15	/side		LLNL
Guide tubes	16	/assbly	16	/assbly		LLNL
Instrumentation tubes	1	/assbly	1	/assbly		LLNL
Total Guide + Instrument tubes	17	/assbly	17	/assbly		-
Clad/tube material	ZIRC-4		ZIRC-4			LLNL
Fuel pellet OD	0.3686	inches	0.936244	cm	0.46812	LLNL
Fuel Stack height	141.8	inches	360.172	cm		LLNL
Mass of U	1023	lb	464	kgm		DOE
Mass of UO ₂	1160.64	lb	526.38	kgm		LLNL
Percent of Theoretical Density	95	%	95	%		LLNL
Fuel clad OD	0.430	inches	1.0922	cm	0.5461	LLNL
Clad thickness	0.0265	inches	0.06731	cm		LLNL
Fuel clad ID*	0.377	inches	0.95758	cm	0.47879	-
Fuel rod pitch	0.568	inches	1.44272	cm		LLNL
Guide tube OD	0.530	inches	1.3462	cm	0.6731	LLNL
Guide tube thickness	0.016	inches	0.04064	cm		LLNL
Guide tube ID*	0.498	inches	1.26492	cm	0.56134	-
Instrumentation tube OD	0.493	inches	1.25222	cm	0.62611	LLNL
Fuel assembly envelope	8.536	inches	21.6814	cm		LLNL

* The inside diameters (IDs) above are calculated by subtracting 2 × thickness from the OD.

LLNL - Reference 5.6

DOE - Reference 5.7

Originator: J. Wesley Davis

Checker: Kenneth D. Wright

4.2 Criteria

This design analysis provides the repository criticality control design criteria for MPCs, based upon criteria from requirement documents. The criteria cited in requirement documents that have bearing on this analysis include:

From May 1995, Revision 01 of the MGDS-Requirements Document (RD)^(5.8);

"3.2.2.6 Criticality Protection

- A. All systems for processing, transporting, handling, storing, retrieving, emplacing, and isolating radioactive waste shall be designed to ensure that a nuclear criticality accident is not possible unless at least two unlikely, independent, and concurrent or sequential changes have occurred in the conditions essential to nuclear criticality safety. Each system shall be designed for criticality safety under normal and accident conditions. The calculated effective multiplication factor (k_{eff}) must be sufficiently below unity to show at least a 5% margin, after allowance for the bias in the method of calculation and the uncertainty in the experiments used to validate the methods of calculation. [10CFR60.131(b)(7)]"

From September 21, 1994 Revision 00, ICN 1 of the Engineered Barrier Design (EBD)-RD^(5.9);

"3.2.2.6 CRITICALITY PROTECTION

- A. The Engineered Barrier Segment shall be designed to ensure that a nuclear criticality accident is not possible unless at least two unlikely, independent, and concurrent or sequential changes have occurred in the conditions essential to nuclear criticality safety. Each system shall be designed for criticality safety under normal and accident conditions. The calculated effective multiplication factor must be sufficiently below unity to show at least a five percent margin, after allowance for the bias in the method of calculation and the uncertainty in the experiments used to validate the methods of calculation. [MGDS-RD 3.2.2.6.A][10CFR60.131(b)(7)]"

From September 21, 1994 Revision 00, ICN 1 of the Engineered Barrier Design (EBD)-RD^(5.9);

"3.7.1.3 INTERNAL STRUCTURE REQUIREMENTS

- A. The internal structure shall provide separation of the waste forms such that nuclear criticality shall not be possible unless at least two unlikely, independent, and concurrent or sequential changes have occurred in the conditions essential to nuclear criticality safety. The calculated effective multiplication factor (k_{eff}) must be sufficiently below unity to show at least a five percent margin after allowance for the bias in the method of calculation and the uncertainty in the experiments used to

Originator: J. Wesley Davis

Checker: Kenneth D. Wright

validate the methods of calculation (TBD). [MGDS-RD 3.2.2.6.A][10CFR60.131(b)(7)]"

4.3 Assumptions

All assumptions identified in this section will require verification (or superseding assumptions) as the waste package design proceeds and should be treated as TBV items for preliminary design. For Pre-title II design (conceptual or preliminary), assumptions are identified and documented, but they are not subject to MGDS NLP-3-15.

- 4.3.1 Burnup credit is an acceptable criticality control mechanism for the waste package (CDA Key 009)^{5,10}. This assumption is based upon encouraging interactions with the NRC staff through the Burnup Credit Committee, chaired by DOE headquarters. This assumption is used throughout Section 7.
- 4.3.2 The design of the MPC disposal container is based on preliminary sketches BBA000000-01717-2100-15018^{5,11} and BBA000000-01717-2100-15019^{5,12} (TBV). These sketches serve as the primary design control for the waste packages in WPDD. This assumption is used throughout Section 7.
- 4.3.3 For SNF, the preliminary list of "Principal Isotopes" for long-term criticality control previously established^{5,13} was used. The 30 principal isotopes are shown in Table 4.3-1. This assumption is used throughout Section 7.

Table 4.3-1. Principal Long-Term Burnup Credit Isotopes

O-16	Tc-99	Rh-103	Ag-109	Cs-133
Nd-143	Nd-145	Sm-147	Sm-149	Sm-150
Sm-151	Sm-152	Eu-151	Eu-153	Gd-155
U-233	U-234	U-235	U-236	U-238
Np-237	Pu-238	Pu-239	Pu-240	Pu-241
Pu-242	Am-241	Am-242m	Am-243	Cm-245

- 4.3.4 The number of isotopes in the model was limited by their availability in the MCNP cross-section libraries. Eight of the identified principal isotopes are not available in the standard MCNP cross-section sets. The unavailable isotopes include: Tc-99, Cs-133, Nd-143, Nd-145, Sm-147, Sm-150, Sm-151, and Sm-152. The 22 available isotopes are used in the MCNP models. The eight unavailable isotopes are absorbers, and, therefore, not accounting for them is conservative. This assumption is used throughout Section 7.

Originator: J. Wesley Davis

Checker: Kenneth D. Wright

- 4.3.5 The reference PWR fuel assembly selected for conceptual MPC development is the B&W 15 x 15 fuel type, which has been established as one of the more reactive PWR fuel designs under intact fuel assembly and fixed MPC geometry conditions^{5,14}. This assumption is used throughout Section 7.
- 4.3.6 The material in the basket control panels is modeled as only aluminum for base cases. The aluminum boron alloy (Al-B) is not an allowable control material for use in the MGDS because of its higher relative corrosion rate compared to the other basket materials^{5,15}. This assumption is used throughout Section 7.
- 4.3.7 The fresh fuel bias and uncertainty for MCNP is approximately 0.015^{5,13}. The preliminary SNF bias and uncertainty is approximately 0.06^{5,13}. These uncertainties were used in a prior unverified analysis. This assumption is used throughout Section 7.
- 4.3.8 Flux traps are not considered acceptable for disposal criticality control due to long-term material performance concerns. Flux trap designs depend upon the structural materials used to form the separative water gaps which control criticality. If the flux trap's separative gap collapses, the neutron interaction between fuel assemblies will increase the criticality potential of the system. This assumption is used throughout Section 7.
- 4.3.9 The design of the 12 PWR assembly MPC is based on that reported in Volume II.A of the MPC Conceptual Design report^{5,14}. This assumption is used throughout Section 7.
- 4.3.10 The material compositions are taken from BBA000000-01717-0200-00002 Rev 00^{5,16}. This analysis was performed to provide a single QA'ed reference for material compositions. This assumption is used throughout Section 7.
- 4.3.11 Various design basis SNF characteristics are used including: 3.75% U-235 enrichment, 37 GWd/MTU burnup, as used by the MRS/MPC group^{5,14}; 1.8% U-235 enrichment, fresh fuel, which was established by the MRS/MPC group to conservatively bound the previously listed design basis^{5,14}; 3.0% U-235 enrichment, 20 GWd/MTU burnup, as established by the M&O^{5,17}. These design basis are assumed to bound the actual design basis fuel. This assumption is used throughout Section 7.
- 4.3.12 The PWR assembly endfitting is approximated in a simplified model description. This assumption has an insignificant effect on the calculation. This assumption is used throughout Section 7.
- 4.3.13 The MPC was modeled axially to include a 2.5 cm thick lid with its lower surface located at the position where the shield plug's lower surface was designated in the referenced figures. The remainder of the shield plug is omitted in the model as a simplification. The replacement of the shield plug with a single thickness lid has an insignificant effect on the calculation. This assumption is used throughout Section 7.
- 4.3.14 The inner and outer barrier lids are modeled as being flush with their respective shrouds. This assumption is used throughout Section 7.

4.4 Codes and Standards

Not Applicable.

5. References

- 5.1 *Yucca Mountain Site Characterization Project Waste Package Implementation Plan*, YMP/92-11Q, REV 1, January 1995.
- 5.2 *Yucca Mountain Site Characterization Project Q-List*, YMP/90-55Q, REV 3, December 1994.
- 5.3 "Perform Criticality, Thermal, Structural, and Shielding Scoping Analyses," CRWMS M&O, Document Identifier (DI) Number: BB0000000-01717-2200-00026 REV 01, August 21, 1995.
- 5.4 *Quality Assurance Requirements and Description (QARD)*, DOE/RW-0333P Rev 4, July 31, 1995.
- 5.5 Briesmeister, Judith F., Ed., "MCNP- A General Monte Carlo Code for Neutron and Photon Transport," LANL, LA-7396-M, Rev. 2, April 1991.
- 5.6 *Preliminary Waste Form Characteristics Report Version 1.0*, UCRL-ID-108314 Rev. 1, LLNL, page 2.1.2.2-6, December, 1994.
- 5.7 *Characteristics of Potential Repository Wastes*, DOE/RW-0184-R1, Volume 1, OCRWM, US Department of Energy, page 2A-8, July, 1992.
- 5.8 *Office of Civilian Radioactive Waste Management Mined Geological Disposal System Requirements Document*, DOE/RW-0404P, DI: B00000000-00811-1708-00002 REV 01 DCN01, May, 1995.
- 5.9 *Yucca Mountain Site Characterization Project Engineered Barrier Design Requirements Document*, YMP/CM-0024, Rev 0, ICN 1, September 21, 1994
- 5.10 *Controlled Design Assumptions (CDA) Document*, DI#:B00000000-01717-4600-00032 REV 01, CRWMS M&O, April 28, 1995.
- 5.11 "MPC Disposal Container (12-PWR/24-BWR)," DI#: BBA000000-01717-2100-15018 REV 0A, CRWMS M&O.
- 5.12 "MPC Disposal Container Weldment (12-PWR/24-BWR)," DI#:

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Title: 12 PWR Assembly MPC Waste Package Criticality Analysis (SCPB: N/A)**Document Identifier:** BBABA0000-01717-0200-00001 REV 00**Page 11 of 24**

BBA000000-01717-2100-15019 REV 0A, CRWMS M&O.

- 5.13 *Initial Summary Report for Repository/Waste Package Advanced Conceptual Design*, DI# B00000000-01717-5705-00015 REV 00, CRWMS M&O, pages 6-241, 6-203, August 1994.
- 5.14 *Multi-Purpose Canister (MPC) Implementation Program Conceptual Design Phase Report, Volume II A - MPC Conceptual Design Report*, DI# A20000000-00811-5705-00002 Final Draft, CRWMS M&O, Pages II.A.3-35, II.A.4-56, Figures 4.2.2.1-1, -2, -3, -4, September 1993.
- 5.15 CRWMS M&O IOC, from J. K. McCoy to D. A. Thomas, "Basket materials", LV.WP.JKM.01/95.038, January 25, 1995
- 5.16 Thomas, D. A., "Material Compositions and Number Densities for Neutronics Calculations," DI# BBA000000-01717-0200-00002 Rev 00, CRWMS M&O, January 2, 1996.
- 5.17 Gottlieb, P., "Waste Package Design Basis Fuel Analysis," DI# B0000000-01717-0200-00121 Rev 01 Draft, CRWMS M&O, March 20, 1995.
- 5.18 "Characteristics Data Base (CDB_H)", DI# A00000000-02268-1200-20005 V1.1 Rev 01, CRWMS M&O, 1993.
- 5.19 Thomas, D. A., "Spent Nuclear Fuel Number Densities for Multi-Purpose Canister Criticality Calculations (SCPB: N/A)," DI# BBAB00000-01717-0200-00005 Rev 00, CRWMS M&O, January 12, 1996.

6. Use of Computer Software

6.1 Scientific and Engineering Software

MCNP 4.2 CSCI B00000000-01717-1200-30006 Rev 0. Hewlett Packard Apollo 9000, Series 735 Workstations

MCNP 4.2^{5.5} is an appropriate tool to be utilized to determine the criticality safety of fresh and spent lattices of PWR assemblies. This software has been validated and was previously obtained from the SCM in accordance with appropriate procedures. An associated continuous energy cross section set based on ENDF/B-V is utilized by MCNP.

There are biases and uncertainties associated with a criticality calculation. How these biases and uncertainties are treated in criticality calculations is covered in the American National

Originator: J. Wesley Davis	Checker: Kenneth D. Wright
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Standard on "Criticality Safety Criteria for the Handling, Storage, and Transportation of LWR Fuel Outside Reactors" (ANSI/ANS-8.17). The fresh fuel bias and uncertainty for MCNP is approximately $0.015^{5.13}$. The preliminary SNF bias and uncertainty is approximately $0.06^{5.13}$. The SNF bias and uncertainty is higher due to additional factors such as isotopics and axial effects.

7. Design Analysis

To better define the pre- and postclosure issues and the methodology for addressing them, a Three-Phased Approach for disposal criticality control was developed. The three time phases associated with the approach are: the Preclosure/Operations Phase, the Postclosure/Substantially Complete Containment Phase (SCC), and the Postclosure/Isolation Phase. This analysis is performed for the Preclosure/Operations Phase and for time effects on isotopic composition for intact conditions. No criticality events external to the waste package or major internal geometry changes are evaluated.

7.1 Background

Two types of fuel baskets are used by the MPC versions to control criticality in the conceptual design MPC^{5.14}: a flux trap design type and a burnup credit design type. The flux trap design relies upon neutron absorber panels that are separated by a gap filled with air (water for accident scenarios). The purpose of the water gap is to thermalize fast neutrons, so that the neutron absorber material may absorb them. The burnup credit design type allows a greater fuel payload for a given MPC diameter by removing the flux trap water gap, and taking credit for the decrease in spent fuel reactivity compared to fresh fuel. Credit for fixed neutron absorber material or flux traps is acceptable for storage and transportation, and was assumed acceptable in the MPC Conceptual Design Report^{5.14} for long-term waste package criticality control at the MGDS.

The criticality evaluations have been performed for various design basis SNF characteristics including: 3.75% U-235 enrichment, 37 GWd/MTU burnup, as used by the MRS/MPC group^{5.14}; 1.8% U-235 enrichment, fresh fuel, which was established by the MRS/MPC group to conservatively bound the previously listed design basis^{5.14}; 3.0% U-235 enrichment, 20 GWd/MTU burnup, as established by the M&O^{5.13}. In addition, cases were run for 3.75% U-235 enrichment and 3.0% U-235 enrichment fresh fuel to demonstrate the effects of burnup credit. The fuel burnup and decay compositions are taken from the Characteristics Data Base (CDB)^{5.18}. The assembly axial and radial burnup variations and differential loading effects have not been accounted for in the models. These effects are not considered significant for PWR models.

7.2 Design Details and Evaluation

The 12 PWR basket array is formed by 1.27 cm (0.5-inch) thick structural steel members and a stacked arrangement of fuel cells. The array formed includes "flux trap" criticality control design features. A symmetrical configuration of three fuel cells placed in each of the four quadrants formed by a thick structural stainless steel structural support cruciform. Water gaps are formed between the 1.27 cm (0.5-inch) thick structural steel parallel sheets by 2.54 cm (1 inch) spacer rods. The fuel cell opening provided is 22.86 cm (9.0-inch). The fuel cell tubes are formed from 0.272 cm (0.107-inch) thick Al-B plates sandwiched between a 0.238 cm (0.094-inch) thick stainless steel inner wall, and a 0.238 cm (0.094-inch) thick stainless steel outer wrapper. Water gaps are maintained by 2.54 cm (1-inch) "ladder" spacers forming flux traps between adjacent fuel cells which are not separated by the thick structural stainless steel formed water gaps.

Flux traps are not considered acceptable for disposal criticality control due to long-term material performance concerns. Flux trap designs depend upon the structural materials to form the separative water gaps which control criticality. If the flux trap's separative gap collapses, the neutron interaction between fuel assemblies increases the criticality potential of the system. The structural performance of materials is one of the first physical properties lost as materials degrade. After the containment barriers have failed, the basket structural materials will lose their structural integrity over the period of isolation, and a flux trap will be unable to provide criticality control.

Flux trap designs are assumed filled with fresh fuel up to some initial enrichment limit. The initial enrichment limit is not sufficient control to prevent a package from going critical when a flux trap collapses, especially if the waste package design is to be able to accept 80 percent of the SNF inventory. The flux trap approach can be combined with other criticality control approaches to form hybrid strategies that may provide criticality control for disposal (i.e., provide sufficient neutron absorber material to control criticality with collapsed flux traps).

For the current analysis, credit is taken for the inherent neutron absorption capability of fixed structural components within the MPC internal basket array. No credit is taken for irradiated control rods or burnable poisons; only approved fixed, full-length supplemental neutron poisons are assumed present. The Al-B is not an allowable control material for use in the MGDS because its higher relative corrosion rate compared to the other basket materials. The material is modeled as only aluminum for base cases, but calculations to demonstrate the worth of boron are performed.

7.3 Modeling

Each fuel assembly is treated as a heterogeneous system with the fuel pins, control rod guide tubes, and instrument guide tube modeled explicitly using the physical parameters from Table

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Title: 12 PWR Assembly MPC Waste Package Criticality Analysis (SCPB: N/A)**Document Identifier:** BBABA0000-01717-0200-00001 REV 00**Page 14 of 24**

4.1-1. The fueled length of the rods was increased to 406.4 cm to conservatively bound most of the SNF inventory. The model consists of an array of fuel pins and tubes placed into an assembly configuration as shown in Figure 7.3-1. An array of these assemblies including the MPC basket materials is then placed into the MPC configuration. The cross-sectional views in the X-Y plane of the physical MCNP model for both the flux trap and collapsed flux trap cases is shown in Figures 7.3-2 and 7.3-3, respectively. The views were generated with the MCNP plotting capability. The ladder spacers in the flux trap and collapsed flux trap models were not included in the model details. One-quarter of the MPC and disposal container are modeled laterally and the assemblies and container are modeled from the centerline up (reflected on the fuel centerline axially) as shown in Figure 7.3-4.

A water reflector (air for "normal" case) 30 cm thick was placed above and around the outer barrier of the disposal container. Approximately 30 cm of water will isolate a package from any interaction with others. Based on mean free paths of neutrons in water, the 30 cm thickness provides the equivalent of an infinite reflector.

Checking of the analysis revealed that the MPC spacers were modeled as stainless steel 316L (SS316L) instead of Alloy 825 as designated in the referenced figures. Based on engineering judgement the effect of this material designation will not significantly affect the calculation results. The SS316L material composition input in the MCNP models contains an iron weight percent of 0.64545; however, the iron weight percent in the SS316L should have been 0.65545. Since the total of the input weight percent contributions to the SS316L material composition is not 100 percent, the code will renormalize the weight percents of the composition. Based on engineering judgement the effect of this renormalization on the calculation results is insignificant. Checking of the analysis revealed that the UO₂ total atom density in the 1.80 weight percent enriched fresh fuel, collapsed case (filename: mpc12y.O; Attachment III) was input as 7.0411E-2 atoms/b-cm instead of 7.0413E-2 atoms/b-cm. Based on engineering judgement the effect of the slightly lower fuel atom density on the calculation results is insignificant. Checking of the analysis revealed that in the following three cases the MPC spacer material was designated incorrectly: 3.00 weight percent enriched, 20 GWD/MTU burned, 5 year decay fuel with flux traps (filename: mpc12tbo; Attachment VII), 3.00 weight percent enriched, 20 GWD/MTU burned, 5 year decay fuel with flux traps (filename: m12tb4.O; Attachment XXXV), and 3.00 weight percent enriched, 20 GWD/MTU burned, 5 year decay fuel with flux traps containing 50 percent dense moderator (filename: m12txb.O; Attachment XXXVI). Since the reactivity worth of the MPC spacers is insignificant, the discrepancy in the spacer material designation of these three cases does not significantly affect the calculational results.

The "normal" condition in the repository, both within and surrounding the WP, is a dry environment. When an insufficient amount of water is present, insufficient neutrons are thermalized (slowed down to thermal energy levels) to bring a system critical. The k_{eff} of a standard WP under "normal" dry conditions is generally less than 0.4. Values of k_{eff} in this

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range do not represent a criticality safety concern, but are needed for shielding calculations to account for subcritical multiplication of the spontaneous fission neutrons and alpha-n reactions.

The "accident" condition considers the repository and waste package as being flooded with water. Under flooded conditions, further detailed criticality evaluations of the system must be performed to determine k_{eff} . A waste package fully flooded with cool (1 g/cc) water is the standard waste package criticality evaluation condition. This is the condition assumed for all but one evaluation in this report.

7.4 Standard Analysis

The Al-B alloy is modeled only as aluminum (1100) because its corrosion rate is higher than the structural materials in the basket. The following models are based on collapsed flux traps. The k_{eff} ($\pm 2\sigma$) value calculated for the different design basis enrichments are as follow:

3.00% U-235 Enrichment, 20 GWd/MTU, 5-year decay	-	0.9328 $\pm$.0069
3.75% U-235 Enrichment, 37 GWd/MTU, 5-year decay	-	0.8820 $\pm$.0071
1.80% U-235 Enrichment, 0 GWd/MTU	-	0.9581 $\pm$.0086
3.00% U-235 Enrichment, 0 GWd/MTU	-	1.1000 $\pm$.0079
3.75% U-235 Enrichment, 0 GWd/MTU	-	1.1562 $\pm$.0086

The k_{eff} results reported are the simple average of the combined track length, absorption, and collision estimates as listed in the last generation print of the MCNP output.

The burnup credit reactivity worth $\{\Delta\rho=(k_2-k_1)/(k_1*k_2)\}$ is $-0.163 \pm .010$ and $-0.269 \pm .011$ for the 3.00% enriched and 3.75% enriched fuels, respectively. The 1.80% U-235 enrichment, 0 GWd/MTU fuel does bound the burned fuels. Note that, with biases applied, the 3.00% enriched burnup credit case does not meet the 0.95 value limit established in Title 10 CFR Part 60.131 (b)(7) with the 0.06 bias applied, but the 3.75% burnup credit case does. Additional criticality control measures offer the potential for the 12 assembly MPC design to meet the requirement for the MGDS.

A "normal" condition case was run with no water moderation using the 3.00% U-235 enrichment, 20 GWd/MTU, and 5 year decay, SNF providing a k_{eff} of $0.2355 \pm .0021$.

In order to demonstrate the reactivity worth of the flux traps, a case was run with flux traps for 3.00% U-235 enrichment, 20 GWd/MTU, and 5 year decay, providing a k_{eff} of $0.8421 \pm .0077$. The reactivity worth of the flux trap is $-0.115 \pm .013$. Two additional cases were run to further investigate the effects of the flux trap. The first case included 4% natural boron in the Al-B basket material providing a k_{eff} of $0.7636 \pm .0073$. The second case had only 50% dense moderator in the flux trap providing a k_{eff} of $0.8489 \pm .0049$. Checking of the analysis

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revealed that the MCNP model containing the 50% reduced density moderator has the reduced density moderator in all flux traps with the exception of the central axis flux trap which contains normal density water.

7.5 Time Effects

To calculate the long-term time effect on criticality, isotopic composition information at different time steps was required. The required isotopic composition information for the fuel characteristics at 12 selected decay time steps were gathered from the CDB, Radiological Data Base (RADDB). Reports of the isotopic composition of the fuel at the 12 time steps were generated from the RADDB, and then used to generate number densities in a separate analysis^{5,19} that were entered into MCNP model files/input decks. Each time step for the fuel characteristics represents an MCNP input decks. The results from the MCNP runs are consolidated to form a plot of the change in the criticality of the MPC waste package (k_{eff}) over time. The results are listed below and shown in Figure 7.5-1 for the 3.00% U-235 enrichment, 20 GWd/MTU MGDS design basis and the 3.75% U-235 enrichment, 37 GWd/MTU MPC design basis.

As shown in Figure 7.5-1, for the first ~200 years after being discharged, the criticality potential of SNF decreases as the Pu-241 (13.2 year half life) fissile material decays. From ~200 years out to ~20,000 years the criticality potential of the SNF increases as Pu-240 (6,580 year half life) and the medium half life neutron absorbers decay. After the ~20,000 year local peak, the criticality potential of the SNF decreases again as the Pu-239 (24,400 year half life) fissile material decays.

3.00% U-235 Enrichment, 20 GWd/MTU, 1 year decay	-	0.9485 ± .0068
3.00% U-235 Enrichment, 20 GWd/MTU, 10 year decay	-	0.9238 ± .0072
3.00% U-235 Enrichment, 20 GWd/MTU, 50 year decay	-	0.8915 ± .0068
3.00% U-235 Enrichment, 20 GWd/MTU, 300 year decay	-	0.8929 ± .0055
3.00% U-235 Enrichment, 20 GWd/MTU, 500 year decay	-	0.8918 ± .0077
3.00% U-235 Enrichment, 20 GWd/MTU, 1000 year decay	-	0.9004 ± .0043
3.00% U-235 Enrichment, 20 GWd/MTU, 5000 year decay	-	0.9027 ± .0056
3.00% U-235 Enrichment, 20 GWd/MTU, 10000 year decay	-	0.9138 ± .0071
3.00% U-235 Enrichment, 20 GWd/MTU, 50000 year decay	-	0.8928 ± .0062
3.00% U-235 Enrichment, 20 GWd/MTU, 100000 year decay	-	0.8862 ± .0044
3.00% U-235 Enrichment, 20 GWd/MTU, 1000000 year decay	-	0.8840 ± .0050
3.75% U-235 Enrichment, 37 GWd/MTU, 1 year decay	-	0.9125 ± .0078
3.75% U-235 Enrichment, 37 GWd/MTU, 10 year decay	-	0.8672 ± .0047
3.75% U-235 Enrichment, 37 GWd/MTU, 50 year decay	-	0.8111 ± .0047
3.75% U-235 Enrichment, 37 GWd/MTU, 300 year decay	-	0.8043 ± .0055

3.75% U-235 Enrichment, 37 GWd/MTU, 500 year decay	-	0.8128 ± .0059
3.75% U-235 Enrichment, 37 GWd/MTU, 1000 year decay	-	0.8159 ± .0055
3.75% U-235 Enrichment, 37 GWd/MTU, 5000 year decay	-	0.8316 ± .0052
3.75% U-235 Enrichment, 37 GWd/MTU, 10000 year decay	-	0.8345 ± .0050
3.75% U-235 Enrichment, 37 GWd/MTU, 50000 year decay	-	0.8181 ± .0054
3.75% U-235 Enrichment, 37 GWd/MTU, 100000 year decay	-	0.7899 ± .0047
3.75% U-235 Enrichment, 37 GWd/MTU, 1000000 year decay	-	0.7955 ± .0075

7.6 Criticality Control Methods

The use of control panels containing boron will significantly reduce the k_{eff} of the waste package. As mentioned previously, Al-B is not acceptable as a long-term criticality control material. Calculations were performed using the collapsed flux trap for various weight percentages of Boron in Al-B to demonstrate its worth. The results are listed below and the plot of the data is shown in Figure 7.6-1.

3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 1% B in Al-B	-	0.8946 ± .0070
3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 2% B in Al-B	-	0.8736 ± .0059
3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 3% B in Al-B	-	0.8669 ± .0059
3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 4% B in Al-B	-	0.8573 ± .0053
3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 5% B in Al-B	-	0.8497 ± .0075

Note that with 2 weight % or greater of natural boron in Al-B the MGDS design basis fuel k_{eff} with bias applied falls below the the 0.95 limit.

8. Conclusions

With biases applied, the 3.00% enriched burnup credit case with collapsed flux traps does not meet the 0.95 value limit established in Title 10 CFR Part 60.131 (b)(7) with the 0.06 bias applied, but the 3.75% burnup credit case does. Additional criticality control measures offer the potential for the 12 assembly MPC design to meet the requirements for MGDS. With 2 weight % or greater of natural boron in Al-B the MGDS design basis fuel (3.00% enriched) k_{eff} with bias applied falls below the the 0.95 limit.

9. Attachments

The following attachments are case output files as listed. The name of the output file is listed in parenthesis.

- I. 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay (mpc12b.o)
- II. 3.75% U-235 Enrichment, 37 GWd/MTU, 5 year decay (mpc12n.o)
- III. 1.80% U-235 Enrichment, 0 GWd/MTU (mpc12y.O)

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- IV. 3.00% U-235 Enrichment, 0 GWd/MTU (mpc12fro)
- V. 3.75% U-235 Enrichment, 0 GWd/MTU (mpc12fxo)
- VI. Normal Condition (dry), 3.00% U-235 Enrichment, 20 GWd/MTU, 5 yr decay (mpc12dro)
- VII. Intact Flux Trap, 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay (mpc12tbo)
- VIII. 3.00% U-235 Enrichment, 20 GWd/MTU, 1 year decay (mpc12a.o)
- IX. 3.00% U-235 Enrichment, 20 GWd/MTU, 10 year decay (mpc12c.o)
- X. 3.00% U-235 Enrichment, 20 GWd/MTU, 50 year decay (mpc12d.o)
- XI. 3.00% U-235 Enrichment, 20 GWd/MTU, 300 year decay (mpc12e.o)
- XII. 3.00% U-235 Enrichment, 20 GWd/MTU, 500 year decay (mpc12f.o)
- XIII. 3.00% U-235 Enrichment, 20 GWd/MTU, 1000 year decay (mpc12g.o)
- XIV. 3.00% U-235 Enrichment, 20 GWd/MTU, 5000 year decay (mpc12h.o)
- XV. 3.00% U-235 Enrichment, 20 GWd/MTU, 10000 year decay (mpc12i.o)
- XVI. 3.00% U-235 Enrichment, 20 GWd/MTU, 50000 year decay (mpc12j.o)
- XVII. 3.00% U-235 Enrichment, 20 GWd/MTU, 100000 year decay (mpc12k.o)
- XVIII. 3.00% U-235 Enrichment, 20 GWd/MTU, 1000000 year decay (mpc12l.o)
- XIX. 3.75% U-235 Enrichment, 37 GWd/MTU, 1 year decay (mpc12m.o)
- XX. 3.75% U-235 Enrichment, 37 GWd/MTU, 10 year decay (mpc12o.o)
- XXI. 3.75% U-235 Enrichment, 37 GWd/MTU, 50 year decay (mpc12p.o)
- XXII. 3.75% U-235 Enrichment, 37 GWd/MTU, 300 year decay (mpc12q.o)
- XXIII. 3.75% U-235 Enrichment, 37 GWd/MTU, 500 year decay (mpc12r.o)
- XXIV. 3.75% U-235 Enrichment, 37 GWd/MTU, 1000 year decay (mpc12s.o)
- XXV. 3.75% U-235 Enrichment, 37 GWd/MTU, 5000 year decay (mpc12t.o)
- XXVI. 3.75% U-235 Enrichment, 37 GWd/MTU, 10000 year decay (mpc12u.o)
- XXVII. 3.75% U-235 Enrichment, 37 GWd/MTU, 50000 year decay (mpc12v.o)
- XXVIII. 3.75% U-235 Enrichment, 37 GWd/MTU, 100000 year decay (mpc12w.o)
- XXIX. 3.75% U-235 Enrichment, 37 GWd/MTU, 1000000 year decay (mpc12x.o)
- XXX. 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 1% B in Al-B (m12bb1.o)
- XXXI. 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 2% B in Al-B (m12bb2.o)
- XXXII. 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 3% B in Al-B (m12bb3.o)
- XXXIII. 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 4% B in Al-B (m12bb4.o)
- XXXIV. 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay 5% B in Al-B (m12bb5.o)
- XXXV. Intact Flux Trap, 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay, 4% B in Al-B (m12tb4.O)
- XXXVI. Intact Flux Trap, 3.00% U-235 Enrichment, 20 GWd/MTU, 5 year decay, 50% moderator in flux trap (m12txb.O)

09/25/95 08:02:49
MPC 12 ASSEMBLY, B&W 15x15 FUEL
3.00%/20 GWD/5 year (mpc12b)

probid = 09/25/95 07:29:21
basis:
(1.000000, .000000, .000000)
(.000000, 1.000000, .000000)
origin:
(13.81, 13.81, 5.00)
extent = (13.85, 13.85)

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Figure 7.3-1. MCNP Cross-Sectional View of a B&W 15x15 PWR Assembly

03/17/95 09:28:48
MPC 12 ASSEMBLY, B&W 15x15 FUEL
3.00%/20 GWD/1 year (mpc12TRP)

PROBID = 03/17/95 09:26:54
BASIS:
(1.000000, .000000, .000000)
(.000000, 1.000000, .000000)
ORIGIN:
(49.00, 49.00, 5.00)
EXTENT = (50.00, 50.00)

Originator: J. Wesley Davis

Checker: Kenneth D. Wright

Figure 7.3-2. MCNP Cross-Sectional View of the 12 PWR Assembly MPC WP with Flux Traps.

03/17/95 09:19:54
MPC 12 ASSEMBLY, B&W 15x15 FUEL
3.00%/20 GWD/1 year (mpc12a)

PROBID = 03/17/95 09:17:54
BASIS:
{ 1.000000, .000000, .000000 }
{ .000000, 1.000000, .000000 }
ORIGIN:
{ 49.00, 49.00, 5.00 }
EXTENT = { 50.00, 50.00 }

Originator: J. Wesley Davis

Checker: Kenneth D. Wright

Figure 7.3-3. MCNP Cross-Sectional View of the 12 PWR Assembly MPC WP w/ Collapsed Flux Traps.

09/25/95 08:11:09
MPC 12 ASSEMBLY, B&W 15x15 FUEL
3.00%/20 GWD/5 year (mpc12b)

probid = 09/25/95 07:29:21
basis:
(1.000000, .000000, .000000)
(.000000, .000000, 1.000000)
origin:
(75.00, 5.00, 215.00)
extent = (75.00, 75.00)

Originator: J. Wesley Davis

Checker: Kenneth D. Wright

Figure 7.3-4. MCNP Axial View of the 12 PWR Assembly MPC WP w/ Collapsed Flux Traps

Without Bias and Uncertainties

Figure.7.5-1. Time Effects on Criticality Potential, 12 PWR MPC WP w/ Collapsed Flux Traps.

Criticality Control Material Effect

12 PWR Flux Trap MPC Waste Package Conceptual Design

Figure 7.6-1. Al-B Criticality Control Panel Effect, 12 PWR MPC WP w/ Collapsed Flux Traps, MGDS DBF.

1MCNP VERSION 4A-B LD=10/04/91 02/16/95 12:50:42

PROBID = 02/16/95 12:50:42

INP=mpc12b OUTP=mpc12b.o

```

1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12b)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2

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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL -ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117-      77      1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118-      C      SS316L MPC LID
119-      80      8 -8.2380 1 2 -9 6 -7 IMP:N=1
120-      C      SS316L MPC LINER
121-      81      8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122-      C      GAP SS316L/INNER 825 BARRIER
123-      82      1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124-      C      GAP BETWEEN MPC LID AND INNER BARRIER LID
125-      83      1 -1.0000 -10 1 2 7 -71 IMP:N=1
126-      C      INNER BARRIER LID - ALLOY 825
127-      84      5 -8.1400 1 2 -11 71 -8 IMP:N=1
128-      C      INNER BARRIER - ALLOY 825
129-      85      5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130-      C      GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131-      86      1 -1.0000 8 -72 -12 1 2 IMP:N=1
132-      C      OUTER BARRIER LID A516 CARBON STEEL
133-      87      7 -7.832 -12 72 -73 1 2 IMP:N=1
134-      C      OUTER BARRIER - A516 CARBON STEEL
135-      88      7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136-      C      WATER, ENDS
137-      89      1 -1.0000 1 2 73 -80 -81 IMP:N=1
138-      C      WATER, SIDE
139-      90      1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140-      C      OUTSIDE WORLD
141-      91      0 -1:-2:-3:80:81 IMP:N=0
142-
143-      C      SURFACE SPECIFICATIONS
144-      1*      PX 0.0
145-      2*      PY 0.00
146-      3*      PZ 0.00
147-      4      PZ 203.2000 $ TOP ACTIVE FUEL
148-      5      PZ 222.2500 $ TOP FUEL HARDWARE
149-      6      PZ 229.2500 $ TOP FUEL REGION
150-      7      PZ 231.7500 $ TOP ALLOY 825 LID
151-      8      PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152-      9      CZ 60.7949 $ ID OF WASTE CONTAINER
153-      10     CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154-      11     CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155-      12     CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156-      C      PIN LATTICE BOUNDS
157-      13     PX 0.72135
158-      14     PX -0.72135
159-      15     PY 0.72135
160-      16     PY -0.72135
161-      C      FUEL ROD
162-      17     CZ 0.468122
163-      18     CZ 0.478790
164-      19     CZ 0.546100
165-      C      CONTROL ROD/GUIDE TUBE
166-      20     CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167-      21     CZ 0.50292
168-      22     CZ 0.56007
169-      23     CZ 0.63246
170-      24     CZ 0.67310
171-      C      INSTRUMENTATION TUBE
172-      25     CZ 0.56007
173-      26     CZ 0.62611
174-      C      CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175-      27     PX 12.80923
176-      28     PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.75%/O GWD/O YEAR -- U02								
331-	C	M2	8016.50C	4.6973E-02						
332-	C	92235.50C	8.9111E-04							
333-	C	92238.50C	2.2583E-02							
334-	C	3.00%/20 GWD/5 YEAR -- U02								
335-	M2	8016.50C	4.7767E-02							
336-		45103.50C	1.7033E-05							
337-		47109.50C	2.0436E-06							
338-		62149.50C	1.3260E-07							
339-		63151.55C	1.6963E-08							
340-		63153.55C	2.1975E-06							
341-		64155.50C	1.0128E-07							
342-		92233.50C	3.2712E-11							
343-		92234.50C	4.9053E-06							
344-		92235.50C	3.1513E-04							
345-		92236.50C	7.0520E-05							
346-		92238.50C	2.2844E-02							
347-		93237.55C	5.4646E-06							
348-		94238.50C	9.9680E-07							
349-		94239.55C	1.0790E-04							
350-		94240.50C	3.0974E-05							
351-		94241.50C	1.4571E-05							
352-		94242.50C	3.7204E-06							
353-		95241.50C	4.3471E-06							
354-		95242.50C	1.3739E-08							
355-		95243.50C	4.1755E-07							
356-		96245.35C	1.4221E-09							

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357-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
358-      M3      2004.50C 1.0
359-      C      ZIRCALOY-4
360-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
361-      40000.50C -0.9818 50000.35C -0.0140
362-      C      ALLOY 825
363-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
364-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
365-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
366-      29000.50C -0.0250 42000.50C -0.0300
367-      C      1100 ALUMINUM ALLOY
368-      M6      13027.50C -0.99880 29000.50C -0.00120
369-      C      A516 CARBON STEEL
370-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
371-      16032.50C -0.00035 25055.50C -0.0090
372-      26000.55C -0.98535
373-      C      SS316L
374-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
375-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
376-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
377-      42000.50C -0.02500
378-      C      TALLIES
379-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.    19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.    19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.    17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.    20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.    21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.    17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.    20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.    21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.    22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.    22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.    23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.    23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.    23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.    23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.    27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.    27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.    25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.    28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3136
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3136
POINTS AFTER EXPANSION OR CONTRACTION	3005
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T				
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,
	63151,	.00000	63153,	.00003	64155,	.00000	92233,
	92234,	.00007	92235,	.00443	92236,	.00099	92238,
	93237,	.00008	94238,	.00001	94239,	.00152	94240,
	94241,	.00020	94242,	.00005	95241,	.00006	95242,
	95243,	.00001	96245,	.00000			.00000
3	2004,	1.00000					

4	8016, .00681	24000, .00175	26000, .00325	40000, .97748
	50000, .01071			
5	6000, .00234	13027, .00417	14000, .01001	16032, .00053
	22000, .01057	24000, .23247	25055, .01023	26000, .28763
	28000, .40235	29000, .02212	42000, .01758	
6	13027, .99949	29000, .00051		
7	6000, .01011	14000, .00541	15031, .00062	16032, .00060
	25055, .00905	26000, .97421		
8	6000, .00140	7014, .00399	14000, .01493	15031, .00081
	16032, .00052	24000, .18282	25055, .02036	26000, .64626
	28000, .11433	42000, .01457		

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001, .11191	8016, .88809		
2	8016, .12057	45103, .00028	47109, .00004	62149, .00000
	63151, .00000	63153, .00005	64155, .00000	92233, .00000
	92234, .00018	92235, .01169	92236, .00263	92238, .85819
	93237, .00020	94238, .00004	94239, .00407	94240, .00117
	94241, .00055	94242, .00014	95241, .00017	95242, .00000
	95243, .00002	96245, .00000		
3	2004, 1.00000			
4	8016, .00120	24000, .00100	26000, .00200	40000, .98180
	50000, .01400			
5	6000, .00050	13027, .00200	14000, .00499	16032, .00030
	22000, .00898	24000, .21446	25055, .00998	26000, .28499
	28000, .41895	29000, .02494	42000, .02993	
6	13027, .99880	29000, .00120		
7	6000, .00220	14000, .00275	15031, .00035	16032, .00035
	25055, .00900	26000, .98535		
8	6000, .00030	7014, .00101	14000, .00758	15031, .00045
	16032, .00030	24000, .17172	25055, .02020	26000, .65197
	28000, .12121	42000, .02525		

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE
17	17	.00000E+00	INFINITE
18	18	.00000E+00	INFINITE
19	19	.00000E+00	INFINITE
20	21	.00000E+00	INFINITE
21	22	.00000E+00	INFINITE
22	23	.00000E+00	INFINITE
23	24	.00000E+00	INFINITE
24	25	.00000E+00	INFINITE
25	26	.00000E+00	INFINITE
26	27	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	INFINITE
31	32	.00000E+00	INFINITE
32	33	.00000E+00	INFINITE
33	34	.00000E+00	INFINITE
34	35	.00000E+00	INFINITE
35	36	.00000E+00	INFINITE
36	37	.00000E+00	INFINITE
37	38	.00000E+00	INFINITE
38	39	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	INFINITE
43	44	.00000E+00	INFINITE
44	45	.00000E+00	INFINITE
45	46	.00000E+00	INFINITE
46	48	.00000E+00	INFINITE
47	49	.00000E+00	INFINITE
48	50	.00000E+00	INFINITE

49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE

109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE
117	27050	.00000E+00	.00000E+00	INFINITE
118	27051	.00000E+00	.00000E+00	INFINITE
119	28048	.00000E+00	.00000E+00	INFINITE
120	28049	.00000E+00	.00000E+00	INFINITE
121	29048	.00000E+00	.00000E+00	INFINITE
122	29049	.00000E+00	.00000E+00	INFINITE
123	30048	.00000E+00	.00000E+00	INFINITE
124	30049	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02

7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			

67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08

60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.

1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396) 79/08/30.

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.
94238.50C 16458 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU
TOTAL NU

(1338) 79/09/12.
(1381) 79/08/30.
(1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
16032.50C 2684 NJOY
22000.50C 25231 NJOY
25055.50C 60097 NJOY
42000.50C 18467 NJOY
62149.50C 11116 NJOY
64155.50C 31471 NJOY

(1315) 79/10/29.
(1316) 79/10/29.
(1322) 79/06/21.
(1325) 79/06/21.
(1321) 79/08/01.
(1319) 02/12/85
(1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
47109.50C 10147 NJOY
93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
(1373) 11/01/85
(1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=0K

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=0K

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
63153.55C 30265

06/28/88
06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
TALLIES 0
BANK 18403
CROSS SECTIONS 1347491
TOTAL 1468152

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

10 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .13 PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12b)

	NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-1.339E-01	1.944E-01	4.930E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.983E-01	1.548E+00	
2	-2.207E-01	-2.477E-01	5.007E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.983E-01	1.144E+00	
3	1.554E-01	1.240E-01	5.042E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.983E-01	2.062E+00	
4	-1.577E-02	2.429E-01	5.457E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.983E-01	6.286E-02	
5	-1.105E-01	8.180E-02	4.852E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.983E-01	8.473E-01	
6	-1.595E-01	-2.368E-01	6.050E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.983E-01	3.429E+00	
7	1.494E-01	-2.810E-01	7.141E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.983E-01	5.631E-02	
8	4.304E-02	4.132E-01	5.200E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.983E-01	1.797E+00	
9	1.392E-01	-2.988E-01	5.432E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.983E-01	1.655E+00	
10	7.010E-02	2.587E-01	6.021E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.983E-01	9.856E-01	
11	5.646E-02	-2.321E-01	6.361E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.983E-01	1.046E+00	
12	1.815E-01	-1.192E-01	6.325E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.983E-01	6.949E-01	
13	-1.520E-01	-4.261E-01	6.126E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.983E-01	7.386E+00	
14	-1.568E-01	-3.122E-01	6.091E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.983E-01	2.495E+00	
15	-2.455E-01	1.365E-01	9.143E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.983E-01	1.622E+00	
16	3.688E-02	-2.064E-01	9.095E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.983E-01	1.465E-01	
17	2.246E-01	-1.672E-01	9.445E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.983E-01	1.915E+00	
18	-2.179E-01	8.162E-02	9.200E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.983E-01	1.956E+00	
19	-3.889E-01	1.191E-02	7.190E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.983E-01	1.164E+00	
20	-2.539E-01	3.467E-01	6.592E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.983E-01	1.846E+00	
21	2.114E-01	3.821E-01	7.020E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.983E-01	4.828E-01	
22	-1.324E-01	4.450E-01	7.095E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.983E-01	1.182E+00	
23	1.166E-01	3.436E-01	9.077E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.983E-01	2.350E+00	
24	-6.895E-02	-1.246E-01	1.042E+02	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.983E-01	9.930E-01	
25	-1.117E-01	2.697E-02	1.037E+02	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.983E-01	5.489E+00	
26	2.399E-01	1.138E-01	7.311E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.983E-01	2.046E+00	
27	-3.490E-01	-3.135E-02	6.496E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.983E-01	3.750E+00	
28	-2.697E-01	5.007E-02	6.666E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.983E-01	1.909E-01	
29	-2.652E-01	-3.707E-01	6.639E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.983E-01	9.801E-01	
30	-3.779E-01	1.372E-01	6.702E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.983E-01	2.655E+00	
31	-4.142E-01	2.076E-01	6.701E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.983E-01	4.529E+00	
32	2.376E-01	-1.993E-01	6.876E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.983E-01	1.191E-01	
33	7.571E-02	2.412E-01	6.528E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.983E-01	1.219E+00	
34	2.425E-01	1.248E-01	6.719E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.983E-01	1.355E+00	
35	2.220E-01	4.075E-01	6.575E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.983E-01	1.769E+00	
36	1.376E-01	-3.286E-01	6.531E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.983E-01	6.439E-01	
37	3.535E-01	2.333E-01	7.462E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.983E-01	2.646E+00	
38	-2.491E-01	-1.714E-01	7.880E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.983E-01	7.589E+00	
39	-1.097E-01	1.731E-01	7.946E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.983E-01	6.220E+00	
40	-1.589E-01	9.748E-02	8.015E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.983E-01	3.374E+00	
41	1.768E-01	2.420E-01	8.815E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.983E-01	5.098E+00	
42	1.595E-01	-2.532E-01	8.896E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.983E-01	5.973E-01	
43	-1.997E-01	3.613E-02	1.059E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.983E-01	1.577E+00	
44	-1.617E-01	2.615E-01	8.412E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.983E-01	2.625E+00	
45	-6.151E-02	-3.088E-01	8.645E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.983E-01	5.410E+00	

46	1.558E-01	3.357E-01	8.619E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.983E-01	6.293E-01
47	-2.951E-01	2.795E-01	8.501E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.983E-01	4.835E+00
48	1.480E-01	2.922E-01	8.387E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.983E-01	2.658E+00
49	2.062E-01	-3.076E-01	7.611E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.983E-01	1.294E+00
50	2.134E-01	-3.716E-01	7.618E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.983E-01	6.683E-01

CYCLE 1 K(COLLISION) .910569 REMOVAL LIFETIME(ABS) 3.0294E+03 SOURCE POINTS GENERATED 2753

CYCLE 2 K(COLLISION) .908270 REMOVAL LIFETIME(ABS) 3.2577E+03 SOURCE POINTS GENERATED 3048

CYCLE 3 K(COLLISION) .895210 REMOVAL LIFETIME(ABS) 3.1781E+03 SOURCE POINTS GENERATED 2950

CYCLE 4 K(COLLISION) .951408 REMOVAL LIFETIME(ABS) 3.2264E+03 SOURCE POINTS GENERATED 3181

CYCLE 5 K(COLLISION) .972254 REMOVAL LIFETIME(ABS) 3.1929E+03 SOURCE POINTS GENERATED 3069

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .927115 REMOVAL LIFETIME(ABS) 3.0904E+03 SOURCE POINTS GENERATED 2825

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.951608	.939362	.0130	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	.948787	.939981	.0094	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	.948377	.943842	.0048	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.2180E+03	3.1592E+03	.0186	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
REM LIFE(ABS)	3.2156E+03	3.1530E+03	.0199				
SOURCE POINTS GENERATED	3120						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.978372	.952365	.0155	K(COL/ABS)	.946130 .0094	.939257 .0081	.4628
K(ABSORPTION)	.939724	.939895	.0054	K(ABS/TK LN)	.944367 .0048	.943531 .0081	.4492
K(TRK LENGTH)	.958834	.948840	.0059	K(TK LN/COL)	.950602 .0108	.946669 .0002	.9999
REM LIFE(COL)	3.1723E+03	3.1636E+03	.0108	LIFE(COL/ABS)	3.1471E+03 .0115	3.1617E+03 .0171	.7769
REM LIFE(ABS)	3.0859E+03	3.1306E+03	.0136				
SOURCE POINTS GENERATED	3069						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.909710	.941701	.0159	K(COL/ABS)	.938449 .0106	.933480 .0068	.7638
K(ABSORPTION)	.921101	.935197	.0063	K(ABS/TK LN)	.935476 .0101	.934984 .0062	.8392
K(TRK LENGTH)	.896502	.935755	.0146	K(TK LN/COL)	.938728 .0148	.936481 .0184	.8869
REM LIFE(COL)	3.1857E+03	3.1691E+03	.0078	K(COL/ABS/TK LN)	.937551 .0117	.934773 .0098	
REM LIFE(ABS)	3.1823E+03	3.1435E+03	.0104	LIFE(COL/ABS)	3.1563E+03 .0086	3.1704E+03 .0102	.7838
SOURCE POINTS GENERATED	2774						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.925250	.938411	.0128	K(COL/ABS)	.935051 .0090	.929988 .0067	.7497
K(ABSORPTION)	.917670	.931692	.0062	K(ABS/TK LN)	.932003 .0087	.931457 .0063	.8216
K(TRK LENGTH)	.918551	.932314	.0119	K(TK LN/COL)	.935363 .0121	.933168 .0142	.8959
REM LIFE(COL)	3.2214E+03	3.1796E+03	.0069	K(COL/ABS/TK LN)	.934139 .0098	.931358 .0089	
REM LIFE(ABS)	3.2197E+03	3.1588E+03	.0094	LIFE(COL/ABS)	3.1692E+03 .0078	3.1843E+03 .0081	.8363
SOURCE POINTS GENERATED	3048						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.932511	.937428	.0105	K(COL/ABS)	.934913 .0073	.931307 .0054	.7230
K(ABSORPTION)	.935926	.932397	.0051	K(ABS/TK LN)	.932649 .0071	.932209 .0051	.8204
K(TRK LENGTH)	.935835	.932901	.0098	K(TK LN/COL)	.935165 .0099	.933656 .0110	.8831
REM LIFE(COL)	3.1839E+03	3.1803E+03	.0056	K(COL/ABS/TK LN)	.934242 .0080	.932394 .0064	
REM LIFE(ABS)	3.1728E+03	3.1611E+03	.0077	LIFE(COL/ABS)	3.1707E+03 .0064	3.1847E+03 .0064	.8356
SOURCE POINTS GENERATED	2977						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.915510	.934297	.0095	K(COL/ABS)	.932303 .0068	.929244 .0050	.7626
K(ABSORPTION)	.917785	.930310	.0049	K(ABS/TK LN)	.931763 .0061	.929907 .0053	.7089
K(TRK LENGTH)	.935105	.933216	.0083	K(TK LN/COL)	.933756 .0085	.933361 .0090	.8118
REM LIFE(COL)	3.1382E+03	3.1743E+03	.0051	K(COL/ABS/TK LN)	.932608 .0070	.929295 .0058	
REM LIFE(ABS)	3.1330E+03	3.1571E+03	.0066	LIFE(COL/ABS)	3.1657E+03 .0056	3.1766E+03 .0057	.8330
SOURCE POINTS GENERATED	2895						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.929194	.933659	.0083	K(COL/ABS)	.932160 .0059	.929920 .0043	.7497
K(ABSORPTION)	.933114	.930660	.0042	K(ABS/TK LN)	.931167 .0053	.930564 .0045	.6680
K(TRK LENGTH)	.920872	.931673	.0074	K(TK LN/COL)	.932666 .0074	.932059 .0079	.8068
REM LIFE(COL)	3.1523E+03	3.1715E+03	.0045	K(COL/ABS/TK LN)	.931998 .0061	.929837 .0048	
REM LIFE(ABS)	3.1170E+03	3.1521E+03	.0060	LIFE(COL/ABS)	3.1618E+03 .0050	3.1752E+03 .0050	.8391
SOURCE POINTS GENERATED	3062						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.943567	.934760	.0074	K(COL/ABS)	.932548 .0052	.929413 .0039	.7222
K(ABSORPTION)	.927747	.930337	.0038	K(ABS/TK LN)	.932997 .0051	.930262 .0040	.5043
K(TRK LENGTH)	.967527	.935657	.0077	K(TK LN/COL)	.935208 .0071	.935127 .0076	.7526
REM LIFE(COL)	3.2743E+03	3.1829E+03	.0054	K(COL/ABS/TK LN)	.933585 .0056	.929693 .0043	
REM LIFE(ABS)	3.2231E+03	3.1600E+03	.0058	LIFE(COL/ABS)	3.1715E+03 .0054	3.1770E+03 .0059	.8505
SOURCE POINTS GENERATED	3062						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.924651	.933749	.0067	K(COL/ABS)	.932535 .0047	.931095 .0037	.6314
K(ABSORPTION)	.940175	.931321	.0035	K(ABS/TK LN)	.933241 .0046	.931437 .0037	.4566
K(TRK LENGTH)	.930693	.935160	.0069	K(TK LN/COL)	.934455 .0064	.934355 .0068	.7529
REM LIFE(COL)	3.1481E+03	3.1795E+03	.0049	K(COL/ABS/TK LN)	.933410 .0050	.931379 .0040	
REM LIFE(ABS)	3.1617E+03	3.1601E+03	.0052	LIFE(COL/ABS)	3.1698E+03 .0048	3.1724E+03 .0052	.8268
SOURCE POINTS GENERATED	2970						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.909322	.931528	.0065	K(COL/ABS)	.930668 .0047	.929561 .0037	.6894
K(ABSORPTION)	.914678	.929808	.0036	K(ABS/TK LN)	.931572 .0045	.929854 .0038	.5233
K(TRK LENGTH)	.915085	.933335	.0066	K(TK LN/COL)	.932432 .0062	.932392 .0065	.7777
REM LIFE(COL)	3.3663E+03	3.1964E+03	.0069	K(COL/ABS/TK LN)	.931557 .0050	.929927 .0039	
REM LIFE(ABS)	3.3347E+03	3.1760E+03	.0068	LIFE(COL/ABS)	3.1862E+03 .0067	3.1840E+03 .0073	.9227
SOURCE POINTS GENERATED	2927						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.929954	.931397	.0060	K(COL/ABS)	.930608	.0043	.929592	.0034
K(ABSORPTION)	.929937	.929818	.0033	K(ABS/TK LN)	.931055	.0041	.929850	.0034
K(TRK LENGTH)	.920820	.932292	.0061	K(TK LN/COL)	.931845	.0057	.931794	.0060
REM LIFE(COL)	3.3129E+03	3.2062E+03	.0070	K(COL/ABS/TK LN)	.931169	.0046	.929789	.0035
REM LIFE(ABS)	3.2909E+03	3.1856E+03	.0069	LIFE(COL/ABS)	3.1959E+03	.0068	3.1931E+03	.0074
SOURCE POINTS GENERATED	3074							.9372

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.939923	.932053	.0055	K(COL/ABS)	.931009	.0040	.929660	.0031
K(ABSORPTION)	.931720	.929965	.0030	K(ABS/TK LN)	.931664	.0039	.929985	.0031
K(TRK LENGTH)	.946218	.933364	.0057	K(TK LN/COL)	.932708	.0053	.932597	.0055
REM LIFE(COL)	3.3055E+03	3.2138E+03	.0068	K(COL/ABS/TK LN)	.931794	.0043	.929923	.0032
REM LIFE(ABS)	3.2929E+03	3.1938E+03	.0068	LIFE(COL/ABS)	3.2038E+03	.0067	3.2030E+03	.0072
SOURCE POINTS GENERATED	3051							.9450

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.940750	.932674	.0052	K(COL/ABS)	.931903	.0038	.930990	.0032
K(ABSORPTION)	.946318	.931133	.0031	K(ABS/TK LN)	.932169	.0036	.931305	.0031
K(TRK LENGTH)	.931153	.933206	.0053	K(TK LN/COL)	.932940	.0049	.932906	.0051
REM LIFE(COL)	3.1255E+03	3.2075E+03	.0066	K(COL/ABS/TK LN)	.932338	.0040	.931179	.0032
REM LIFE(ABS)	3.1423E+03	3.1902E+03	.0065	LIFE(COL/ABS)	3.1988E+03	.0064	3.1939E+03	.0068
SOURCE POINTS GENERATED	2985							.9410

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.934072	.932767	.0048	K(COL/ABS)	.932020	.0035	.931135	.0029
K(ABSORPTION)	.933225	.931272	.0028	K(ABS/TK LN)	.932746	.0034	.931487	.0029
K(TRK LENGTH)	.948407	.934219	.0051	K(TK LN/COL)	.933493	.0046	.933338	.0048
REM LIFE(COL)	3.4216E+03	3.2218E+03	.0076	K(COL/ABS/TK LN)	.932753	.0037	.931488	.0030
REM LIFE(ABS)	3.4408E+03	3.2069E+03	.0079	LIFE(COL/ABS)	3.2143E+03	.0077	3.2215E+03	.0079
SOURCE POINTS GENERATED	2980							.9596

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12b)

PROBID = 02/16/95 15:06:08
02/16/95 12:50:42

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59845	1.0026E+00	2.0646E+00	ESCAPE	1	1.4834E-05	2.1546E-08
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.5961E-02	4.9065E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59930	6.6846E-02	4.2863E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
				FORCED COLLISIONS	0	0.	0.
				EXP. TRANSFORM	0	0.	0.

UPSCATTERING	0	0.	1.2571E-07	DOWNSCATTERING	0	0.	1.9554E+00
(N,XN)	172	2.2913E-03	1.7187E-03	CAPTURE	0	6.4978E-01	3.1983E-02
FISSION	0	0.	0.	LOSS TO (N,XN)	86	1.1456E-03	9.4715E-03
TOTAL	60017	1.0708E+00	2.0663E+00	LOSS TO FISSION	0	3.5306E-01	6.9454E-02
				TOTAL	60017	1.0708E+00	2.0663E+00

NUMBER OF NEUTRONS BANKED 86
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0029E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 5.7437E+01
 TOTAL NEUTRON COLLISIONS 3437289
 NET MULTIPLICATION 1.0011E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 9.6319E+00
 CAPTURE 3.1986E+03
 CAPTURE OR ESCAPE 3.1985E+03
 ANY TERMINATION 3.5398E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 116.07 MINUTES
 COMPUTER TIME IN MCRUN 115.93 MINUTES
 SOURCE PARTICLES PER MINUTE 5.1620E+02
 RANDOM NUMBERS GENERATED 41719999

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 8370 IN HISTORY 13779

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4310E-01 TO 1.0897E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26025	9678	3.2822E+00	1.1801E-04	3.7599E-01	7.2813E-01	1.0982E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	726341	59931	297620	4.1589E+00	7.1553E-04	7.4583E-01	8.7603E-01	2.5109E+00
33	34	3059	167	619	6.4624E-03	5.3198E-05	2.3015E-01	6.0965E-01	4.3078E+00
34	35	120	11	390	2.6727E-03	2.2381E-07	3.8961E-05	4.1492E-01	3.4113E-01
35	36	1299952	59931	9	1.3943E-04	6.2378E-04	7.0789E-01	8.7233E-01	3.4967E+03
36	37	224	10	12	8.2059E-05	2.1474E-07	3.3249E-05	4.1552E-01	3.6012E-01
37	38	1409210	59931	50737	7.4916E-01	5.9941E-04	6.9747E-01	8.7207E-01	4.1124E+00
38	39	237	10	105	7.3212E-04	5.2162E-06	1.6786E-02	4.3342E-01	3.9375E-01
39	40	2250653	59931	1442054	1.8839E+01	5.1983E-04	6.6320E-01	8.6953E-01	1.6357E+00
40	41	56687	31023	90170	1.1787E+00	3.8478E-04	6.1420E-01	8.6549E-01	1.5424E+00
41	42	21	6	68	3.7321E-04	3.5470E-08	4.3795E-08	3.2440E-01	3.0923E-01
42	43	119920	32749	3669	5.3803E-02	4.1072E-04	6.2390E-01	8.6815E-01	4.1328E+00
43	44	134518	35097	30150	3.9379E-01	4.1654E-04	6.3181E-01	8.6804E-01	1.5751E+00
44	45	147271	36085	3262	4.7946E-02	4.2842E-04	6.3573E-01	8.6918E-01	4.1336E+00
45	46	179591	41234	72311	9.4701E-01	4.2009E-04	6.2830E-01	8.6832E-01	1.5700E+00
46	47	7042	3288	7458	9.8654E-02	3.9903E-04	6.2575E-01	8.7120E-01	1.5543E+00
47	48	9458	3604	314	4.5748E-03	4.2936E-04	6.6403E-01	8.7649E-01	4.1645E+00
48	49	12334	4930	6446	8.5645E-02	4.2215E-04	6.3079E-01	8.7610E-01	1.5631E+00
49	50	33946	15115	67476	8.0394E-01	3.3799E-04	5.6218E-01	8.2310E-01	1.4678E+00
50	51	33825	14364	12603	1.5579E-01	3.9127E-04	5.7104E-01	8.0579E-01	2.0954E+00
51	52	33455	14049	2364	3.4035E-02	3.9965E-04	5.6913E-01	8.0448E-01	9.2206E+00
52	53	33745	14122	12829	1.5655E-01	3.7516E-04	5.5663E-01	7.9848E-01	2.0758E+00
53	54	174	51	1179	9.9818E-03	5.2639E-05	2.4590E-01	5.7115E-01	8.0920E-01
54	55	34422	15385	66686	7.9594E-01	3.4167E-04	5.7330E-01	8.2361E-01	1.4745E+00
55	56	34310	14657	12799	1.5773E-01	3.8976E-04	5.8150E-01	8.0531E-01	2.0827E+00
56	57	34030	14331	2528	3.6349E-02	4.0266E-04	5.8005E-01	8.0250E-01	9.1725E+00
57	58	34171	14372	12874	1.5699E-01	3.7671E-04	5.7373E-01	7.9834E-01	2.0775E+00
58	59	137	41	916	8.2283E-03	5.3814E-05	1.8925E-01	6.2481E-01	7.8774E-01
59	60	53061	19038	92868	1.1574E+00	4.8143E-04	5.5455E-01	8.4481E-01	1.4977E+00
60	61	52593	18169	17754	2.2949E-01	6.7198E-04	5.7867E-01	8.3671E-01	2.2720E+00
61	62	251	73	1024	9.9314E-03	6.5594E-05	2.7316E-01	6.5160E-01	8.6124E-01
62	63	52097	18826	90779	1.1274E+00	4.6905E-04	5.5481E-01	8.4242E-01	1.4937E+00
63	64	51595	17980	17684	2.2971E-01	6.6834E-04	5.7934E-01	8.3675E-01	2.2628E+00
64	65	263	61	1244	1.1395E-02	4.9223E-05	2.9058E-01	6.1378E-01	8.1478E-01
65	66	10192	5111	440388	4.0177E+00	5.5682E-05	2.6848E-01	6.1419E-01	8.5540E-01
66	67	10067	3960	14985	1.5700E-01	1.6679E-04	4.0799E-01	6.9567E-01	1.7722E+00
67	68	9978	3927	14632	1.5206E-01	1.7748E-04	4.5409E-01	6.8889E-01	1.7849E+00
68	70	32862	8764	10887	1.4108E-01	9.4001E-04	5.6865E-01	8.3750E-01	2.3750E+00
69	71	32972	8433	6053	9.0048E-02	1.0332E-03	5.7245E-01	8.3748E-01	8.8758E+00
70	72	17771	8237	55045	7.0600E-01	1.3460E-03	5.7862E-01	8.3820E-01	2.5167E+00
71	73	34394	9241	11542	1.4838E-01	9.1617E-04	5.7387E-01	8.3450E-01	2.3587E+00
72	74	34473	8920	6635	9.8165E-02	1.0091E-03	5.7591E-01	8.3495E-01	8.9112E+00
73	75	18499	8660	56672	7.2405E-01	1.3344E-03	5.8974E-01	8.3493E-01	2.5283E+00
74	76	128	33	2216	1.8456E-02	4.3652E-05	2.4733E-01	5.4838E-01	7.8835E-01
75	77	123	44	2030	1.8329E-02	4.5905E-05	1.9761E-01	6.1259E-01	7.4305E-01
76	80	8	3	42	4.9006E-04	1.6717E-04	4.2930E-01	6.7086E-01	1.1716E+00
77	81	3549	1571	10401	1.1350E-01	3.3578E-04	5.0938E-01	7.2509E-01	2.0472E+00
78	82	2245	949	12597	1.3203E-01	2.7269E-04	4.4415E-01	7.4644E-01	1.3001E+00
79	83	3	2	144	1.5993E-03	1.9036E-04	9.3811E-01	7.6884E-01	1.8893E+00
80	84	1	1	1	7.7501E-06	2.8109E-08	2.8183E-08	4.3229E-01	7.3442E-01
81	85	1794	733	5292	6.3389E-02	8.5129E-04	5.4504E-01	7.8040E-01	2.1048E+00
82	86	1	1	66	3.4131E-04	3.6018E-08	4.8757E-08	3.1176E-01	3.1838E-01
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1104	473	9811	1.1220E-01	1.8715E-03	4.7797E-01	7.8081E-01	4.3386E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	392	228	47503	4.0217E-01	2.9169E-05	1.1988E-01	5.5969E-01	6.2718E-01

TOTAL 7075294 697541 3437289 4.2028E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3133E-01	-5.3133E-01
2	2	3.2764E-01	.0000E+00	.0000E+00	-9.1013E-01	-5.8249E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5050E-02	-1.5050E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.3540E-02	-5.3540E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.6125E-02	-1.6125E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.5079E-01	-1.5079E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6446E+00	-1.6446E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0040E+00	-2.0040E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1224E-01	-2.1224E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1508E-01	-2.1508E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8224E-01	-3.8224E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.7591E-01	-3.7591E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.6426E-02	-7.6426E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.7826E-02	-7.7826E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-9.0355E-02	-9.0355E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.2489E-02	-7.2489E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.1552E-02	-7.1552E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.4818E-02	-7.4818E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.9462E-02	-9.9462E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-9.7691E-02	-9.7691E-02
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9138E-02	-8.9138E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.1688E-02	-8.1688E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1103E-01	-1.1103E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.0790E-01	-1.0790E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1018E-01	-1.1018E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1015E-01	-1.1015E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0324E-01	-1.0324E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.4659E-02	-8.4659E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.4437E-02	-9.4437E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0183E-01	-1.0183E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8861E+01	-1.8861E+01
32	33	9.6886E+00	1.0026E+00	.0000E+00	-9.4846E+00	1.2066E+00
33	34	3.0969E-02	.0000E+00	.0000E+00	-2.9588E-02	1.3805E-03
34	35	8.4010E-04	.0000E+00	.0000E+00	-8.3323E-04	6.8721E-06
35	36	1.8963E+01	.0000E+00	.0000E+00	-1.8952E+01	1.1039E-02
36	37	1.5505E-03	.0000E+00	.0000E+00	-1.5156E-03	3.4922E-05
37	38	2.0552E+01	.0000E+00	.0000E+00	-2.0476E+01	7.5440E-02
38	39	1.6679E-03	.0000E+00	.0000E+00	-1.6638E-03	4.0901E-06
39	40	3.2754E+01	.0000E+00	.0000E+00	-1.0762E+01	2.1993E+01
40	41	8.2314E-01	.0000E+00	.0000E+00	-8.1962E-01	3.5228E-03
41	42	1.1490E-04	.0000E+00	.0000E+00	-1.0440E-04	1.0499E-05
42	43	1.7381E+00	.0000E+00	.0000E+00	-1.7375E+00	6.1264E-04
43	44	1.9505E+00	.0000E+00	.0000E+00	-1.9493E+00	1.1959E-03
44	45	2.1360E+00	.0000E+00	.0000E+00	-2.1355E+00	5.1704E-04
45	46	2.6085E+00	.0000E+00	.0000E+00	-1.1050E+00	1.5034E+00
46	47	1.0271E-01	.0000E+00	.0000E+00	-6.2763E-02	3.9950E-02
47	48	1.3808E-01	.0000E+00	.0000E+00	-1.3322E-01	4.8673E-03
48	49	1.8052E-01	.0000E+00	.0000E+00	-7.0506E-02	1.1002E-01
49	50	4.6901E-01	.0000E+00	.0000E+00	-2.6420E-01	2.0481E-01
50	51	4.6039E-01	.0000E+00	.0000E+00	-4.4448E-01	1.5906E-02
51	52	4.5176E-01	.0000E+00	.0000E+00	-4.4626E-01	5.5028E-03
52	53	4.5536E-01	.0000E+00	.0000E+00	-1.9013E-01	2.6523E-01
53	54	1.6712E-03	.0000E+00	.0000E+00	-9.3100E-05	1.5781E-03
54	55	4.7659E-01	.0000E+00	.0000E+00	-2.6842E-01	2.0817E-01

TOTAL	1.0154E+02	1.0026E+00	.0000E+00	.0000E+00	-1.0154E+02	1.0026E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

[illegible]

22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-1.2032E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2032E-04
33	34	.0000E+00	.0000E+00	-7.8045E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8045E-06
34	35	.0000E+00	.0000E+00	8.3824E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3824E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	4.1974E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1974E-06
37	38	.0000E+00	.0000E+00	1.5076E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5076E-06
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	-7.8003E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8003E-05
40	41	.0000E+00	.0000E+00	7.5933E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.5933E-05
41	42	.0000E+00	.0000E+00	-8.3377E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3377E-06
42	43	.0000E+00	.0000E+00	5.3403E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3403E-07
43	44	.0000E+00	.0000E+00	-2.4760E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4760E-05
44	45	.0000E+00	.0000E+00	-1.3180E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3180E-05
45	46	.0000E+00	.0000E+00	-2.0359E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0359E-05
46	47	.0000E+00	.0000E+00	8.3862E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3862E-06
47	48	.0000E+00	.0000E+00	-4.0256E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0256E-06
48	49	.0000E+00	.0000E+00	8.3967E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3967E-06
49	50	.0000E+00	.0000E+00	1.7478E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7478E-06
50	51	.0000E+00	.0000E+00	-1.2522E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2522E-04
51	52	.0000E+00	.0000E+00	1.0787E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0787E-05
52	53	.0000E+00	.0000E+00	-7.9004E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9004E-06
53	54	.0000E+00	.0000E+00	1.0243E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0243E-07
54	55	.0000E+00	.0000E+00	3.0735E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0735E-05
55	56	.0000E+00	.0000E+00	1.5152E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5152E-04
56	57	.0000E+00	.0000E+00	1.6993E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6993E-05
57	58	.0000E+00	.0000E+00	1.4060E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4060E-04
58	59	.0000E+00	.0000E+00	1.2568E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2568E-05
59	60	.0000E+00	.0000E+00	-5.7275E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.7275E-05
60	61	.0000E+00	.0000E+00	-1.4866E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4866E-04
61	62	.0000E+00	.0000E+00	-4.1621E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1621E-06
62	63	.0000E+00	.0000E+00	-6.9570E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9570E-05
63	64	.0000E+00	.0000E+00	-6.7237E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.7237E-05
64	65	.0000E+00	.0000E+00	8.4469E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4469E-06
65	66	.0000E+00	.0000E+00	2.9798E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9798E-05
66	67	.0000E+00	.0000E+00	-8.4788E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4788E-05
67	68	.0000E+00	.0000E+00	-2.1059E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1059E-04
68	70	.0000E+00	.0000E+00	-4.9356E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.9356E-05
69	71	.0000E+00	.0000E+00	2.1252E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1252E-05
70	72	.0000E+00	.0000E+00	-1.5499E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5499E-04
71	73	.0000E+00	.0000E+00	6.9377E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.9377E-05
72	74	.0000E+00	.0000E+00	-1.8604E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8604E-05
73	75	.0000E+00	.0000E+00	-9.3423E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3423E-05
74	76	.0000E+00	.0000E+00	1.5791E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5791E-07
75	77	.0000E+00	.0000E+00	-8.2760E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2760E-06
76	80	.0000E+00	.0000E+00	6.3020E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.3020E-06
77	81	.0000E+00	.0000E+00	1.4376E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4376E-05
78	82	.0000E+00	.0000E+00	2.1367E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1367E-05
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	2.5108E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5108E-05

82	86	.0000E+00	.0000E+00	-4.1566E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1566E-06
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-4.5631E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.5631E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7828E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7828E-05

TOTAL		.0000E+00	.0000E+00	-8.8446E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8446E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4258E-02	.0000E+00	-1.4258E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.1973E-03	.0000E+00	-3.6812E-01	-1.0987E-03	-7.2008E-01
33	34	.0000E+00	.0000E+00	-1.3457E-04	.0000E+00	-1.3457E-04
34	35	.0000E+00	.0000E+00	-1.5255E-05	.0000E+00	-1.5255E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-4.1417E-07	.0000E+00	-4.1417E-07
37	38	9.3935E-05	.0000E+00	-6.5829E-03	-4.6967E-05	-6.5359E-03
38	39	.0000E+00	.0000E+00	-4.0901E-06	.0000E+00	-4.0901E-06
39	40	.0000E+00	.0000E+00	-5.0817E-02	.0000E+00	-5.0817E-02
40	41	.0000E+00	.0000E+00	-3.5987E-03	.0000E+00	-3.5987E-03
41	42	.0000E+00	.0000E+00	-2.1609E-06	.0000E+00	-2.1609E-06
42	43	.0000E+00	.0000E+00	-6.1318E-04	.0000E+00	-6.1318E-04
43	44	.0000E+00	.0000E+00	-1.1711E-03	.0000E+00	-1.1711E-03
44	45	.0000E+00	.0000E+00	-5.0386E-04	.0000E+00	-5.0386E-04
45	46	.0000E+00	.0000E+00	-2.7978E-03	.0000E+00	-2.7978E-03
46	47	.0000E+00	.0000E+00	-2.9953E-04	.0000E+00	-2.9953E-04
47	48	.0000E+00	.0000E+00	-4.8851E-05	.0000E+00	-4.8851E-05
48	49	.0000E+00	.0000E+00	-2.4761E-04	.0000E+00	-2.4761E-04

49	50	.0000E+00	.0000E+00	-2.5124E-03	.0000E+00	.0000E+00	-2.5124E-03
50	51	.0000E+00	.0000E+00	-1.0671E-02	.0000E+00	.0000E+00	-1.0671E-02
51	52	.0000E+00	.0000E+00	-5.9242E-04	.0000E+00	.0000E+00	-5.9242E-04
52	53	.0000E+00	.0000E+00	-1.0847E-02	.0000E+00	.0000E+00	-1.0847E-02
53	54	.0000E+00	.0000E+00	-5.2600E-05	.0000E+00	.0000E+00	-5.2600E-05
54	55	.0000E+00	.0000E+00	-2.4915E-03	.0000E+00	.0000E+00	-2.4915E-03
55	56	.0000E+00	.0000E+00	-1.0994E-02	.0000E+00	.0000E+00	-1.0994E-02
56	57	.0000E+00	.0000E+00	-6.7142E-04	.0000E+00	.0000E+00	-6.7142E-04
57	58	.0000E+00	.0000E+00	-1.1301E-02	.0000E+00	.0000E+00	-1.1301E-02
58	59	.0000E+00	.0000E+00	-4.2154E-05	.0000E+00	.0000E+00	-4.2154E-05
59	60	.0000E+00	.0000E+00	-2.9353E-03	.0000E+00	.0000E+00	-2.9353E-03
60	61	.0000E+00	.0000E+00	-1.1108E-02	.0000E+00	.0000E+00	-1.1108E-02
61	62	.0000E+00	.0000E+00	-4.5915E-05	.0000E+00	.0000E+00	-4.5915E-05
62	63	.0000E+00	.0000E+00	-2.8708E-03	.0000E+00	.0000E+00	-2.8708E-03
63	64	.0000E+00	.0000E+00	-1.1154E-02	.0000E+00	.0000E+00	-1.1154E-02
64	65	.0000E+00	.0000E+00	-6.4642E-05	.0000E+00	.0000E+00	-6.4642E-05
65	66	.0000E+00	.0000E+00	-2.0416E-02	.0000E+00	.0000E+00	-2.0416E-02
66	67	.0000E+00	.0000E+00	-1.5687E-02	.0000E+00	.0000E+00	-1.5687E-02
67	68	.0000E+00	.0000E+00	-1.5569E-02	.0000E+00	.0000E+00	-1.5569E-02
68	70	.0000E+00	.0000E+00	-5.3013E-03	.0000E+00	.0000E+00	-5.3013E-03
69	71	.0000E+00	.0000E+00	-6.4310E-04	.0000E+00	.0000E+00	-6.4310E-04
70	72	.0000E+00	.0000E+00	-2.0982E-02	.0000E+00	.0000E+00	-2.0982E-02
71	73	.0000E+00	.0000E+00	-5.5371E-03	.0000E+00	.0000E+00	-5.5371E-03
72	74	.0000E+00	.0000E+00	-7.3230E-04	.0000E+00	.0000E+00	-7.3230E-04
73	75	.0000E+00	.0000E+00	-2.1869E-02	.0000E+00	.0000E+00	-2.1869E-02
74	76	.0000E+00	.0000E+00	-9.4649E-05	.0000E+00	.0000E+00	-9.4649E-05
75	77	.0000E+00	.0000E+00	-9.1121E-05	.0000E+00	.0000E+00	-9.1121E-05
76	80	.0000E+00	.0000E+00	-2.9500E-05	.0000E+00	.0000E+00	-2.9500E-05
77	81	.0000E+00	.0000E+00	-8.1536E-03	.0000E+00	.0000E+00	-8.1536E-03
78	82	.0000E+00	.0000E+00	-4.0979E-04	.0000E+00	.0000E+00	-4.0979E-04
79	83	.0000E+00	.0000E+00	-8.7814E-06	.0000E+00	.0000E+00	-8.7814E-06
80	84	.0000E+00	.0000E+00	-1.5066E-06	.0000E+00	.0000E+00	-1.5066E-06
81	85	.0000E+00	.0000E+00	-2.4490E-03	.0000E+00	.0000E+00	-2.4490E-03
82	86	.0000E+00	.0000E+00	-2.0869E-06	.0000E+00	.0000E+00	-2.0869E-06
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.1542E-03	.0000E+00	.0000E+00	-2.1542E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0751E-03	.0000E+00	.0000E+00	-2.0751E-03

TOTAL 2.2913E-03 .0000E+00 -6.4978E-01 -1.1456E-03 -3.5306E-01 -1.0017E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	294662 16684	3.0821E+00 2.0008E-01	1.4166E-02 9.2701E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7097E-01 2.3926E-04 2.8706E-05 1.8626E-06 2.3827E-07 3.0867E-05 1.4226E-06 4.5949E-10 6.8903E-05 4.4265E-03 9.9057E-04 3.2088E-01 7.6759E-05 1.4002E-05 1.5156E-03 4.3508E-04 2.0467E-04 5.2259E-05 6.1062E-05 1.9299E-07 5.8652E-06 1.9976E-08	98810 562 65 918 13 134 427 0 130 23062 854 150536 197 64 15696 3131 2473 104 416 10 18 0	1.4317E+00 7.2426E-03 8.9393E-04 1.0023E-02 1.1690E-04 1.6989E-03 4.4191E-03 .0000E+00 1.6756E-03 4.4308E-01 1.2444E-02 2.1860E+00 2.5416E-03 7.6213E-04 3.1176E-01 4.0923E-02 5.0245E-02 1.4778E-03 5.1343E-03 2.5816E-04 2.6875E-04 2.6980E-06	1.1984E-03 6.0964E-03 7.2083E-04 9.9284E-03 1.1674E-04 1.5000E-03 4.4087E-03 .0000E+00 1.0909E-03 3.9297E-02 4.4019E-03 1.9004E-01 2.0463E-03 5.5692E-04 5.7679E-02 3.6093E-02 7.0635E-03 1.0087E-03 4.6356E-03 2.2289E-05 2.2120E-04 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.8057E-05 1.9406E-01 1.9428E-04 2.0650E-02 2.8291E-05 3.7984E-05 1.1795E-01 1.6864E-04 1.9782E-02 9.2100E-06 4.7173E-05 1.0890E-04 3.7648E-07 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 8.2366E-06 .0000E+00 1.0904E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 0 1 612 6	.0000E+00 .0000E+00 9.5617E-06 6.3869E-03 6.5930E-05	.0000E+00 .0000E+00 1.4980E-06 1.2804E-04 5.0339E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	374 16	2.5800E-03 9.2686E-05	1.5251E-05 3.7751E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	9	1.3943E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	11 1	7.4240E-05 7.8187E-06	4.1396E-07 2.0352E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	179 80 225 49766 487	2.5248E-03 1.1156E-03 3.0832E-03 7.3539E-01 7.0459E-03	5.1859E-06 1.1062E-04 1.4365E-04 6.1420E-03 1.8137E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 4.6967E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	98 7	6.9032E-04 4.1800E-05	4.0888E-06 1.3372E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00

39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1324542 117512	1.7150E+01 1.6891E+00	4.9535E-02 1.2816E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	83295 6875	1.0801E+00 9.8618E-02	3.5334E-03 6.5320E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	66 2	3.5990E-04 1.3315E-05	2.1605E-06 4.4536E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	18 13 22 3582 34	2.5982E-04 1.8833E-04 3.0880E-04 5.2582E-02 4.6411E-04	2.2447E-09 1.9670E-05 1.4101E-05 5.6012E-04 1.9284E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	27862 2288	3.6101E-01 3.2779E-02	1.1533E-03 1.7853E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	15 4 20 3205 18	2.2723E-04 5.2919E-05 2.7987E-04 4.7135E-02 2.5109E-04	2.8269E-09 7.2836E-06 1.7529E-05 4.6860E-04 1.0441E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	66713 5598	8.6647E-01 8.0542E-02	2.7385E-03 5.9292E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6915 543	9.0948E-02 7.7058E-03	2.9354E-04 5.9864E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 1 1 311 0	1.7316E-05 1.5916E-05 1.2416E-05 4.5292E-03 .0000E+00	4.1818E-13 4.0481E-08 5.3920E-07 4.8271E-05 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5952 494	7.8471E-02 7.1744E-03	2.4499E-04 2.6218E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	62682 4794	7.3909E-01 6.4843E-02	2.4798E-03 3.2694E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 43 37 9 4 1528 494 7931 2375 175	9.9203E-05 5.0060E-04 5.3989E-04 1.1611E-04 5.8620E-05 1.9709E-02 7.0099E-03 9.6169E-02 2.9142E-02 2.4434E-03	1.1555E-08 2.7402E-05 2.7839E-06 1.3658E-06 1.6622E-06 1.9563E-03 8.8529E-04 5.6060E-03 1.8499E-03 3.4044E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2359 5	3.3971E-02 6.3899E-05	5.9059E-04 1.8216E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C	1.3966E-03 3.9931E-03 1.4932E-02	10 47 48	1.1922E-04 5.2227E-04 6.6379E-04	3.1575E-08 3.5148E-05 5.4395E-06	.0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00

		15031.50C	8.1237E-04	2	2.3849E-05	2.8484E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.0962E-05	2.7077E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1484	1.8964E-02	1.9828E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	500	6.9303E-03	8.7544E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8163	9.7951E-02	5.8313E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2416	2.9223E-02	1.8283E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	156	2.1157E-03	2.8561E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1135	9.5435E-03	5.2578E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	44	4.3831E-04	2.2290E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	61992	7.3244E-01	2.4473E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4694	6.3500E-02	4.4226E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	6	9.1217E-05	3.3600E-09	.0000E+00	.0000F+00
		7014.50C	3.9931E-03	42	5.0431E-04	2.4927E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	7.6077E-04	7.7597E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.9383E-05	1.0994E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.3249E-05	2.0765E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1472	1.8919E-02	1.9691E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	535	7.5086E-03	9.9108E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8075	9.7872E-02	5.8209E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2450	2.9854E-02	1.8946E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	161	2.1426E-03	2.8258E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2520	3.6236E-02	6.5780E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.1291E-04	1.3621E-05	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	12	1.5829E-04	1.9215E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	6.2362E-04	2.8192E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	67	9.6961E-04	9.7243E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.9105E-05	4.5830E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1684E-05	1.2551E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1505	1.8961E-02	2.1091E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	516	7.1797E-03	1.1542E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8110	9.7273E-02	5.8846E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2455	2.9648E-02	1.8678E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	154	2.0668E-03	2.4545E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	873	7.8846E-03	4.2142E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	43	3.4371E-04	1.1935E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	85386	1.0526E+00	2.8768E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7482	1.0476E-01	5.8549E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	6	7.8126E-05	6.9405E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	6.8621E-04	2.4535E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	70	1.0155E-03	5.1107E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1439E-04	1.3455E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	5.6550E-06	1.1131E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2152	2.9396E-02	1.8549E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	821	1.1840E-02	1.1451E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11101	1.4088E-01	5.7883E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3285	4.1899E-02	1.8251E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	254	3.5699E-03	4.6284E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	977	9.4167E-03	4.5902E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	47	5.1469E-04	1.3154E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	83495	1.0265E+00	2.8258E-03	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	7284	1.0096E-01	4.4978E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	16	2.2925E-04	2.8483E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	65	8.1282E-04	2.8850E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	86	1.2433E-03	8.8782E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.5562E-05	2.5743E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6794E-05	2.3888E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2193	2.9656E-02	2.0668E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	849	1.2248E-02	1.1183E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10876	1.3888E-01	5.6481E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3345	4.3050E-02	1.8372E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	249	3.5028E-03	4.4345E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1194	1.0889E-02	6.3052E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	50	5.0631E-04	1.5901E-06	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	420104	3.8127E+00	2.0346E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20284	2.0498E-01	7.0688E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	11	1.0671E-04	1.8670E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	5.3663E-04	3.4509E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	5.9780E-04	8.2884E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.7284E-05	2.8433E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1664	1.8238E-02	2.8714E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	490	6.3223E-03	1.3351E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9747	1.0007E-01	8.4681E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2843	2.9596E-02	2.6767E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	132	1.4961E-03	2.9258E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	9	1.1598E-04	1.5053E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	5.3007E-04	3.7768E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	37	4.4461E-04	7.3927E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.3983E-05	8.6311E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2534E-05	1.2636E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1612	1.7584E-02	2.8837E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	422	5.1855E-03	1.4486E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9501	9.6922E-02	8.2807E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2839	2.9395E-02	2.6132E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	151	1.7599E-03	2.9572E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	8	9.2910E-05	1.3549E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.8139E-04	1.2692E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	65	9.3325E-04	7.1177E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.0991E-05	3.5404E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1406	1.9409E-02	9.6670E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	496	7.1536E-03	5.4796E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6722	8.5192E-02	2.6826E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1991	2.5459E-02	8.4204E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	161	2.3329E-03	2.4220E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6044	8.9912E-02	6.4156E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.3545E-04	1.5427E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	41	5.2528E-04	3.9805E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	190	2.3446E-03	6.5755E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	298	4.3214E-03	1.5200E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.6974E-04	2.2789E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	1.0073E-04	1.2412E-06	.0000E+00	.0000E+00

		24000.50C	1.8282E-01	7130	9.8012E-02	3.7042E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2409	3.3815E-02	2.0149E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33594	4.2109E-01	1.0591E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10535	1.3408E-01	3.4966E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	814	1.1343E-02	1.0911E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	5	4.7009E-05	4.6914E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.6009E-04	1.8044E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	7.7719E-04	6.9962E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.7048E-05	6.7001E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6402E-05	2.0830E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1473	2.0055E-02	9.1491E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	501	7.1015E-03	5.1231E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7163	9.0091E-02	2.9120E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2128	2.7338E-02	8.9421E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	177	2.4675E-03	2.7853E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6624	9.8019E-02	7.2839E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	11	1.4582E-04	3.9097E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	39	5.3511E-04	2.1217E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	180	2.2870E-03	6.2645E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	266	3.9391E-03	1.7254E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	17	2.3924E-04	2.2640E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	9.4707E-05	1.5674E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7182	9.8103E-02	3.7649E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2359	3.3203E-02	2.1534E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34809	4.3454E-01	1.1079E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10911	1.3853E-01	3.6058E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	902	1.2582E-02	1.1827E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2103	1.7432E-02	9.4615E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	113	1.0240E-03	3.3906E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	1934	1.7317E-02	9.0560E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	96	1.0122E-03	5.6093E-07	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	2.9251E-05	2.6518E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	5	7.5332E-05	1.0356E-05	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	28	3.2118E-04	1.2373E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6	6.4299E-05	4.1183E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	4.5530E-05	4.5318E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.3862E-04	2.2218E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	37	4.9367E-04	4.6543E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.4521E-05	5.8235E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	4.4966E-05	6.8607E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1177	1.3570E-02	1.4589E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	358	4.7047E-03	7.1800E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6630	7.0552E-02	4.3257E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1998	2.1759E-02	1.3649E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	151	1.8769E-03	2.5231E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11711	1.2124E-01	4.0278E-04	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	886	1.0785E-02	7.0124E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	143	1.5849E-03	8.7798E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	1.4397E-05	1.6100E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	1	7.7501E-06	1.5066E-06	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	7	8.0461E-05	6.6088E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	6	8.8008E-05	2.9735E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	22	2.8495E-04	1.5430E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	1.7720E-05	1.2034E-07	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	36	4.7443E-04	3.8951E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	732	9.1749E-03	5.0673E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	86	1.1376E-03	7.1975E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1258	1.4548E-02	4.6661E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2971	3.5378E-02	1.2106E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	104	1.3087E-03	6.3921E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	69	8.9595E-04	8.8475E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	63	3.2636E-04	2.0863E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	1.4954E-05	6.1829E-10	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	48	5.8953E-04	1.9504E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	28	3.9669E-04	3.8910E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	1	7.8888E-06	1.6967E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	5	6.7659E-05	2.0014E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	176	2.3551E-03	1.4184E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9553	1.0878E-01	2.0098E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	45354	3.8211E-01	2.0743E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2149	2.0052E-02	8.0946E-07	.0000E+00	.0000E+00
TOTAL				3437289	4.2381E+01	6.4978E-01	3.5306E-01	1.1456E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2589636	3.0654E+01	1.0554E-01	.0000E+00	.0000E+00
		2004.50C		9	1.3943E-04	.0000E+00	.0000E+00	.0000E+00

6000.50C	229	2.9138E-03	2.4476E-07	.0000E+00	.0000E+00
7014.50C	886	1.0728E-02	4.2269E-04	.0000E+00	.0000E+00
8016.50C	297013	4.1246E+00	2.9902E-03	.0000E+00	.0000E+00
13027.50C	17553	2.5823E-01	2.6184E-03	.0000E+00	.0000E+00
14000.50C	1215	1.7382E-02	1.0853E-04	.0000E+00	.0000E+00
15031.50C	93	1.2791E-03	1.0832E-05	.0000E+00	.0000E+00
16032.50C	38	5.4168E-04	2.4279E-05	.0000E+00	.0000E+00
22000.50C	36	4.7443E-04	3.8951E-05	.0000E+00	.0000E+00
24000.50C	32811	4.3115E-01	2.9151E-02	.0000E+00	.0000E+00
25055.50C	11017	1.5377E-01	1.5124E-02	.0000E+00	.0000E+00
26000.55C	173530	2.0948E+00	8.5584E-02	.0000E+00	.0000E+00
28000.50C	52549	6.4442E-01	2.7813E-02	.0000E+00	.0000E+00
29000.50C	137	1.7668E-03	8.4816E-05	.0000E+00	.0000E+00
40000.50C	57476	8.4603E-01	7.3471E-03	.0000E+00	4.6967E-05
42000.50C	3706	5.0596E-02	5.7840E-03	.0000E+00	.0000E+00
45103.50C	562	7.2426E-03	6.0964E-03	.0000E+00	.0000E+00
47109.50C	65	8.9393E-04	7.2083E-04	.0000E+00	.0000E+00
50000.35C	545	7.8270E-03	2.1612E-04	.0000E+00	.0000E+00
62149.50C	918	1.0023E-02	9.9284E-03	.0000E+00	.0000E+00
63151.55C	13	1.1690E-04	1.1674E-04	.0000E+00	.0000E+00
63153.55C	134	1.6989E-03	1.5000E-03	.0000E+00	.0000E+00
64155.50C	427	4.4191E-03	4.4087E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	130	1.6756E-03	1.0909E-03	1.8057E-05	.0000E+00
92235.50C	23062	4.4308E-01	3.9297E-02	1.9406E-01	8.2366E-06
92236.50C	854	1.2444E-02	4.4019E-03	1.9428E-04	.0000E+00
92238.50C	150536	2.1860E+00	1.9004E-01	2.0650E-02	1.0904E-03
93237.55C	197	2.5416E-03	2.0463E-03	2.8291E-05	.0000E+00
94238.50C	64	7.6213E-04	5.5692E-04	3.7984E-05	.0000E+00
94239.55C	15696	3.1176E-01	5.7679E-02	1.1795E-01	.0000E+00
94240.50C	3131	4.0923E-02	3.6093E-02	1.6864E-04	.0000E+00
94241.50C	2473	5.0245E-02	7.0635E-03	1.9782E-02	.0000E+00
94242.50C	104	1.4778E-03	1.0087E-03	9.2100E-06	.0000E+00
95241.50C	416	5.1343E-03	4.6356E-03	4.7173E-05	.0000E+00
95242.50C	10	2.5816E-04	2.2289E-05	1.0890E-04	.0000E+00
95243.50C	18	2.6875E-04	2.2120E-04	3.7648E-07	.0000E+00
96245.35C	0	2.6980E-06	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59845 CTM = 115.93

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 116.08 MINUTES

MCNP VERSION 4A-B 10/04/91

02/16/95 15:06:09

PROBID = 02/16/95 12:50:42

1MCNP VERSION 4A-B LD=10/04/91 02/23/95 18:30:58

PROBID = 02/23/95 18:30:58

INP=mpc12n OUTP=mpc12n.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/5 year (mpc12n)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1909-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL -ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      PWR: 3.75% U-235 - 37 Gwd/MTU - 5 YEAR DECAY
331- M2      8016.50C 4.8529E-02
332-      45103.50C 2.7100E-05
333-      47109.50C 4.1671E-06
334-      62149.50C 1.5447E-07
335-      63151.55C 2.5475E-08
336-      63153.55C 5.0457E-06
337-      64155.50C 2.9088E-07
338-      92233.50C 6.5897E-11
339-      92234.50C 4.9909E-06
340-      92235.50C 2.3026E-04
341-      92236.50C 1.1298E-04
342-      92238.50C 2.2728E-02
343-      93237.55C 1.4627E-05
344-      94238.50C 4.8194E-06
345-      94239.55C 1.4485E-04
346-      94240.50C 5.5858E-05
347-      94241.50C 2.5367E-05
348-      94242.50C 1.1251E-05
349-      95241.50C 8.0561E-06
350-      95242.50C 5.1312E-08
351-      95243.50C 2.4302E-06
352-      96245.35C 3.1485E-08
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3      2004.50C 1.0
355- C      ZIRCALOY-4
356- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-		40000.50C	-0.9818	50000.35C	-0.0140	
358-	C	ALLOY 825				
359-	M5	6000.50C	-0.0005	13027.50C	-0.0020	14000.50C -0.0050
360-		16032.50C	-0.0003	22000.50C	-0.0090	24000.50C -0.2150
361-		25055.50C	-0.0100	26000.55C	-0.2857	28000.50C -0.4200
362-		29000.50C	-0.0250	42000.50C	-0.0300	
363-	C	1100 ALUMINUM				
364-	M6	13027.50C	-0.99880	29000.50C	-0.00120	
365-	C	A516 CARBON STEEL				
366-	M7	6000.50C	-0.0022	14000.50C	-0.00275	15031.50C -0.00035
367-		16032.50C	-0.00035	25055.50C	-0.0090	
368-		26000.55C	-0.98535			
369-	C	SS316L				
370-	M8	6000.50C	-0.00030	7014.50C	-0.00100	14000.50C -0.00750
371-		15031.50C	-0.00045	16032.50C	-0.00030	24000.50C -0.17000
372-		25055.50C	-0.02000	26000.55C	-0.64545	28000.50C -0.12000
373-		42000.50C	-0.02500			
374-	C	TALLIES				
375-	PRINT					

SURFACES	16048 AND	19048 OF CELL	8 ARE THE SAME.	19048 WILL BE DELETED.
SURFACES	16049 AND	19049 OF CELL	8 ARE THE SAME.	19049 WILL BE DELETED.
SURFACES	16050 AND	17050 OF CELL	8 ARE THE SAME.	17050 WILL BE DELETED.
SURFACES	16050 AND	20050 OF CELL	8 ARE THE SAME.	20050 WILL BE DELETED.
SURFACES	16050 AND	21050 OF CELL	8 ARE THE SAME.	21050 WILL BE DELETED.
SURFACES	16051 AND	17051 OF CELL	8 ARE THE SAME.	17051 WILL BE DELETED.
SURFACES	16051 AND	20051 OF CELL	8 ARE THE SAME.	20051 WILL BE DELETED.
SURFACES	16051 AND	21051 OF CELL	8 ARE THE SAME.	21051 WILL BE DELETED.
SURFACES	18050 AND	22050 OF CELL	8 ARE THE SAME.	22050 WILL BE DELETED.
SURFACES	18051 AND	22051 OF CELL	8 ARE THE SAME.	22051 WILL BE DELETED.
SURFACES	19050 AND	23050 OF CELL	8 ARE THE SAME.	23050 WILL BE DELETED.
SURFACES	19051 AND	23051 OF CELL	8 ARE THE SAME.	23051 WILL BE DELETED.
SURFACES	20048 AND	23048 OF CELL	8 ARE THE SAME.	23048 WILL BE DELETED.
SURFACES	20049 AND	23049 OF CELL	8 ARE THE SAME.	23049 WILL BE DELETED.
SURFACES	24048 AND	27048 OF CELL	9 ARE THE SAME.	27048 WILL BE DELETED.
SURFACES	24049 AND	27049 OF CELL	9 ARE THE SAME.	27049 WILL BE DELETED.
SURFACES	24050 AND	25050 OF CELL	9 ARE THE SAME.	25050 WILL BE DELETED.
SURFACES	24050 AND	28050 OF CELL	9 ARE THE SAME.	28050 WILL BE DELETED.
SURFACES	24050 AND	29050 OF CELL	9 ARE THE SAME.	29050 WILL BE DELETED.
SURFACES	24051 AND	25051 OF CELL	9 ARE THE SAME.	25051 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
1 INITIAL SOURCE FROM FILE SRCTP

CYCLES TO SKIP BEFORE TALLYING 5

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL	1 WAS 1.003170E-01
THE SUM OF THE FRACTIONS OF MATERIAL	2 WAS 7.190936E-02
THE SUM OF THE FRACTIONS OF MATERIAL	5 WAS 1.002500E+00
THE SUM OF THE FRACTIONS OF MATERIAL	8 WAS 9.900000E-01

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	U-235
2	U-238
3	Th-232
4	Th-230
5	Pa-231
6	U-234
7	Th-234
8	Pa-233
9	U-233
10	Th-229
11	Pa-227
12	U-235
13	U-238
14	Th-232
15	Th-230
16	Pa-231
17	U-234
18	Th-234
19	Pa-233
20	U-233
21	Th-229
22	Pa-227
23	U-235
24	U-238
25	Th-232
26	Th-230
27	Pa-231
28	U-234
29	Th-234
30	Pa-233
31	U-233
32	Th-229
33	Pa-227
34	U-235
35	U-238
36	Th-232
37	Th-230
38	Pa-231
39	U-234
40	Th-234
41	Pa-233
42	U-233
43	Th-229
44	Pa-227
45	U-235
46	U-238
47	Th-232
48	Th-230
49	Pa-231
50	U-234
51	Th-234
52	Pa-233
53	U-233
54	Th-229
55	Pa-227
56	U-235
57	U-238
58	Th-232
59	Th-230
60	Pa-231
61	U-234
62	Th-234
63	Pa-233
64	U-233
65	Th-229
66	Pa-227
67	U-235
68	U-238
69	Th-232
70	Th-230
71	Pa-231
72	U-234
73	Th-234
74	Pa-233
75	U-233
76	Th-229
77	Pa-227
78	U-235
79	U-238
80	Th-232
81	Th-230
82	Pa-231
83	U-234
84	Th-234
85	Pa-233
86	U-233
87	Th-229
88	Pa-227
89	U-235
90	U-238
91	Th-232
92	Th-230
93	Pa-231
94	U-234
95	Th-234
96	Pa-233
97	U-233
98	Th-229
99	Pa-227
100	U-235

1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B)	DATA SETS:		LWTR.01T					
2	8016,	.67486	45103,	.00038	47109,	.00006	62149,	.00000
	63151,	.00000	63153,	.00007	64155,	.00000	92233,	.00000
	92234,	.00007	92235,	.00320	92236,	.00157	92238,	.31606
	93237,	.00020	94238,	.00007	94239,	.00201	94240,	.00078
	94241,	.00035	94242,	.00016	95241,	.00011	95242,	.00000
	95243,	.00003	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12250	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00000	63153,	.00012	64155,	.00001	92233,	.00000
	92234,	.00018	92235,	.00854	92236,	.00421	92238,	.85382
	93237,	.00055	94238,	.00018	94239,	.00546	94240,	.00212
	94241,	.00096	94242,	.00043	95241,	.00031	95242,	.00000
	95243,	.00009	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19090E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT, TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE


```

113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19090E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1.31148E+01 8.65579E+01
 1SURFACES

PRINT TABLE 70

SURFACE		TRANS	TYPE	SURFACE COEFFICIENTS	
1	1	REFL.	PX	.0000000E+00	
2	2	REFL.	PY	.0000000E+00	
3	3	REFL.	PZ	.0000000E+00	
4	4		PZ	2.0320000E+02	
5	5		PZ	2.2225000E+02	
6	6		PZ	2.2925000E+02	
7	7		PZ	2.3175000E+02	
8	8		PZ	2.4885000E+02	
9	9		CZ	6.0794900E+01	
10	10		CZ	6.3017400E+01	

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
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40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
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56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
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WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 TOTAL NU (1373) 11/01/85
 TOTAL NU (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0

CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/5 year (mpc12n)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-3.512E-02	2.243E-01	1.746E+02	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.002E+00	2.396E+00
2	2.742E-01	-2.465E-01	1.627E+02	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.002E+00	5.821E+00
3	1.670E-01	-2.501E-01	1.743E+02	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.002E+00	5.649E+00
4	-1.956E-01	-1.750E-01	1.741E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.002E+00	1.605E+00
5	-3.532E-01	-2.348E-01	1.742E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.002E+00	4.590E+00
6	-3.566E-01	-2.813E-01	1.752E+02	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.002E+00	1.839E+00
7	-5.009E-02	2.101E-01	1.748E+02	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.002E+00	1.150E+00
8	5.774E-02	2.458E-01	6.087E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.002E+00	1.809E+00
9	-3.276E-01	-2.627E-01	6.083E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.002E+00	1.196E+00
10	-2.778E-01	1.505E-01	3.461E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.002E+00	2.200E-01
11	5.514E-02	-7.564E-02	3.639E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.002E+00	8.706E-01
12	2.413E-01	2.618E-01	3.981E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.002E+00	2.087E+00
13	1.256E-01	-3.094E-01	3.980E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.002E+00	3.104E+00
14	1.245E-01	1.049E-01	1.321E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.002E+00	2.402E+00
15	1.166E-01	4.590E-02	7.737E+00	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.002E+00	4.323E+00
16	-6.924E-02	-1.143E-01	7.453E+00	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.002E+00	3.578E+00
17	-4.941E-02	3.620E-02	9.317E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.002E+00	6.320E-01
18	2.530E-01	-2.989E-01	8.192E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.002E+00	1.245E+00
19	2.483E-01	-6.310E-02	1.096E+02	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.002E+00	3.702E+00
20	2.672E-01	1.016E-01	1.464E+02	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.002E+00	1.475E-01
21	-6.789E-03	7.346E-02	1.495E+02	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.002E+00	3.559E+00
22	-1.677E-01	-3.514E-01	1.098E+02	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.002E+00	1.010E+01
23	-3.300E-01	1.326E-01	1.101E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.002E+00	2.828E+00
24	-2.225E-01	-6.712E-02	1.097E+02	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.002E+00	1.320E+00
25	3.834E-01	-2.216E-01	1.112E+02	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.002E+00	1.639E+00
26	3.285E-01	2.733E-01	1.120E+02	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.002E+00	8.705E-01
27	-1.444E-01	-3.594E-01	1.107E+02	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.002E+00	2.628E+00
28	1.912E-01	3.027E-01	1.080E+02	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.002E+00	9.731E-01
29	-3.225E-02	3.408E-01	1.417E+02	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.002E+00	4.781E+00
30	4.023E-01	1.440E-02	1.405E+02	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.002E+00	2.269E+00
31	-4.099E-01	9.717E-02	1.759E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.002E+00	1.944E+00
32	-2.408E-01	-8.744E-02	7.105E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.002E+00	1.581E+00
33	3.829E-01	2.419E-01	6.454E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.002E+00	3.885E+00
34	-5.951E-02	-1.891E-01	8.190E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.002E+00	2.202E+00
35	2.382E-01	2.623E-02	1.983E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.002E+00	1.229E+00
36	2.382E-01	2.623E-02	1.983E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.002E+00	3.292E-01
37	8.974E-02	2.165E-01	1.628E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.002E+00	2.686E-01
38	1.739E-01	3.513E-01	1.684E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.002E+00	6.776E-01
39	2.042E-01	-8.461E-02	2.005E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.002E+00	9.691E-01
40	-3.087E-01	-6.414E-02	1.973E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.002E+00	7.615E-01
41	1.487E-01	-8.796E-03	1.974E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.002E+00	5.659E-01
42	-3.793E-01	1.393E-01	1.684E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.002E+00	4.575E+00
43	-2.800E-01	-2.230E-01	1.831E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.002E+00	2.436E+00
44	5.917E-02	9.371E-02	1.397E+02	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.002E+00	3.605E+00
45	-6.576E-02	1.360E-01	1.398E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.002E+00	2.157E+00
46	1.743E-01	5.784E-03	1.364E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.002E+00	2.287E+00
47	3.358E-01	2.875E-01	1.362E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.002E+00	7.610E-01
48	2.508E-01	-3.406E-01	7.299E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.002E+00	5.112E+00
49	-2.646E-01	2.608E-01	7.929E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.002E+00	1.964E+00

50 -1.593E-01 -2.698E-01 7.812E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 1.002E+00 5.331E+00

CYCLE 1 K(COLLISION) .889322 REMOVAL LIFETIME(ABS) 3.1056E+03 SOURCE POINTS GENERATED 2693
 CYCLE 2 K(COLLISION) .906461 REMOVAL LIFETIME(ABS) 3.1630E+03 SOURCE POINTS GENERATED 3053
 CYCLE 3 K(COLLISION) .874895 REMOVAL LIFETIME(ABS) 3.1740E+03 SOURCE POINTS GENERATED 2884
 CYCLE 4 K(COLLISION) .868108 REMOVAL LIFETIME(ABS) 2.9195E+03 SOURCE POINTS GENERATED 3000
 CYCLE 5 K(COLLISION) .886387 REMOVAL LIFETIME(ABS) 2.9787E+03 SOURCE POINTS GENERATED 3054

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .876576 REMOVAL LIFETIME(ABS) 2.8664E+03 SOURCE POINTS GENERATED 2967

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.868389	.872482	.0047	K(COL/ABS)	.000000	.0000	.000000	.0000
K(ABSORPTION)	.873042	.875360	.0026	K(ABS/TK LN)	.000000	.0000	.000000	.0000
K(TRK LENGTH)	.866293	.861883	.0051	K(TK LN/COL)	.000000	.0000	.000000	.0000
REM LIFE(COL)	2.9175E+03	2.8668E+03	.0177					
REM LIFE(ABS)	2.9504E+03	2.9084E+03	.0144	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000
SOURCE POINTS GENERATED	3015							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.870771	.871912	.0028	K(COL/ABS)	.873854	.0021	.877555	.0030
K(ABSORPTION)	.876666	.875796	.0016	K(ABS/TK LN)	.871758	.0037	.875277	.0024
K(TRK LENGTH)	.879397	.867721	.0073	K(TK LN/COL)	.869817	.0030	.870931	.0025
REM LIFE(COL)	3.1257E+03	2.9531E+03	.0309					
REM LIFE(ABS)	3.1360E+03	2.9843E+03	.0267	LIFE(COL/ABS)	2.9687E+03	.0288	3.1970E+03	.0072
SOURCE POINTS GENERATED	2931							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.880906	.874160	.0032	K(COL/ABS)	.876549	.0034	.872828	.0056
K(ABSORPTION)	.888362	.878937	.0037	K(ABS/TK LN)	.874771	.0043	.878100	.0051
K(TRK LENGTH)	.879259	.870606	.0061	K(TK LN/COL)	.872383	.0036	.873492	.0037
REM LIFE(COL)	3.0230E+03	2.9706E+03	.0225	K(COL/ABS/TK LN)	.874568	.0035	.858651	.0125
REM LIFE(ABS)	3.0580E+03	3.0027E+03	.0197	LIFE(COL/ABS)	2.9866E+03	.0211	3.2107E+03	.0149
SOURCE POINTS GENERATED	3059							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.870524	.873433	.0026	K(COL/ABS)	.876185	.0027	.874188	.0042
K(ABSORPTION)	.878939	.878938	.0029	K(ABS/TK LN)	.875221	.0034	.878234	.0036
K(TRK LENGTH)	.875102	.871505	.0049	K(TK LN/COL)	.872469	.0028	.873012	.0027
REM LIFE(COL)	2.9664E+03	2.9697E+03	.0174	K(COL/ABS/TK LN)	.874625	.0027	.863310	.0117
REM LIFE(ABS)	3.0008E+03	3.0023E+03	.0153	LIFE(COL/ABS)	2.9860E+03	.0163	3.2123E+03	.0110
SOURCE POINTS GENERATED	2952							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.882352	.874920	.0027	K(COL/ABS)	.878208	.0032	.870667	.0036

K(ABSORPTION) .894286 .881496 .0037
 K(TRK LENGTH) .870110 .871272 .0040
 REM LIFE(COL) 2.8990E+03 2.9580E+03 .0148
 REM LIFE(ABS) 2.9450E+03 2.9928E+03 .0129
 SOURCE POINTS GENERATED 3065

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

K(ABS/TK LN) .876384 .0031 .876725 .0037 .2496
 K(TK LN/COL) .873096 .0024 .873734 .0025 -.0068
 K(COL/ABS/TK LN) .875896 .0027 .867478 .0051
 LIFE(COL/ABS) 2.9754E+03 .0139 3.2055E+03 .0090 .9984

CYCLE = 11

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .855085 .872086 .0040
 K(ABSORPTION) .866348 .879332 .0040
 K(TRK LENGTH) .858168 .869400 .0040
 REM LIFE(COL) 3.0749E+03 2.9747E+03 .0137
 REM LIFE(ABS) 3.1050E+03 3.0088E+03 .0121
 SOURCE POINTS GENERATED 2951

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .875709 .0039 .875156 .0055 .9170
 K(ABS/TK LN) .874366 .0035 .874222 .0041 .4961
 K(TK LN/COL) .870743 .0034 .870739 .0037 .4342
 K(COL/ABS/TK LN) .873606 .0035 .870804 .0104
 LIFE(COL/ABS) 2.9917E+03 .0129 3.2291E+03 .0094 .9981

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .874180 .872348 .0035
 K(ABSORPTION) .863724 .877381 .0041
 K(TRK LENGTH) .859271 .868134 .0038
 REM LIFE(COL) 2.9343E+03 2.9696E+03 .0120
 REM LIFE(ABS) 2.9409E+03 3.0003E+03 .0109
 SOURCE POINTS GENERATED 3062

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .874864 .0035 .873309 .0038 .7237
 K(ABS/TK LN) .872757 .0035 .871585 .0041 .5940
 K(TK LN/COL) .870241 .0030 .870491 .0033 .3653
 K(COL/ABS/TK LN) .872621 .0032 .869344 .0055
 LIFE(COL/ABS) 2.9850E+03 .0114 3.0882E+03 .0126 .9909

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .911071 .876650 .0058
 K(ABSORPTION) .897351 .879600 .0044
 K(TRK LENGTH) .914137 .873246 .0067
 REM LIFE(COL) 2.9804E+03 2.9708E+03 .0106
 REM LIFE(ABS) 2.9575E+03 2.9956E+03 .0097
 SOURCE POINTS GENERATED 3145

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .878125 .0048 .879782 .0048 .7979
 K(ABS/TK LN) .876423 .0052 .880263 .0048 .7362
 K(TK LN/COL) .874948 .0060 .876375 .0062 .8346
 K(COL/ABS/TK LN) .876499 .0052 .880263 .0058
 LIFE(COL/ABS) 2.9832E+03 .0101 3.0114E+03 .0109 .9708

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .888430 .877828 .0053
 K(ABSORPTION) .887696 .880409 .0041
 K(TRK LENGTH) .889717 .874893 .0063
 REM LIFE(COL) 2.9276E+03 2.9665E+03 .0096
 REM LIFE(ABS) 2.9447E+03 2.9905E+03 .0089
 SOURCE POINTS GENERATED 2910

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .879119 .0045 .880668 .0043 .8092
 K(ABS/TK LN) .877651 .0049 .881233 .0043 .7520
 K(TK LN/COL) .876360 .0056 .877786 .0057 .8461
 K(COL/ABS/TK LN) .877710 .0049 .881232 .0051
 LIFE(COL/ABS) 2.9785E+03 .0092 3.0036E+03 .0099 .9709

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .904365 .880241 .0055
 K(ABSORPTION) .881634 .880521 .0037
 K(TRK LENGTH) .892770 .876518 .0060
 REM LIFE(COL) 3.1107E+03 2.9796E+03 .0097
 REM LIFE(ABS) 3.0505E+03 2.9959E+03 .0082
 SOURCE POINTS GENERATED 3039

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .880381 .0043 .880542 .0039 .7197
 K(ABS/TK LN) .878519 .0045 .881066 .0038 .7251
 K(TK LN/COL) .878379 .0055 .879267 .0058 .8525
 K(COL/ABS/TK LN) .879093 .0047 .881178 .0045
 LIFE(COL/ABS) 2.9878E+03 .0088 3.0065E+03 .0085 .9439

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .869375 .879335 .0052

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .880179 .0039 .881027 .0036 .6618

K(ABSORPTION)	.886552	.881023	.0034	K(ABS/TK LN)	.878495	.0041	.881430	.0036	.6909
K(TRK LENGTH)	.869911	.875967	.0055	K(TK LN/COL)	.877651	.0051	.878305	.0054	.8527
REM LIFE(COL)	3.0457E+03	2.9851E+03	.0090	K(COL/ABS/TK LN)	.878775	.0043	.881662	.0042	
REM LIFE(ABS)	3.0417E+03	2.9997E+03	.0076	LIFE(COL/ABS)	2.9924E+03	.0082	3.0100E+03	.0077	.9451
SOURCE POINTS GENERATED 2921									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.902200	.881094	.0051			K(COL/ABS)	.881795	.0040	.882558
K(ABSORPTION)	.900158	.882495	.0035			K(ABS/TK LN)	.879896	.0041	.882808
K(TRK LENGTH)	.893258	.877297	.0053			K(TK LN/COL)	.879196	.0050	.879467
REM LIFE(COL)	2.9517E+03	2.9825E+03	.0083			K(COL/ABS/TK LN)	.880296	.0043	.882805
REM LIFE(ABS)	2.9428E+03	2.9954E+03	.0072			LIFE(COL/ABS)	2.9889E+03	.0076	3.0026E+03
SOURCE POINTS GENERATED 3072									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.899585	.882415	.0050			K(COL/ABS)	.882924	.0039	.883521
K(ABSORPTION)	.895634	.883434	.0034			K(ABS/TK LN)	.880994	.0040	.883886
K(TRK LENGTH)	.894884	.878554	.0051			K(TK LN/COL)	.880484	.0049	.880694
REM LIFE(COL)	3.0390E+03	2.9866E+03	.0078			K(COL/ABS/TK LN)	.881467	.0042	.883797
REM LIFE(ABS)	3.0315E+03	2.9979E+03	.0067			LIFE(COL/ABS)	2.9923E+03	.0071	3.0048E+03
SOURCE POINTS GENERATED 2954									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.889274	.882872	.0047			K(COL/ABS)	.883219	.0037	.883628
K(ABSORPTION)	.885417	.883566	.0032			K(ABS/TK LN)	.881635	.0038	.883941
K(TRK LENGTH)	.895800	.879703	.0049			K(TK LN/COL)	.881288	.0046	.881817
REM LIFE(COL)	3.0807E+03	2.9929E+03	.0076			K(COL/ABS/TK LN)	.882047	.0040	.883882
REM LIFE(ABS)	3.0579E+03	3.0019E+03	.0064			LIFE(COL/ABS)	2.9974E+03	.0069	3.0083E+03
SOURCE POINTS GENERATED 3015									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/5 year (mpc12n)

PROBID = 02/23/95 20:24:37
02/23/95 18:30:58

NEUTRON CREATION				NEUTRON LOSS			
TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY		TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	
SOURCE	59721	1.0047E+00	2.0731E+00	ESCAPE	1	1.2984E-05	5.9323E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.3041E-02	4.9207E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59792	6.3211E-02	4.7536E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.1873E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	143	1.9172E-03	1.4703E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9645E+00
				CAPTURE	0	6.7785E-01	3.3621E-02
				LOSS TO (N,XN)	71	9.5242E-04	8.0765E-03
				LOSS TO FISSION	0	3.2760E-01	6.8318E-02

TOTAL	59864	1.0696E+00	2.0746E+00	TOTAL	59864	1.0696E+00	2.0746E+00
NUMBER OF NEUTRONS BANKED	72			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0024E+00			ESCAPE	1.8988E+00	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.5637E+01			CAPTURE	3.0161E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3322720			CAPTURE OR ESCAPE	3.0161E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0010E+00	.0002		ANY TERMINATION	3.3495E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	113.40 MINUTES			MAXIMUM NUMBER EVER IN BANK	2		
COMPUTER TIME IN MCRUN	113.28 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.2718E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	40609267			MOST RANDOM NUMBERS USED WAS	6843	IN HISTORY	59618

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5390E-01 TO 1.1140E+00

WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25698	9473	3.1930E+00	1.2288E-04	3.9072E-01	7.3123E-01	1.1182E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	709726	59793	292208	4.1405E+00	7.9290E-04	7.6108E-01	8.8545E-01	2.5052E+00
33	34	4547	250	971	1.0390E-02	5.4972E-05	2.3231E-01	6.2337E-01	4.2820E+00
34	35	222	22	582	4.6609E-03	2.5390E-05	1.6639E-01	5.0898E-01	6.2846E-01
35	36	1269714	59793	15	2.3057E-04	6.7779E-04	7.2204E-01	8.8164E-01	3.4786E+03
36	37	404	22	22	1.6719E-04	1.5839E-05	9.9493E-02	4.9320E-01	5.2979E-01
37	38	1376877	59793	49660	7.4241E-01	6.5516E-04	7.0986E-01	8.8122E-01	4.1083E+00
38	39	424	23	191	1.4908E-03	1.8725E-05	1.1974E-01	4.8557E-01	5.6633E-01
39	40	2197781	59793	1369044	1.8196E+01	5.6768E-04	6.7789E-01	8.7878E-01	1.6621E+00
40	41	54916	30492	84303	1.1286E+00	4.1507E-04	6.2318E-01	8.7839E-01	1.5636E+00
41	42	27	9	56	3.8505E-04	3.5708E-08	4.5891E-08	4.1208E-01	3.1178E-01
42	43	116164	32253	3538	5.2920E-02	4.4700E-04	6.4011E-01	8.7931E-01	4.1275E+00
43	44	130277	34562	28195	3.7781E-01	4.5103E-04	6.3886E-01	8.7976E-01	1.5922E+00
44	45	142505	35543	3150	4.7092E-02	4.6065E-04	6.4728E-01	8.7905E-01	4.1317E+00
45	46	173466	40776	67030	8.9739E-01	4.7223E-04	6.5892E-01	8.8016E-01	1.6166E+00
46	47	6977	3261	7146	9.5005E-02	4.4372E-04	6.2577E-01	8.7515E-01	1.5753E+00
47	48	9362	3551	311	4.7329E-03	4.7758E-04	6.3983E-01	8.7928E-01	4.1402E+00
48	49	12045	4818	5757	7.7402E-02	4.9223E-04	6.3592E-01	8.8237E-01	1.5997E+00
49	50	32569	14724	63696	7.6568E-01	3.6328E-04	5.9182E-01	8.2878E-01	1.5073E+00
50	51	32380	14006	12134	1.5237E-01	4.3044E-04	6.0080E-01	8.1396E-01	2.1062E+00
51	52	31927	13607	2375	3.4228E-02	4.3689E-04	6.0453E-01	8.1038E-01	9.1821E+00
52	53	31996	13641	11950	1.4746E-01	4.1184E-04	5.9207E-01	8.0581E-01	2.1044E+00
53	54	268	64	1793	1.5834E-02	4.2628E-05	2.3166E-01	5.8644E-01	7.5889E-01
54	55	34081	15320	65243	7.8572E-01	3.6975E-04	5.9219E-01	8.2891E-01	1.5035E+00
55	56	33976	14539	12679	1.5881E-01	4.1584E-04	6.0549E-01	8.1166E-01	2.0855E+00
56	57	33669	14200	2503	3.6167E-02	4.2292E-04	5.9997E-01	8.1028E-01	9.1295E+00
57	58	33712	14249	12555	1.5492E-01	4.0168E-04	5.8585E-01	8.0532E-01	2.0981E+00
58	59	311	82	2072	1.9029E-02	7.1015E-05	3.6991E-01	6.2661E-01	9.6136E-01
59	60	52180	18887	88622	1.1196E+00	5.2130E-04	5.8129E-01	8.5182E-01	1.5345E+00
60	61	51987	17947	17812	2.3386E-01	7.2761E-04	6.0453E-01	8.4244E-01	2.2852E+00
61	62	473	96	2167	1.9400E-02	4.3823E-05	2.1035E-01	5.9667E-01	7.7638E-01
62	63	51481	18709	89140	1.1262E+00	4.9658E-04	5.6507E-01	8.5076E-01	1.5069E+00
63	64	51213	17835	17365	2.2750E-01	7.0493E-04	5.8734E-01	8.4236E-01	2.2623E+00
64	65	431	100	1985	1.7405E-02	4.5595E-05	2.4409E-01	5.7887E-01	7.8289E-01
65	66	10085	5009	431482	3.9429E+00	5.6185E-05	2.7061E-01	6.1473E-01	8.5886E-01
66	67	10003	3932	14901	1.5638E-01	1.8078E-04	4.3980E-01	6.9471E-01	1.7973E+00
67	68	9832	3978	14773	1.5769E-01	1.8997E-04	4.5430E-01	7.0382E-01	1.7955E+00
68	70	32965	8772	11212	1.4638E-01	9.3076E-04	5.5850E-01	8.4023E-01	2.3584E+00
69	71	32992	8403	6252	9.3109E-02	1.0059E-03	5.5886E-01	8.3814E-01	8.9714E+00
70	72	17677	8173	55228	7.0745E-01	1.3082E-03	5.7168E-01	8.3452E-01	2.4880E+00
71	73	34908	9236	11460	1.4920E-01	1.0124E-03	5.9901E-01	8.4154E-01	2.3913E+00
72	74	35228	8894	6444	9.5044E-02	1.0843E-03	5.8106E-01	8.4006E-01	8.8342E+00
73	75	18898	8681	58841	7.5940E-01	1.3475E-03	5.8887E-01	8.3734E-01	2.4794E+00
74	76	172	45	2949	2.3727E-02	3.9756E-05	1.7522E-01	5.3723E-01	7.2861E-01
75	77	202	61	3762	3.2964E-02	4.6527E-05	2.4429E-01	5.8865E-01	8.0720E-01
76	80	12	7	18	1.1864E-04	1.3676E-03	1.3920E+00	6.0299E-01	3.1921E+00
77	81	3504	1492	10811	1.1959E-01	3.6021E-04	4.8215E-01	7.3661E-01	2.0718E+00
78	82	2219	864	12035	1.3154E-01	2.6003E-04	4.4141E-01	7.6561E-01	1.2917E+00
79	83	5	4	565	5.7604E-03	7.5743E-05	3.2763E-01	6.7278E-01	1.0083E+00
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1740	692	5181	6.4223E-02	8.8234E-04	5.4538E-01	8.0097E-01	2.0972E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1131	478	9799	1.1719E-01	2.1204E-03	5.0131E-01	8.0768E-01	4.4630E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	430	243	49611	4.2233E-01	2.9642E-05	1.4932E-01	5.6294E-01	6.4939E-01

TOTAL 6915789 691197 3322720 4.1110E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3819E-01	-5.3819E-01
2	2	3.2536E-01	.0000E+00	.0000E+00	-8.9186E-01	-5.6651E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5702E-02	-1.5702E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.3376E-02	-5.3376E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5399E-02	-1.5399E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4935E-01	-1.4935E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6143E+00	-1.6143E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9918E+00	-1.9918E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.0718E-01	-2.0718E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1582E-01	-2.1582E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8098E-01	-3.8098E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.7572E-01	-3.7572E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.4994E-02	-7.4994E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.7490E-02	-7.7490E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.5013E-02	-8.5013E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.5567E-02	-7.5567E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-6.9956E-02	-6.9956E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.0338E-02	-7.0338E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.2711E-02	-9.2711E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-9.5269E-02	-9.5269E-02
21	22	.0000E+00	.0000E+00	.0000E+00	-8.6711E-02	-8.6711E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.1031E-02	-8.1031E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.0778E-01	-1.0778E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.0709E-01	-1.0709E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1013E-01	-1.1013E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.0625E-01	-1.0625E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0108E-01	-1.0108E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.6627E-02	-8.6627E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.3682E-02	-9.3682E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0145E-01	-1.0145E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8655E+01	-1.8655E+01
32	33	9.5771E+00	1.0047E+00	.0000E+00	-9.3622E+00	1.2196E+00
33	34	4.7529E-02	.0000E+00	.0000E+00	-4.5380E-02	2.1496E-03
34	35	1.8210E-03	.0000E+00	.0000E+00	-1.7396E-03	8.1404E-05
35	36	1.8759E+01	.0000E+00	.0000E+00	-1.8748E+01	1.0803E-02
36	37	3.3057E-03	.0000E+00	.0000E+00	-3.3047E-03	9.6481E-07
37	38	2.0337E+01	.0000E+00	.0000E+00	-2.0261E+01	7.5791E-02
38	39	3.4485E-03	.0000E+00	.0000E+00	-3.4320E-03	1.6481E-05
39	40	3.2396E+01	.0000E+00	.0000E+00	-1.0656E+01	2.1740E+01
40	41	8.1018E-01	.0000E+00	.0000E+00	-8.0685E-01	3.3317E-03
41	42	2.0618E-04	.0000E+00	.0000E+00	-2.0392E-04	2.2532E-06
42	43	1.7104E+00	.0000E+00	.0000E+00	-1.7099E+00	5.1757E-04
43	44	1.9189E+00	.0000E+00	.0000E+00	-1.9179E+00	1.0988E-03
44	45	2.0991E+00	.0000E+00	.0000E+00	-2.0987E+00	4.2327E-04
45	46	2.5579E+00	.0000E+00	.0000E+00	-1.0847E+00	1.4732E+00
46	47	1.0245E-01	.0000E+00	.0000E+00	-6.2428E-02	4.0022E-02
47	48	1.3767E-01	.0000E+00	.0000E+00	-1.3232E-01	5.3443E-03
48	49	1.7760E-01	.0000E+00	.0000E+00	-6.9949E-02	1.0765E-01
49	50	4.5471E-01	.0000E+00	.0000E+00	-2.5514E-01	1.9956E-01
50	51	4.4503E-01	.0000E+00	.0000E+00	-4.2997E-01	1.5064E-02
51	52	4.3513E-01	.0000E+00	.0000E+00	-4.2950E-01	5.6268E-03
52	53	4.3571E-01	.0000E+00	.0000E+00	-1.8305E-01	2.5266E-01
53	54	2.7697E-03	.0000E+00	.0000E+00	-4.7469E-05	2.7222E-03
54	55	4.7444E-01	.0000E+00	.0000E+00	-2.6693E-01	2.0751E-01
55	56	4.6604E-01	.0000E+00	.0000E+00	-4.5001E-01	1.6027E-02
56	57	4.5849E-01	.0000E+00	.0000E+00	-4.5261E-01	5.8814E-03
57	58	4.5912E-01	.0000E+00	.0000E+00	-1.9326E-01	2.6586E-01

58	59	3.3311E-03	.0000E+00	.0000E+00	.0000E+00	-2.0116E-04	3.1299E-03
59	60	7.4682E-01	.0000E+00	.0000E+00	.0000E+00	-3.7452E-01	3.7230E-01
60	61	7.3965E-01	.0000E+00	.0000E+00	.0000E+00	-3.5080E-01	3.8886E-01
61	62	4.7755E-03	.0000E+00	.0000E+00	.0000E+00	-6.8726E-05	4.7067E-03
62	63	7.3598E-01	.0000E+00	.0000E+00	.0000E+00	-3.6910E-01	3.6688E-01
63	64	7.2677E-01	.0000E+00	.0000E+00	.0000E+00	-3.4391E-01	3.8286E-01
64	65	4.2179E-03	.0000E+00	.0000E+00	.0000E+00	-1.4419E-04	4.0737E-03
65	66	1.2168E-01	.0000E+00	.0000E+00	.0000E+00	-7.5077E-02	4.6606E-02
66	67	1.1884E-01	.0000E+00	.0000E+00	.0000E+00	-5.9394E-02	5.9449E-02
67	68	1.1787E-01	.0000E+00	.0000E+00	.0000E+00	-6.0097E-02	5.7773E-02
68	70	4.6576E-01	.0000E+00	.0000E+00	.0000E+00	-4.6044E-01	5.3124E-03
69	71	4.6402E-01	.0000E+00	.0000E+00	.0000E+00	-4.6334E-01	6.8452E-04
70	72	2.5016E-01	.0000E+00	.0000E+00	.0000E+00	-2.2939E-01	2.0765E-02
71	73	4.9415E-01	.0000E+00	.0000E+00	.0000E+00	-4.8887E-01	5.2776E-03
72	74	4.9735E-01	.0000E+00	.0000E+00	.0000E+00	-4.9658E-01	7.6513E-04
73	75	2.6852E-01	.0000E+00	.0000E+00	.0000E+00	-2.4723E-01	2.1294E-02
74	76	1.6211E-03	.0000E+00	.0000E+00	.0000E+00	-1.4759E-03	1.4527E-04
75	77	2.0574E-03	.0000E+00	.0000E+00	.0000E+00	-1.8769E-03	1.8041E-04
76	80	1.0832E-04	.0000E+00	.0000E+00	.0000E+00	-7.7721E-05	3.0604E-05
77	81	4.3276E-02	.0000E+00	.0000E+00	.0000E+00	-3.5419E-02	7.8562E-03
78	82	2.9067E-02	.0000E+00	.0000E+00	.0000E+00	-2.8678E-02	3.8941E-04
79	83	6.2216E-05	.0000E+00	.0000E+00	.0000E+00	-2.8468E-05	3.3748E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.3340E-02	.0000E+00	.0000E+00	.0000E+00	-2.0930E-02	2.4096E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.4701E-02	.0000E+00	.0000E+00	.0000E+00	-1.2569E-02	2.1320E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	5.6970E-03	.0000E+00	.0000E+00	.0000E+00	-3.4763E-03	2.2207E-03

TOTAL	1.0048E+02	1.0047E+00	.0000E+00	.0000E+00	-1.0048E+02	1.0047E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-2.6450E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.6450E-05
33	34	.0000E+00	.0000E+00	-1.4707E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4707E-05
34	35	.0000E+00	.0000E+00	8.4110E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4110E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-2.5137E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5137E-07
38	39	.0000E+00	.0000E+00	-8.3573E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3573E-06
39	40	.0000E+00	.0000E+00	-1.8015E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8015E-04
40	41	.0000E+00	.0000E+00	3.8271E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8271E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	1.7204E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7204E-05
43	44	.0000E+00	.0000E+00	-8.1623E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1623E-06
44	45	.0000E+00	.0000E+00	-3.9362E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9362E-06
45	46	.0000E+00	.0000E+00	-2.4716E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4716E-05
46	47	.0000E+00	.0000E+00	-8.2812E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2812E-06
47	48	.0000E+00	.0000E+00	4.3329E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3329E-06
48	49	.0000E+00	.0000E+00	-8.3321E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3321E-06
49	50	.0000E+00	.0000E+00	4.7363E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7363E-05
50	51	.0000E+00	.0000E+00	-8.1529E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1529E-05
51	52	.0000E+00	.0000E+00	4.9742E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.9742E-06
52	53	.0000E+00	.0000E+00	1.6250E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6250E-04
53	54	.0000E+00	.0000E+00	8.5079E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5079E-06
54	55	.0000E+00	.0000E+00	-6.1128E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1128E-05
55	56	.0000E+00	.0000E+00	-8.8505E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8505E-05
56	57	.0000E+00	.0000E+00	-2.7862E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7862E-05
57	58	.0000E+00	.0000E+00	-8.8534E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8534E-05
58	59	.0000E+00	.0000E+00	-4.1103E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1103E-06
59	60	.0000E+00	.0000E+00	4.7702E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7702E-05
60	61	.0000E+00	.0000E+00	-9.0748E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0748E-05
61	62	.0000E+00	.0000E+00	-4.0263E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0263E-06
62	63	.0000E+00	.0000E+00	5.1741E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.1741E-05
63	64	.0000E+00	.0000E+00	-1.9508E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9508E-05
64	65	.0000E+00	.0000E+00	6.3059E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.3059E-08
65	66	.0000E+00	.0000E+00	-2.2719E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2719E-04
66	67	.0000E+00	.0000E+00	7.5989E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.5989E-05
67	68	.0000E+00	.0000E+00	-8.3674E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3674E-05
68	70	.0000E+00	.0000E+00	-1.3905E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3905E-04
69	71	.0000E+00	.0000E+00	1.8360E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8360E-05
70	72	.0000E+00	.0000E+00	1.5181E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5181E-04
71	73	.0000E+00	.0000E+00	9.9845E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.9845E-05
72	74	.0000E+00	.0000E+00	-3.1978E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.1978E-05
73	75	.0000E+00	.0000E+00	3.7935E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7935E-04
74	76	.0000E+00	.0000E+00	-2.0709E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0709E-05
75	77	.0000E+00	.0000E+00	-8.0603E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0603E-06
76	80	.0000E+00	.0000E+00	-1.8424E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8424E-05
77	81	.0000E+00	.0000E+00	-9.2757E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2757E-05
78	82	.0000E+00	.0000E+00	3.3929E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3929E-05
79	83	.0000E+00	.0000E+00	-4.1836E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1836E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	3.0520E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0520E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-7.7875E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7875E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7530E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7530E-05
TOTAL		.0000E+00	.0000E+00	-1.7027E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7027E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3745E-02	.0000E+00	-1.3745E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.8033E-03	.0000E+00	-4.0701E-01	-8.9547E-04	-3.2760E-01
33	34	.0000E+00	.0000E+00	-2.1338E-04	.0000E+00	-2.1338E-04
34	35	.0000E+00	.0000E+00	-2.6331E-05	.0000E+00	-2.6331E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-9.6481E-07	.0000E+00	-9.6481E-07
37	38	8.5410E-05	.0000E+00	-6.1877E-03	-4.2705E-05	-6.1450E-03
38	39	.0000E+00	.0000E+00	-8.1236E-06	.0000E+00	-8.1236E-06
39	40	.0000E+00	.0000E+00	-4.7003E-02	.0000E+00	-4.7003E-02
40	41	.0000E+00	.0000E+00	-3.3699E-03	.0000E+00	-3.3699E-03
41	42	.0000E+00	.0000E+00	-2.2532E-06	.0000E+00	-2.2532E-06
42	43	.0000E+00	.0000E+00	-5.3477E-04	.0000E+00	-5.3477E-04
43	44	.0000E+00	.0000E+00	-1.0907E-03	.0000E+00	-1.0907E-03
44	45	2.8479E-05	.0000E+00	-4.3357E-04	-1.4240E-05	-4.1933E-04
45	46	.0000E+00	.0000E+00	-2.5353E-03	.0000E+00	-2.5353E-03
46	47	.0000E+00	.0000E+00	-2.7355E-04	.0000E+00	-2.7355E-04
47	48	.0000E+00	.0000E+00	-4.1759E-05	.0000E+00	-4.1759E-05
48	49	.0000E+00	.0000E+00	-2.0866E-04	.0000E+00	-2.0866E-04
49	50	.0000E+00	.0000E+00	-2.3731E-03	.0000E+00	-2.3731E-03
50	51	.0000E+00	.0000E+00	-1.0017E-02	.0000E+00	-1.0017E-02
51	52	.0000E+00	.0000E+00	-5.6081E-04	.0000E+00	-5.6081E-04

52	53	.0000E+00	.0000E+00	-1.0033E-02	.0000E+00	.0000E+00	-1.0033E-02
53	54	.0000E+00	.0000E+00	-8.2672E-05	.0000E+00	.0000E+00	-8.2672E-05
54	55	.0000E+00	.0000E+00	-2.3887E-03	.0000E+00	.0000E+00	-2.3887E-03
55	56	.0000E+00	.0000E+00	-1.0650E-02	.0000E+00	.0000E+00	-1.0650E-02
56	57	.0000E+00	.0000E+00	-6.5441E-04	.0000E+00	.0000E+00	-6.5441E-04
57	58	.0000E+00	.0000E+00	-1.0666E-02	.0000E+00	.0000E+00	-1.0666E-02
58	59	.0000E+00	.0000E+00	-9.6847E-05	.0000E+00	.0000E+00	-9.6847E-05
59	60	.0000E+00	.0000E+00	-2.7408E-03	.0000E+00	.0000E+00	-2.7408E-03
60	61	.0000E+00	.0000E+00	-1.0578E-02	.0000E+00	.0000E+00	-1.0578E-02
61	62	.0000E+00	.0000E+00	-1.0091E-04	.0000E+00	.0000E+00	-1.0091E-04
62	63	.0000E+00	.0000E+00	-2.7914E-03	.0000E+00	.0000E+00	-2.7914E-03
63	64	.0000E+00	.0000E+00	-1.0728E-02	.0000E+00	.0000E+00	-1.0728E-02
64	65	.0000E+00	.0000E+00	-9.1866E-05	.0000E+00	.0000E+00	-9.1866E-05
65	66	.0000E+00	.0000E+00	-2.0065E-02	.0000E+00	.0000E+00	-2.0065E-02
66	67	.0000E+00	.0000E+00	-1.5501E-02	.0000E+00	.0000E+00	-1.5501E-02
67	68	.0000E+00	.0000E+00	-1.5248E-02	.0000E+00	.0000E+00	-1.5248E-02
68	70	.0000E+00	.0000E+00	-5.1733E-03	.0000E+00	.0000E+00	-5.1733E-03
69	71	.0000E+00	.0000E+00	-7.0288E-04	.0000E+00	.0000E+00	-7.0288E-04
70	72	.0000E+00	.0000E+00	-2.0917E-02	.0000E+00	.0000E+00	-2.0917E-02
71	73	.0000E+00	.0000E+00	-5.3774E-03	.0000E+00	.0000E+00	-5.3774E-03
72	74	.0000E+00	.0000E+00	-7.3316E-04	.0000E+00	.0000E+00	-7.3316E-04
73	75	.0000E+00	.0000E+00	-2.1674E-02	.0000E+00	.0000E+00	-2.1674E-02
74	76	.0000E+00	.0000E+00	-1.2456E-04	.0000E+00	.0000E+00	-1.2456E-04
75	77	.0000E+00	.0000E+00	-1.7235E-04	.0000E+00	.0000E+00	-1.7235E-04
76	80	.0000E+00	.0000E+00	-1.2180E-05	.0000E+00	.0000E+00	-1.2180E-05
77	81	.0000E+00	.0000E+00	-7.7635E-03	.0000E+00	.0000E+00	-7.7635E-03
78	82	.0000E+00	.0000E+00	-4.2334E-04	.0000E+00	.0000E+00	-4.2334E-04
79	83	.0000E+00	.0000E+00	-2.9564E-05	.0000E+00	.0000E+00	-2.9564E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.4402E-03	.0000E+00	.0000E+00	-2.4402E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.0541E-03	.0000E+00	.0000E+00	-2.0541E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.2032E-03	.0000E+00	.0000E+00	-2.2032E-03

TOTAL 1.9172E-03 .0000E+00 -6.7785E-01 -9.5242E-04 -3.2760E-01 -1.0045E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	284660 16466	2.9940E+00 1.9898E-01	1.3658E-02 8.7324E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7486E-01 3.7686E-04 5.7949E-05 2.1481E-06 3.5427E-07 7.0168E-05 4.0451E-06 9.1639E-10 6.9405E-05 3.2021E-03 1.5711E-03 3.1606E-01 2.0341E-04 6.7020E-05 2.0143E-03 7.7678E-04 3.5276E-04 1.5646E-04 1.1203E-04 7.1357E-07 3.3795E-05 4.3784E-07	97496 878 140 1018 26 220 1079 0 120 15108 1323 145168 494 288 19266 4661 3762 311 701 38 104 7	1.4322E+00 1.1398E-02 1.8648E-03 1.1359E-02 2.8238E-04 2.7596E-03 1.1416E-02 .0000E+00 1.6036E-03 2.9170E-01 1.9397E-02 2.1368E+00 6.5103E-03 3.4213E-03 3.8323E-01 6.1277E-02 7.6898E-02 4.4224E-03 8.7112E-03 8.5136E-04 1.4276E-03 1.6330E-04	1.2757E-03 9.6744E-03 1.5536E-03 1.1283E-02 2.8182E-04 2.4202E-03 1.1375E-02 .0000E+00 1.1710E-03 2.6509E-02 6.4284E-03 1.7940E-01 5.0151E-03 2.6277E-03 7.1901E-02 5.3184E-02 1.0947E-02 2.8595E-03 7.8407E-03 6.7263E-05 1.1897E-03 1.0947E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.0999E-05 1.2911E-01 3.0487E-04 2.0281E-02 8.3275E-05 1.3297E-04 1.4668E-01 3.0506E-04 3.0163E-02 4.4675E-05 7.8979E-05 3.3066E-04 1.2670E-05 6.5158E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2331E-05 8.8397E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.1526E-05 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 3 7 947 13	4.9649E-06 2.3373E-05 8.0230E-05 1.0124E-02 1.5749E-04	2.0774E-10 7.9362E-06 8.0738E-06 1.8838E-04 8.9873E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	556 26	4.4703E-03 1.9066E-04	2.6323E-05 7.3918E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	15	2.3057E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	22 0	1.6719E-04 .0000E+00	9.6481E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	192 68 187 48749 464	2.8386E-03 9.7014E-04 2.5585E-03 7.2913E-01 6.9158E-03	3.3518E-06 7.6148E-05 1.1618E-04 5.8529E-03 1.3920E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 4.2705E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	181 10	1.3929E-03 9.7906E-05	8.1210E-06 2.6427E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1254602 114442	1.6528E+01 1.6679E+00	4.5706E-02 1.2975E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	77724 6579	1.0327E+00 9.5917E-02	3.2852E-03 8.4769E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	54 2	3.6742E-04 1.7630E-05	2.2526E-06 5.6869E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	17 6 19 3467 29	2.4756E-04 8.6659E-05 2.8407E-04 5.1867E-02 4.3503E-04	1.7909E-09 8.7121E-06 8.1754E-06 5.0547E-04 1.2412E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	25941 2254	3.4469E-01 3.3118E-02	1.0644E-03 2.6240E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 4 13 3096 25	1.7297E-04 6.3488E-05 1.9388E-04 4.6275E-02 3.8643E-04	2.0360E-08 1.9044E-06 7.2284E-06 4.1219E-04 1.2231E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.4240E-05 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61686 5344	8.1952E-01 7.7867E-02	2.4813E-03 5.4040E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6590 556	8.6919E-02 8.0853E-03	2.6461E-04 8.9393E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 0 1 307 2	1.1740E-05 .0000E+00 1.5887E-05 4.6719E-03 3.3380E-05	4.0354E-10 .0000E+00 2.1812E-06 3.9306E-05 2.7161E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5287 470	7.0478E-02 6.9237E-03	2.0513E-04 3.5294E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59160 4536	7.0356E-01 6.2126E-02	2.3269E-03 4.6225E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 40 48 4 0 1385 520 7735 2240 155	1.0920E-04 4.5915E-04 6.8123E-04 5.4863E-05 .0000E+00 1.8287E-02 7.3606E-03 9.5422E-02 2.7878E-02 2.1147E-03	5.5351E-09 2.9354E-05 5.3864E-06 4.7507E-07 .0000E+00 1.7390E-03 9.6690E-04 5.3323E-03 1.6228E-03 3.2084E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2370 5	3.4157E-02 7.0996E-05	5.5854E-04 2.2744E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	7 51 62 4 2 1385	6.9171E-05 5.9729E-04 8.4915E-04 5.4575E-05 2.1140E-05 1.8069E-02	1.2742E-08 3.4953E-05 1.7958E-05 7.0799E-07 1.2120E-06 1.7113E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	505	7.1971E-03	9.8645E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7488	9.0709E-02	5.2344E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2282	2.7669E-02	1.7328E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	164	2.2298E-03	3.1293E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1719	1.5135E-02	8.2652E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	74	6.9823E-04	1.9736E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	60557	7.2153E-01	2.3413E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4686	6.4192E-02	4.7366E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	7	1.0277E-04	2.7510E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	53	6.5929E-04	3.3845E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	71	9.5422E-04	1.1588E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.3022E-04	9.1915E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.9339E-05	8.5678E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1533	1.9953E-02	2.0585E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	524	7.4889E-03	9.8529E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7941	9.7605E-02	5.4896E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2389	2.9739E-02	1.7928E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	2.1470E-03	2.7763E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2499	3.6103E-02	6.5342E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	6.3427E-05	9.8763E-07	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	5	7.2142E-05	6.7128E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	4.5346E-04	2.1403E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	6.3296E-04	6.4676E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	7.5103E-05	6.5113E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.7469E-05	3.2068E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1512	1.9874E-02	2.0469E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	483	6.8657E-03	8.8641E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7916	9.5593E-02	5.5880E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2363	2.8820E-02	1.7884E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	181	2.5111E-03	3.2448E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1988	1.8205E-02	9.6821E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	84	8.2354E-04	2.5972E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	81455	1.0183E+00	2.6871E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7167	1.0126E-01	5.3729E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	7	1.1035E-04	4.6550E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	6.4899E-04	2.6805E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	88	1.2613E-03	8.4075E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0480E-04	6.7213E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.6161E-05	2.6046E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2261	3.1388E-02	1.9208E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	770	1.1163E-02	9.5447E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11108	1.4314E-01	5.4922E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3253	4.2255E-02	1.7486E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	266	3.7493E-03	4.2320E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2065	1.8429E-02	1.0088E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	102	9.7154E-04	3.1740E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	81853	1.0236E+00	2.7224E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7287	1.0257E-01	6.8949E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	8	9.3899E-05	8.3964E-09	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	60	7.9003E-04	3.4192E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	91	1.3589E-03	8.6268E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	11	1.5145E-04	1.5078E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	6.9448E-05	2.9189E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2166	3.0011E-02	1.9369E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	780	1.1314E-02	1.0963E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10770	1.3836E-01	5.4788E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3225	4.1881E-02	1.6977E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	249	3.4693E-03	4.7058E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1899	1.6564E-02	9.1841E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	86	8.4160E-04	2.4771E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	411880	3.7433E+00	1.9997E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19602	1.9959E-01	6.7558E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	12	1.3511E-04	5.8313E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	4.9923E-04	4.0415E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	4.6077E-04	1.0880E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	4.2363E-06	1.2261E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6586E-05	2.8804E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1577	1.7265E-02	2.7186E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	447	5.6565E-03	1.4435E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9763	1.0121E-01	8.2831E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2859	2.9322E-02	2.6165E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	1.8034E-03	3.8801E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	7	4.6962E-05	1.7972E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	57	5.6053E-04	4.0169E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	40	4.8494E-04	9.4891E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.0491E-04	1.4813E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1588	1.7724E-02	2.8775E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	493	6.1797E-03	1.4715E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9577	1.0069E-01	8.0112E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2825	2.9776E-02	2.5615E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	176	2.1312E-03	2.7524E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	9	1.2767E-04	8.2701E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	5.9961E-04	2.4956E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	8.0995E-04	4.9000E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.7290E-05	1.3148E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.8621E-05	8.7337E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1420	1.9773E-02	9.1676E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	505	7.3613E-03	4.3916E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6816	8.6871E-02	2.6551E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2168	2.8187E-02	8.7539E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	181	2.5272E-03	2.5687E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6234	9.2844E-02	6.9448E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	18	2.6494E-04	8.3987E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	43	5.7220E-04	2.9876E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	201	2.5073E-03	5.3851E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	266	3.9465E-03	1.6438E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.4748E-04	3.9481E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	9.0561E-05	6.3023E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7138	9.7826E-02	3.8438E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2322	3.2842E-02	1.8351E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34004	4.2506E-01	1.0754E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10364	1.3215E-01	3.3109E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	873	1.2303E-02	1.0963E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	8	1.0944E-04	7.5559E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	5.4741E-04	1.3667E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	8.2253E-04	3.9107E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.2476E-05	3.4541E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.9081E-05	2.5538E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1375	1.8773E-02	8.9114E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	498	7.1644E-03	5.7818E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7123	9.1091E-02	2.7675E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2170	2.7999E-02	8.7741E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	177	2.5773E-03	2.4521E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6431	9.4879E-02	7.2592E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.6473E-04	7.2349E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	40	5.4388E-04	2.7331E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	200	2.5665E-03	5.4435E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	311	4.5374E-03	1.6617E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	16	2.0990E-04	7.9511E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.1092E-04	6.1800E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7389	1.0177E-01	3.7436E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2670	3.8225E-02	2.0056E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36217	4.5660E-01	1.1080E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11064	1.4192E-01	3.5621E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	926	1.2909E-02	1.2049E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2804	2.2446E-02	1.2452E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	145	1.2813E-03	3.8652E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3597	3.1316E-02	1.7231E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	165	1.6482E-03	4.3445E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	1	1.0277E-05	2.8967E-09	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	2.6597E-05	2.6069E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	13	7.5853E-05	8.9050E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1	5.9084E-06	6.6508E-07	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	5	4.3802E-05	1.0553E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	30	3.5268E-04	1.3553E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	41	5.5681E-04	4.6349E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	6.4355E-05	1.1427E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1200	1.4216E-02	1.3647E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	406	5.4988E-03	6.2118E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6943	7.4941E-02	4.2294E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2052	2.2415E-02	1.3289E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	126	1.5058E-03	1.9994E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11209	1.2112E-01	4.1941E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	826	1.0423E-02	3.9296E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	540	5.4770E-03	2.9558E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	25	2.8340E-04	6.3245E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	4	3.9741E-05	5.9436E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	5	6.5145E-05	1.6894E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	16	2.1470E-04	9.3519E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	47	6.1425E-04	4.6946E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	689	8.8896E-03	4.9653E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	106	1.4448E-03	8.8038E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1204	1.4682E-02	4.2751E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2909	3.5547E-02	1.1988E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	109	1.4867E-03	5.8995E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	92	1.2384E-03	1.2071E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	63	8.2863E-04	2.1356E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	18	2.5895E-04	6.4902E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	5	6.7244E-05	1.5116E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	2.9957E-05	7.6761E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	236	3.2945E-03	9.6032E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9475	1.1271E-01	1.9572E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	47424	4.0184E-01	2.1999E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2187	2.0496E-02	3.2503E-06	.0000E+00	.0000E+00
TOTAL				3322720	4.1437E+01	6.7785E-01	3.2760E-01	9.6477E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2485453	2.9744E+01	1.0009E-01	.0000E+00	.0000E+00
		2004.50C		15	2.3057E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		232	3.0050E-03	2.4853E-07	.0000E+00	.0000E+00
		7014.50C		925	1.1241E-02	4.2160E-04	.0000E+00	.0000E+00
		8016.50C		290840	4.0918E+00	3.1327E-03	.0000E+00	.0000E+00

13027.50C	17539	2.5805E-01	2.6341E-03	.0000E+00	.0000E+00
14000.50C	1254	1.7841E-02	1.2689E-04	.0000E+00	.0000E+00
15031.50C	102	1.3089E-03	9.4979E-06	.0000E+00	.0000E+00
16032.50C	38	5.2929E-04	2.2729E-05	.0000E+00	.0000E+00
22000.50C	47	6.1425E-04	4.6946E-05	.0000E+00	.0000E+00
24000.50C	32702	4.3499E-01	2.8363E-02	.0000E+00	.0000E+00
25055.50C	11265	1.5906E-01	1.4454E-02	.0000E+00	.0000E+00
26000.55C	174320	2.1279E+00	8.2931E-02	.0000E+00	.0000E+00
28000.50C	52164	6.4557E-01	2.6715E-02	.0000E+00	.0000E+00
29000.50C	149	2.0508E-03	7.7890E-05	.0000E+00	.0000E+00
40000.50C	56566	8.4206E-01	6.9982E-03	.0000E+00	5.6944E-05
42000.50C	3864	5.3216E-02	5.9168E-03	.0000E+00	.0000E+00
45103.50C	878	1.1398E-02	9.6744E-03	.0000E+00	.0000E+00
47109.50C	140	1.8648E-03	1.5536E-03	.0000E+00	.0000E+00
50000.35C	533	7.9282E-03	1.7311E-04	.0000E+00	.0000E+00
62149.50C	1018	1.1359E-02	1.1283E-02	.0000E+00	.0000E+00
63151.55C	26	2.8238E-04	2.8182E-04	.0000E+00	.0000E+00
63153.55C	220	2.7596E-03	2.4202E-03	.0000E+00	.0000E+00
64155.50C	1079	1.1416E-02	1.1375E-02	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	120	1.6036E-03	1.1710E-03	1.0999E-05	.0000E+00
92235.50C	15108	2.9170E-01	2.6509E-02	1.2911E-01	.0000E+00
92236.50C	1323	1.9397E-02	6.4284E-03	3.0487E-04	1.2331E-05
92238.50C	145168	2.1368E+00	1.7940E-01	2.0281E-02	8.8397E-04
93237.55C	494	6.5103E-03	5.0151E-03	8.3275E-05	.0000E+00
94238.50C	288	3.4213E-03	2.6277E-03	1.3297E-04	.0000E+00
94239.55C	19266	3.8323E-01	7.1901E-02	1.4668E-01	.0000E+00
94240.50C	4661	6.1277E-02	5.3184E-02	3.0506E-04	.0000E+00
94241.50C	3762	7.6898E-02	1.0947E-02	3.0163E-02	.0000E+00
94242.50C	311	4.4224E-03	2.8595E-03	4.4675E-05	1.1526E-05
95241.50C	701	8.7112E-03	7.8407E-03	7.8979E-05	.0000E+00
95242.50C	38	8.5136E-04	6.7263E-05	3.3066E-04	.0000E+00
95243.50C	104	1.4276E-03	1.1897E-03	1.2670E-05	.0000E+00
96245.35C	7	1.6330E-04	1.0947E-05	6.5158E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59721 CTM = 113.28

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 113.40 MINUTES

MCNP VERSION 4A-B 10/04/91

02/23/95 20:24:37

PROBID = 02/23/95 18:30:58

1MCNP VERSION 4A-B LD=10/04/91 09/29/95 07:45:39

 INP=mpc12y OUTP=mpc12y.0

PROBID = 09/29/95 07:45:39

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 1.80%/0 GWD/0 year (mpc12y)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.0411-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2

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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      1.80%/O GWD/O YEAR -- UO2
331- M2      8016.50C 4.6941E-02
332-      92235.50C 4.2777E-04
333-      92238.50C 2.3043E-02
334- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
335- M3      2004.50C 1.0
336- C      ZIRCALOY-4
337- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
338-      40000.50C -0.9818 50000.35C -0.0140
339- C      ALLOY 825
340- M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
341-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
342-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
343-      29000.50C -0.0250 42000.50C -0.0300
344- C      1100 ALUMINUM ALLOY
345- M6      13027.50C -0.99880 29000.50C -0.00120
346- C      A516 CARBON STEEL
347- M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
348-      16032.50C -0.00035 25055.50C -0.0090
349-      26000.55C -0.98535
350- C      SS316L
351- M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
352-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
353-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
354-      42000.50C -0.02500
355- C      TALLIES
356- PRINT

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SURFACES	16048 AND	19048 OF CELL	8 ARE THE SAME.	19048 WILL BE DELETED.
SURFACES	16049 AND	19049 OF CELL	8 ARE THE SAME.	19049 WILL BE DELETED.
SURFACES	16050 AND	17050 OF CELL	8 ARE THE SAME.	17050 WILL BE DELETED.
SURFACES	16050 AND	20050 OF CELL	8 ARE THE SAME.	20050 WILL BE DELETED.
SURFACES	16050 AND	21050 OF CELL	8 ARE THE SAME.	21050 WILL BE DELETED.
SURFACES	16051 AND	17051 OF CELL	8 ARE THE SAME.	17051 WILL BE DELETED.
SURFACES	16051 AND	20051 OF CELL	8 ARE THE SAME.	20051 WILL BE DELETED.
SURFACES	16051 AND	21051 OF CELL	8 ARE THE SAME.	21051 WILL BE DELETED.
SURFACES	18050 AND	22050 OF CELL	8 ARE THE SAME.	22050 WILL BE DELETED.
SURFACES	18051 AND	22051 OF CELL	8 ARE THE SAME.	22051 WILL BE DELETED.
SURFACES	19050 AND	23050 OF CELL	8 ARE THE SAME.	23050 WILL BE DELETED.
SURFACES	19051 AND	23051 OF CELL	8 ARE THE SAME.	23051 WILL BE DELETED.
SURFACES	20048 AND	23048 OF CELL	8 ARE THE SAME.	23048 WILL BE DELETED.
SURFACES	20049 AND	23049 OF CELL	8 ARE THE SAME.	23049 WILL BE DELETED.
SURFACES	24048 AND	27048 OF CELL	9 ARE THE SAME.	27048 WILL BE DELETED.
SURFACES	24049 AND	27049 OF CELL	9 ARE THE SAME.	27049 WILL BE DELETED.
SURFACES	24050 AND	25050 OF CELL	9 ARE THE SAME.	25050 WILL BE DELETED.
SURFACES	24050 AND	28050 OF CELL	9 ARE THE SAME.	28050 WILL BE DELETED.
SURFACES	24050 AND	29050 OF CELL	9 ARE THE SAME.	29050 WILL BE DELETED.
SURFACES	24051 AND	25051 OF CELL	9 ARE THE SAME.	25051 WILL BE DELETED.
SURFACES	24051 AND	28051 OF CELL	9 ARE THE SAME.	28051 WILL BE DELETED.
SURFACES	24051 AND	29051 OF CELL	9 ARE THE SAME.	29051 WILL BE DELETED.
SURFACES	26050 AND	30050 OF CELL	9 ARE THE SAME.	30050 WILL BE DELETED.
SURFACES	26051 AND	30051 OF CELL	9 ARE THE SAME.	30051 WILL BE DELETED.
SURFACES	27050 AND	31050 OF CELL	9 ARE THE SAME.	31050 WILL BE DELETED.
SURFACES	27051 AND	31051 OF CELL	9 ARE THE SAME.	31051 WILL BE DELETED.
SURFACES	28048 AND	31048 OF CELL	9 ARE THE SAME.	31048 WILL BE DELETED.
SURFACES	28049 AND	31049 OF CELL	9 ARE THE SAME.	31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2999
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2999
 POINTS AFTER EXPANSION OR CONTRACTION 2999
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.041177E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	8016, .66666 92235, .00608 92238, .32726
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748
5	50000, .01071 6000, .00234 13027, .00417 14000, .01001 16032, .00053
6	22000, .01057 24000, .23247 25055, .01023 26000, .28763
7	28000, .40235 29000, .02212 42000, .01758
8	13027, .99949 29000, .00051 15031, .00062 16032, .00060
	6000, .01011 14000, .00541 25055, .00905 26000, .97421
	25055, .00905 26000, .97421 7014, .00399 14000, .01493 15031, .00081
	6000, .00140 24000, .18282 25055, .02036 26000, .64626
	16032, .00052 42000, .01457
	28000, .11433

MATERIAL
 NUMBER

COMPONENT NUCLIDE, MASS FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, MASS FRACTION
1	1001, .11191 8016, .88809
2	8016, .11849 92235, .01587 92238, .86565
3	2004, 1.00000
4	8016, .00120 24000, .00100 26000, .00200 40000, .98180
5	50000, .01400 6000, .00050 13027, .00200 14000, .00499 16032, .00030
6	22000, .00898 24000, .21446 25055, .00998 26000, .28499
	28000, .41895 29000, .02494 42000, .02993
	13027, .99880 29000, .00120

7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1CELL VOLUMES AND MASSES

PRINT TABLE 50

	CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.04110E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE

17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE

77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE
117	27050	.00000E+00	.00000E+00	INFINITE
118	27051	.00000E+00	.00000E+00	INFINITE
119	28048	.00000E+00	.00000E+00	INFINITE
120	28049	.00000E+00	.00000E+00	INFINITE
121	29048	.00000E+00	.00000E+00	INFINITE
122	29049	.00000E+00	.00000E+00	INFINITE
123	30048	.00000E+00	.00000E+00	INFINITE
124	30049	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.04110E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00

68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1.31148E+01 8.65579E+01
1SURFACES

PRINT TABLE 70

SURFACE		TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01
15	15		PY	7.2135000E-01
16	16		PY	-7.2135000E-01
17	17		CZ	4.6812200E-01
18	18		CZ	4.7879000E-01
19	19		CZ	5.4610000E-01
20	21		CZ	5.0292000E-01
21	22		CZ	5.6007000E-01
22	23		CZ	6.3246000E-01
23	24		CZ	6.7310000E-01
24	25		CZ	5.6007000E-01
25	26		CZ	6.2611000E-01
26	27		PX	1.2809230E+01
27	28		PX	-1.2809230E+01
28	29		PY	1.2809230E+01
29	30		PY	-1.2809230E+01
30	31		PY	1.0820240E+01
31	32		PX	1.0820240E+01
32	33		PY	-1.0820240E+01
33	34		PX	-1.0820240E+01
34	35		PY	1.1430000E+01

35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	1001 PX	2.5991819E+01			
74	2042	1001 PX	2.1437590E+00			
75	2039	1001 PY	2.5991819E+01			
76	2041	1001 PY	2.1437590E+00			
77	3027	1002 PX	2.9032230E+01			
78	3028	1002 PX	3.4137700E+00			
79	3029	1002 PY	7.9232790E+01			
80	3030	1002 PY	5.3614330E+01			
81	4027	1003 PX	5.3515300E+01			
82	4028	1003 PX	2.7896840E+01			
83	4029	1003 PY	5.3515300E+01			
84	4030	1003 PY	2.7896840E+01			
85	5027	1004 PX	7.9232790E+01			
86	5028	1004 PX	5.3614330E+01			
87	5029	1004 PY	2.9032230E+01			
88	5030	1004 PY	3.4137700E+00			
89	16048	1005 PX	2.1641000E+00			
90	16049	1005 PX	3.6067000E+00			
91	16050	1005 PY	2.1641000E+00			
92	16051	1005 PY	3.6067000E+00			
93	17048	1006 PX	6.4922000E+00			
94	17049	1006 PX	7.9348000E+00			

95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08

28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY

TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1395)	79/09/12.
(1398)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
16032.50C	2684	NJOY
22000.50C	25231	NJOY
25055.50C	60097	NJOY
42000.50C	18467	NJOY

(1315)	79/10/29.
(1316)	79/10/29.
(1322)	79/06/21.
(1325)	79/06/21.
(1321)	79/08/01.

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=OK
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(48)	86/02/01
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TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN
TOTAL	683883	

1001	0	010/22/85
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WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	98858
TALLIES	0
BANK	18403
CROSS SECTIONS	683883

TOTAL	801144
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DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

3 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .07

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 1.80%/0 GWD/0 year (mpc12y)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-1.715E-01	-7.983E-02	9.142E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.000E+00	1.556E+00
2	3.755E-01	-4.606E-02	9.423E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.000E+00	3.303E+00
3	-2.577E-02	4.441E-01	9.658E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.000E+00	2.747E+00
4	-1.947E-01	1.584E-01	1.481E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.000E+00	8.153E-01
5	1.597E-01	3.709E-01	1.422E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.000E+00	2.080E+00
6	2.050E-01	3.347E-01	1.351E+02	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.000E+00	5.558E-01
7	1.556E-01	-1.888E-01	1.902E+02	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.000E+00	1.330E+00
8	4.032E-03	2.021E-01	1.357E+02	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.000E+00	3.144E+00
9	1.697E-04	-2.375E-01	9.790E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.000E+00	3.203E+00
10	1.760E-01	3.562E-01	9.944E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.000E+00	8.250E-01
11	2.426E-01	1.372E-01	8.914E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.000E+00	8.062E-01
12	-3.171E-01	3.358E-01	1.460E+02	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.000E+00	9.312E-01
13	2.506E-01	1.495E-01	1.214E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.000E+00	9.925E-01
14	3.741E-01	-7.663E-02	1.204E+02	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.000E+00	8.136E-01
15	3.765E-01	1.051E-01	1.855E+02	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.000E+00	1.371E+00
16	-3.836E-01	1.536E-01	8.997E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.000E+00	1.948E+00
17	-1.438E-01	-2.334E-01	5.119E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.000E+00	5.499E-01
18	9.322E-02	-2.925E-01	5.657E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.000E+00	8.467E-01
19	3.153E-01	-1.354E-01	1.239E+02	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.000E+00	6.190E-01
20	-3.217E-01	3.381E-01	3.921E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.000E+00	4.405E+00
21	-3.830E-01	2.147E-01	4.919E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.000E+00	7.735E-01
22	-1.528E-01	-2.242E-02	4.644E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.000E+00	1.317E+00
23	-1.286E-01	-2.332E-01	1.198E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.000E+00	2.949E+00
24	-2.726E-01	1.086E-01	3.816E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.000E+00	2.557E+00
25	3.236E-01	-9.895E-02	3.487E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.000E+00	7.110E+00
26	1.973E-01	2.487E-01	4.704E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.000E+00	4.631E+00
27	-2.470E-01	3.426E-01	2.820E-01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.000E+00	1.783E+00
28	-7.326E-02	-2.796E-01	1.285E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.000E+00	6.730E+00
29	2.590E-01	1.106E-01	6.593E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.000E+00	1.511E+00
30	1.059E-01	4.346E-01	9.757E+00	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.000E+00	9.862E-01
31	2.902E-01	-9.694E-02	1.072E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.000E+00	1.559E+00
32	3.985E-02	-3.444E-01	6.583E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.000E+00	8.793E-01
33	-7.776E-02	-4.267E-01	8.508E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.000E+00	2.672E+00
34	3.927E-01	-2.271E-01	1.284E+02	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.000E+00	7.803E-01
35	4.115E-01	-2.223E-01	1.020E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.000E+00	1.229E+00
36	4.115E-01	-2.223E-01	1.020E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.000E+00	4.346E+00
37	-4.192E-01	1.775E-01	9.210E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.000E+00	2.756E+00
38	-3.310E-01	-1.966E-01	1.950E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.000E+00	5.707E-01
39	3.390E-01	-1.528E-01	1.652E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.000E+00	4.242E+00
40	3.243E-01	2.038E-01	1.659E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.000E+00	3.207E-01
41	1.106E-01	2.543E-01	1.131E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.000E+00	2.275E+00
42	-4.051E-02	-4.430E-01	2.908E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.000E+00	3.166E+00
43	-1.461E-01	3.587E-01	6.928E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.000E+00	2.438E+00
44	-3.817E-01	-7.021E-03	7.925E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.000E+00	1.659E-01
45	4.479E-02	1.499E-01	1.290E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.000E+00	2.652E+00
46	4.456E-02	1.166E-01	1.446E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.000E+00	6.200E+00
47	2.850E-01	-2.785E-01	1.442E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.000E+00	6.576E-02
48	3.499E-01	-1.428E-01	3.450E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.000E+00	2.273E+00
49	-2.102E-02	-8.851E-02	1.770E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.000E+00	2.236E+00
50	3.286E-02	-1.749E-01	1.760E+02	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.000E+00	6.025E+00

CYCLE 1 K(COLLISION) .903717 REMOVAL LIFETIME(ABS) 4.1279E+03 SOURCE POINTS GENERATED 2711

CYCLE 2 K(COLLISION) .941305 REMOVAL LIFETIME(ABS) 4.0314E+03 SOURCE POINTS GENERATED 3125
 CYCLE 3 K(COLLISION) .960492 REMOVAL LIFETIME(ABS) 4.0851E+03 SOURCE POINTS GENERATED 3075
 CYCLE 4 K(COLLISION) .985245 REMOVAL LIFETIME(ABS) 4.0958E+03 SOURCE POINTS GENERATED 3056
 CYCLE 5 K(COLLISION) .933638 REMOVAL LIFETIME(ABS) 4.0369E+03 SOURCE POINTS GENERATED 2819

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .976841 REMOVAL LIFETIME(ABS) 4.0675E+03 SOURCE POINTS GENERATED 3149

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.986954	.981898	.0051	K(COL/ABS)	.000000	.0000	.000000	.0000
K(ABSORPTION)	.961698	.959381	.0024	K(ABS/TK LN)	.000000	.0000	.000000	.0000
K(TRK LENGTH)	.965311	.964414	.0009	K(TK LN/COL)	.000000	.0000	.000000	.0000
REM LIFE(COL)	4.1596E+03	4.1200E+03	.0096					
REM LIFE(ABS)	4.1148E+03	4.0912E+03	.0058	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000
SOURCE POINTS GENERATED	2972							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.971237	.978344	.0047	K(COL/ABS)	.970958	.0022	.970747	.0039
K(ABSORPTION)	.971955	.963572	.0046	K(ABS/TK LN)	.966862	.0052	.952011	.0086
K(TRK LENGTH)	.981626	.970151	.0059	K(TK LN/COL)	.974248	.0021	.974783	.0030
REM LIFE(COL)	4.1643E+03	4.1348E+03	.0066					
REM LIFE(ABS)	4.1733E+03	4.1186E+03	.0074	LIFE(COL/ABS)	4.1267E+03	.0068	4.1331E+03	.0101
SOURCE POINTS GENERATED	2961							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.907253	.960571	.0188	K(COL/ABS)	.959473	.0121	.957792	.0062
K(ABSORPTION)	.942782	.958375	.0063	K(ABS/TK LN)	.957143	.0108	.959844	.0034
K(TRK LENGTH)	.913189	.955911	.0155	K(TK LN/COL)	.958241	.0168	.953978	.0189
REM LIFE(COL)	4.0030E+03	4.1018E+03	.0093	K(COL/ABS/TK LN)	.958286	.0131	.961263	.0037
REM LIFE(ABS)	4.0078E+03	4.0909E+03	.0086	LIFE(COL/ABS)	4.0963E+03	.0088	4.0883E+03	.0108
SOURCE POINTS GENERATED	2785							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.990236	.966504	.0157	K(COL/ABS)	.964103	.0105	.960154	.0055
K(ABSORPTION)	.975006	.961701	.0060	K(ABS/TK LN)	.961063	.0093	.962539	.0040
K(TRK LENGTH)	.978480	.960425	.0128	K(TK LN/COL)	.963464	.0140	.956991	.0146
REM LIFE(COL)	4.0687E+03	4.0952E+03	.0074	K(COL/ABS/TK LN)	.962877	.0112	.963639	.0054
REM LIFE(ABS)	4.0580E+03	4.0843E+03	.0069	LIFE(COL/ABS)	4.0897E+03	.0070	4.0817E+03	.0082
SOURCE POINTS GENERATED	3316							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.970399	.967153	.0129	K(COL/ABS)	.966197	.0088	.964903	.0065
K(ABSORPTION)	.982937	.965240	.0061	K(ABS/TK LN)	.964399	.0083	.966270	.0054
K(TRK LENGTH)	.979225	.963558	.0109	K(TK LN/COL)	.965356	.0116	.962838	.0123
REM LIFE(COL)	3.9182E+03	4.0657E+03	.0095	K(COL/ABS/TK LN)	.965317	.0094	.968211	.0057

REM LIFE(ABS) 3.9368E+03 4.0597E+03 .0083 LIFE(COL/ABS) 4.0627E+03 .0088 4.0501E+03 .0084 .9768
SOURCE POINTS GENERATED 2990

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.961516		.966348	.0109	K(COL/ABS)	.964940 .0076	.963109 .0058	.6726
K(ABSORPTION)		.953278		.963531	.0055	K(ABS/TK LN)	.963902 .0070	.963266 .0055	.8202
K(TRK LENGTH)		.968563		.964273	.0093	K(TK LN/COL)	.965311 .0098	.963989 .0102	.8840
REM LIFE(COL)	4.1371E+03		4.0759E+03		.0084	K(COL/ABS/TK LN)	.964718 .0080	.963510 .0062	
REM LIFE(ABS)	4.1283E+03		4.0695E+03		.0074	LIFE(COL/ABS)	4.0727E+03 .0078	4.0588E+03 .0074	.9787
SOURCE POINTS GENERATED	2938								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.939544		.962998	.0101	K(COL/ABS)	.963549 .0067	.964187 .0051	.5837
K(ABSORPTION)		.968080		.964100	.0048	K(ABS/TK LN)	.963255 .0061	.964500 .0049	.7622
K(TRK LENGTH)		.949363		.962409	.0083	K(TK LN/COL)	.962703 .0089	.962258 .0088	.8874
REM LIFE(COL)	3.9938E+03		4.0656E+03		.0077	K(COL/ABS/TK LN)	.963169 .0071	.964687 .0054	
REM LIFE(ABS)	4.0331E+03		4.0650E+03		.0065	LIFE(COL/ABS)	4.0653E+03 .0070	4.0641E+03 .0063	.9672
SOURCE POINTS GENERATED	2966								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.936426		.960045	.0094	K(COL/ABS)	.961620 .0063	.963533 .0045	.6097
K(ABSORPTION)		.955961		.963196	.0043	K(ABS/TK LN)	.961184 .0058	.964266 .0043	.7669
K(TRK LENGTH)		.933277		.959172	.0081	K(TK LN/COL)	.959609 .0085	.958999 .0086	.8983
REM LIFE(COL)	4.0081E+03		4.0593E+03		.0070	K(COL/ABS/TK LN)	.960804 .0068	.964573 .0048	
REM LIFE(ABS)	4.0108E+03		4.0589E+03		.0059	LIFE(COL/ABS)	4.0591E+03 .0064	4.0585E+03 .0057	.9688
SOURCE POINTS GENERATED	2995								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.968740		.960915	.0085	K(COL/ABS)	.961558 .0056	.962276 .0042	.5578
K(ABSORPTION)		.953246		.962201	.0040	K(ABS/TK LN)	.961866 .0053	.962252 .0042	.6173
K(TRK LENGTH)		.982771		.961532	.0076	K(TK LN/COL)	.961223 .0078	.961492 .0081	.8798
REM LIFE(COL)	4.2535E+03		4.0787E+03		.0078	K(COL/ABS/TK LN)	.961549 .0061	.962262 .0045	
REM LIFE(ABS)	4.2591E+03		4.0790E+03		.0072	LIFE(COL/ABS)	4.0788E+03 .0075	4.0793E+03 .0074	.9773
SOURCE POINTS GENERATED	3194								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.969130		.961662	.0077	K(COL/ABS)	.961318 .0051	.960978 .0040	.4898
K(ABSORPTION)		.948721		.960975	.0038	K(ABS/TK LN)	.962014 .0048	.961050 .0040	.4926
K(TRK LENGTH)		.978262		.963053	.0070	K(TK LN/COL)	.962357 .0071	.962841 .0074	.8756
REM LIFE(COL)	4.2218E+03		4.0917E+03		.0077	K(COL/ABS/TK LN)	.961897 .0055	.961142 .0043	
REM LIFE(ABS)	4.1745E+03		4.0876E+03		.0068	LIFE(COL/ABS)	4.0897E+03 .0072	4.0821E+03 .0067	.9746
SOURCE POINTS GENERATED	2999								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.946631		.960409	.0072	K(COL/ABS)	.959587 .0050	.958869 .0044	.5024
K(ABSORPTION)		.934445		.958764	.0042	K(ABS/TK LN)	.959805 .0049	.958840 .0044	.5722
K(TRK LENGTH)		.936562		.960846	.0068	K(TK LN/COL)	.960627 .0068	.960705 .0071	.8721
REM LIFE(COL)	4.1079E+03		4.0930E+03		.0071	K(COL/ABS/TK LN)	.960006 .0054	.958810 .0046	

REM LIFE(ABS) 4.1041E+03 4.0890E+03 .0062 LIFE(COL/ABS) 4.0910E+03 .0066 4.0835E+03 .0061 .9746
SOURCE POINTS GENERATED 2925

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.935782	.958515	.0069	K(COL/ABS)	.958565	.0047	.958611	.0040	.4924
K(ABSORPTION)	.956837	.958616	.0039	K(ABS/TK LN)	.958660	.0047	.958618	.0040	.5523
K(TRK LENGTH)	.933012	.958704	.0067	K(TK LN/COL)	.958610	.0066	.958634	.0069	.8833
REM LIFE(COL)	4.1172E+03	4.0949E+03	.0065	K(COL/ABS/TK LN)	.958612	.0052	.958597	.0042	
REM LIFE(ABS)	4.1074E+03	4.0904E+03	.0058	LIFE(COL/ABS)	4.0927E+03	.0061	4.0842E+03	.0056	.9747
SOURCE POINTS GENERATED	3001								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.949867	.957897	.0064	K(COL/ABS)	.957600	.0045	.957351	.0040	.4935
K(ABSORPTION)	.940239	.957304	.0038	K(ABS/TK LN)	.958100	.0044	.957451	.0040	.5040
K(TRK LENGTH)	.961403	.958897	.0062	K(TK LN/COL)	.958397	.0061	.958534	.0063	.8751
REM LIFE(COL)	3.9152E+03	4.0821E+03	.0068	K(COL/ABS/TK LN)	.958033	.0049	.957435	.0042	
REM LIFE(ABS)	3.9028E+03	4.0770E+03	.0063	LIFE(COL/ABS)	4.0795E+03	.0065	4.0712E+03	.0063	.9783
SOURCE POINTS GENERATED	3050								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.959833	.958026	.0060	K(COL/ABS)	.958123	.0042	.958200	.0038	.4823
K(ABSORPTION)	.971055	.958220	.0037	K(ABS/TK LN)	.958132	.0041	.958195	.0037	.4416
K(TRK LENGTH)	.946089	.958043	.0058	K(TK LN/COL)	.958035	.0057	.958036	.0059	.8612
REM LIFE(COL)	3.8964E+03	4.0697E+03	.0071	K(COL/ABS/TK LN)	.958097	.0045	.958197	.0039	
REM LIFE(ABS)	3.9351E+03	4.0676E+03	.0063	LIFE(COL/ABS)	4.0686E+03	.0066	4.0642E+03	.0060	.9795
SOURCE POINTS GENERATED	3079								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 1.80%/0 GWD/0 year (mpc12y)

PROBID = 09/29/95 10:39:12
09/29/95 07:45:39

NEUTRON CREATION				NEUTRON LOSS			
TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY		TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	
SOURCE	60026	9.9957E-01	2.0323E+00	ESCAPE	0	0.	0.
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	8.0225E-02	4.6420E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	60115	7.8941E-02	4.5562E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.5649E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	176	2.3538E-03	1.7261E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9261E+00
TOTAL	60202	1.0821E+00	2.0340E+00	CAPTURE	0	6.1417E-01	3.1182E-02
				LOSS TO (N,XN)	87	1.1672E-03	1.0003E-02
				LOSS TO FISSION	0	3.8787E-01	6.6721E-02
				TOTAL	60202	1.0821E+00	2.0340E+00

NUMBER OF NEUTRONS BANKED

89

AVERAGE LIFETIME, SHAKES

CUTOFFS

NEUTRON TRACKS PER SOURCE PARTICLE 1.0029E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.6011E+01
 TOTAL NEUTRON COLLISIONS 3962368
 NET MULTIPLICATION 1.0012E+00 .0002

ESCAPE .0000E+00
 CAPTURE 4.0595E+03
 CAPTURE OR ESCAPE 4.0595E+03
 ANY TERMINATION 4.4568E+03

TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 99.03 MINUTES
 COMPUTER TIME IN MCRUN 98.97 MINUTES
 SOURCE PARTICLES PER MINUTE 6.0653E+02
 RANDOM NUMBERS GENERATED 46694450

MAXIMUM NUMBER EVER IN BANK 2
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 9094 IN HISTORY 4599

RANGE OF SAMPLED SOURCE WEIGHTS = 9.0470E-01 TO 1.1066E+00
 WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	27827	10239	3.4277E+00	1.1406E-04	3.7657E-01	7.1490E-01	1.0944E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	796086	60115	4.3230E+00	5.0425E-04	6.8271E-01	8.4969E-01	2.5153E+00
33	34	7369	388	1.5703E-02	5.2472E-05	2.6254E-01	5.9272E-01	4.2989E+00

34	35	265	31	609	3.9188E-03	4.4147E-05	4.1984E-01	4.3074E-01	9.4697E-01
35	36	1442719	60115	15	2.2494E-04	4.4001E-04	6.4390E-01	8.4524E-01	3.5815E+03
36	37	469	30	32	2.3014E-04	4.2833E-05	3.4082E-01	4.3107E-01	8.7730E-01
37	38	1563264	60115	55282	7.9212E-01	4.2684E-04	6.3561E-01	8.4446E-01	4.1239E+00
38	39	528	30	224	1.4525E-03	4.7408E-05	4.2841E-01	4.3333E-01	9.6704E-01
39	40	2499641	60115	1779267	2.2018E+01	3.7712E-04	6.0594E-01	8.4164E-01	1.5353E+00
40	41	63585	32626	111001	1.3817E+00	2.9071E-04	5.5671E-01	8.3989E-01	1.4413E+00
41	42	8	6	23	1.4567E-04	3.7758E-08	4.9714E-08	4.0194E-01	3.1849E-01
42	43	134316	34308	4014	5.7375E-02	3.0464E-04	5.6871E-01	8.4053E-01	4.1379E+00
43	44	150573	36690	37247	4.6486E-01	3.0930E-04	5.6968E-01	8.4173E-01	1.4681E+00
44	45	164722	37626	3572	5.0725E-02	3.1167E-04	5.7071E-01	8.4202E-01	4.1426E+00
45	46	200421	42632	88615	1.1055E+00	3.1811E-04	5.7912E-01	8.4224E-01	1.4811E+00
46	47	7941	3536	9546	1.1915E-01	2.8894E-04	5.8114E-01	8.3882E-01	1.4623E+00
47	48	10669	3851	341	4.9100E-03	3.0240E-04	5.6289E-01	8.3952E-01	4.1526E+00
48	49	13933	5244	7939	9.8857E-02	3.1153E-04	5.7861E-01	8.4003E-01	1.4689E+00
49	50	36244	15733	76678	8.6873E-01	2.8355E-04	5.3682E-01	7.9625E-01	1.4132E+00
50	51	35482	14843	13523	1.6158E-01	3.4221E-04	5.5815E-01	7.8551E-01	2.0407E+00
51	52	35044	14472	2474	3.4887E-02	3.4066E-04	5.5022E-01	7.8413E-01	9.2423E+00
52	53	35300	14534	13337	1.5783E-01	3.2879E-04	5.4200E-01	7.7909E-01	2.0450E+00
53	54	465	120	3161	2.8358E-02	2.9799E-05	1.5078E-01	5.8962E-01	6.7258E-01
54	55	36417	15684	77736	8.8324E-01	2.7176E-04	5.1787E-01	7.9646E-01	1.3890E+00
55	56	35582	14861	13502	1.6067E-01	3.2585E-04	5.3583E-01	7.8421E-01	2.0245E+00
56	57	35210	14527	2552	3.5458E-02	3.3123E-04	5.5064E-01	7.8029E-01	9.2176E+00
57	58	35496	14580	13562	1.5984E-01	3.2131E-04	5.3843E-01	7.7845E-01	2.0360E+00
58	59	339	97	2079	1.8551E-02	3.9356E-05	2.0972E-01	5.8708E-01	7.4981E-01
59	60	54443	19170	101469	1.2105E+00	3.8656E-04	5.2238E-01	8.2286E-01	1.4376E+00
60	61	53331	18228	18744	2.3419E-01	5.5031E-04	5.5188E-01	8.1585E-01	2.2265E+00
61	62	737	169	3347	2.9240E-02	3.7341E-05	1.8831E-01	5.7655E-01	7.1900E-01
62	63	55402	19278	103696	1.2396E+00	3.7884E-04	5.1963E-01	8.2252E-01	1.4295E+00
63	64	54325	18289	19078	2.3927E-01	5.3745E-04	5.4940E-01	8.1513E-01	2.2085E+00
64	65	667	145	2850	2.5286E-02	5.0624E-05	2.5122E-01	5.9847E-01	8.2640E-01
65	66	10844	5364	464192	4.2094E+00	5.3888E-05	2.4967E-01	6.1214E-01	8.3341E-01
66	67	10633	4107	15925	1.6691E-01	1.7383E-04	4.3333E-01	6.8966E-01	1.7674E+00
67	68	10686	4231	16187	1.6793E-01	1.7732E-04	4.2801E-01	6.8819E-01	1.8156E+00
68	70	34928	9247	11917	1.5021E-01	7.7331E-04	5.4678E-01	8.2199E-01	2.3291E+00
69	71	34738	8922	6221	9.0821E-02	8.3820E-04	5.4783E-01	8.2184E-01	8.9577E+00
70	72	18694	8695	59013	7.3720E-01	1.0960E-03	5.6142E-01	8.2156E-01	2.4499E+00
71	73	33878	9074	11254	1.4207E-01	8.0125E-04	5.6496E-01	8.2196E-01	2.3438E+00
72	74	33956	8747	6124	8.9462E-02	8.8404E-04	5.6159E-01	8.2506E-01	8.8997E+00
73	75	18359	8556	56881	7.0880E-01	1.1175E-03	5.7241E-01	8.2213E-01	2.4629E+00
74	76	337	93	6255	5.6307E-02	6.0549E-05	2.6445E-01	6.1711E-01	8.6530E-01
75	77	301	86	6904	5.8041E-02	3.4513E-05	1.9503E-01	5.4753E-01	6.9628E-01
76	80	11	5	26	2.3196E-04	3.2018E-04	1.5166E+00	6.7400E-01	1.6258E+00
77	81	3794	1658	11402	1.2387E-01	3.6501E-04	5.1369E-01	7.2792E-01	2.1239E+00
78	82	2320	960	12968	1.3582E-01	2.6873E-04	4.5196E-01	7.4957E-01	1.3055E+00
79	83	5	3	316	3.3096E-03	1.6335E-04	8.8519E-01	7.1387E-01	1.7068E+00
80	84	1	1	13	9.4037E-05	6.2542E-08	6.2827E-08	3.8742E-01	7.9510E-01
81	85	1803	746	5051	5.9885E-02	8.8402E-04	5.6229E-01	7.8055E-01	2.1511E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1138	495	10567	1.1680E-01	1.8053E-03	4.8705E-01	7.6488E-01	4.2351E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	421	236	40999	3.5488E-01	3.1777E-05	1.3090E-01	5.7379E-01	6.5809E-01

TOTAL 7805667 713653 3962368 4.6725E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
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1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.4017E-01	-5.4017E-01
2	2	3.4268E-01	.0000E+00	.0000E+00	.0000E+00	-9.2650E-01	-5.8383E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7644E-02	-1.7644E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.5126E-02	-5.5126E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6130E-02	-1.6130E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5799E-01	-1.5799E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7755E+00	-1.7755E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1143E+00	-2.1143E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2210E-01	-2.2210E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2192E-01	-2.2192E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8325E-01	-3.8325E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8839E-01	-3.8839E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2587E-02	-8.2587E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5127E-02	-8.5127E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5639E-02	-9.5639E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0671E-02	-8.0671E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8868E-02	-7.8868E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8392E-02	-7.8392E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0661E-01	-1.0661E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0651E-01	-1.0651E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9607E-02	-9.9607E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3224E-02	-9.3224E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1748E-01	-1.1748E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1958E-01	-1.1958E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2028E-01	-1.2028E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1663E-01	-1.1663E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0531E-01	-1.0531E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2360E-02	-9.2360E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8341E-02	-9.8341E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0634E-01	-1.0634E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0264E+01	-2.0264E+01
32	33	1.0343E+01	9.9957E-01	.0000E+00	.0000E+00	-1.0141E+01	1.2018E+00
33	34	7.2971E-02	.0000E+00	.0000E+00	.0000E+00	-6.9192E-02	3.7791E-03
34	35	1.9174E-03	.0000E+00	.0000E+00	.0000E+00	-1.8059E-03	1.1150E-04
35	36	2.0323E+01	.0000E+00	.0000E+00	.0000E+00	-2.0311E+01	1.2425E-02
36	37	3.3402E-03	.0000E+00	.0000E+00	.0000E+00	-3.3391E-03	1.0669E-06
37	38	2.2013E+01	.0000E+00	.0000E+00	.0000E+00	-2.1932E+01	8.1055E-02
38	39	3.7534E-03	.0000E+00	.0000E+00	.0000E+00	-3.7367E-03	1.6648E-05
39	40	3.5119E+01	.0000E+00	.0000E+00	.0000E+00	-1.1513E+01	2.3606E+01
40	41	8.9228E-01	.0000E+00	.0000E+00	.0000E+00	-8.8749E-01	4.7879E-03
41	42	4.4199E-05	.0000E+00	.0000E+00	.0000E+00	-4.3366E-05	8.3324E-07
42	43	1.8811E+00	.0000E+00	.0000E+00	.0000E+00	-1.8805E+00	6.4163E-04
43	44	2.1103E+00	.0000E+00	.0000E+00	.0000E+00	-2.1087E+00	1.5838E-03
44	45	2.3092E+00	.0000E+00	.0000E+00	.0000E+00	-2.3086E+00	5.7479E-04
45	46	2.8136E+00	.0000E+00	.0000E+00	.0000E+00	-1.1941E+00	1.6195E+00
46	47	1.1149E-01	.0000E+00	.0000E+00	.0000E+00	-6.7579E-02	4.3912E-02
47	48	1.4981E-01	.0000E+00	.0000E+00	.0000E+00	-1.4417E-01	5.6406E-03
48	49	1.9567E-01	.0000E+00	.0000E+00	.0000E+00	-7.6664E-02	1.1900E-01
49	50	4.8462E-01	.0000E+00	.0000E+00	.0000E+00	-2.7086E-01	2.1376E-01
50	51	4.6882E-01	.0000E+00	.0000E+00	.0000E+00	-4.5152E-01	1.7303E-02
51	52	4.6003E-01	.0000E+00	.0000E+00	.0000E+00	-4.5434E-01	5.6879E-03
52	53	4.6324E-01	.0000E+00	.0000E+00	.0000E+00	-1.9246E-01	2.7078E-01
53	54	4.6340E-03	.0000E+00	.0000E+00	.0000E+00	-3.3080E-04	4.3032E-03
54	55	4.8643E-01	.0000E+00	.0000E+00	.0000E+00	-2.7189E-01	2.1453E-01
55	56	4.6972E-01	.0000E+00	.0000E+00	.0000E+00	-4.5288E-01	1.6838E-02
56	57	4.6137E-01	.0000E+00	.0000E+00	.0000E+00	-4.5579E-01	5.5769E-03
57	58	4.6502E-01	.0000E+00	.0000E+00	.0000E+00	-1.9323E-01	2.7180E-01
58	59	3.3897E-03	.0000E+00	.0000E+00	.0000E+00	-2.0031E-04	3.1894E-03
59	60	7.4899E-01	.0000E+00	.0000E+00	.0000E+00	-3.7410E-01	3.7489E-01
60	61	7.3091E-01	.0000E+00	.0000E+00	.0000E+00	-3.4604E-01	3.8487E-01

TOTAL	1.0836E+02	9.9957E-01	.0000E+00	.0000E+00	-1.0836E+02	9.9957E-01
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	3.3373E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3373E-04
33	34	.0000E+00	.0000E+00	8.6636E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6636E-07
34	35	.0000E+00	.0000E+00	8.4089E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4089E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	9.6016E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.6016E-05
38	39	.0000E+00	.0000E+00	-4.1392E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1392E-06
39	40	.0000E+00	.0000E+00	2.4203E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4203E-04
40	41	.0000E+00	.0000E+00	-8.1995E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1995E-05
41	42	.0000E+00	.0000E+00	1.2804E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2804E-08
42	43	.0000E+00	.0000E+00	3.3498E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3498E-05
43	44	.0000E+00	.0000E+00	-2.8701E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8701E-05
44	45	.0000E+00	.0000E+00	5.1358E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.1358E-06
45	46	.0000E+00	.0000E+00	-3.0614E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.0614E-06
46	47	.0000E+00	.0000E+00	-8.2288E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2288E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	-4.1305E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1305E-06
49	50	.0000E+00	.0000E+00	6.0581E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.0581E-05
50	51	.0000E+00	.0000E+00	-1.4094E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4094E-05
51	52	.0000E+00	.0000E+00	-1.2406E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2406E-05
52	53	.0000E+00	.0000E+00	1.0099E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0099E-04
53	54	.0000E+00	.0000E+00	2.0805E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0805E-07
54	55	.0000E+00	.0000E+00	-4.7429E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.7429E-05
55	56	.0000E+00	.0000E+00	-2.4270E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4270E-05
56	57	.0000E+00	.0000E+00	-2.4910E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4910E-05
57	58	.0000E+00	.0000E+00	-8.4215E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4215E-05
58	59	.0000E+00	.0000E+00	8.3712E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3712E-06
59	60	.0000E+00	.0000E+00	2.3238E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3238E-05
60	61	.0000E+00	.0000E+00	-7.4996E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4996E-05
61	62	.0000E+00	.0000E+00	1.2670E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2670E-05
62	63	.0000E+00	.0000E+00	4.0006E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.0006E-05
63	64	.0000E+00	.0000E+00	-3.8789E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8789E-05
64	65	.0000E+00	.0000E+00	1.9170E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9170E-07
65	66	.0000E+00	.0000E+00	8.9083E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.9083E-05
66	67	.0000E+00	.0000E+00	8.0794E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.0794E-05
67	68	.0000E+00	.0000E+00	-8.1913E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1913E-05
68	70	.0000E+00	.0000E+00	-5.7451E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.7451E-05
69	71	.0000E+00	.0000E+00	4.2944E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2944E-05
70	72	.0000E+00	.0000E+00	4.7147E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7147E-04
71	73	.0000E+00	.0000E+00	7.0176E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.0176E-05
72	74	.0000E+00	.0000E+00	-2.4871E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4871E-05
73	75	.0000E+00	.0000E+00	2.5695E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5695E-04
74	76	.0000E+00	.0000E+00	-3.7714E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7714E-06
75	77	.0000E+00	.0000E+00	4.2010E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2010E-05
76	80	.0000E+00	.0000E+00	1.3872E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3872E-06
77	81	.0000E+00	.0000E+00	-8.8421E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8421E-05
78	82	.0000E+00	.0000E+00	4.6332E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6332E-05
79	83	.0000E+00	.0000E+00	-4.1330E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1330E-06
80	84	.0000E+00	.0000E+00	9.9096E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.9096E-07
81	85	.0000E+00	.0000E+00	-7.0881E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.0881E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	8.7262E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7262E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.6426E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6426E-04

TOTAL .0000E+00 .0000E+00 1.2836E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2836E-03
 1 NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.5153E-02	.0000E+00	-1.5153E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.2013E-03	.0000E+00	-2.8836E-01	-1.0910E-03	-3.8787E-01
33	34	.0000E+00	.0000E+00	-3.5769E-04	.0000E+00	-3.5769E-04
34	35	.0000E+00	.0000E+00	-2.2187E-05	.0000E+00	-2.2187E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.0669E-06	.0000E+00	-1.0669E-06
37	38	1.3437E-04	.0000E+00	-7.8811E-03	-6.7186E-05	-7.8139E-03
38	39	.0000E+00	.0000E+00	-8.2884E-06	.0000E+00	-8.2884E-06
39	40	.0000E+00	.0000E+00	-6.8555E-02	.0000E+00	-6.8555E-02
40	41	.0000E+00	.0000E+00	-4.7059E-03	.0000E+00	-4.7059E-03
41	42	.0000E+00	.0000E+00	-8.4605E-07	.0000E+00	-8.4605E-07
42	43	.0000E+00	.0000E+00	-6.7512E-04	.0000E+00	-6.7512E-04
43	44	.0000E+00	.0000E+00	-1.5551E-03	.0000E+00	-1.5551E-03
44	45	.0000E+00	.0000E+00	-5.7993E-04	.0000E+00	-5.7993E-04
45	46	.0000E+00	.0000E+00	-3.6977E-03	.0000E+00	-3.6977E-03
46	47	.0000E+00	.0000E+00	-4.1957E-04	.0000E+00	-4.1957E-04
47	48	.0000E+00	.0000E+00	-5.9924E-05	.0000E+00	-5.9924E-05
48	49	.0000E+00	.0000E+00	-3.3165E-04	.0000E+00	-3.3165E-04
49	50	.0000E+00	.0000E+00	-2.9291E-03	.0000E+00	-2.9291E-03
50	51	.0000E+00	.0000E+00	-1.2176E-02	.0000E+00	-1.2176E-02
51	52	.0000E+00	.0000E+00	-6.6346E-04	.0000E+00	-6.6346E-04
52	53	.0000E+00	.0000E+00	-1.2045E-02	.0000E+00	-1.2045E-02
53	54	.0000E+00	.0000E+00	-1.4921E-04	.0000E+00	-1.4921E-04
54	55	.0000E+00	.0000E+00	-2.9887E-03	.0000E+00	-2.9887E-03

55	56	.0000E+00	.0000E+00	-1.2085E-02	.0000E+00	.0000E+00	-1.2085E-02
56	57	.0000E+00	.0000E+00	-7.4901E-04	.0000E+00	.0000E+00	-7.4901E-04
57	58	.0000E+00	.0000E+00	-1.2250E-02	.0000E+00	.0000E+00	-1.2250E-02
58	59	.0000E+00	.0000E+00	-9.7926E-05	.0000E+00	.0000E+00	-9.7926E-05
59	60	.0000E+00	.0000E+00	-3.3956E-03	.0000E+00	.0000E+00	-3.3956E-03
60	61	.0000E+00	.0000E+00	-1.2824E-02	.0000E+00	.0000E+00	-1.2824E-02
61	62	.0000E+00	.0000E+00	-1.4895E-04	.0000E+00	.0000E+00	-1.4895E-04
62	63	.0000E+00	.0000E+00	-3.4982E-03	.0000E+00	.0000E+00	-3.4982E-03
63	64	1.8126E-05	.0000E+00	-1.2762E-02	-9.0628E-06	.0000E+00	-1.2753E-02
64	65	.0000E+00	.0000E+00	-1.2950E-04	.0000E+00	.0000E+00	-1.2950E-04
65	66	.0000E+00	.0000E+00	-2.1359E-02	.0000E+00	.0000E+00	-2.1359E-02
66	67	.0000E+00	.0000E+00	-1.6583E-02	.0000E+00	.0000E+00	-1.6583E-02
67	68	.0000E+00	.0000E+00	-1.6399E-02	.0000E+00	.0000E+00	-1.6399E-02
68	70	.0000E+00	.0000E+00	-6.3732E-03	.0000E+00	.0000E+00	-6.3732E-03
69	71	.0000E+00	.0000E+00	-7.7884E-04	.0000E+00	.0000E+00	-7.7884E-04
70	72	.0000E+00	.0000E+00	-2.4730E-02	.0000E+00	.0000E+00	-2.4730E-02
71	73	.0000E+00	.0000E+00	-5.8243E-03	.0000E+00	.0000E+00	-5.8243E-03
72	74	.0000E+00	.0000E+00	-7.3865E-04	.0000E+00	.0000E+00	-7.3865E-04
73	75	.0000E+00	.0000E+00	-2.3898E-02	.0000E+00	.0000E+00	-2.3898E-02
74	76	.0000E+00	.0000E+00	-2.8594E-04	.0000E+00	.0000E+00	-2.8594E-04
75	77	.0000E+00	.0000E+00	-3.0794E-04	.0000E+00	.0000E+00	-3.0794E-04
76	80	.0000E+00	.0000E+00	-2.4359E-05	.0000E+00	.0000E+00	-2.4359E-05
77	81	.0000E+00	.0000E+00	-8.6539E-03	.0000E+00	.0000E+00	-8.6539E-03
78	82	.0000E+00	.0000E+00	-4.3785E-04	.0000E+00	.0000E+00	-4.3785E-04
79	83	.0000E+00	.0000E+00	-1.4710E-05	.0000E+00	.0000E+00	-1.4710E-05
80	84	.0000E+00	.0000E+00	-1.3215E-05	.0000E+00	.0000E+00	-1.3215E-05
81	85	.0000E+00	.0000E+00	-2.3552E-03	.0000E+00	.0000E+00	-2.3552E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.3104E-03	.0000E+00	.0000E+00	-2.3104E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.8228E-03	.0000E+00	.0000E+00	-1.8228E-03

TOTAL 2.3538E-03 .0000E+00 -6.1417E-01 -1.1672E-03 -3.8787E-01 -1.0009E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	315208 17568	3.2228E+00 2.0493E-01	1.5067E-02 8.5365E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 92235.50C 92238.50C	6.6666E-01 6.0753E-03 3.2726E-01	108535 44581 167173	1.5163E+00 8.4660E-01 2.3486E+00	1.1333E-03 7.0865E-02 2.1637E-01	.0000E+00 3.6751E-01 2.0357E-02	.0000E+00 .0000E+00 1.1103E-03
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	11 6 18 1520 18	1.2520E-04 5.6619E-05 1.5669E-04 1.5152E-02 2.1279E-04	2.9669E-09 1.4856E-05 1.9783E-05 3.0712E-04 1.5920E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	583 26	3.7377E-03 1.8109E-04	2.2181E-05 6.4741E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	15	2.2494E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	30 2	2.1039E-04 1.9756E-05	1.0662E-06 6.9860E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	239 98 268 54150 527	3.4090E-03 1.3604E-03 3.4849E-03 7.7637E-01 7.4944E-03	3.8965E-06 1.3203E-04 2.0115E-04 7.3394E-03 2.0462E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 6.7186E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	218 6	1.4199E-03 3.2560E-05	8.2870E-06 1.3617E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1647053 132214	2.0187E+01 1.8313E+00	6.7315E-02 1.2391E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	103414 7587	1.2769E+00 1.0486E-01	4.6514E-03 5.4554E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	21 2	1.3274E-04 1.2933E-05	8.4570E-07 3.4923E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	21 6 23 3921 43	2.9413E-04 7.0591E-05 2.6731E-04 5.6135E-02 6.0814E-04	2.8621E-09 1.2453E-05 1.9138E-05 6.2541E-04 1.8124E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	34661 2586	4.2899E-01 3.5867E-02	1.5337E-03 2.1441E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	23 7 12 3493 37	2.9200E-04 9.0867E-05 1.7242E-04 4.9639E-02 5.3086E-04	4.4233E-09 7.7588E-06 6.3159E-06 5.4807E-04 1.7776E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

[illegible]

56	57	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2548 4	3.5403E-02 5.4848E-05	7.4698E-04 2.0300E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
57	58	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 48 56 3 1 1564 500 8612 2610 161	8.1233E-05 5.5015E-04 7.7234E-04 2.3340E-05 6.0914E-06 1.9382E-02 6.8738E-03 9.9668E-02 3.0362E-02 2.1248E-03	2.6204E-08 3.1041E-05 1.1742E-05 5.0201E-07 7.7824E-07 2.2777E-03 1.0508E-03 6.4539E-03 2.0803E-03 3.4317E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
58	59	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1982 97	1.7685E-02 8.6546E-04	9.7897E-05 2.9024E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
59	60	1001.50C 8016.50C	6.6667E-01 3.3333E-01	93913 7556	1.1084E+00 1.0205E-01	3.3468E-03 4.8855E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
60	61	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	10 71 75 9 4 2240 843 11621 3597 274	1.5855E-04 8.6554E-04 1.0459E-03 1.2410E-04 5.7957E-05 2.9413E-02 1.2005E-02 1.4221E-01 4.4534E-02 3.7691E-03	7.9515E-09 3.6029E-05 7.2396E-06 1.9617E-06 4.3931E-06 2.3600E-03 1.1750E-03 6.5991E-03 2.1642E-03 4.7623E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
61	62	1001.50C 8016.50C	6.6667E-01 3.3333E-01	3189 158	2.7816E-02 1.4238E-03	1.4890E-04 4.1654E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
62	63	1001.50C 8016.50C	6.6667E-01 3.3333E-01	95723 7973	1.1311E+00 1.0847E-01	3.4337E-03 6.4491E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
63	64	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	9 61 83 6 2 2315 789 11992 3565 256	1.1826E-04 7.2886E-04 1.2381E-03 8.5796E-05 3.3597E-05 3.0920E-02 1.1131E-02 1.4732E-01 4.4061E-02 3.6374E-03	1.6334E-08 3.0640E-05 1.3080E-05 4.4429E-07 4.5247E-08 2.2706E-03 1.0760E-03 6.8111E-03 2.1232E-03 4.3687E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
64	65	1001.50C 8016.50C	6.6667E-01 3.3333E-01	2721 129	2.4039E-02 1.2466E-03	1.2947E-04 3.2332E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
65	66	1001.50C 8016.50C	6.6667E-01 3.3333E-01	442865 21327	3.9941E+00 2.1528E-01	2.1294E-02 6.4842E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
66	67	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	10 52 58 5 4 1731	8.3409E-05 5.3609E-04 6.5156E-04 5.7944E-05 5.9637E-05 1.8949E-02	2.1137E-08 4.2658E-05 1.4205E-05 6.7438E-07 5.7900E-06 2.9488E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	500	6.2155E-03	1.5946E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10359	1.0713E-01	8.8651E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3032	3.1185E-02	2.7785E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	174	2.0424E-03	3.3287E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	3	3.2290E-05	9.1039E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	4.5027E-04	4.1800E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	7.2838E-04	1.6164E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.5436E-05	1.0134E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	6.5112E-06	2.1236E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1788	1.9415E-02	2.9921E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	454	5.7937E-03	1.3004E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10530	1.0708E-01	8.9374E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3115	3.2320E-02	2.7632E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	178	2.0341E-03	3.4501E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	16	2.2515E-04	2.4097E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	4.7969E-04	1.5768E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	91	1.2540E-03	1.1420E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.7051E-05	2.6165E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.6817E-05	2.9398E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1483	1.9680E-02	1.2011E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	498	7.0132E-03	5.4765E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7374	9.1007E-02	3.2349E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2249	2.8231E-02	1.0545E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	165	2.2661E-03	3.0461E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6209	9.0643E-02	7.7399E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.7839E-04	4.8489E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	43	5.9870E-04	2.1412E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	190	2.3611E-03	7.0297E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	338	4.8257E-03	2.4520E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	17	1.8322E-04	2.1363E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.1508E-04	3.8164E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7383	9.8464E-02	4.3469E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2430	3.4059E-02	2.3957E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36269	4.4338E-01	1.2431E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11435	1.4087E-01	4.1562E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	900	1.2346E-02	1.2991E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	9	1.1780E-04	5.6561E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	5.4064E-04	2.1740E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	6.3049E-04	3.5110E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.5387E-05	2.7364E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1429	1.9048E-02	1.0858E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	464	6.6377E-03	5.6710E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7004	8.6587E-02	3.0011E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2100	2.6281E-02	9.6615E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	155	2.1642E-03	1.7859E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6111	8.9276E-02	7.2980E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.8591E-04	8.8518E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	42	5.5832E-04	4.0450E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	205	2.5127E-03	7.0176E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	308	4.4506E-03	2.0582E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.8862E-04	1.6148E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0142E-04	1.0671E-06	.0000E+00	.0000E+00

		24000.50C	1.8282E-01	7180	9.5261E-02	4.3733E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2364	3.3056E-02	2.1199E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35340	4.2974E-01	1.2311E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10556	1.3103E-01	3.8688E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	859	1.1803E-02	1.1318E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	5953	5.3252E-02	2.8295E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	302	3.0547E-03	2.9967E-06	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	6586	5.5001E-02	3.0601E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	318	3.0403E-03	1.9333E-06	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	1	1.3394E-05	1.0056E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1	8.3297E-06	2.8219E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	19	1.6297E-04	1.5972E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	5	4.7264E-05	4.5596E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	7	7.2550E-05	1.1594E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.0539E-04	2.2668E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	5.7956E-04	6.0961E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.4002E-05	6.5839E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6574E-05	9.3316E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1361	1.5923E-02	1.6448E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	349	4.5077E-03	7.4516E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7331	7.7691E-02	4.5802E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2145	2.3176E-02	1.4062E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	124	1.4523E-03	2.4781E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	12085	1.2502E-01	4.2937E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	883	1.0799E-02	8.4721E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	303	3.1679E-03	1.4706E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	13	1.4169E-04	3.6772E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1	6.0288E-06	1.7831E-06	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	4	2.9603E-05	3.5995E-06	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	8	5.8405E-05	7.8321E-06	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	4	4.5447E-05	8.4207E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	6.2902E-05	7.9885E-09	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	19	2.5844E-04	5.6429E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	33	4.0352E-04	4.3524E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	665	8.4836E-03	4.2623E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	98	1.3062E-03	5.8217E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1212	1.4069E-02	4.9456E-04	.0000E+00	.0000E+00

		28000.50C	4.0235E-01	2845	3.3100E-02	1.1338E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	101	1.2460E-03	8.7791E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	70	9.1064E-04	1.1054E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	53	6.5572E-04	2.3272E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	20	2.2356E-04	9.1466E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	3	3.9948E-05	1.0687E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.5646E-05	3.7010E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	249	3.1009E-03	1.6925E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	10241	1.1277E-01	2.1400E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	39079	3.3656E-01	1.8200E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1920	1.8322E-02	2.8226E-06	.0000E+00	.0000E+00
TOTAL				3962368	4.7113E+01	6.1417E-01	3.8787E-01	1.1866E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	3051517	3.4863E+01	1.3028E-01	.0000E+00	.0000E+00
2004.50C	15	2.2494E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	231	2.9496E-03	2.7137E-07	.0000E+00	.0000E+00
7014.50C	928	1.1033E-02	4.7142E-04	.0000E+00	.0000E+00
8016.50C	327243	4.4000E+00	2.8676E-03	.0000E+00	.0000E+00
13027.50C	17340	2.5019E-01	2.9125E-03	.0000E+00	.0000E+00
14000.50C	1365	1.8914E-02	1.5851E-04	.0000E+00	.0000E+00
15031.50C	94	1.2023E-03	1.1193E-05	.0000E+00	.0000E+00
16032.50C	34	4.8358E-04	2.6753E-05	.0000E+00	.0000E+00
22000.50C	33	4.0352E-04	4.3524E-05	.0000E+00	.0000E+00
24000.50C	33959	4.3555E-01	3.2754E-02	.0000E+00	.0000E+00
25055.50C	11099	1.5342E-01	1.6034E-02	.0000E+00	.0000E+00
26000.55C	183937	2.1630E+00	9.5452E-02	.0000E+00	.0000E+00
28000.50C	54835	6.5397E-01	3.0617E-02	.0000E+00	9.0628E-06
29000.50C	136	1.7494E-03	1.0521E-04	.0000E+00	.0000E+00
40000.50C	63422	9.0217E-01	8.8787E-03	.0000E+00	6.7186E-05
42000.50C	3800	5.0844E-02	6.0641E-03	.0000E+00	.0000E+00
50000.35C	626	8.8537E-03	2.5768E-04	.0000E+00	.0000E+00
92235.50C	44581	8.4660E-01	7.0865E-02	3.6751E-01	.0000E+00
92238.50C	167173	2.3486E+00	2.1637E-01	2.0357E-02	1.1103E-03

 DUMP NO. 2 ON FILE RUNTPE NPS = 60026 CTM = 98.97

3 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 99.03 MINUTES

MCNP VERSION 4A-B 10/04/91

09/29/95 10:39:12

PROBID = 09/29/95 07:45:39

1MCNP VERSION 4A-B LD=10/04/91 09/29/95 13:51:29

PROBID = 09/29/95 13:51:29

INP=mpc12fr OUTP=mpc12fro

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/0 GWD/0 year (mpc12fr)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - NEW MODEL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL
18- 8 1 -1.0000 -32 34 -31 33 IMP:N=1 FILL=9 U=11
19- C TOP OF ASSEMBLY OUTSIDE LATTICE
20- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
21- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
22- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
23- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
24- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
25- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
27- C PIN LATTICE DESCRIPTION
28- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 U=9
29- FILL -8:8 -8:8 0:0 9 16R 9 2 14R 9 9 2 14R 9 9 2 4R 3 2 2R 3 2 4R 9
30- 9 2 2R 3 2 6R 3 2 2R 9 9 2 14R 9
31- 9 2 2 3 2 2 3 2 2R 3 2 2 3 2 2 9 9 2 14R 9
32- 9 2 6R 4 2 6R 9
33- 9 2 14R 9 9 2 2 3 2 2 3 2 2R 3 2 2 3 2 2 9
34- 9 2 14R 9 9 2 2R 3 2 6R 3 2 2R 9
35- 9 2 4R 3 2 2R 3 2 4R 9 9 2 14R 9 9 2 14R 9 9 16R
36- C FUEL ROD
37- 33 2 7.0421-2 -17 -4 IMP:N=1 U=2
38- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
39- 35 1 -1.0000 -17 5 IMP:N=1 U=2
40- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
41- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
42- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
43- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
44- 40 1 -1.0000 19 IMP:N=1 U=2
45- C CONTROL ROD/GUIDE TUBE
46- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
47- 42 1 -1.0000 -21 5 IMP:N=1 U=3
48- 43 4 -6.6000 21 -22 IMP:N=1 U=3
49- 44 1 -1.0000 22 -23 IMP:N=1 U=3
50- 45 4 -6.6000 23 -24 IMP:N=1 U=3
51- 46 1 -1.0000 24 IMP:N=1 U=3
52- C INSTRUMENTATION TUBE
53- 47 1 -1.0000 -25 IMP:N=1 U=4
54- 48 4 -6.6000 25 -26 IMP:N=1 U=4
55- 49 1 -1.0000 26 IMP:N=1 U=4
56- C WATER GAP - ASSEMBLY TOP
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57- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
58- C SS TUBE WALL - ASSEMBLY TOP
59- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
60- C AL-B WALL -ASSEMBLY TOP
61- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
62- C SS WALL - ASSEMBLY TOP
63- 53 8 -8.2380 46 -4 IMP:N=1 U=5
64- C WATER ABOVE BASKET
65- 54 1 -1.000 4 IMP:N=1 U=5
66- C WATER GAP - ASSEMBLY RIGHT
67- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
68- C SS TUBE WALL - ASSEMBLY RIGHT
69- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
70- C AL-B WALL - ASSEMBLY RIGHT
71- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
72- C SS WALL - ASSEMBLY RIGHT
73- 58 8 -8.2380 45 -4 IMP:N=1 U=6
74- C WATER ABOVE BASKET
75- 59 1 -1.000 4 IMP:N=1 U=6
76- C WATER GAP - ASSEMBLY BOTTOM
77- 60 1 -1.0000 37 -4 IMP:N=1 U=7
78- C SS TUBE WALL - ASSEMBLY BOTTOM
79- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
80- C WATER ABOVE BASKET
81- 62 1 -1.000 4 IMP:N=1 U=7
82- C WATER GAP - ASSEMBLY LEFT
83- 63 1 -1.0000 38 -4 IMP:N=1 U=8
84- C LOWER ST COMB - ASSEMBLY LEFT
85- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
86- C WATER ABOVE BASKET
87- 65 1 -1.000 4 IMP:N=1 U=8
88- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
89- 66 1 -1.0000 74 75 IMP:N=1 U=10
90- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
91- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
92- C AXIS MATERIALS
93- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
94- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
95- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
96- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
97- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
98- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
99- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
100- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
101- C SS316L MPC LID
102- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
103- C SS316L MPC LINER
104- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
105- C GAP SS316L/INNER 825 BARRIER
106- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
107- C GAP BETWEEN MPC LID AND INNER BARRIER LID
108- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
109- C INNER BARRIER LID - ALLOY 825
110- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
111- C INNER BARRIER - ALLOY 825
112- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
113- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
114- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
115- C OUTER BARRIER LID A516 CARBON STEEL
116- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1

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117- C OUTER BARRIER - A516 CARBON STEEL
118- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
119- C WATER, ENDS
120- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
121- C WATER, SIDE
122- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
123- C OUTSIDE WORLD
124- 91 0 -1:-2:-3:80:81 IMP:N=0
125-
126- C SURFACE SPECIFICATIONS
127- 1* PX 0.0
128- 2* PY 0.00
129- 3* PZ 0.00
130- 4 PZ 203.2000 $ TOP ACTIVE FUEL
131- 5 PZ 222.2500 $ TOP FUEL HARDWARE
132- 6 PZ 229.2500 $ TOP FUEL REGION
133- 7 PZ 231.7500 $ TOP ALLOY 825 LID
134- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
135- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
136- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
137- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
138- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
139- C PIN LATTICE BOUNDS
140- 13 PX 0.72135
141- 14 PX -0.72135
142- 15 PY 0.72135
143- 16 PY -0.72135
144- C FUEL ROD
145- 17 CZ 0.468122
146- 18 CZ 0.478790
147- 19 CZ 0.546100
148- C CONTROL ROD/GUIDE TUBE
149- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
150- 21 CZ 0.50292
151- 22 CZ 0.56007
152- 23 CZ 0.63246
153- 24 CZ 0.67310
154- C INSTRUMENTATION TUBE
155- 25 CZ 0.56007
156- 26 CZ 0.62611
157- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
158- 27 PX 12.80923
159- 28 PX -12.80923
160- 29 PY 12.80923
161- 30 PY -12.80923
162- C ASSEMBLY LATTICE BOUNDS
163- 31 PY 10.82024 $ ACTUAL 10.82025
164- 32 PX 10.82024 $ ACTUAL 10.82025
165- 33 PY -10.82024 $ ACTUAL -10.82025
166- 34 PX -10.82024 $ ACTUAL -10.82025
167- 35 PY 11.4300
168- 36 PX 11.4300
169- 37 PY -11.4300
170- 38 PX -11.4300
171- 39 PY 12.17930
172- 40 PX 12.17930
173- 41 PY -11.66876
174- 42 PX -11.66876
175- 43 PX 11.66876
176- 44 PY 11.66876
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177- 45 PX 11.94054
178- 46 PY 11.94054
179- C BLANK PIN CELL
180- 48 PX -0.7213
181- 49 PX 0.7213
182- 50 PY -0.7213
183- 51 PY 0.7213
184- 52 PY 0.0001
185- 53 PY -0.0001
186- 54 PY 0.0
187- 55 P 1. -1. 0. 0.
188- 56 P 1. 1. 0. 0. $ 24.35
189- C EXTRA CARDS
190- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
191- 58 PY 2.14376
192- 59 PX 1.9050
193- 60 PY 1.9050
194- 61 PX 1.270
195- 62 PY 1.270050
196- 64 PX -.0000005
197- 65 PY -.0000005
198- 66 PX 95.
199- 67 PY 95.
200- C OUTER BARRIER
201- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
202- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
203- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
204- 73 PZ 282.3500 $TOP OF OUTER BARRIER
205- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
206- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
207- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
208- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
209-
210- MODE N
211- C VOL 88J
212- KCODE 3000 1. 5 20
213- KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
214- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
215- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
216- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
217- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
218- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
219- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.
220- C 22.19 13.53 10. 22.19 17.86 10. 22.19 22.19 10.
221- C 4.87 4.87 75. 4.87 9.20 75. 4.87 13.53 75.
222- C 4.87 17.86 75. 4.87 22.19 75. 9.20 4.87 75.
223- C 9.20 9.20 75. 9.20 13.53 75. 9.20 17.86 75.
224- C 9.20 22.19 75. 13.53 4.87 75. 13.53 9.20 75.
225- C 13.53 17.86 75. 13.53 22.19 75. 17.86 4.87 75.
226- C 17.86 9.20 75. 17.86 13.53 75. 17.86 17.86 75.
227- C 17.86 22.19 75. 22.19 4.87 75. 22.19 9.20 75.
228- C 22.19 13.53 75. 22.19 17.86 75. 22.19 22.19 75.
229- C 4.87 4.87 150. 4.87 9.20 150. 4.87 13.53 150.
230- C 4.87 17.86 150. 4.87 22.19 150. 9.20 4.87 150.
231- C 9.20 9.20 150. 9.20 13.53 150. 9.20 17.86 150.
232- C 9.20 22.19 150. 13.53 4.87 150. 13.53 9.20 150.
233- C 13.53 17.86 150. 13.53 22.19 150. 17.86 4.87 150.
234- C 17.86 9.20 150. 17.86 13.53 150. 17.86 17.86 150.
235- C 17.86 22.19 150. 22.19 4.87 150. 22.19 9.20 150.
236- C 22.19 13.53 150. 22.19 17.86 150. 22.19 22.19 150.

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237-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
238-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
239-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
240-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
241-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
242-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
243-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
244-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
245-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
246-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
247-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
248-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
249-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
250-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
251-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
252-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
253-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
254-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
255-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
256-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
257-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
258-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
259-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
260-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
261-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
262-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
263-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
264-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
265-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
266-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
267-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
268-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
269-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
270-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
271-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
272-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
273-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
274-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
275-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
276-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
277-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
278-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
279-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.
280-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
281-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
282-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
283-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
284-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
285-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
286-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
287-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
288-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
289-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
290-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
291-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
292-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
293-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
294-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
295-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
296-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.

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297- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
298- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
299- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
300- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
301- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
302- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
303- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
304- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
305- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
306- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
307- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
308- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
309- C      MATERIAL SPECIFICATIONS
310- C      WATER AT 300 K
311- M1     1001.50C 6.6878-2 8016.50C 3.3439-2
312- MT1    LWTR.01T
313- C      3.00%/O GWD/O YEAR -- UO2
314- M2     8016.50C 4.6947E-02
315-       92235.50C 7.1294E-04
316-       92238.50C 2.2761E-02
317- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
318- M3     2004.50C 1.0
319- C      ZIRCALOY-4
320- M4     8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
321-       40000.50C -0.9818 50000.35C -0.0140
322- C      ALLOY 825
323- M5     6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
324-       16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
325-       25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
326-       29000.50C -0.0250 42000.50C -0.0300
327- C      1100 ALUMINUM ALLOY
328- M6     13027.50C -0.99880 29000.50C -0.00120
329- C      A516 CARBON STEEL
330- M7     6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
331-       16032.50C -0.00035 25055.50C -0.0090
332-       26000.55C -0.98535
333- C      SS316L
334- M8     6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
335-       15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
336-       25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
337-       42000.50C -0.02500
338- C      TALLIES
339- PRINT
1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3079
POINTS NOT IN ANY CELL 0
POINTS IN CELLS OF ZERO IMPORTANCE 0
POINTS IN VOID CELLS 0
POINTS IN AMBIGUOUS CELLS 0
TOTAL POINTS REJECTED 0
POINTS REMAINING 3079
POINTS AFTER EXPANSION OR CONTRACTION 3007
NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

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1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.042094E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE	ATOM FRACTION
1	1001, .66667	8016, .33333
2	8016, .66666	92235, .01012
3	2004, 1.00000	
4	8016, .00681	24000, .00175
5	50000, .01071	26000, .00325
6	6000, .00234	14000, .01001
7	22000, .01057	25055, .01023
8	28000, .40235	29000, .02212
	13027, .99949	29000, .00051
	6000, .01011	14000, .00541
	25055, .00905	26000, .97421
	6000, .00140	7014, .00399
	16032, .00052	24000, .18282
	28000, .11433	42000, .01457

MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE	MASS FRACTION
1	1001, .11191	8016, .88809
2	8016, .11850	92235, .02644
3	2004, 1.00000	
4	8016, .00120	24000, .00100
5	50000, .01400	26000, .00200
6	6000, .00050	14000, .00499
7	22000, .00898	25055, .00998
8	28000, .41895	29000, .02494
	13027, .99880	29000, .00120
	6000, .00220	14000, .00275
	25055, .00900	26000, .98535
	6000, .00030	7014, .00101
	16032, .00030	24000, .17172
	28000, .12121	42000, .02525

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
 1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	33	7.04210E-02	1.05226E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
15	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
34	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
50	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
51	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
52	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
53	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
54	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
55	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
56	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
57	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
58	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
59	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
60	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
61	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
62	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
63	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

64	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
65	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
66	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
67	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
68	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	NOT A BOUNDARY
47	49	.00000E+00	.00000E+00	NOT A BOUNDARY
48	50	.00000E+00	.00000E+00	NOT A BOUNDARY
49	51	.00000E+00	.00000E+00	NOT A BOUNDARY
50	52	.00000E+00	.00000E+00	NOT A BOUNDARY

51	53	.00000E+00	.00000E+00	NOT A BOUNDARY
52	54	.00000E+00	.00000E+00	NOT A BOUNDARY
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE	
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00	
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
8	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
9	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
10	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
11	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
12	32	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
13	33	2	7.04210E-02	1.05226E+01	.00000E+00	0	1.0000E+00	
14	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
15	35	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
16	36	3	2.68559E-04	1.78500E-03	.00000E+00	0	1.0000E+00	
17	37	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	

18	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
33	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
34	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
36	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1 REFL.	PX	.0000000E+00
2	2 REFL.	PY	.0000000E+00
3	3 REFL.	PZ	.0000000E+00

4	4	PZ	2.0320000E+02			
5	5	PZ	2.2225000E+02			
6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	-1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			

64	67	PY	9.5000000E+01	
65	70	CZ	7.6525000E+01	
66	71	PZ	2.4635000E+02	
67	72	PZ	2.7135000E+02	
68	73	PZ	2.8235000E+02	
69	74	PX	-1.1856720E+01	
70	75	PY	-1.1856720E+01	
71	80	PZ	3.1235000E+02	
72	81	CZ	1.0652500E+02	
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00

WARNING. SURFACE 48 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 49 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 50 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 51 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 52 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 53 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 54 IS NOT USED FOR ANYTHING.
1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08

PRINT TABLE 72

38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

8 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE	LENGTH
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TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY

(1301)	79/07/31.
(1270)	79/06/19.

6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
TOTAL NU				
TOTAL NU				

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=OK	(48)	86/02/01
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TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN			1001	0	010/22/85
TOTAL	683883						

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1 DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	88384
TALLIES	0
BANK	18403
CROSS SECTIONS	683883
TOTAL	790670

DUMP NO. 1 ON FILE RUNTPF NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

9 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .05 PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/0 GWD/0 year (mpc12fr)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.600E-01	-2.229E-01	3.217E-02	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.977E-01	3.542E-01
2	-2.360E-01	3.595E-01	6.404E+00	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.977E-01	2.539E+00

3	-4.482E-01	1.049E-01	3.848E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.977E-01	1.416E+00
4	1.755E-01	-4.926E-02	7.846E+00	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.977E-01	1.297E+00
5	-1.891E-01	2.116E-01	2.480E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.977E-01	1.609E+00
6	4.456E-01	2.781E-02	2.209E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.977E-01	1.633E+00
7	-2.620E-01	1.359E-01	1.182E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.977E-01	6.485E-01
8	-3.318E-01	-1.619E-01	7.974E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.977E-01	3.224E+00
9	6.530E-02	-3.855E-01	8.715E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.977E-01	2.064E+00
10	1.260E-01	-1.470E-01	6.253E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.977E-01	9.189E-01
11	-4.301E-01	-1.052E-01	8.813E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.977E-01	2.622E+00
12	-1.963E-01	3.881E-01	8.835E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.977E-01	6.219E-01
13	1.777E-01	-3.756E-01	8.547E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.977E-01	6.696E-01
14	3.188E-01	-1.847E-01	7.395E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.977E-01	1.104E+00
15	-7.829E-03	-4.136E-01	5.654E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.977E-01	5.326E+00
16	1.548E-01	-4.360E-01	5.603E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.977E-01	2.400E-01
17	-3.201E-01	-2.424E-01	5.574E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.977E-01	1.044E+00
18	-3.631E-01	2.195E-01	5.614E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.977E-01	7.866E-01
19	3.120E-02	1.600E-02	8.629E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.977E-01	1.731E+00
20	3.188E-01	-2.286E-01	1.057E+02	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.977E-01	1.039E+00
21	-2.797E-01	-2.913E-01	9.744E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.977E-01	1.379E+00
22	1.262E-01	2.317E-02	1.090E+02	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.977E-01	9.425E-01
23	2.102E-01	-2.741E-01	1.146E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.977E-01	8.122E-01
24	2.654E-02	-1.397E-01	7.444E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.977E-01	1.102E+00
25	-4.517E-01	-8.471E-02	7.462E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.977E-01	4.902E+00
26	2.098E-01	2.038E-01	8.422E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.977E-01	2.893E+00
27	2.421E-01	1.111E-01	9.271E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.977E-01	2.134E+00
28	-3.060E-01	5.202E-02	9.660E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.977E-01	2.337E+00
29	-3.479E-01	3.050E-01	9.669E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.977E-01	4.440E+00
30	2.587E-01	-2.873E-01	9.846E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.977E-01	1.152E+00
31	-1.452E-02	-6.694E-02	1.190E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.977E-01	3.653E-01
32	3.438E-01	-2.290E-01	7.170E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.977E-01	8.279E-01
33	1.548E-01	-2.476E-01	6.689E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.977E-01	7.752E-01
34	1.852E-01	-9.388E-02	8.787E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.977E-01	1.206E+00
35	-4.110E-01	9.766E-02	8.147E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.977E-01	8.375E-01
36	-2.550E-01	2.289E-01	7.936E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.977E-01	6.846E-01
37	-3.336E-01	-8.533E-02	8.015E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.977E-01	9.473E-01
38	-2.686E-01	1.846E-01	8.162E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.977E-01	6.205E-01
39	1.065E-02	-4.005E-01	4.678E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.977E-01	9.443E-01
40	2.129E-01	-4.077E-01	6.489E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.977E-01	7.212E-01
41	-1.606E-01	2.424E-01	4.000E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.977E-01	3.072E-01
42	3.854E-01	-2.856E-02	6.420E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.977E-01	3.517E+00
43	-4.132E-01	1.452E-01	7.885E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.977E-01	3.452E-01
44	2.034E-01	1.413E-01	6.904E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.977E-01	6.667E-01
45	-1.070E-01	-3.908E-01	7.191E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.977E-01	2.801E+00
46	-2.042E-01	3.701E-01	6.202E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.977E-01	3.931E+00
47	-4.218E-01	2.960E-02	5.308E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.977E-01	9.029E-01
48	1.972E-01	6.249E-03	5.509E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.977E-01	3.360E+00
49	1.963E-01	-8.793E-02	9.831E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.977E-01	1.613E+00
50	-3.773E-01	2.004E-01	8.234E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.977E-01	2.916E+00

CYCLE	1	K(COLLISION)	1.082996	REMOVAL LIFETIME(ABS)	3.2198E+03	SOURCE POINTS GENERATED	3318
CYCLE	2	K(COLLISION)	1.115436	REMOVAL LIFETIME(ABS)	3.3509E+03	SOURCE POINTS GENERATED	3156
CYCLE	3	K(COLLISION)	1.084675	REMOVAL LIFETIME(ABS)	3.1609E+03	SOURCE POINTS GENERATED	2899
CYCLE	4	K(COLLISION)	1.114128	REMOVAL LIFETIME(ABS)	3.2288E+03	SOURCE POINTS GENERATED	3079
CYCLE	5	K(COLLISION)	1.104806	REMOVAL LIFETIME(ABS)	3.2158E+03	SOURCE POINTS GENERATED	2972

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 5

CYCLE 6 K(COLLISION) 1.127895 REMOVAL LIFETIME(ABS) 3.3061E+03 SOURCE POINTS GENERATED 3010

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.110851		1.119373	.0076	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	1.100260		1.101683	.0013	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	1.087871		1.109649	.0196	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.2212E+03		3.2608E+03	.0121				
REM LIFE(ABS)	3.1612E+03		3.2336E+03	.0224	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	2961							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.105706		1.114817	.0060	K(COL/ABS)	1.106454 .0045	1.091649 .0082	.8258
K(ABSORPTION)	1.090904		1.098090	.0034	K(ABS/TK LN)	1.107895 .0064	1.100396 .0045	-.3380
K(TRK LENGTH)	1.133803		1.117700	.0134	K(TK LN/COL)	1.116259 .0080	1.115080 .0084	.2516
REM LIFE(COL)	3.3745E+03		3.2987E+03	.0134				
REM LIFE(ABS)	3.3653E+03		3.2775E+03	.0185	LIFE(COL/ABS)	3.2881E+03 .0159	3.3340E+03 .0135	.9761
SOURCE POINTS GENERATED	3010							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.090374		1.108707	.0070	K(COL/ABS)	1.102500 .0048	1.091249 .0032	.8653
K(ABSORPTION)	1.090903		1.096293	.0029	K(ABS/TK LN)	1.107645 .0045	1.099650 .0033	-.3454
K(TRK LENGTH)	1.122888		1.118997	.0095	K(TK LN/COL)	1.113852 .0061	1.112175 .0073	.0567
REM LIFE(COL)	3.1580E+03		3.2635E+03	.0144	K(COL/ABS/TK LN)	1.107999 .0044	1.094575 .0039	
REM LIFE(ABS)	3.1862E+03		3.2547E+03	.0149	LIFE(COL/ABS)	3.2591E+03 .0144	3.2609E+03 .0177	.9239
SOURCE POINTS GENERATED	2929							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.125374		1.112040	.0062	K(COL/ABS)	1.104615 .0042	1.091306 .0023	.8771
K(ABSORPTION)	1.100779		1.097190	.0024	K(ABS/TK LN)	1.108003 .0035	1.100581 .0025	-.3319
K(TRK LENGTH)	1.118084		1.118815	.0074	K(TK LN/COL)	1.115427 .0049	1.114787 .0056	.0388
REM LIFE(COL)	3.2817E+03		3.2671E+03	.0112	K(COL/ABS/TK LN)	1.109348 .0036	1.094693 .0029	
REM LIFE(ABS)	3.2754E+03		3.2588E+03	.0116	LIFE(COL/ABS)	3.2630E+03 .0112	3.2647E+03 .0130	.9247
SOURCE POINTS GENERATED	3121							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.141408		1.116935	.0067	K(COL/ABS)	1.107801 .0045	1.091140 .0018	.9177
K(ABSORPTION)	1.106054		1.098668	.0024	K(ABS/TK LN)	1.109538 .0032	1.102014 .0026	-.1343
K(TRK LENGTH)	1.128371		1.120407	.0062	K(TK LN/COL)	1.118671 .0049	1.118825 .0055	.1800
REM LIFE(COL)	3.2292E+03		3.2608E+03	.0094	K(COL/ABS/TK LN)	1.112003 .0038	1.094516 .0022	
REM LIFE(ABS)	3.2148E+03		3.2515E+03	.0098	LIFE(COL/ABS)	3.2561E+03 .0094	3.2586E+03 .0106	.9280
SOURCE POINTS GENERATED	3073							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.074620		1.110890	.0078	K(COL/ABS)	1.104093 .0051	1.092559 .0014	.9283
K(ABSORPTION)	1.089072		1.097297	.0024	K(ABS/TK LN)	1.106174 .0041	1.097621 .0027	.2743
K(TRK LENGTH)	1.082918		1.115052	.0071	K(TK LN/COL)	1.112971 .0066	1.113422 .0072	.5640
REM LIFE(COL)	3.1886E+03		3.2505E+03	.0086	K(COL/ABS/TK LN)	1.107746 .0050	1.094344 .0012	

REM LIFE(ABS) 3.1948E+03 3.2434E+03 .0086
SOURCE POINTS GENERATED 2849

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES
K(COLLISION)	1.097729		1.109245		.0070
K(ABSORPTION)	1.117781		1.099857		.0031
K(TRK LENGTH)	1.102546		1.113489		.0063
REM LIFE(COL)	3.2378E+03		3.2489E+03		.0074
REM LIFE(ABS)	3.2263E+03		3.2413E+03		.0075
SOURCE POINTS GENERATED	3124				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	1.104551 .0044	1.099874 .0034	.4369
K(ABS/TK LN)	1.106673 .0035	1.102407 .0031	.0089
K(TK LN/COL)	1.111367 .0059	1.111839 .0064	.5846
K(COL/ABS/TK LN)	1.107530 .0043	1.101989 .0038	
LIFE(COL/ABS)	3.2451E+03 .0073	3.2456E+03 .0080	.9324

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES
K(COLLISION)	1.104984		1.108771		.0062
K(ABSORPTION)	1.094077		1.099215		.0028
K(TRK LENGTH)	1.134749		1.115851		.0060
REM LIFE(COL)	3.2742E+03		3.2517E+03		.0066
REM LIFE(ABS)	3.2893E+03		3.2466E+03		.0068
SOURCE POINTS GENERATED	2992				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	1.103993 .0039	1.099259 .0030	.4407
K(ABS/TK LN)	1.107533 .0032	1.102398 .0027	-.0663
K(TK LN/COL)	1.112311 .0053	1.112518 .0057	.5204
K(COL/ABS/TK LN)	1.107946 .0038	1.102026 .0034	
LIFE(COL/ABS)	3.2492E+03 .0066	3.2502E+03 .0070	.9286

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES
K(COLLISION)	1.079429		1.105837		.0061
K(ABSORPTION)	1.082896		1.097583		.0029
K(TRK LENGTH)	1.060734		1.110339		.0073
REM LIFE(COL)	3.1216E+03		3.2387E+03		.0072
REM LIFE(ABS)	3.1208E+03		3.2340E+03		.0073
SOURCE POINTS GENERATED	2985				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	1.101710 .0041	1.097068 .0031	.5627
K(ABS/TK LN)	1.103961 .0043	1.098067 .0031	.3059
K(TK LN/COL)	1.108088 .0061	1.107018 .0063	.6383
K(COL/ABS/TK LN)	1.104586 .0046	1.097665 .0037	
LIFE(COL/ABS)	3.2364E+03 .0071	3.2369E+03 .0076	.9496

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES
K(COLLISION)	1.091499		1.104534		.0057
K(ABSORPTION)	1.117194		1.099366		.0031
K(TRK LENGTH)	1.090055		1.108495		.0068
REM LIFE(COL)	2.9814E+03		3.2153E+03		.0098
REM LIFE(ABS)	3.0513E+03		3.2174E+03		.0084
SOURCE POINTS GENERATED	3023				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	1.101950 .0037	1.099930 .0032	.3591
K(ABS/TK LN)	1.103931 .0039	1.100587 .0031	.1242
K(TK LN/COL)	1.106514 .0057	1.105482 .0058	.6562
K(COL/ABS/TK LN)	1.104132 .0042	1.100577 .0035	
LIFE(COL/ABS)	3.2164E+03 .0090	3.2194E+03 .0083	.9582

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES
K(COLLISION)	1.100082		1.104163		.0052
K(ABSORPTION)	1.095789		1.099068		.0028
K(TRK LENGTH)	1.089790		1.106936		.0064
REM LIFE(COL)	3.2221E+03		3.2159E+03		.0089
REM LIFE(ABS)	3.2033E+03		3.2162E+03		.0077
SOURCE POINTS GENERATED	3045				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	1.101615 .0034	1.099620 .0029	.3629
K(ABS/TK LN)	1.103002 .0037	1.100034 .0029	.1417
K(TK LN/COL)	1.105550 .0053	1.104755 .0053	.6530
K(COL/ABS/TK LN)	1.103389 .0039	1.100030 .0032	
LIFE(COL/ABS)	3.2161E+03 .0082	3.2166E+03 .0076	.9560

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES
K(COLLISION)	1.082014		1.102459		.0050
K(ABSORPTION)	1.074358		1.097167		.0031
K(TRK LENGTH)	1.094568		1.105985		.0059
REM LIFE(COL)	3.3234E+03		3.2242E+03		.0086

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	1.099813 .0035	1.097819 .0032	.4577
K(ABS/TK LN)	1.101576 .0036	1.098573 .0031	.1969
K(TK LN/COL)	1.104222 .0050	1.103370 .0051	.6593
K(COL/ABS/TK LN)	1.101870 .0038	1.098537 .0035	

REM LIFE(ABS) 3.3280E+03 3.2248E+03 .0075 LIFE(COL/ABS) 3.2245E+03 .0080 3.2254E+03 .0075 .9590
SOURCE POINTS GENERATED 3025

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.075903		1.100562		.0050	K(COL/ABS)	1.098185	1.096226	.5310
K(ABSORPTION)	1.078127		1.095807		.0032	K(ABS/TK LN)	1.100028	1.097040	.2818
K(TRK LENGTH)	1.081691		1.104250		.0057	K(TK LN/COL)	1.102406	1.101564	.6898
REM LIFE(COL)	3.2991E+03		3.2295E+03		.0081	K(COL/ABS/TK LN)	1.100206	1.096994	.0035
REM LIFE(ABS)	3.2644E+03		3.2277E+03		.0070	LIFE(COL/ABS)	3.2286E+03	3.2261E+03	.9569
SOURCE POINTS GENERATED	2960								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.107000		1.100991		.0046	K(COL/ABS)	1.098929	1.097366	.5289
K(ABSORPTION)	1.111713		1.096867		.0031	K(ABS/TK LN)	1.099541	1.097877	.1509
K(TRK LENGTH)	1.073715		1.102214		.0057	K(TK LN/COL)	1.101603	1.101295	.6223
REM LIFE(COL)	3.2506E+03		3.2309E+03		.0076	K(COL/ABS/TK LN)	1.100024	1.097672	.0032
REM LIFE(ABS)	3.2432E+03		3.2287E+03		.0065	LIFE(COL/ABS)	3.2298E+03	3.2268E+03	.9570
SOURCE POINTS GENERATED	3137								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 20
1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/0 GWD/0 year (mpc12fr)

PROBID = 09/29/95 15:17:11
09/29/95 13:51:29

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	60538	9.9111E-01	2.0362E+00	ESCAPE	0	0.	0.
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	7.0565E-02	5.4359E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	60594	7.0861E-02	5.6286E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2641E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	112	1.4613E-03	1.0305E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9325E+00
TOTAL	60650	1.0631E+00	2.0373E+00	CAPTURE	0	5.4834E-01	3.1386E-02
				LOSS TO (N,XN)	56	7.3063E-04	6.2057E-03
				LOSS TO FISSION	0	4.4321E-01	6.7208E-02
				TOTAL	60650	1.0631E+00	2.0373E+00

NUMBER OF NEUTRONS BANKED 56
NEUTRON TRACKS PER SOURCE PARTICLE 1.0019E+00
NEUTRON COLLISIONS PER SOURCE PARTICLE 5.7507E+01
TOTAL NEUTRON COLLISIONS 3481341
NET MULTIPLICATION 1.0007E+00 .0002

COMPUTER TIME SO FAR IN THIS RUN 43.33 MINUTES
COMPUTER TIME IN MCRUN 43.28 MINUTES
SOURCE PARTICLES PER MINUTE 1.3986E+03
RANDOM NUMBERS GENERATED 42024319

AVERAGE LIFETIME, SHAKES
ESCAPE .0000E+00
CAPTURE 3.2289E+03
CAPTURE OR ESCAPE 3.2289E+03
ANY TERMINATION 3.5506E+03

CUTOFFS
TCO 1.0000E+34
ECO .0000E+00
WC1 -5.0000E-01
WC2 -2.5000E-01
MAXIMUM NUMBER EVER IN BANK 1
BANK OVERFLOWS TO BACKUP FILE 0
FIELD LENGTH 0
MOST RANDOM NUMBERS USED WAS 7053 IN HISTORY 18330

RANGE OF SAMPLED SOURCE WEIGHTS = 9.0416E-01 TO 1.0530E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26193	9624	308407	3.1954E+00	1.1650E-04	3.7319E-01	7.2100E-01	1.0935E+00
3	3	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	703885	60594	301130	4.1115E+00	7.2202E-04	7.2926E-01	8.6798E-01	2.5234E+00
14	34	5417	293	1216	1.1684E-02	4.9556E-05	2.2402E-01	5.8272E-01	4.2959E+00
15	35	194	25	475	3.9036E-03	3.8689E-05	2.7417E-01	5.5573E-01	7.8582E-01
16	36	1324494	60594	13	1.9080E-04	6.1295E-04	6.9112E-01	8.6310E-01	3.5114E+03
17	37	365	25	27	1.8874E-04	3.0258E-05	2.0548E-01	5.3890E-01	7.0973E-01
18	38	1431505	60594	51789	7.4938E-01	5.9113E-04	6.8017E-01	8.6286E-01	4.1102E+00
19	39	401	27	159	1.2774E-03	3.7824E-05	2.8819E-01	5.4552E-01	7.9111E-01
20	40	2055661	60594	1466305	1.8803E+01	5.0997E-04	6.4849E-01	8.6010E-01	1.6183E+00
21	41	58197	31781	92294	1.1819E+00	3.7107E-04	5.9942E-01	8.5662E-01	1.5243E+00
22	42	14	8	51	3.6006E-04	1.3387E-05	3.1789E-02	4.7317E-01	4.7507E-01
23	43	123186	33582	3638	5.2070E-02	3.8300E-04	6.0241E-01	8.5735E-01	4.1300E+00
24	44	138277	35893	31309	4.0176E-01	3.9559E-04	6.0404E-01	8.5792E-01	1.5417E+00
25	45	151258	36871	3267	4.7097E-02	4.0001E-04	6.0963E-01	8.5874E-01	4.1254E+00
26	46	184060	42008	74037	9.5150E-01	4.0357E-04	6.1051E-01	8.5881E-01	1.5495E+00
27	47	4275	3240	7260	9.5524E-02	3.8043E-04	5.9274E-01	8.6740E-01	1.5245E+00
28	48	9031	3543	322	4.7193E-03	4.0361E-04	6.0283E-01	8.6967E-01	4.1144E+00
29	49	11745	4922	6446	8.4483E-02	4.0861E-04	6.2014E-01	8.6901E-01	1.5654E+00
30	50	33894	15231	66317	7.7166E-01	3.4431E-04	5.7621E-01	8.1211E-01	1.4864E+00
31	51	33840	14445	12583	1.5122E-01	3.9053E-04	5.7290E-01	7.9503E-01	2.0797E+00
32	52	33603	14128	2419	3.3712E-02	3.8628E-04	5.6191E-01	7.9058E-01	9.1501E+00
33	53	33656	14196	12627	1.5060E-01	3.7115E-04	5.5854E-01	7.8669E-01	2.0670E+00
34	54	339	81	2042	1.7288E-02	3.5459E-05	1.6294E-01	5.7140E-01	6.9374E-01
35	55	34687	15493	68035	7.9301E-01	3.3565E-04	5.5765E-01	8.1308E-01	1.4624E+00
36	56	34333	14729	12619	1.5292E-01	3.9228E-04	5.6749E-01	7.9827E-01	2.0935E+00
37	57	33884	14394	2455	3.4328E-02	3.8910E-04	5.6429E-01	7.9289E-01	9.1646E+00
38	58	34109	14462	12462	1.4927E-01	3.7691E-04	5.4932E-01	7.9170E-01	2.0914E+00
39	59	264	84	1735	1.7375E-02	5.8336E-05	2.6132E-01	6.6328E-01	8.6323E-01
40	60	52944	19092	93457	1.1346E+00	4.6314E-04	5.5326E-01	8.3194E-01	1.4938E+00
41	61	52854	18234	18123	2.2823E-01	6.4620E-04	5.7387E-01	8.2273E-01	2.2646E+00
42	62	477	104	2032	1.7597E-02	5.9154E-05	3.3609E-01	5.9792E-01	9.2404E-01
43	63	53700	19446	94287	1.1486E+00	4.6561E-04	5.4734E-01	8.3419E-01	1.4858E+00

44	64	53279	18496	18236	2.3076E-01	6.6051E-04	5.7677E-01	8.2700E-01	2.2659E+00
45	65	600	121	2641	2.2972E-02	3.4459E-05	1.5677E-01	5.7657E-01	6.8384E-01
46	66	10007	5024	441030	3.9559E+00	5.3003E-05	2.5350E-01	6.0984E-01	8.3172E-01
47	67	10038	3930	14715	1.4988E-01	1.7205E-04	4.2515E-01	6.8026E-01	1.7919E+00
48	68	9854	3929	14688	1.5267E-01	1.7500E-04	4.1197E-01	6.9477E-01	1.7950E+00
49	70	34517	9190	11373	1.4377E-01	9.5633E-04	5.8104E-01	8.2864E-01	2.3808E+00
50	71	34586	8883	6546	9.4701E-02	1.0198E-03	5.6944E-01	8.2757E-01	8.8307E+00
51	72	18460	8632	56109	7.0599E-01	1.3296E-03	5.7802E-01	8.2816E-01	2.5126E+00
52	73	34670	9202	11690	1.4736E-01	9.1989E-04	5.7091E-01	8.2319E-01	2.3761E+00
53	74	34731	8868	6463	9.2875E-02	1.0050E-03	5.6867E-01	8.2365E-01	8.8804E+00
54	75	18643	8675	58316	7.2738E-01	1.2755E-03	5.7460E-01	8.2210E-01	2.4790E+00
55	76	256	67	5071	4.3430E-02	1.7022E-05	5.4415E-02	5.6249E-01	5.2325E-01
56	77	201	53	3453	3.0550E-02	6.2354E-05	3.8199E-01	5.9946E-01	9.8293E-01
57	80	11	4	32	3.1798E-04	2.7544E-04	2.8058E-01	7.1735E-01	2.7827E+00
58	81	3663	1565	10899	1.1536E-01	3.1268E-04	4.8895E-01	7.1345E-01	2.0391E+00
59	82	2237	908	12359	1.2853E-01	2.6227E-04	4.5440E-01	7.4289E-01	1.3003E+00
60	83	6	1	154	1.1565E-03	1.0302E-04	1.8432E-01	5.8801E-01	9.5801E-01
61	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	1641	696	4897	5.8670E-02	1.0296E-03	5.9684E-01	7.8764E-01	2.1524E+00
63	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	1061	450	9003	1.0223E-01	2.1210E-03	4.9019E-01	7.8202E-01	4.3982E+00
66	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	400	212	44328	3.6967E-01	2.5256E-05	1.0615E-01	5.5015E-01	5.9826E-01

TOTAL 6929603 707243 3481341 4.1770E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3385E-01	-5.3385E-01
2	2	3.2186E-01	.0000E+00	.0000E+00	-8.9006E-01	-5.6820E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5221E-02	-1.5221E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.2223E-02	-5.2223E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5685E-02	-1.5685E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4656E-01	-1.4656E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.2711E+00	-1.2711E+00
8	10	.0000E+00	.0000E+00	.0000E+00	-2.0824E-01	-2.0824E-01
9	11	.0000E+00	.0000E+00	.0000E+00	-2.1538E-01	-2.1538E-01
10	12	.0000E+00	.0000E+00	.0000E+00	-3.7183E-01	-3.7183E-01
11	13	.0000E+00	.0000E+00	.0000E+00	-3.7917E-01	-3.7917E-01
12	32	.0000E+00	.0000E+00	.0000E+00	-1.8809E+01	-1.8809E+01
13	33	9.1548E+00	9.9111E-01	.0000E+00	-9.4332E+00	7.1277E-01
14	34	5.2048E-02	.0000E+00	.0000E+00	-5.1811E-02	2.3662E-04
15	35	1.8075E-03	.0000E+00	.0000E+00	-1.7909E-03	1.6612E-05
16	36	1.8899E+01	.0000E+00	.0000E+00	-1.8899E+01	.0000E+00
17	37	3.3484E-03	.0000E+00	.0000E+00	-3.3473E-03	1.0749E-06
18	38	2.0421E+01	.0000E+00	.0000E+00	-2.0415E+01	6.5451E-03
19	39	3.6193E-03	.0000E+00	.0000E+00	-3.5972E-03	2.2159E-05
20	40	2.9256E+01	.0000E+00	.0000E+00	-1.0728E+01	1.8528E+01
21	41	8.2587E-01	.0000E+00	.0000E+00	-8.2223E-01	3.6386E-03
22	42	1.1854E-04	.0000E+00	.0000E+00	-1.0882E-04	9.7175E-06
23	43	1.7448E+00	.0000E+00	.0000E+00	-1.7442E+00	5.6611E-04
24	44	1.9597E+00	.0000E+00	.0000E+00	-1.9584E+00	1.2549E-03
25	45	2.1447E+00	.0000E+00	.0000E+00	-2.1443E+00	4.5351E-04
26	46	2.6140E+00	.0000E+00	.0000E+00	-1.1087E+00	1.5052E+00
27	47	6.1300E-02	.0000E+00	.0000E+00	-6.1003E-02	2.9617E-04
28	48	1.2942E-01	.0000E+00	.0000E+00	-1.2937E-01	5.1713E-05
29	49	1.6857E-01	.0000E+00	.0000E+00	-6.8414E-02	1.0016E-01

30	50	4.5606E-01	.0000E+00	.0000E+00	.0000E+00	-2.5613E-01	1.9993E-01
31	51	4.4814E-01	.0000E+00	.0000E+00	.0000E+00	-4.3241E-01	1.5735E-02
32	52	4.4194E-01	.0000E+00	.0000E+00	.0000E+00	-4.3633E-01	5.6011E-03
33	53	4.4250E-01	.0000E+00	.0000E+00	.0000E+00	-1.8645E-01	2.5605E-01
34	54	3.2787E-03	.0000E+00	.0000E+00	.0000E+00	-1.7058E-04	3.1081E-03
35	55	4.6857E-01	.0000E+00	.0000E+00	.0000E+00	-2.6134E-01	2.0722E-01
36	56	4.5727E-01	.0000E+00	.0000E+00	.0000E+00	-4.4113E-01	1.6139E-02
37	57	4.4726E-01	.0000E+00	.0000E+00	.0000E+00	-4.4168E-01	5.5851E-03
38	58	4.5042E-01	.0000E+00	.0000E+00	.0000E+00	-1.8951E-01	2.6090E-01
39	59	2.8764E-03	.0000E+00	.0000E+00	.0000E+00	-1.3704E-04	2.7393E-03
40	60	7.3133E-01	.0000E+00	.0000E+00	.0000E+00	-3.6822E-01	3.6310E-01
41	61	7.2441E-01	.0000E+00	.0000E+00	.0000E+00	-3.4077E-01	3.8363E-01
42	62	4.6866E-03	.0000E+00	.0000E+00	.0000E+00	-1.3551E-04	4.5511E-03
43	63	7.4291E-01	.0000E+00	.0000E+00	.0000E+00	-3.7293E-01	3.6998E-01
44	64	7.3330E-01	.0000E+00	.0000E+00	.0000E+00	-3.4690E-01	3.8640E-01
45	65	5.7714E-03	.0000E+00	.0000E+00	.0000E+00	-1.6043E-04	5.6109E-03
46	66	1.1759E-01	.0000E+00	.0000E+00	.0000E+00	-7.1344E-02	4.6245E-02
47	67	1.1559E-01	.0000E+00	.0000E+00	.0000E+00	-5.8859E-02	5.6732E-02
48	68	1.1514E-01	.0000E+00	.0000E+00	.0000E+00	-5.7131E-02	5.8009E-02
49	70	4.7486E-01	.0000E+00	.0000E+00	.0000E+00	-4.6944E-01	5.4184E-03
50	71	4.7461E-01	.0000E+00	.0000E+00	.0000E+00	-4.7386E-01	7.4864E-04
51	72	2.5491E-01	.0000E+00	.0000E+00	.0000E+00	-2.3407E-01	2.0840E-02
52	73	4.7434E-01	.0000E+00	.0000E+00	.0000E+00	-4.6872E-01	5.6171E-03
53	74	4.7373E-01	.0000E+00	.0000E+00	.0000E+00	-4.7296E-01	7.7424E-04
54	75	2.5568E-01	.0000E+00	.0000E+00	.0000E+00	-2.3379E-01	2.1885E-02
55	76	2.5472E-03	.0000E+00	.0000E+00	.0000E+00	-2.2988E-03	2.4846E-04
56	77	2.0099E-03	.0000E+00	.0000E+00	.0000E+00	-1.8500E-03	1.5994E-04
57	80	1.0230E-04	.0000E+00	.0000E+00	.0000E+00	-8.1687E-05	2.0616E-05
58	81	4.3416E-02	.0000E+00	.0000E+00	.0000E+00	-3.4879E-02	8.5366E-03
59	82	2.7783E-02	.0000E+00	.0000E+00	.0000E+00	-2.7358E-02	4.2529E-04
60	83	6.5168E-05	.0000E+00	.0000E+00	.0000E+00	-6.4210E-05	9.5806E-07
61	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	2.1281E-02	.0000E+00	.0000E+00	.0000E+00	-1.9181E-02	2.0991E-03
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	1.3349E-02	.0000E+00	.0000E+00	.0000E+00	-1.1540E-02	1.8099E-03
66	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	4.9076E-03	.0000E+00	.0000E+00	.0000E+00	-2.9566E-03	1.9509E-03

TOTAL	9.7195E+01	9.9111E-01	.0000E+00	.0000E+00	-9.7195E+01	9.9111E-01
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	1.8435E-04	.0000E+00	.0000E+00	.0000E+00	1.8435E-04
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	.0000E+00	.0000E+00	5.3375E-04	.0000E+00	.0000E+00	.0000E+00	5.3375E-04
14	34	.0000E+00	.0000E+00	2.7412E-05	.0000E+00	.0000E+00	.0000E+00	2.7412E-05
15	35	.0000E+00	.0000E+00	4.1511E-06	.0000E+00	.0000E+00	.0000E+00	4.1511E-06

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL	
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	
TOTAL 1NEUTRON WEIGHT BALANCE IN EACH CELL --							PRINT TABLE 130

2	2	.0000E+00	.0000E+00	-1.3915E-02	.0000E+00	.0000E+00	-1.3915E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	1.3697E-03	.0000E+00	-2.7078E-01	-6.8483E-04	-4.4321E-01	-7.1330E-01
14	34	.0000E+00	.0000E+00	-2.6404E-04	.0000E+00	.0000E+00	-2.6404E-04
15	35	.0000E+00	.0000E+00	-2.0763E-05	.0000E+00	.0000E+00	-2.0763E-05
16	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	37	.0000E+00	.0000E+00	-1.0749E-06	.0000E+00	.0000E+00	-1.0749E-06
18	38	6.0556E-05	.0000E+00	-6.5474E-03	-3.0278E-05	.0000E+00	-6.5171E-03
19	39	.0000E+00	.0000E+00	-7.3514E-06	.0000E+00	.0000E+00	-7.3514E-06
20	40	.0000E+00	.0000E+00	-5.0759E-02	.0000E+00	.0000E+00	-5.0759E-02
21	41	.0000E+00	.0000E+00	-3.6519E-03	.0000E+00	.0000E+00	-3.6519E-03
22	42	.0000E+00	.0000E+00	-1.9859E-06	.0000E+00	.0000E+00	-1.9859E-06
23	43	.0000E+00	.0000E+00	-5.7615E-04	.0000E+00	.0000E+00	-5.7615E-04
24	44	.0000E+00	.0000E+00	-1.2244E-03	.0000E+00	.0000E+00	-1.2244E-03
25	45	.0000E+00	.0000E+00	-4.5577E-04	.0000E+00	.0000E+00	-4.5577E-04
26	46	.0000E+00	.0000E+00	-2.8459E-03	.0000E+00	.0000E+00	-2.8459E-03
27	47	.0000E+00	.0000E+00	-2.9212E-04	.0000E+00	.0000E+00	-2.9212E-04
28	48	.0000E+00	.0000E+00	-5.1713E-05	.0000E+00	.0000E+00	-5.1713E-05
29	49	.0000E+00	.0000E+00	-2.5338E-04	.0000E+00	.0000E+00	-2.5338E-04
30	50	.0000E+00	.0000E+00	-2.4152E-03	.0000E+00	.0000E+00	-2.4152E-03
31	51	.0000E+00	.0000E+00	-1.0536E-02	.0000E+00	.0000E+00	-1.0536E-02
32	52	.0000E+00	.0000E+00	-6.2686E-04	.0000E+00	.0000E+00	-6.2686E-04
33	53	.0000E+00	.0000E+00	-1.0718E-02	.0000E+00	.0000E+00	-1.0718E-02
34	54	.0000E+00	.0000E+00	-9.1430E-05	.0000E+00	.0000E+00	-9.1430E-05
35	55	.0000E+00	.0000E+00	-2.4793E-03	.0000E+00	.0000E+00	-2.4793E-03
36	56	.0000E+00	.0000E+00	-1.0552E-02	.0000E+00	.0000E+00	-1.0552E-02
37	57	.0000E+00	.0000E+00	-6.0778E-04	.0000E+00	.0000E+00	-6.0778E-04
38	58	.0000E+00	.0000E+00	-1.0333E-02	.0000E+00	.0000E+00	-1.0333E-02
39	59	.0000E+00	.0000E+00	-8.9157E-05	.0000E+00	.0000E+00	-8.9157E-05
40	60	.0000E+00	.0000E+00	-2.9237E-03	.0000E+00	.0000E+00	-2.9237E-03
41	61	.0000E+00	.0000E+00	-1.0994E-02	.0000E+00	.0000E+00	-1.0994E-02
42	62	.0000E+00	.0000E+00	-9.5295E-05	.0000E+00	.0000E+00	-9.5295E-05

62	85	.0000E+00	.0000E+00	-2.0511E-03	.0000E+00	.0000E+00	-2.0511E-03
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	.0000E+00	.0000E+00	-1.7871E-03	.0000E+00	.0000E+00	-1.7871E-03
66	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	.0000E+00	.0000E+00	-1.9124E-03	.0000E+00	.0000E+00	-1.9124E-03

TOTAL 1.4613E-03 .0000E+00 -5.4834E-01 -7.3063E-04 -4.4321E-01 -9.9082E-01
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	291630 16777	2.9985E+00 1.9690E-01	1.3828E-02 8.6965E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	33	8016.50C 92235.50C 92238.50C	6.6666E-01 1.0124E-02 3.2321E-01	99187 50642 151301	1.4080E+00 9.9572E-01 2.1523E+00	1.2243E-03 8.5489E-02 1.8406E-01	.0000E+00 4.2344E-01 1.9767E-02
14	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	6 4 5 1182 19	7.8561E-05 4.4786E-05 3.0690E-05 1.1314E-02 2.1574E-04	1.7584E-09 1.2120E-05 4.5401E-06 2.3375E-04 1.3621E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
15	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	457 18	3.7362E-03 1.6738E-04	2.0759E-05 4.9253E-09	.0000E+00 .0000E+00
16	36	2004.50C	1.0000E+00	13	1.9080E-04	.0000E+00	.0000E+00

17	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	25 2	1.7301E-04 1.5734E-05	1.0743E-06 6.3625E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	207 91 212 50742 537	2.9496E-03 1.2340E-03 2.7823E-03 7.3474E-01 7.6723E-03	1.8234E-06 6.9667E-05 1.2938E-04 6.1636E-03 1.8297E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 3.0278E-05 .0000E+00
19	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	152 7	1.2201E-03 5.7309E-05	7.3493E-06 2.1043E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1347270 119035	1.7129E+01 1.6741E+00	4.9544E-02 1.2145E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	85317 6977	1.0841E+00 9.7816E-02	3.5901E-03 6.1844E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	48 3	3.4048E-04 1.9576E-05	1.9851E-06 7.8850E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	16 7 19 3556 40	2.2808E-04 9.6216E-05 2.5921E-04 5.0902E-02 5.8433E-04	1.7270E-09 6.9512E-06 2.0630E-05 5.3604E-04 1.2532E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
24	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	28959 2350	3.6865E-01 3.3103E-02	1.2007E-03 2.3658E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 3 9 3214 32	1.2890E-04 2.5501E-05 1.2036E-04 4.6344E-02 4.7831E-04	1.1122E-09 8.6420E-06 4.3992E-06 4.3237E-04 1.0366E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
26	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68284 5753	8.7054E-01 8.0964E-02	2.7924E-03 5.3412E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6714 546	8.7800E-02 7.7240E-03	2.8751E-04 4.6084E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	3 0 1 317 1	3.9049E-05 .0000E+00 9.2721E-06 4.6563E-03 1.4693E-05	7.3052E-10 .0000E+00 1.2747E-06 5.0219E-05 2.1847E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
29	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5927 519	7.7124E-02 7.3592E-03	2.5124E-04 2.1349E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61581 4736	7.0927E-01 6.2387E-02	2.3799E-03 3.5267E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04	5 32 56 4 0	5.0311E-05 3.7063E-04 7.6465E-04 5.6628E-05 .0000E+00	1.5348E-08 2.7753E-05 1.0223E-05 1.0937E-06 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		24000.50C	1.8282E-01	1491	1.8943E-02	1.9136E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	488	6.6600E-03	9.4846E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7930	9.3522E-02	5.4968E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2408	2.8637E-02	1.8003E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	169	2.2202E-03	3.3775E-04	.0000E+00	.0000E+00
32	52	13027.50C	9.9949E-01	2413	3.3625E-02	6.1916E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	6	8.6334E-05	7.7007E-06	.0000E+00	.0000E+00
33	53	6000.50C	1.3966E-03	4	5.8289E-05	1.8139E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.6853E-04	2.3123E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	67	8.5896E-04	1.1003E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0613E-04	6.9555E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4020E-05	1.0926E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1484	1.8871E-02	1.9248E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	477	6.4867E-03	1.0752E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7889	9.1975E-02	5.5609E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2501	2.9718E-02	1.8475E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	2.0433E-03	2.7401E-04	.0000E+00	.0000E+00
34	54	1001.50C	6.6667E-01	1953	1.6420E-02	9.1407E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	89	8.6735E-04	2.2013E-08	.0000E+00	.0000E+00
35	55	1001.50C	6.6667E-01	63097	7.2742E-01	2.4433E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4938	6.5592E-02	3.5985E-05	.0000E+00	.0000E+00
36	56	6000.50C	1.3966E-03	3	3.7541E-05	1.1686E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	4.6348E-04	2.8624E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	63	8.7926E-04	6.1865E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	4.9265E-05	5.9492E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3753E-05	1.2055E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1456	1.8517E-02	1.8532E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	499	6.7915E-03	9.6323E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8052	9.5891E-02	5.6019E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2344	2.8150E-02	1.7669E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	156	2.1064E-03	3.3017E-04	.0000E+00	.0000E+00
37	57	13027.50C	9.9949E-01	2447	3.4218E-02	6.0143E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.1029E-04	6.3522E-06	.0000E+00	.0000E+00
38	58	6000.50C	1.3966E-03	4	5.7001E-05	4.5268E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.2897E-04	1.8335E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	62	8.6538E-04	1.1440E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.6997E-05	1.6884E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.1478E-05	2.6687E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1439	1.8261E-02	1.7424E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	511	6.9555E-03	9.8678E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7877	9.2201E-02	5.5584E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2375	2.8408E-02	1.7646E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	147	1.9541E-03	2.4663E-04	.0000E+00	.0000E+00
39	59	1001.50C	6.6667E-01	1655	1.6455E-02	8.8548E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	80	9.1913E-04	6.0909E-07	.0000E+00	.0000E+00
40	60	1001.50C	6.6667E-01	85917	1.0318E+00	2.8704E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7540	1.0281E-01	5.3264E-05	.0000E+00	.0000E+00
41	61	6000.50C	1.3966E-03	10	1.2679E-04	3.0447E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	67	8.0800E-04	3.7782E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	95	1.3694E-03	6.6483E-06	.0000E+00	.0000E+00

		15031.50C	8.1237E-04	6	8.3590E-05	2.1301E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2221	2.9204E-02	1.9071E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	822	1.1410E-02	1.0208E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11287	1.3971E-01	5.8320E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3341	4.1761E-02	1.7972E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	274	3.7546E-03	3.9078E-04	.0000E+00	.0000E+00
42	62	1001.50C	6.6667E-01	1945	1.6822E-02	9.1077E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	87	7.7507E-04	4.2178E-06	.0000E+00	.0000E+00
43	63	1001.50C	6.6667E-01	86694	1.0450E+00	2.8778E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7593	1.0359E-01	4.4939E-05	.0000E+00	.0000E+00
44	64	6000.50C	1.3966E-03	10	1.2437E-04	2.7262E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	60	7.0993E-04	2.4659E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	83	1.1773E-03	5.9619E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.2545E-05	1.6443E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4840E-05	3.2910E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2202	2.9154E-02	1.9215E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	762	1.0697E-02	9.6522E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11385	1.4178E-01	5.7692E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3477	4.3587E-02	1.8547E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	252	3.4667E-03	3.7637E-04	.0000E+00	.0000E+00
45	65	1001.50C	6.6667E-01	2526	2.1805E-02	1.2111E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	115	1.1665E-03	3.2069E-08	.0000E+00	.0000E+00
46	66	1001.50C	6.6667E-01	420630	3.7541E+00	2.0023E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20400	2.0176E-01	6.0373E-05	.0000E+00	.0000E+00
47	67	6000.50C	1.3966E-03	6	7.2315E-05	9.8845E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	5.8321E-04	3.6625E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	4.8014E-04	8.4708E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	5.3655E-05	1.6712E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	1.6996E-05	3.5468E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1647	1.7561E-02	2.8159E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	458	5.7033E-03	1.2668E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9579	9.5803E-02	7.9219E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2758	2.7651E-02	2.5672E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	166	1.9536E-03	3.2577E-04	.0000E+00	.0000E+00
48	68	6000.50C	1.3966E-03	8	8.9837E-05	1.4384E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	55	5.4871E-04	4.1496E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	66	8.0775E-04	1.4588E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.5446E-05	6.8474E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.1888E-05	1.1234E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1525	1.6617E-02	2.6065E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	503	6.1633E-03	1.3601E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9503	9.6858E-02	7.9887E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2862	2.9658E-02	2.6168E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	1.8577E-03	3.2861E-04	.0000E+00	.0000E+00
49	70	6000.50C	1.3966E-03	10	1.4769E-04	5.5925E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.3563E-04	1.3200E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	6.2705E-04	7.4125E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	9.0422E-05	1.5250E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1439	1.9097E-02	9.5025E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	454	6.1998E-03	4.8479E-04	.0000E+00	.0000E+00

		26000.55C	6.4626E-01	7047	8.7886E-02	2.7224E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2175	2.7055E-02	9.4700E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.2309E-03	2.2785E-04	.0000E+00	.0000E+00
50	71	13027.50C	9.9949E-01	6539	9.4609E-02	7.2756E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	9.1332E-05	4.3049E-06	.0000E+00	.0000E+00
51	72	6000.50C	1.3966E-03	44	6.2681E-04	2.6078E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	193	2.3601E-03	6.8302E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	285	4.0056E-03	2.1865E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	23	3.2799E-04	7.8281E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.3080E-04	1.2224E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7288	9.7845E-02	3.7458E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2334	3.2451E-02	1.9729E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34523	4.2478E-01	1.0702E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10574	1.3197E-01	3.4364E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	836	1.1494E-02	9.9305E-04	.0000E+00	1.5525E-05
52	73	6000.50C	1.3966E-03	7	7.6306E-05	9.8873E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.2291E-04	1.2242E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	8.1285E-04	2.9291E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.8647E-05	1.5900E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.8931E-05	6.0459E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1460	1.9673E-02	1.0138E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	565	7.9359E-03	5.0996E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7226	8.8914E-02	2.8591E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2183	2.7388E-02	9.5541E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	2.0304E-03	1.6552E-04	.0000E+00	.0000E+00
53	74	13027.50C	9.9949E-01	6444	9.2636E-02	7.2038E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	19	2.3900E-04	1.1063E-05	.0000E+00	.0000E+00
54	75	6000.50C	1.3966E-03	54	7.4979E-04	2.9395E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	193	2.2815E-03	6.1816E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	309	4.2758E-03	2.0561E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.6955E-04	1.7861E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0953E-04	3.5487E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7501	9.9086E-02	4.0188E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2538	3.5153E-02	1.8662E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35635	4.3471E-01	1.1087E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11173	1.3869E-01	3.6042E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	886	1.2058E-02	1.2721E-03	.0000E+00	.0000E+00
55	76	1001.50C	6.6667E-01	4848	4.1414E-02	2.2814E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	223	2.0163E-03	5.7600E-08	.0000E+00	.0000E+00
56	77	1001.50C	6.6667E-01	3293	2.9034E-02	1.5812E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	160	1.5156E-03	1.9415E-06	.0000E+00	.0000E+00
57	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	1	1.4624E-05	2.2753E-08	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	4.3971E-05	1.2967E-07	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	21	1.9159E-04	1.6343E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	7	6.7789E-05	7.4116E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

58	81	6000.50C	1.3966E-03	10	1.2523E-04	1.5603E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	5.1049E-04	2.7779E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	33	4.3180E-04	4.5318E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.0176E-05	2.3349E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1299	1.4596E-02	1.6258E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	326	4.0070E-03	7.0688E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6947	7.1902E-02	4.4538E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2089	2.2005E-02	1.4223E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	145	1.7278E-03	2.4877E-04	.0000E+00	.0000E+00
59	82	1001.50C	6.6667E-01	11543	1.1860E-01	4.0499E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	816	9.9307E-03	1.9058E-07	.0000E+00	.0000E+00
60	83	1001.50C	6.6667E-01	145	1.0831E-03	5.0976E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9	7.3360E-05	2.1827E-09	.0000E+00	.0000E+00
61	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	6000.50C	2.3404E-03	6	6.0930E-05	4.8714E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	6	9.4882E-05	3.9600E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	14	1.8765E-04	1.6005E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	45	6.1647E-04	1.1133E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	651	8.3585E-03	4.1156E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	110	1.4692E-03	9.3211E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1168	1.3790E-02	4.1318E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2748	3.2181E-02	1.0015E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	79	9.6451E-04	4.3587E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	70	9.4665E-04	7.5299E-05	.0000E+00	.0000E+00
63	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	6000.50C	1.0113E-02	52	6.4382E-04	1.5749E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	18	2.3676E-04	3.2152E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	2	3.1463E-05	1.0035E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	4.0610E-05	1.5381E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	243	3.1689E-03	1.1159E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8685	9.8106E-02	1.6735E-03	.0000E+00	.0000E+00
66	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

67	90	1001.50C	6.6667E-01	42392	3.5178E-01	1.9093E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1936	1.7881E-02	3.1109E-06	.0000E+00	.0000E+00
TOTAL				3481341	4.2215E+01	5.4834E-01	4.4321E-01	7.3063E-04

TOTAL OVER ALL CELLS FOR EACH NUCLIDE	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2623002	3.0502E+01	1.0522E-01	.0000E+00	.0000E+00
2004.50C	13	1.9080E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	233	3.0470E-03	2.2090E-07	.0000E+00	.0000E+00
7014.50C	878	1.0392E-02	4.2174E-04	.0000E+00	.0000E+00
8016.50C	300137	4.0809E+00	2.9133E-03	.0000E+00	.0000E+00
13027.50C	17849	2.5518E-01	2.6686E-03	.0000E+00	.0000E+00
14000.50C	1296	1.7795E-02	1.3377E-04	.0000E+00	.0000E+00
15031.50C	104	1.3725E-03	1.3310E-05	.0000E+00	.0000E+00
16032.50C	34	4.7284E-04	1.6584E-05	.0000E+00	.0000E+00
22000.50C	45	6.1647E-04	1.1133E-05	.0000E+00	.0000E+00
24000.50C	33211	4.2723E-01	2.8548E-02	.0000E+00	.0000E+00
25055.50C	11090	1.5125E-01	1.4332E-02	.0000E+00	.0000E+00
26000.55C	175000	2.0712E+00	8.3817E-02	.0000E+00	.0000E+00
28000.50C	53015	6.3692E-01	2.7389E-02	.0000E+00	.0000E+00
29000.50C	119	1.4915E-03	7.3008E-05	.0000E+00	.0000E+00
40000.50C	59011	8.4795E-01	7.4159E-03	.0000E+00	3.0278E-05
42000.50C	3732	4.9844E-02	5.5926E-03	.0000E+00	1.5525E-05
50000.35C	629	8.9654E-03	2.1971E-04	.0000E+00	.0000E+00
92235.50C	50642	9.9572E-01	8.5489E-02	4.2344E-01	.0000E+00
92238.50C	151301	2.1523E+00	1.8406E-01	1.9767E-02	6.8483E-04

DUMP NO. 2 ON FILE RUNTPF NPS = 60538 CTM = 43.28

9 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 43.33 MINUTES

MCNP VERSION 4A-B 10/04/91

09/29/95 15:17:11

PROBID = 09/29/95 13:51:29

1MCNP VERSION 4A-B LD=10/04/91 09/29/95 15:46:50

PROBID = 09/29/95 15:46:50

INP=mpc12fx OUTP=mpc12fxo

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/0 GWD/0 year (mpc12fx)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - NEW MODEL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL
18- 1 -1.0000 -32 34 -31 33 IMP:N=1 FILL=9 U=11
19- C TOP OF ASSEMBLY OUTSIDE LATTICE
20- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
21- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
22- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
23- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
24- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
25- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
27- C PIN LATTICE DESCRIPTION
28- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 U=9
29- FILL -8:8 -8:8 0:0 9 16R 9 2 14R 9 9 2 14R 9 9 2 4R 3 2 2R 3 2 4R 9
30- 9 2 2R 3 2 6R 3 2 2R 9 9 2 14R 9
31- 9 2 2 3 2 2 3 2 2R 3 2 2 3 2 2 9 9 2 14R 9
32- 9 2 6R 4 2 6R 9
33- 9 2 14R 9 9 2 2 3 2 2 3 2 2R 3 2 2 3 2 2 9
34- 9 2 14R 9 9 2 2R 3 2 6R 3 2 2R 9
35- 9 2 4R 3 2 2R 3 2 4R 9 9 2 14R 9 9 2 14R 9 9 16R
36- C FUEL ROD
37- 33 2 7.0426-2 -17 -4 IMP:N=1 U=2
38- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
39- 35 1 -1.0000 -17 5 IMP:N=1 U=2
40- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
41- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
42- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
43- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
44- 40 1 -1.0000 19 IMP:N=1 U=2
45- C CONTROL ROD/GUIDE TUBE
46- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
47- 42 1 -1.0000 -21 5 IMP:N=1 U=3
48- 43 4 -6.6000 21 -22 IMP:N=1 U=3
49- 44 1 -1.0000 22 -23 IMP:N=1 U=3
50- 45 4 -6.6000 23 -24 IMP:N=1 U=3
51- 46 1 -1.0000 24 IMP:N=1 U=3
52- C INSTRUMENTATION TUBE
53- 47 1 -1.0000 -25 IMP:N=1 U=4
54- 48 4 -6.6000 25 -26 IMP:N=1 U=4
55- 49 1 -1.0000 26 IMP:N=1 U=4
56- C WATER GAP - ASSEMBLY TOP
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57- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
58- C SS TUBE WALL - ASSEMBLY TOP
59- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
60- C AL-B WALL -ASSEMBLY TOP
61- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
62- C SS WALL - ASSEMBLY TOP
63- 53 8 -8.2380 46 -4 IMP:N=1 U=5
64- C WATER ABOVE BASKET
65- 54 1 -1.000 4 IMP:N=1 U=5
66- C WATER GAP - ASSEMBLY RIGHT
67- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
68- C SS TUBE WALL - ASSEMBLY RIGHT
69- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
70- C AL-B WALL - ASSEMBLY RIGHT
71- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
72- C SS WALL - ASSEMBLY RIGHT
73- 58 8 -8.2380 45 -4 IMP:N=1 U=6
74- C WATER ABOVE BASKET
75- 59 1 -1.000 4 IMP:N=1 U=6
76- C WATER GAP - ASSEMBLY BOTTOM
77- 60 1 -1.0000 37 -4 IMP:N=1 U=7
78- C SS TUBE WALL - ASSEMBLY BOTTOM
79- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
80- C WATER ABOVE BASKET
81- 62 1 -1.000 4 IMP:N=1 U=7
82- C WATER GAP - ASSEMBLY LEFT
83- 63 1 -1.0000 38 -4 IMP:N=1 U=8
84- C LOWER ST COMB - ASSEMBLY LEFT
85- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
86- C WATER ABOVE BASKET
87- 65 1 -1.000 4 IMP:N=1 U=8
88- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
89- 66 1 -1.0000 74 75 IMP:N=1 U=10
90- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
91- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
92- C AXIS MATERIALS
93- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
94- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
95- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
96- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
97- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
98- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
99- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
100- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
101- C SS316L MPC LID
102- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
103- C SS316L MPC LINER
104- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
105- C GAP SS316L/INNER 825 BARRIER
106- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
107- C GAP BETWEEN MPC LID AND INNER BARRIER LID
108- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
109- C INNER BARRIER LID - ALLOY 825
110- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
111- C INNER BARRIER - ALLOY 825
112- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
113- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
114- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
115- C OUTER BARRIER LID A516 CARBON STEEL
116- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1

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117- C OUTER BARRIER - A516 CARBON STEEL
118- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
119- C WATER, ENDS
120- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
121- C WATER, SIDE
122- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
123- C OUTSIDE WORLD
124- 91 0 -1:-2:-3:80:81 IMP:N=0
125-
126- C SURFACE SPECIFICATIONS
127- 1* PX 0.0
128- 2* PY 0.00
129- 3* PZ 0.00
130- 4 PZ 203.2000 $ TOP ACTIVE FUEL
131- 5 PZ 222.2500 $ TOP FUEL HARDWARE
132- 6 PZ 229.2500 $ TOP FUEL REGION
133- 7 PZ 231.7500 $ TOP ALLOY 825 LID
134- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
135- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
136- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
137- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
138- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
139- C PIN LATTICE BOUNDS
140- 13 PX 0.72135
141- 14 PX -0.72135
142- 15 PY 0.72135
143- 16 PY -0.72135
144- C FUEL ROD
145- 17 CZ 0.468122
146- 18 CZ 0.478790
147- 19 CZ 0.546100
148- C CONTROL ROD/GUIDE TUBE
149- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
150- 21 CZ 0.50292
151- 22 CZ 0.56007
152- 23 CZ 0.63246
153- 24 CZ 0.67310
154- C INSTRUMENTATION TUBE
155- 25 CZ 0.56007
156- 26 CZ 0.62611
157- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
158- 27 PX 12.80923
159- 28 PX -12.80923
160- 29 PY 12.80923
161- 30 PY -12.80923
162- C ASSEMBLY LATTICE BOUNDS
163- 31 PY 10.82024 $ ACTUAL 10.82025
164- 32 PX 10.82024 $ ACTUAL 10.82025
165- 33 PY -10.82024 $ ACTUAL -10.82025
166- 34 PX -10.82024 $ ACTUAL -10.82025
167- 35 PY 11.4300
168- 36 PX 11.4300
169- 37 PY -11.4300
170- 38 PX -11.4300
171- 39 PY 12.17930
172- 40 PX 12.17930
173- 41 PY -11.66876
174- 42 PX -11.66876
175- 43 PX 11.66876
176- 44 PY 11.66876
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177- 45 PX 11.94054
178- 46 PY 11.94054
179- C BLANK PIN CELL
180- 48 PX -0.7213
181- 49 PX 0.7213
182- 50 PY -0.7213
183- 51 PY 0.7213
184- 52 PY 0.0001
185- 53 PY -0.0001
186- 54 PY 0.0
187- 55 P 1. -1. 0. 0.
188- 56 P 1. 1. 0. 0. $ 24.35
189- C EXTRA CARDS
190- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
191- 58 PY 2.14376
192- 59 PX 1.9050
193- 60 PY 1.9050
194- 61 PX 1.270
195- 62 PY 1.270050
196- 64 PX -.0000005
197- 65 PY -.0000005
198- 66 PX 95.
199- 67 PY 95.
200- C OUTER BARRIER
201- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
202- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
203- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
204- 73 PZ 282.3500 $TOP OF OUTER BARRIER
205- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
206- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
207- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
208- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
209-
210- MODE N
211- C VOL 88J
212- KCODE 3000 1. 5 20
213- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
214- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
215- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
216- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
217- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
218- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
219- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.
220- C 22.19 13.53 10. 22.19 17.86 10. 22.19 22.19 10.
221- C 4.87 4.87 75. 4.87 9.20 75. 4.87 13.53 75.
222- C 4.87 17.86 75. 4.87 22.19 75. 9.20 4.87 75.
223- C 9.20 9.20 75. 9.20 13.53 75. 9.20 17.86 75.
224- C 9.20 22.19 75. 13.53 4.87 75. 13.53 9.20 75.
225- C 13.53 17.86 75. 13.53 22.19 75. 17.86 4.87 75.
226- C 17.86 9.20 75. 17.86 13.53 75. 17.86 17.86 75.
227- C 17.86 22.19 75. 22.19 4.87 75. 22.19 9.20 75.
228- C 22.19 13.53 75. 22.19 17.86 75. 22.19 22.19 75.
229- C 4.87 4.87 150. 4.87 9.20 150. 4.87 13.53 150.
230- C 4.87 17.86 150. 4.87 22.19 150. 9.20 4.87 150.
231- C 9.20 9.20 150. 9.20 13.53 150. 9.20 17.86 150.
232- C 9.20 22.19 150. 13.53 4.87 150. 13.53 9.20 150.
233- C 13.53 17.86 150. 13.53 22.19 150. 17.86 4.87 150.
234- C 17.86 9.20 150. 17.86 13.53 150. 17.86 17.86 150.
235- C 17.86 22.19 150. 22.19 4.87 150. 22.19 9.20 150.
236- C 22.19 13.53 150. 22.19 17.86 150. 22.19 22.19 150.

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237-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
238-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
239-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
240-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
241-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
242-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
243-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
244-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
245-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
246-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
247-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
248-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
249-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
250-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
251-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
252-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
253-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
254-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
255-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
256-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
257-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
258-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
259-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
260-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
261-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
262-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
263-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
264-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
265-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
266-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
267-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
268-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
269-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
270-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
271-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
272-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
273-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
274-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
275-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
276-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
277-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
278-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
279-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.
280-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
281-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
282-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
283-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
284-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
285-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
286-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
287-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
288-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
289-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
290-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
291-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
292-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
293-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
294-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
295-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
296-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.

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297- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
298- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
299- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
300- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
301- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
302- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
303- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
304- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
305- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
306- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
307- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
308- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
309- C      MATERIAL SPECIFICATIONS
310- C      WATER AT 300 K
311- M1     1001.50C 6.6878-2 8016.50C 3.3439-2
312- MT1    LWTR.01T
313- C      3.75%/0 GWD/0 YEAR -- UO2
314- M2     8016.50C 4.6951E-02
315-      92235.50C 8.9117E-04
316-      92238.50C 2.2584E-02
317- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
318- M3     2004.50C 1.0
319- C      ZIRCALOY-4
320- M4     8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
321-      40000.50C -0.9818 50000.35C -0.0140
322- C      ALLOY 825
323- M5     6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
324-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
325-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
326-      29000.50C -0.0250 42000.50C -0.0300
327- C      1100 ALUMINUM ALLOY
328- M6     13027.50C -0.99880 29000.50C -0.00120
329- C      A516 CARBON STEEL
330- M7     6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
331-      16032.50C -0.00035 25055.50C -0.0090
332-      26000.55C -0.98535
333- C      SS316L
334- M8     6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
335-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
336-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
337-      42000.50C -0.02500
338- C      TALLIES
339- PRINT

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1 INITIAL SOURCE FROM FILE SRCTP

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ORIGINAL NUMBER OF POINTS      3137
POINTS NOT IN ANY CELL         0
POINTS IN CELLS OF ZERO IMPORTANCE 0
POINTS IN VOID CELLS           0
POINTS IN AMBIGUOUS CELLS      0
TOTAL POINTS REJECTED          0
POINTS REMAINING                3137
POINTS AFTER EXPANSION OR CONTRACTION 3004
NOMINAL SOURCE SIZE            3000

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INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.042617E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	8016, .66667 92235, .01265 92238, .32068
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748
5	50000, .01071 6000, .00234 13027, .00417 14000, .01001 16032, .00053
	22000, .01057 24000, .23247 25055, .01023 26000, .28763
	28000, .40235 29000, .02212 42000, .01758
6	13027, .99949 29000, .00051
7	6000, .01011 14000, .00541 15031, .00062 16032, .00060
	25055, .00905 26000, .97421
8	6000, .00140 7014, .00399 14000, .01493 15031, .00081
	16032, .00052 24000, .18282 25055, .02036 26000, .64626
	28000, .11433 42000, .01457

MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, MASS FRACTION
1	1001, .11191 8016, .88809
2	8016, .11851 92235, .03306 92238, .84843
3	2004, 1.00000
4	8016, .00120 24000, .00100 26000, .00200 40000, .98180
	50000, .01400 6000, .00050 13027, .00200 14000, .00499 16032, .00030
5	22000, .00898 24000, .21446 25055, .00998 26000, .28499
	28000, .41895 29000, .02494 42000, .02993
6	13027, .99880 29000, .00120
7	6000, .00220 14000, .00275 15031, .00035 16032, .00035
	25055, .00900 26000, .98535
8	6000, .00030 7014, .00101 14000, .00758 15031, .00045
	16032, .00030 24000, .17172 25055, .02020 26000, .65197
	28000, .12121 42000, .02525

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
 1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1 .00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	33	7.04260E-02	1.05223E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
15	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
34	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
50	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
51	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
52	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
53	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
54	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
55	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
56	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
57	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
58	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
59	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
60	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
61	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
62	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
63	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

64	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
65	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
66	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
67	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
68	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	NOT A BOUNDARY
47	49	.00000E+00	.00000E+00	NOT A BOUNDARY
48	50	.00000E+00	.00000E+00	NOT A BOUNDARY
49	51	.00000E+00	.00000E+00	NOT A BOUNDARY
50	52	.00000E+00	.00000E+00	NOT A BOUNDARY

51	53	.00000E+00	.00000E+00	NOT A BOUNDARY
52	54	.00000E+00	.00000E+00	NOT A BOUNDARY
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE	
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00	
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
8	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
9	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
10	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
11	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
12	32	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
13	33	2	7.04260E-02	1.05223E+01	.00000E+00	0	1.0000E+00	
14	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
15	35	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
16	36	3	2.68559E-04	1.78500E-03	.00000E+00	0	1.0000E+00	
17	37	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	

18	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
33	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
34	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
36	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1 REFL.		PX	.0000000E+00
2	2 REFL.		PY	.0000000E+00
3	3 REFL.		PZ	.0000000E+00

4	4	PZ	2.0320000E+02			
5	5	PZ	2.2225000E+02			
6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			

64	67	PY	9.5000000E+01
65	70	CZ	7.6525000E+01
66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00

WARNING. SURFACE 48 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 49 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 50 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 51 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 52 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 53 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 54 IS NOT USED FOR ANYTHING.
1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08

38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

8 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE	LENGTH
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TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY

(1301)	79/07/31.
(1270)	79/06/19.

6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
			TOTAL NU	
			TOTAL NU	

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=0K	(48)	86/02/01
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TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN			1001	0	010/22/85
TOTAL	683883						

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1 DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	88384
TALLIES	0
BANK	18403
CROSS SECTIONS	683883
TOTAL	790670

DUMP NO. 1 ON FILE RUNTPG NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

9 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .05 PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/0 GWD/0 year (mpc12fx)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-2.327E-01	3.606E-01	9.671E+00	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.987E-01	6.364E-01
2	2.619E-01	3.157E-01	3.640E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.987E-01	8.091E-01

3	1.819E-01	3.327E-01	1.233E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.987E-01	2.683E+00
4	1.324E-03	1.432E-01	1.346E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.987E-01	2.704E+00
5	1.324E-03	1.432E-01	1.346E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.987E-01	4.140E+00
6	1.749E-02	1.589E-01	1.327E+02	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.987E-01	7.022E-01
7	-2.539E-01	-2.887E-01	1.333E+02	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.987E-01	2.216E+00
8	-4.722E-02	2.675E-01	1.228E+02	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.987E-01	1.066E+00
9	-1.820E-02	-4.082E-01	1.322E+02	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.987E-01	6.482E-01
10	6.867E-02	-1.163E-01	9.192E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.987E-01	2.324E+00
11	4.441E-01	1.308E-01	9.213E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.987E-01	6.680E-01
12	-3.370E-01	2.561E-01	1.852E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.987E-01	8.804E-01
13	-2.854E-01	3.117E-01	5.624E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.987E-01	1.621E+00
14	7.250E-02	1.735E-01	5.264E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.987E-01	2.951E+00
15	2.131E-01	1.940E-01	5.236E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.987E-01	4.240E+00
16	6.242E-02	-1.999E-02	4.327E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.987E-01	1.829E+00
17	2.239E-01	-3.400E-01	3.889E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.987E-01	1.345E-01
18	-1.159E-01	-2.207E-01	2.438E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.987E-01	3.584E+00
19	2.587E-01	-3.311E-01	7.683E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.987E-01	3.473E+00
20	2.511E-01	-1.088E-01	7.654E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.987E-01	1.338E+00
21	-4.581E-02	1.093E-01	7.494E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.987E-01	2.887E+00
22	-2.072E-01	4.093E-01	6.382E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.987E-01	1.061E+00
23	-1.792E-01	-2.592E-01	6.377E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.987E-01	1.886E+00
24	-1.435E-01	1.498E-01	6.402E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.987E-01	6.187E-01
25	3.719E-01	-6.384E-02	3.379E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.987E-01	1.864E+00
26	3.017E-01	-2.744E-01	5.212E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.987E-01	7.182E-01
27	2.182E-01	3.395E-01	5.081E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.987E-01	2.553E-01
28	1.583E-01	-3.790E-01	5.577E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.987E-01	1.665E+00
29	-3.733E-01	2.409E-01	4.697E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.987E-01	7.998E-01
30	1.473E-01	3.606E-01	6.341E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.987E-01	4.072E-01
31	2.665E-01	3.056E-01	6.104E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.987E-01	9.020E-01
32	-2.518E-01	-2.570E-01	1.004E+02	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.987E-01	1.936E+00
33	7.493E-02	3.751E-01	2.579E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.987E-01	1.515E+00
34	1.460E-02	-3.237E-01	2.739E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.987E-01	1.035E+00
35	-1.703E-01	1.091E-01	5.563E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.987E-01	6.686E-01
36	-2.613E-01	-1.135E-01	5.660E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.987E-01	5.362E-01
37	3.489E-01	-2.008E-01	6.592E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.987E-01	2.470E-01
38	3.662E-01	4.809E-02	6.043E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.987E-01	2.214E+00
39	2.136E-01	2.060E-01	6.053E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.987E-01	3.181E+00
40	-4.912E-02	6.747E-02	7.261E+00	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.987E-01	1.114E+00
41	3.665E-02	-3.142E-02	7.139E+00	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.987E-01	1.493E+00
42	-2.522E-01	1.294E-01	2.024E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.987E-01	3.452E+00
43	2.626E-01	-8.939E-02	8.193E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.987E-01	2.005E+00
44	-3.466E-01	3.095E-02	6.369E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.987E-01	2.492E+00
45	-3.386E-01	-2.250E-01	6.328E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.987E-01	2.085E+00
46	-3.666E-01	-2.309E-01	4.790E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.987E-01	3.102E-02
47	3.240E-01	2.341E-01	4.434E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.987E-01	6.722E-01
48	-2.634E-02	2.498E-01	4.469E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.987E-01	2.640E+00
49	-1.076E-01	2.074E-01	3.935E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.987E-01	3.164E+00
50	2.014E-01	2.073E-01	4.339E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.987E-01	7.296E-01

CYCLE	1	K(COLLISION)	1.148321	REMOVAL LIFETIME(ABS)	3.0053E+03	SOURCE POINTS GENERATED	3479
CYCLE	2	K(COLLISION)	1.146004	REMOVAL LIFETIME(ABS)	3.0885E+03	SOURCE POINTS GENERATED	3030
CYCLE	3	K(COLLISION)	1.156963	REMOVAL LIFETIME(ABS)	2.9386E+03	SOURCE POINTS GENERATED	3002
CYCLE	4	K(COLLISION)	1.132628	REMOVAL LIFETIME(ABS)	2.9997E+03	SOURCE POINTS GENERATED	2962
CYCLE	5	K(COLLISION)	1.172461	REMOVAL LIFETIME(ABS)	2.9423E+03	SOURCE POINTS GENERATED	3101

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 5

CYCLE 6 K(COLLISION) 1.166245 REMOVAL LIFETIME(ABS) 2.9835E+03 SOURCE POINTS GENERATED 3033

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.148932		1.157589		.0075	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	1.132071		1.139468		.0065	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	1.144335		1.150036		.0050	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	2.8889E+03		2.9430E+03		.0184				
REM LIFE(ABS)	2.8877E+03		2.9356E+03		.0163	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	2987								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.173217		1.162798		.0062	K(COL/ABS)	1.151836 .0049	1.128526 .0124	.8831
K(ABSORPTION)	1.143683		1.140873		.0039	K(ABS/TK LN)	1.149130 .0050	1.138977 .0083	.6733
K(TRK LENGTH)	1.172089		1.157387		.0070	K(TK LN/COL)	1.160093 .0065	1.164694 .0112	.9415
REM LIFE(COL)	2.8883E+03		2.9248E+03		.0124				
REM LIFE(ABS)	2.8392E+03		2.9035E+03		.0146	LIFE(COL/ABS)	2.9141E+03 .0133	2.9394E+03 .0196	.9456
SOURCE POINTS GENERATED	3129								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.187111		1.168876		.0068	K(COL/ABS)	1.158433 .0067	1.155686 .0187	.9308
K(ABSORPTION)	1.149338		1.147989		.0068	K(ABS/TK LN)	1.156960 .0076	1.137117 .0120	.9120
K(TRK LENGTH)	1.191560		1.165930		.0088	K(TK LN/COL)	1.167403 .0077	1.173763 .0065	.9730
REM LIFE(COL)	2.7956E+03		2.8925E+03		.0142	K(COL/ABS/TK LN)	1.160932 .0073	1.163974 .0378	
REM LIFE(ABS)	2.8023E+03		2.8782E+03		.0136	LIFE(COL/ABS)	2.8853E+03 .0138	2.8779E+03 .0176	.9543
SOURCE POINTS GENERATED	3087								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.133334		1.161768		.0081	K(COL/ABS)	1.155697 .0057	1.152039 .0063	.3897
K(ABSORPTION)	1.156177		1.149627		.0054	K(ABS/TK LN)	1.155159 .0061	1.150356 .0066	.5911
K(TRK LENGTH)	1.139737		1.160692		.0082	K(TK LN/COL)	1.161230 .0080	1.161365 .0093	.9476
REM LIFE(COL)	2.9862E+03		2.9112E+03		.0127	K(COL/ABS/TK LN)	1.157362 .0065	1.150191 .0072	
REM LIFE(ABS)	2.9771E+03		2.8980E+03		.0125	LIFE(COL/ABS)	2.9046E+03 .0125	2.9007E+03 .0151	.9659
SOURCE POINTS GENERATED	2887								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.157921		1.161127		.0066	K(COL/ABS)	1.156632 .0047	1.154752 .0051	.3118
K(ABSORPTION)	1.164687		1.152137		.0049	K(ABS/TK LN)	1.157344 .0053	1.153241 .0057	.6185
K(TRK LENGTH)	1.171850		1.162551		.0069	K(TK LN/COL)	1.161839 .0066	1.161576 .0074	.8991
REM LIFE(COL)	2.9244E+03		2.9134E+03		.0104	K(COL/ABS/TK LN)	1.158605 .0054	1.149716 .0057	
REM LIFE(ABS)	2.9376E+03		2.9046E+03		.0104	LIFE(COL/ABS)	2.9090E+03 .0103	2.9091E+03 .0117	.9561
SOURCE POINTS GENERATED	3077								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.144273		1.158719		.0060	K(COL/ABS)	1.154375 .0044	1.152433 .0048	.4071
K(ABSORPTION)	1.137392		1.150031		.0046	K(ABS/TK LN)	1.154401 .0052	1.149893 .0051	.6903
K(TRK LENGTH)	1.136098		1.158772		.0067	K(TK LN/COL)	1.158746 .0062	1.158717 .0066	.9053
REM LIFE(COL)	2.9747E+03		2.9222E+03		.0093	K(COL/ABS/TK LN)	1.155841 .0051	1.149162 .0042	

REM LIFE(ABS) 2.9656E+03 2.9133E+03 .0093 LIFE(COL/ABS) 2.9177E+03 .0092 2.9178E+03 .0102 .9606
 SOURCE POINTS GENERATED 2952

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.181133		1.161521		.0057	K(COL/ABS)	1.156975	1.154678	.5234
K(ABSORPTION)	1.169214		1.152428		.0045	K(ABS/TK LN)	1.157682	1.150615	.7648
K(TRK LENGTH)	1.192074		1.162935		.0068	K(TK LN/COL)	1.162228	1.160928	.9200
REM LIFE(COL)	3.2121E+03		2.9584E+03		.0146	K(COL/ABS/TK LN)	1.158961	1.149255	.0038
REM LIFE(ABS)	3.1804E+03		2.9467E+03		.0138	LIFE(COL/ABS)	2.9525E+03	2.9300E+03	.0149
SOURCE POINTS GENERATED	3089								.9870

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.169121		1.162365		.0051	K(COL/ABS)	1.158041	1.156023	.5374
K(ABSORPTION)	1.164029		1.153717		.0041	K(ABS/TK LN)	1.159080	1.151725	.7769
K(TRK LENGTH)	1.176499		1.164442		.0061	K(TK LN/COL)	1.163404	1.161400	.9201
REM LIFE(COL)	2.9900E+03		2.9619E+03		.0129	K(COL/ABS/TK LN)	1.160175	1.149552	.0034
REM LIFE(ABS)	2.9891E+03		2.9514E+03		.0123	LIFE(COL/ABS)	2.9567E+03	2.9384E+03	.0131
SOURCE POINTS GENERATED	2962								.9864

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.152512		1.161380		.0046	K(COL/ABS)	1.157053	1.155036	.5562
K(ABSORPTION)	1.143798		1.152725		.0038	K(ABS/TK LN)	1.159744	1.152826	.6322
K(TRK LENGTH)	1.187643		1.166762		.0058	K(TK LN/COL)	1.164071	1.161445	.7872
REM LIFE(COL)	2.9499E+03		2.9607E+03		.0116	K(COL/ABS/TK LN)	1.160289	1.153075	.0053
REM LIFE(ABS)	2.9459E+03		2.9508E+03		.0110	LIFE(COL/ABS)	2.9558E+03	2.9387E+03	.0116
SOURCE POINTS GENERATED	2941								.9863

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.144261		1.159824		.0044	K(COL/ABS)	1.155932	1.153783	.5743
K(ABSORPTION)	1.145200		1.152041		.0035	K(ABS/TK LN)	1.158603	1.151781	.6460
K(TRK LENGTH)	1.149183		1.165164		.0054	K(TK LN/COL)	1.162494	1.159864	.8024
REM LIFE(COL)	2.8593E+03		2.9515E+03		.0109	K(COL/ABS/TK LN)	1.159010	1.151793	.0048
REM LIFE(ABS)	2.8642E+03		2.9430E+03		.0103	LIFE(COL/ABS)	2.9472E+03	2.9300E+03	.0107
SOURCE POINTS GENERATED	2939								.9869

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.147297		1.158780		.0041	K(COL/ABS)	1.155236	1.153124	.5787
K(ABSORPTION)	1.147863		1.151693		.0032	K(ABS/TK LN)	1.157728	1.151252	.6474
K(TRK LENGTH)	1.148344		1.163763		.0051	K(TK LN/COL)	1.161271	1.158662	.8124
REM LIFE(COL)	2.9720E+03		2.9532E+03		.0100	K(COL/ABS/TK LN)	1.158078	1.151214	.0042
REM LIFE(ABS)	2.9608E+03		2.9445E+03		.0094	LIFE(COL/ABS)	2.9488E+03	2.9311E+03	.0097
SOURCE POINTS GENERATED	3015								.9869

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.183618		1.160690		.0041	K(COL/ABS)	1.156392	1.153249	.5743
K(ABSORPTION)	1.156906		1.152094		.0029	K(ABS/TK LN)	1.157928	1.151778	.6428
K(TRK LENGTH)	1.163757		1.163762		.0047	K(TK LN/COL)	1.162226	1.161447	.7450
REM LIFE(COL)	3.0976E+03		2.9643E+03		.0099	K(COL/ABS/TK LN)	1.158849	1.152267	.0041

REM LIFE(ABS) 3.0890E+03 2.9556E+03 .0094 LIFE(COL/ABS) 2.9599E+03 .0096 2.9423E+03 .0097 .9887
SOURCE POINTS GENERATED 3114

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.157802		1.160484		.0038	K(COL/ABS)	1.156436	1.153542	.5668
K(ABSORPTION)	1.156211		1.152388		.0027	K(ABS/TK LN)	1.157794	1.152281	.6258
K(TRK LENGTH)	1.155898		1.163200		.0044	K(TK LN/COL)	1.161842	1.161130	.7448
REM LIFE(COL)	3.0016E+03		2.9670E+03		.0092	K(COL/ABS/TK LN)	1.158691	1.152762	.9870
REM LIFE(ABS)	3.0132E+03		2.9597E+03		.0088	LIFE(COL/ABS)	2.9633E+03	2.9520E+03	
SOURCE POINTS GENERATED	2845								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	1.124310		1.158072		.0041	K(COL/ABS)	1.154171	1.150971	.6921
K(ABSORPTION)	1.120600		1.150269		.0031	K(ABS/TK LN)	1.155328	1.149123	.7351
K(TRK LENGTH)	1.120994		1.160387		.0048	K(TK LN/COL)	1.159230	1.158401	.8103
REM LIFE(COL)	2.9444E+03		2.9655E+03		.0086	K(COL/ABS/TK LN)	1.156243	1.149691	.9868
REM LIFE(ABS)	2.9291E+03		2.9577E+03		.0083	LIFE(COL/ABS)	2.9616E+03	2.9500E+03	
SOURCE POINTS GENERATED	2916								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/O GWD/O year (mpc12fx)

PROBID = 09/29/95 17:08:21
09/29/95 15:46:50

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	60635	9.8953E-01	2.0331E+00	ESCAPE	2	1.6953E-05	6.8719E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.9155E-02	6.0626E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	60718	6.9716E-02	6.3058E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.1715E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	170	2.2311E-03	1.5184E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9257E+00
TOTAL	60805	1.0609E+00	2.0346E+00	CAPTURE	0	5.2719E-01	3.0454E-02
				LOSS TO (N,XN)	85	1.1156E-03	9.5086E-03
				LOSS TO FISSION	0	4.6288E-01	6.8868E-02
				TOTAL	60805	1.0609E+00	2.0346E+00

NUMBER OF NEUTRONS BANKED 85
NEUTRON TRACKS PER SOURCE PARTICLE 1.0028E+00
NEUTRON COLLISIONS PER SOURCE PARTICLE 5.5030E+01
TOTAL NEUTRON COLLISIONS 3336718
NET MULTIPLICATION 1.0011E+00 .0002

AVERAGE LIFETIME, SHAKES

ESCAPE 6.6477E+03
CAPTURE 2.9652E+03
CAPTURE OR ESCAPE 2.9653E+03
ANY TERMINATION 3.2757E+03

CUTOFFS

TCO 1.0000E+34
ECO .0000E+00
WC1 -5.0000E-01
WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 41.53 MINUTES
COMPUTER TIME IN MCRUN 41.48 MINUTES
SOURCE PARTICLES PER MINUTE 1.4617E+03
RANDOM NUMBERS GENERATED 40639114

MAXIMUM NUMBER EVER IN BANK 1
BANK OVERFLOWS TO BACKUP FILE 0
FIELD LENGTH 0
MOST RANDOM NUMBERS USED WAS 8249 IN HISTORY 12499

RANGE OF SAMPLED SOURCE WEIGHTS = 8.6232E-01 TO 1.0545E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25829	9555	312919	3.2373E+00	1.1531E-04	3.6476E-01	7.2126E-01	1.0870E+00
3	3	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	679926	60719	292052	4.0115E+00	8.4778E-04	7.4550E-01	8.7532E-01	2.5267E+00
14	34	6504	353	1472	1.4835E-02	6.9150E-05	3.4957E-01	5.9725E-01	4.3350E+00
15	35	359	40	862	5.9963E-03	5.0243E-05	3.6613E-01	4.6667E-01	8.9483E-01
16	36	1277036	60719	12	1.9500E-04	7.0768E-04	7.0685E-01	8.7002E-01	3.4863E+03
17	37	654	39	43	3.3410E-04	3.5868E-05	2.6352E-01	4.7049E-01	7.4413E-01
18	38	1381145	60719	50380	7.3223E-01	6.7332E-04	6.9250E-01	8.6936E-01	4.1002E+00
19	39	720	39	320	2.2473E-03	4.0502E-05	2.6240E-01	4.6625E-01	7.8047E-01
20	40	1987144	60719	1362263	1.7720E+01	5.7364E-04	6.6009E-01	8.6647E-01	1.6425E+00
21	41	56369	31117	86754	1.1316E+00	4.1188E-04	6.1352E-01	8.6519E-01	1.5513E+00
22	42	24	15	48	3.2682E-04	9.4010E-05	4.8943E-01	4.5304E-01	1.2528E+00
23	43	119198	32953	3625	5.2447E-02	4.4017E-04	6.2340E-01	8.6598E-01	4.1290E+00
24	44	133524	35407	28250	3.6957E-01	4.4330E-04	6.2532E-01	8.6676E-01	1.5726E+00
25	45	145857	36399	3080	4.4578E-02	4.5419E-04	6.2710E-01	8.6656E-01	4.1229E+00
26	46	177478	41700	68810	8.9775E-01	4.5061E-04	6.2435E-01	8.6635E-01	1.5735E+00
27	47	4185	3170	7259	9.4598E-02	3.9330E-04	6.0697E-01	8.6455E-01	1.5416E+00
28	48	8859	3487	320	4.7150E-03	4.6776E-04	6.5707E-01	8.7258E-01	4.1349E+00
29	49	11385	4764	5744	7.6191E-02	4.7096E-04	6.4895E-01	8.7347E-01	1.6141E+00
30	50	33547	15053	65122	7.6150E-01	3.6439E-04	5.7040E-01	8.1731E-01	1.4838E+00
31	51	33397	14323	12340	1.5094E-01	4.0923E-04	5.6420E-01	8.0247E-01	2.0899E+00
32	52	33065	14014	2414	3.3543E-02	4.0753E-04	5.6517E-01	7.9704E-01	9.1434E+00
33	53	33149	14062	12179	1.4615E-01	3.8512E-04	5.5529E-01	7.9304E-01	2.0863E+00
34	54	342	90	2339	1.9141E-02	4.3501E-05	2.4494E-01	5.4887E-01	7.8128E-01
35	55	33312	15119	64017	7.5478E-01	3.6407E-04	5.7267E-01	8.2036E-01	1.4899E+00
36	56	33182	14330	12320	1.5054E-01	4.0986E-04	5.7216E-01	8.0288E-01	2.0974E+00
37	57	32820	14021	2513	3.5231E-02	4.0894E-04	5.6500E-01	8.0097E-01	9.0926E+00
38	58	32852	14104	11953	1.4419E-01	3.8607E-04	5.5434E-01	7.9669E-01	2.0834E+00
39	59	413	93	2862	2.4297E-02	3.2429E-05	1.8658E-01	5.5566E-01	6.9277E-01
40	60	52198	19040	89056	1.0904E+00	5.0578E-04	5.5696E-01	8.3621E-01	1.5070E+00
41	61	52357	18199	18040	2.2906E-01	7.2915E-04	5.8688E-01	8.2841E-01	2.2901E+00
42	62	506	119	2307	2.0231E-02	4.4881E-05	2.3329E-01	5.9637E-01	7.9057E-01
43	63	52390	19089	89349	1.1010E+00	5.0376E-04	5.5618E-01	8.3953E-01	1.5019E+00

44	64	52083	18198	17694	2.2575E-01	7.0316E-04	5.8262E-01	8.3073E-01	2.2723E+00
45	65	768	140	3503	2.9542E-02	3.7506E-05	1.8432E-01	5.6414E-01	7.2348E-01
46	66	10203	5023	438851	3.8986E+00	5.4229E-05	2.5671E-01	6.0584E-01	8.4043E-01
47	67	10215	3884	15024	1.5483E-01	1.7187E-04	4.2079E-01	6.8811E-01	1.8203E+00
48	68	10056	3927	14844	1.5164E-01	1.7027E-04	4.1409E-01	6.8531E-01	1.7626E+00
49	70	34393	9177	11463	1.4510E-01	9.6728E-04	5.7746E-01	8.2864E-01	2.3673E+00
50	71	34638	8854	6583	9.5027E-02	1.0585E-03	5.7316E-01	8.2818E-01	8.9297E+00
51	72	18629	8646	57929	7.2618E-01	1.3409E-03	5.6849E-01	8.2651E-01	2.4763E+00
52	73	34400	9147	11500	1.4492E-01	9.8355E-04	5.8082E-01	8.2599E-01	2.3807E+00
53	74	34557	8819	6309	9.0906E-02	1.0580E-03	5.7435E-01	8.2586E-01	8.8967E+00
54	75	18639	8585	57728	7.1796E-01	1.3327E-03	5.7814E-01	8.2177E-01	2.4982E+00
55	76	289	79	4733	3.9193E-02	4.3116E-05	1.7475E-01	5.6796E-01	7.5444E-01
56	77	192	61	4030	3.4823E-02	5.4687E-05	2.6263E-01	5.9134E-01	8.4923E-01
57	80	24	12	92	9.6527E-04	2.0977E-04	6.5467E-01	6.1863E-01	1.5040E+00
58	81	3314	1459	10039	1.0707E-01	3.4391E-04	5.1052E-01	7.1662E-01	2.0508E+00
59	82	1970	820	10796	1.1241E-01	2.7127E-04	4.5835E-01	7.4498E-01	1.3137E+00
60	83	12	7	602	4.7576E-03	6.5488E-05	5.1006E-01	5.4733E-01	1.0106E+00
61	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	1540	648	4570	5.2381E-02	8.7377E-04	5.4111E-01	7.6335E-01	2.1257E+00
63	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	953	419	8506	9.6610E-02	2.0630E-03	4.6411E-01	7.8728E-01	4.6017E+00
66	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	348	200	40898	3.4023E-01	2.9217E-05	1.1701E-01	5.5601E-01	6.3237E-01

TOTAL 6706949 701675 3336718 4.0226E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.2933E-01	-5.2933E-01
2	2	3.1817E-01	.0000E+00	.0000E+00	-8.7211E-01	-5.5394E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.6999E-02	-1.6999E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.1333E-02	-5.1333E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5099E-02	-1.5099E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4663E-01	-1.4663E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.2473E+00	-1.2473E+00
8	10	.0000E+00	.0000E+00	.0000E+00	-2.0649E-01	-2.0649E-01
9	11	.0000E+00	.0000E+00	.0000E+00	-2.0601E-01	-2.0601E-01
10	12	.0000E+00	.0000E+00	.0000E+00	-3.6735E-01	-3.6735E-01
11	13	.0000E+00	.0000E+00	.0000E+00	-3.7372E-01	-3.7372E-01
12	32	.0000E+00	.0000E+00	.0000E+00	-1.8281E+01	-1.8281E+01
13	33	8.8730E+00	9.8953E-01	.0000E+00	-9.1387E+00	7.2378E-01
14	34	6.3897E-02	.0000E+00	.0000E+00	-6.3594E-02	3.0270E-04
15	35	2.6838E-03	.0000E+00	.0000E+00	-2.6396E-03	4.4275E-05
16	36	1.8334E+01	.0000E+00	.0000E+00	-1.8334E+01	.0000E+00
17	37	4.9515E-03	.0000E+00	.0000E+00	-4.9498E-03	1.6471E-06
18	38	1.9824E+01	.0000E+00	.0000E+00	-1.9818E+01	6.0071E-03
19	39	5.5070E-03	.0000E+00	.0000E+00	-5.4757E-03	3.1256E-05
20	40	2.8442E+01	.0000E+00	.0000E+00	-1.0425E+01	1.8016E+01
21	41	8.0669E-01	.0000E+00	.0000E+00	-8.0340E-01	3.2930E-03
22	42	1.9025E-04	.0000E+00	.0000E+00	-1.6834E-04	2.1913E-05
23	43	1.7026E+00	.0000E+00	.0000E+00	-1.7021E+00	5.0174E-04
24	44	1.9085E+00	.0000E+00	.0000E+00	-1.9074E+00	1.0615E-03
25	45	2.0852E+00	.0000E+00	.0000E+00	-2.0848E+00	4.4267E-04
26	46	2.5396E+00	.0000E+00	.0000E+00	-1.0770E+00	1.4626E+00
27	47	6.0024E-02	.0000E+00	.0000E+00	-5.9751E-02	2.7308E-04
28	48	1.2697E-01	.0000E+00	.0000E+00	-1.2693E-01	3.9386E-05
29	49	1.6398E-01	.0000E+00	.0000E+00	-6.7217E-02	9.6762E-02

30	50	4.5498E-01	.0000E+00	.0000E+00	.0000E+00	-2.5617E-01	1.9882E-01
31	51	4.4659E-01	.0000E+00	.0000E+00	.0000E+00	-4.3129E-01	1.5295E-02
32	52	4.3818E-01	.0000E+00	.0000E+00	.0000E+00	-4.3271E-01	5.4714E-03
33	53	4.3936E-01	.0000E+00	.0000E+00	.0000E+00	-1.8447E-01	2.5489E-01
34	54	3.1959E-03	.0000E+00	.0000E+00	.0000E+00	-1.4597E-04	3.0499E-03
35	55	4.5329E-01	.0000E+00	.0000E+00	.0000E+00	-2.5508E-01	1.9821E-01
36	56	4.4398E-01	.0000E+00	.0000E+00	.0000E+00	-4.2936E-01	1.4614E-02
37	57	4.3580E-01	.0000E+00	.0000E+00	.0000E+00	-4.3095E-01	4.8494E-03
38	58	4.3611E-01	.0000E+00	.0000E+00	.0000E+00	-1.8260E-01	2.5352E-01
39	59	3.7894E-03	.0000E+00	.0000E+00	.0000E+00	-1.4918E-04	3.6402E-03
40	60	7.2294E-01	.0000E+00	.0000E+00	.0000E+00	-3.6449E-01	3.5845E-01
41	61	7.2014E-01	.0000E+00	.0000E+00	.0000E+00	-3.3997E-01	3.8017E-01
42	62	5.0499E-03	.0000E+00	.0000E+00	.0000E+00	-6.5470E-05	4.9844E-03
43	63	7.2800E-01	.0000E+00	.0000E+00	.0000E+00	-3.6476E-01	3.6324E-01
44	64	7.1877E-01	.0000E+00	.0000E+00	.0000E+00	-3.4159E-01	3.7718E-01
45	65	7.1545E-03	.0000E+00	.0000E+00	.0000E+00	-1.8303E-04	6.9715E-03
46	66	1.1924E-01	.0000E+00	.0000E+00	.0000E+00	-7.4880E-02	4.4360E-02
47	67	1.1843E-01	.0000E+00	.0000E+00	.0000E+00	-6.0412E-02	5.8019E-02
48	68	1.1632E-01	.0000E+00	.0000E+00	.0000E+00	-5.7905E-02	5.8412E-02
49	70	4.7260E-01	.0000E+00	.0000E+00	.0000E+00	-4.6707E-01	5.5384E-03
50	71	4.7458E-01	.0000E+00	.0000E+00	.0000E+00	-4.7390E-01	6.7552E-04
51	72	2.5683E-01	.0000E+00	.0000E+00	.0000E+00	-2.3571E-01	2.1123E-02
52	73	4.7097E-01	.0000E+00	.0000E+00	.0000E+00	-4.6574E-01	5.2332E-03
53	74	4.7206E-01	.0000E+00	.0000E+00	.0000E+00	-4.7138E-01	6.7404E-04
54	75	2.5621E-01	.0000E+00	.0000E+00	.0000E+00	-2.3465E-01	2.1566E-02
55	76	2.8300E-03	.0000E+00	.0000E+00	.0000E+00	-2.6300E-03	2.0004E-04
56	77	2.0409E-03	.0000E+00	.0000E+00	.0000E+00	-1.8565E-03	1.8444E-04
57	80	2.5963E-04	.0000E+00	.0000E+00	.0000E+00	-2.0170E-04	5.7930E-05
58	81	3.9506E-02	.0000E+00	.0000E+00	.0000E+00	-3.2021E-02	7.4847E-03
59	82	2.4692E-02	.0000E+00	.0000E+00	.0000E+00	-2.4344E-02	3.4830E-04
60	83	1.3416E-04	.0000E+00	.0000E+00	.0000E+00	-1.1688E-04	1.7287E-05
61	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	1.9547E-02	.0000E+00	.0000E+00	.0000E+00	-1.7347E-02	2.1994E-03
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	1.1847E-02	.0000E+00	.0000E+00	.0000E+00	-1.0128E-02	1.7185E-03
66	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	4.4090E-03	.0000E+00	.0000E+00	.0000E+00	-2.6489E-03	1.7601E-03

TOTAL	9.4582E+01	9.8953E-01	.0000E+00	.0000E+00	-9.4582E+01	9.8951E-01
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-2.2078E-05	.0000E+00	.0000E+00	.0000E+00	-2.2078E-05
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	.0000E+00	.0000E+00	-1.7477E-04	.0000E+00	.0000E+00	.0000E+00	-1.7477E-04
14	34	.0000E+00	.0000E+00	1.7137E-05	.0000E+00	.0000E+00	.0000E+00	1.7137E-05
15	35	.0000E+00	.0000E+00	1.2411E-05	.0000E+00	.0000E+00	.0000E+00	1.2411E-05

16	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	38	.0000E+00	.0000E+00	5.3149E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3149E-06
19	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	40	.0000E+00	.0000E+00	-1.3659E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3659E-04
21	41	.0000E+00	.0000E+00	4.1832E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1832E-05
22	42	.0000E+00	.0000E+00	-4.0992E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0992E-06
23	43	.0000E+00	.0000E+00	-1.8851E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8851E-05
24	44	.0000E+00	.0000E+00	-1.2252E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2252E-05
25	45	.0000E+00	.0000E+00	1.2638E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2638E-05
26	46	.0000E+00	.0000E+00	2.9283E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9283E-05
27	47	.0000E+00	.0000E+00	1.6531E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6531E-05
28	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	49	.0000E+00	.0000E+00	1.2414E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2414E-05
30	50	.0000E+00	.0000E+00	1.0867E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0867E-04
31	51	.0000E+00	.0000E+00	-2.5326E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5326E-04
32	52	.0000E+00	.0000E+00	3.4479E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4479E-05
33	53	.0000E+00	.0000E+00	4.2841E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2841E-06
34	54	.0000E+00	.0000E+00	1.2718E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2718E-07
35	55	.0000E+00	.0000E+00	2.5927E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5927E-05
36	56	.0000E+00	.0000E+00	3.5069E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5069E-06
37	57	.0000E+00	.0000E+00	-6.5709E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5709E-05
38	58	.0000E+00	.0000E+00	-1.4306E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4306E-05
39	59	.0000E+00	.0000E+00	1.2535E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2535E-05
40	60	.0000E+00	.0000E+00	-2.3349E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3349E-05
41	61	.0000E+00	.0000E+00	5.4599E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4599E-05
42	62	.0000E+00	.0000E+00	-2.0418E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0418E-05
43	63	.0000E+00	.0000E+00	-6.6752E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.6752E-06
44	64	.0000E+00	.0000E+00	-5.0546E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.0546E-05
45	65	.0000E+00	.0000E+00	1.6712E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6712E-05
46	66	.0000E+00	.0000E+00	1.1965E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1965E-04
47	67	.0000E+00	.0000E+00	1.1603E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1603E-04
48	68	.0000E+00	.0000E+00	-2.0472E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0472E-04
49	70	.0000E+00	.0000E+00	-9.0223E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0223E-05
50	71	.0000E+00	.0000E+00	7.7639E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.7639E-06
51	72	.0000E+00	.0000E+00	-2.2380E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2380E-05
52	73	.0000E+00	.0000E+00	1.8877E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8877E-05
53	74	.0000E+00	.0000E+00	-7.8606E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8606E-06
54	75	.0000E+00	.0000E+00	-2.5991E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5991E-04
55	76	.0000E+00	.0000E+00	4.4666E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4666E-06
56	77	.0000E+00	.0000E+00	-8.0934E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0934E-06
57	80	.0000E+00	.0000E+00	-2.5571E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5571E-06
58	81	.0000E+00	.0000E+00	1.4571E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4571E-04
59	82	.0000E+00	.0000E+00	8.6758E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6758E-06
60	83	.0000E+00	.0000E+00	8.2753E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.2753E-06
61	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	.0000E+00	.0000E+00	-8.4898E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4898E-05
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	.0000E+00	.0000E+00	8.9795E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.9795E-05
66	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	.0000E+00	.0000E+00	-5.4940E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.4940E-06

TOTAL	.0000E+00	.0000E+00	-5.6137E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6137E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS								PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

2	2	.0000E+00	.0000E+00	-1.4016E-02	.0000E+00	.0000E+00	-1.4016E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	2.0264E-03	.0000E+00	-2.6174E-01	-1.0132E-03	-4.6288E-01	-7.2361E-01
14	34	.0000E+00	.0000E+00	-3.1983E-04	.0000E+00	.0000E+00	-3.1983E-04
15	35	.0000E+00	.0000E+00	-3.3191E-05	.0000E+00	.0000E+00	-3.3191E-05
16	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	37	.0000E+00	.0000E+00	-1.6471E-06	.0000E+00	.0000E+00	-1.6471E-06
18	38	1.4695E-04	.0000E+00	-6.0859E-03	-7.3473E-05	.0000E+00	-6.0124E-03
19	39	.0000E+00	.0000E+00	-1.2282E-05	.0000E+00	.0000E+00	-1.2282E-05
20	40	.0000E+00	.0000E+00	-4.4757E-02	.0000E+00	.0000E+00	-4.4757E-02
21	41	.0000E+00	.0000E+00	-3.3349E-03	.0000E+00	.0000E+00	-3.3349E-03
22	42	.0000E+00	.0000E+00	-1.7971E-06	.0000E+00	.0000E+00	-1.7971E-06
23	43	.0000E+00	.0000E+00	-4.8289E-04	.0000E+00	.0000E+00	-4.8289E-04
24	44	.0000E+00	.0000E+00	-1.0492E-03	.0000E+00	.0000E+00	-1.0492E-03
25	45	.0000E+00	.0000E+00	-4.5531E-04	.0000E+00	.0000E+00	-4.5531E-04
26	46	.0000E+00	.0000E+00	-2.5421E-03	.0000E+00	.0000E+00	-2.5421E-03
27	47	.0000E+00	.0000E+00	-2.8961E-04	.0000E+00	.0000E+00	-2.8961E-04
28	48	.0000E+00	.0000E+00	-3.9386E-05	.0000E+00	.0000E+00	-3.9386E-05
29	49	.0000E+00	.0000E+00	-2.2098E-04	.0000E+00	.0000E+00	-2.2098E-04
30	50	.0000E+00	.0000E+00	-2.3200E-03	.0000E+00	.0000E+00	-2.3200E-03
31	51	.0000E+00	.0000E+00	-1.0113E-02	.0000E+00	.0000E+00	-1.0113E-02
32	52	.0000E+00	.0000E+00	-5.8667E-04	.0000E+00	.0000E+00	-5.8667E-04
33	53	.0000E+00	.0000E+00	-1.0286E-02	.0000E+00	.0000E+00	-1.0286E-02
34	54	.0000E+00	.0000E+00	-9.8738E-05	.0000E+00	.0000E+00	-9.8738E-05
35	55	.0000E+00	.0000E+00	-2.2797E-03	.0000E+00	.0000E+00	-2.2797E-03
36	56	.0000E+00	.0000E+00	-9.8794E-03	.0000E+00	.0000E+00	-9.8794E-03
37	57	.0000E+00	.0000E+00	-6.1908E-04	.0000E+00	.0000E+00	-6.1908E-04
38	58	.0000E+00	.0000E+00	-9.9398E-03	.0000E+00	.0000E+00	-9.9398E-03
39	59	.0000E+00	.0000E+00	-1.2945E-04	.0000E+00	.0000E+00	-1.2945E-04
40	60	.0000E+00	.0000E+00	-2.6784E-03	.0000E+00	.0000E+00	-2.6784E-03
41	61	.0000E+00	.0000E+00	-1.0299E-02	.0000E+00	.0000E+00	-1.0299E-02
42	62	.0000E+00	.0000E+00	-1.0855E-04	.0000E+00	.0000E+00	-1.0855E-04

62	85	.0000E+00	.0000E+00	-2.1145E-03	.0000E+00	.0000E+00	-2.1145E-03
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	.0000E+00	.0000E+00	-1.8083E-03	.0000E+00	.0000E+00	-1.8083E-03
66	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	.0000E+00	.0000E+00	-1.7546E-03	.0000E+00	.0000E+00	-1.7546E-03

TOTAL 2.2311E-03 .0000E+00 -5.2719E-01 -1.1156E-03 -4.6288E-01 -9.8895E-01
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	295973 16946	3.0392E+00 1.9812E-01	1.3931E-02 8.5305E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	33	8016.50C 92235.50C 92238.50C	6.6667E-01 1.2654E-02 3.2068E-01	94946 52724 144382	1.3569E+00 1.0542E+00 2.0667E+00	1.0568E-03 9.1464E-02 1.6922E-01	.0000E+00 4.4319E-01 1.9689E-02
14	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	6 2 14 1435 15	6.4979E-05 1.9221E-05 1.1212E-04 1.4481E-02 1.5852E-04	1.5010E-09 8.7271E-06 1.8518E-05 2.8160E-04 1.0990E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
15	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	827 35	5.7533E-03 2.4302E-04	3.3185E-05 6.5649E-09	.0000E+00 .0000E+00
16	36	2004.50C	1.0000E+00	12	1.9500E-04	.0000E+00	.0000E+00

17	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	42 1	3.1991E-04 1.4183E-05	1.6471E-06 6.4020E-11	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	199 76 211 49380 514	2.8380E-03 1.1091E-03 2.8385E-03 7.1802E-01 7.4237E-03	3.4207E-06 5.8891E-05 1.2890E-04 5.7362E-03 1.5841E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 7.3473E-05 .0000E+00
19	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	306 14	2.1374E-03 1.0996E-04	1.2280E-05 2.1641E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1246569 115694	1.6083E+01 1.6367E+00	4.3577E-02 1.1802E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	79947 6807	1.0352E+00 9.6401E-02	3.2793E-03 5.5537E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	47 1	3.1269E-04 1.4128E-05	1.7971E-06 1.7552E-13	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 7 15 3564 30	1.4406E-04 9.5044E-05 2.2362E-04 5.1562E-02 4.2255E-04	3.8086E-09 4.6991E-06 1.0057E-05 4.5503E-04 1.3093E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
24	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	25986 2264	3.3769E-01 3.1881E-02	1.0249E-03 2.4376E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	8 10 9 3020 33	9.7710E-05 1.4895E-04 1.2349E-04 4.3736E-02 4.7192E-04	2.2857E-06 3.8077E-06 3.0530E-06 4.3562E-04 1.0542E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
26	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63445 5365	8.2184E-01 7.5910E-02	2.4904E-03 5.1630E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6701 558	8.6693E-02 7.9050E-03	2.8559E-04 4.0234E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 0 1 317 1	1.5956E-05 .0000E+00 1.6069E-05 4.6679E-03 1.5079E-05	3.0617E-11 .0000E+00 5.0130E-08 3.9241E-05 9.4843E-08	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
29	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5294 450	6.9662E-02 6.5294E-03	2.1303E-04 7.9487E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	60372 4750	6.9814E-01 6.3358E-02	2.2781E-03 4.1904E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04	7 41 45 2 4	9.2969E-05 4.7539E-04 6.0379E-04 1.9037E-05 5.7292E-05	1.0084E-08 2.5715E-05 6.4274E-06 1.6175E-07 1.6626E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		24000.50C	1.8282E-01	1480	1.9116E-02	1.8737E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	554	7.6485E-03	9.5444E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7742	9.3010E-02	5.1881E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2296	2.7604E-02	1.7573E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	169	2.3150E-03	3.0600E-04	.0000E+00	.0000E+00
32	52	13027.50C	9.9949E-01	2410	3.3491E-02	5.8335E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	5.2520E-05	3.3211E-06	.0000E+00	.0000E+00
33	53	6000.50C	1.3966E-03	9	9.9295E-05	1.8451E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.6787E-04	2.3777E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	6.7521E-04	9.8905E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.8479E-05	7.0944E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6834E-05	8.0872E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1457	1.8561E-02	1.8680E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	561	7.6448E-03	1.1207E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7663	9.0221E-02	5.2701E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2233	2.6309E-02	1.6899E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	2.0914E-03	3.0209E-04	.0000E+00	.0000E+00
34	54	1001.50C	6.6667E-01	2236	1.8208E-02	9.8706E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	103	9.3286E-04	3.1863E-08	.0000E+00	.0000E+00
35	55	1001.50C	6.6667E-01	59326	6.9205E-01	2.2434E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4691	6.2728E-02	3.6297E-05	.0000E+00	.0000E+00
36	56	6000.50C	1.3966E-03	4	5.2007E-05	2.5347E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.1920E-04	3.0008E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.7306E-04	7.3469E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.2750E-05	1.2912E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1420	1.8384E-02	1.7312E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	527	7.3147E-03	8.7104E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7857	9.4325E-02	5.3226E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2271	2.7312E-02	1.6753E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	152	1.9981E-03	2.4054E-04	.0000E+00	.0000E+00
37	57	13027.50C	9.9949E-01	2505	3.5124E-02	6.1001E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.0745E-04	9.0694E-06	.0000E+00	.0000E+00
38	58	6000.50C	1.3966E-03	10	1.3955E-04	1.0656E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	4.0158E-04	1.9762E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.2250E-04	8.9726E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.5602E-05	1.1177E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1453	1.8577E-02	1.8068E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	494	6.7531E-03	9.8694E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7442	8.7641E-02	5.1924E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2297	2.7738E-02	1.6688E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	165	2.1487E-03	2.5489E-04	.0000E+00	.0000E+00
39	59	1001.50C	6.6667E-01	2745	2.3250E-02	1.2942E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	117	1.0471E-03	3.3182E-08	.0000E+00	.0000E+00
40	60	1001.50C	6.6667E-01	81870	9.9268E-01	2.6302E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7186	9.7740E-02	4.8214E-05	.0000E+00	.0000E+00
41	61	6000.50C	1.3966E-03	13	1.6235E-04	1.8279E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	54	6.6059E-04	2.6401E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	83	1.1000E-03	1.4466E-05	.0000E+00	.0000E+00

		15031.50C	8.1237E-04	14	2.1156E-04	1.2758E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.0209E-05	4.1651E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2153	2.8837E-02	1.6856E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	830	1.1791E-02	8.5885E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11170	1.3919E-01	5.4279E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3449	4.3387E-02	1.7763E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	270	3.6596E-03	5.0448E-04	.0000E+00	.0000E+00
42	62	1001.50C	6.6667E-01	2224	1.9360E-02	1.0734E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	83	8.7061E-04	1.2178E-06	.0000E+00	.0000E+00
43	63	1001.50C	6.6667E-01	82079	1.0007E+00	2.6500E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7270	1.0031E-01	5.8572E-05	.0000E+00	.0000E+00
44	64	6000.50C	1.3966E-03	11	1.4416E-04	1.2379E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	6.5457E-04	2.0963E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	67	9.5988E-04	4.2310E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0889E-04	1.5739E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.8311E-05	2.4447E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2196	2.9406E-02	1.9152E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	839	1.1809E-02	8.7735E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10971	1.3767E-01	5.2786E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3299	4.1485E-02	1.7879E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	249	3.4651E-03	4.3151E-04	.0000E+00	.0000E+00
45	65	1001.50C	6.6667E-01	3335	2.7951E-02	1.5445E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	168	1.5914E-03	4.7211E-08	.0000E+00	.0000E+00
46	66	1001.50C	6.6667E-01	418465	3.6965E+00	1.9710E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20386	2.0206E-01	6.4756E-05	.0000E+00	.0000E+00
47	67	6000.50C	1.3966E-03	9	9.3333E-05	1.2543E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	64	6.6384E-04	5.0262E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	4.8693E-04	9.1005E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	4.4402E-05	6.7464E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	4.2325E-06	8.8298E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1637	1.7686E-02	2.9269E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	451	5.4837E-03	1.2661E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9750	9.8971E-02	8.2480E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2902	2.9573E-02	2.6883E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	161	1.8215E-03	3.3770E-04	.0000E+00	.0000E+00
48	68	6000.50C	1.3966E-03	13	1.0920E-04	3.2798E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	4.5698E-04	4.0177E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	56	6.2734E-04	1.5809E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	6.0989E-05	5.7206E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2788E-05	1.5558E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1632	1.7519E-02	2.8571E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	461	5.6207E-03	1.3864E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9508	9.5173E-02	8.0743E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2936	2.9921E-02	2.6543E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	183	2.1240E-03	3.3515E-04	.0000E+00	.0000E+00
49	70	6000.50C	1.3966E-03	10	1.4310E-04	7.5482E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.7157E-04	1.7975E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	6.9011E-04	7.1129E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	5.7016E-05	4.7978E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.3384E-05	1.9999E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1492	1.9900E-02	9.8873E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	523	7.3595E-03	5.9747E-04	.0000E+00	.0000E+00

		26000.55C	6.4626E-01	7015	8.7013E-02	2.6784E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2141	2.6895E-02	8.8795E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	186	2.5502E-03	2.6808E-04	.0000E+00	.0000E+00
50	71	13027.50C	9.9949E-01	6569	9.4857E-02	6.7628E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	14	1.7014E-04	6.9963E-06	.0000E+00	.0000E+00
51	72	6000.50C	1.3966E-03	51	6.8048E-04	4.1887E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	184	2.2548E-03	5.4930E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	327	4.6738E-03	1.6387E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	17	2.1887E-04	1.0880E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0768E-04	1.8780E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7315	9.8093E-02	3.6089E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2562	3.5264E-02	2.0524E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35565	4.3584E-01	1.0628E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11004	1.3667E-01	3.5127E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	897	1.2387E-02	1.2254E-03	.0000E+00	.0000E+00
52	73	6000.50C	1.3966E-03	7	9.3498E-05	2.7416E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	5.3467E-04	1.3326E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	5.9902E-04	3.0966E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.9747E-05	4.2961E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1437E-05	5.0973E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1460	1.9326E-02	9.6201E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	467	6.3742E-03	4.8955E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7074	8.7652E-02	2.6869E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2230	2.7873E-02	8.8048E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	173	2.4185E-03	2.1621E-04	.0000E+00	.0000E+00
53	74	13027.50C	9.9949E-01	6296	9.0744E-02	6.5195E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.6199E-04	1.4228E-05	.0000E+00	.0000E+00
54	75	6000.50C	1.3966E-03	49	6.7744E-04	2.2276E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	200	2.4559E-03	5.9055E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	305	4.2705E-03	2.1193E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.8684E-04	1.8483E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.1444E-04	2.4500E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7473	9.8919E-02	3.8030E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2547	3.4864E-02	2.0768E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35068	4.2632E-01	1.0673E-02	.0000E+00	1.3426E-05
		28000.50C	1.1433E-01	11152	1.3777E-01	3.5986E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	898	1.2184E-02	1.0835E-03	.0000E+00	.0000E+00
55	76	1001.50C	6.6667E-01	4529	3.7343E-02	2.0445E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	204	1.8506E-03	5.2392E-08	.0000E+00	.0000E+00
56	77	1001.50C	6.6667E-01	3843	3.3070E-02	1.7630E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	187	1.7526E-03	5.1065E-08	.0000E+00	.0000E+00
57	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	1	5.7457E-06	1.7798E-07	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	12	1.3808E-04	1.0730E-05	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1	1.3670E-05	1.0631E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	67	6.9170E-04	3.6292E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	9	9.5905E-05	5.4574E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	2	2.0168E-05	1.6522E-06	.0000E+00	.0000E+00

58	81	6000.50C	1.3966E-03	8	8.2177E-05	2.3679E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	4.4081E-04	2.1336E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	29	3.3611E-04	4.4697E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	8.0837E-05	1.5885E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.8025E-05	1.1896E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1193	1.3394E-02	1.4528E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	322	3.9586E-03	7.4266E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6375	6.6808E-02	3.9106E-03	.0000E+00	1.5474E-05
		28000.50C	1.1433E-01	1944	2.0489E-02	1.2894E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	120	1.4335E-03	2.2327E-04	.0000E+00	.0000E+00
59	82	1001.50C	6.6667E-01	10049	1.0327E-01	3.5285E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	747	9.1390E-03	4.1296E-06	.0000E+00	.0000E+00
60	83	1001.50C	6.6667E-01	572	4.4809E-03	2.5552E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	30	2.7675E-04	9.7113E-09	.0000E+00	.0000E+00
61	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
62	85	6000.50C	2.3404E-03	4	4.9444E-05	5.3869E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	6	8.3663E-05	3.9163E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	9	1.1268E-04	9.3502E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	31	3.7430E-04	3.8866E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	583	7.1435E-03	3.9316E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	92	1.2198E-03	1.0181E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1010	1.1077E-02	3.9194E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2665	3.0222E-02	1.0334E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	98	1.1958E-03	6.0337E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	72	9.0245E-04	9.3586E-05	.0000E+00	.0000E+00
63	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
65	88	6000.50C	1.0113E-02	65	8.1018E-04	3.2020E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	13	1.7850E-04	3.1501E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	6	7.3910E-05	1.2620E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	3.8446E-05	1.4761E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	180	2.4391E-03	1.0246E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8239	9.3070E-02	1.7039E-03	.0000E+00	.0000E+00
66	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

67	90	1001.50C	6.6667E-01	39110	3.2376E-01	1.7526E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1788	1.6470E-02	1.9880E-06	.0000E+00	.0000E+00
TOTAL				3336718	4.0692E+01	5.2719E-01	4.6288E-01	1.1156E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2495892	2.9153E+01	9.7363E-02	.0000E+00	.0000E+00
2004.50C	12	1.9500E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	270	3.4292E-03	2.7608E-07	.0000E+00	.0000E+00
7014.50C	873	1.0358E-02	4.0369E-04	.0000E+00	.0000E+00
8016.50C	291014	3.9741E+00	2.7288E-03	.0000E+00	.0000E+00
13027.50C	17786	2.5430E-01	2.5220E-03	.0000E+00	.0000E+00
14000.50C	1225	1.6715E-02	1.2993E-04	.0000E+00	.0000E+00
15031.50C	112	1.4689E-03	1.1507E-05	.0000E+00	.0000E+00
16032.50C	40	5.8307E-04	1.8874E-05	.0000E+00	.0000E+00
22000.50C	31	3.7430E-04	3.8866E-05	.0000E+00	.0000E+00
24000.50C	33051	4.2637E-01	2.7960E-02	.0000E+00	.0000E+00
25055.50C	11411	1.5556E-01	1.4486E-02	.0000E+00	.0000E+00
26000.55C	172766	2.0480E+00	8.0872E-02	.0000E+00	2.8900E-05
28000.50C	52828	6.3334E-01	2.6906E-02	.0000E+00	.0000E+00
29000.50C	137	1.6879E-03	9.3951E-05	.0000E+00	.0000E+00
40000.50C	57716	8.3247E-01	6.9477E-03	.0000E+00	7.3473E-05
42000.50C	3855	5.1519E-02	5.8241E-03	.0000E+00	.0000E+00
50000.35C	593	8.4918E-03	1.9313E-04	.0000E+00	.0000E+00
92235.50C	52724	1.0542E+00	9.1464E-02	4.4319E-01	9.8973E-06
92238.50C	144382	2.0667E+00	1.6922E-01	1.9689E-02	1.0033E-03

DUMP NO. 2 ON FILE RUNTPG NPS = 60635 CTM = 41.48

9 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 41.53 MINUTES

MCNP VERSION 4A-B 10/04/91

09/29/95 17:08:21

PROBID = 09/29/95 15:46:50

1MCNP VERSION 4A-B LD=10/04/91 03/21/95 16:57:08

PROBID = 03/21/95 16:57:08

INP=mpc12dr OUTP=mpc12dro

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12dr)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - NEW MODEL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.00-5 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.00-5 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP -.00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.0-5 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL
18- 8 1 -1.00-5 -32 34 -31 33 IMP:N=1 FILL=9 U=11
19- C TOP OF ASSEMBLY OUTSIDE LATTICE
20- 10 1 -1.00-5 -55 56 31 IMP:N=1 FILL=5 U=11
21- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
22- 11 1 -1.00-5 32 55 56 IMP:N=1 FILL=6 U=11
23- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
24- 12 1 -1.00-5 55 -56 -33 IMP:N=1 FILL=7 U=11
25- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 13 1 -1.00-5 -34 -55 -56 IMP:N=1 FILL=8 U=11
27- C PIN LATTICE DESCRIPTION
28- 32 1 -1.00-5 -13 14 -15 16 IMP:N=1 LAT=1 U=9
29- FILL -8:8 -8:8 0:0 9 16R 9 2 14R 9 9 2 14R 9 9 2 4R 3 2 2R 3 2 4R 9
30- 9 2 2R 3 2 6R 3 2 2R 9 9 2 14R 9
31- 9 2 2 3 2 2 3 2 2R 3 2 2 3 2 2 9 9 2 14R 9
32- 9 2 6R 4 2 6R 9
33- 9 2 14R 9 9 2 2 3 2 2 3 2 2R 3 2 2 3 2 2 9
34- 9 2 14R 9 9 2 2R 3 2 6R 3 2 2R 9
35- 9 2 4R 3 2 2R 3 2 4R 9 9 2 14R 9 9 2 14R 9 9 16R
36- C FUEL ROD
37- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
38- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
39- 35 1 -1.00-5 -17 5 IMP:N=1 U=2
40- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
41- 37 1 -1.00-5 17 -18 5 IMP:N=1 U=2
42- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
43- 39 1 -1.00-5 18 -19 5 IMP:N=1 U=2
44- 40 1 -1.00-5 19 IMP:N=1 U=2
45- C CONTROL ROD/GUIDE TUBE
46- 41 1 -1.00-5 -21 -5 IMP:N=1 U=3
47- 42 1 -1.00-5 -21 5 IMP:N=1 U=3
48- 43 4 -6.6000 21 -22 IMP:N=1 U=3
49- 44 1 -1.00-5 22 -23 IMP:N=1 U=3
50- 45 4 -6.6000 23 -24 IMP:N=1 U=3
51- 46 1 -1.00-5 24 IMP:N=1 U=3
52- C INSTRUMENTATION TUBE
53- 47 1 -1.00-5 -25 IMP:N=1 U=4
54- 48 4 -6.6000 25 -26 IMP:N=1 U=4
55- 49 1 -1.00-5 26 IMP:N=1 U=4
56- C WATER GAP - ASSEMBLY TOP
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57- 50 1 -1.00-5 -35 -4 IMP:N=1 U=5
58- C SS TUBE WALL - ASSEMBLY TOP
59- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
60- C AL-B WALL -ASSEMBLY TOP
61- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
62- C SS WALL - ASSEMBLY TOP
63- 53 8 -8.2380 46 -4 IMP:N=1 U=5
64- C WATER ABOVE BASKET
65- 54 1 -1.0-5 4 IMP:N=1 U=5
66- C WATER GAP - ASSEMBLY RIGHT
67- 55 1 -1.00-5 -36 -4 IMP:N=1 U=6
68- C SS TUBE WALL - ASSEMBLY RIGHT
69- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
70- C AL-B WALL - ASSEMBLY RIGHT
71- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
72- C SS WALL - ASSEMBLY RIGHT
73- 58 8 -8.2380 45 -4 IMP:N=1 U=6
74- C WATER ABOVE BASKET
75- 59 1 -1.0-5 4 IMP:N=1 U=6
76- C WATER GAP - ASSEMBLY BOTTOM
77- 60 1 -1.00-5 37 -4 IMP:N=1 U=7
78- C SS TUBE WALL - ASSEMBLY BOTTOM
79- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
80- C WATER ABOVE BASKET
81- 62 1 -1.0-5 4 IMP:N=1 U=7
82- C WATER GAP - ASSEMBLY LEFT
83- 63 1 -1.00-5 38 -4 IMP:N=1 U=8
84- C LOWER ST COMB - ASSEMBLY LEFT
85- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
86- C WATER ABOVE BASKET
87- 65 1 -1.0-5 4 IMP:N=1 U=8
88- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
89- 66 1 -1.00-5 74 75 IMP:N=1 U=10
90- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
91- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
92- C AXIS MATERIALS
93- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
94- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
95- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
96- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
97- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
98- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
99- 76 1 -1.00-5 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
100- 77 1 -1.00-5 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
101- C SS316L MPC LID
102- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
103- C SS316L MPC LINER
104- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
105- C GAP SS316L/INNER 825 BARRIER
106- 82 1 -1.00-5 10 -11 1 2 3 -71 IMP:N=1
107- C GAP BETWEEN MPC LID AND INNER BARRIER LID
108- 83 1 -1.00-5 -10 1 2 7 -71 IMP:N=1
109- C INNER BARRIER LID - ALLOY 825
110- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
111- C INNER BARRIER - ALLOY 825
112- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
113- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
114- 86 1 -1.00-5 8 -72 -12 1 2 IMP:N=1
115- C OUTER BARRIER LID A516 CARBON STEEL
116- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1

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117- C OUTER BARRIER - A516 CARBON STEEL
118- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
119- C WATER, ENDS
120- 89 1 -1.00-5 1 2 73 -80 -81 IMP:N=1
121- C WATER, SIDE
122- 90 1 -1.00-5 1 2 3 70 -73 -81 IMP:N=1
123- C OUTSIDE WORLD
124- 91 0 -1:-2:-3:80:81 IMP:N=0
125-
126- C SURFACE SPECIFICATIONS
127- 1* PX 0.0
128- 2* PY 0.00
129- 3* PZ 0.00
130- 4 PZ 203.2000 $ TOP ACTIVE FUEL
131- 5 PZ 222.2500 $ TOP FUEL HARDWARE
132- 6 PZ 229.2500 $ TOP FUEL REGION
133- 7 PZ 231.7500 $ TOP ALLOY 825 LID
134- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
135- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
136- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
137- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
138- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
139- C PIN LATTICE BOUNDS
140- 13 PX 0.72135
141- 14 PX -0.72135
142- 15 PY 0.72135
143- 16 PY -0.72135
144- C FUEL ROD
145- 17 CZ 0.468122
146- 18 CZ 0.478790
147- 19 CZ 0.546100
148- C CONTROL ROD/GUIDE TUBE
149- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
150- 21 CZ 0.50292
151- 22 CZ 0.56007
152- 23 CZ 0.63246
153- 24 CZ 0.67310
154- C INSTRUMENTATION TUBE
155- 25 CZ 0.56007
156- 26 CZ 0.62611
157- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
158- 27 PX 12.80923
159- 28 PX -12.80923
160- 29 PY 12.80923
161- 30 PY -12.80923
162- C ASSEMBLY LATTICE BOUNDS
163- 31 PY 10.82024 $ ACTUAL 10.82025
164- 32 PX 10.82024 $ ACTUAL 10.82025
165- 33 PY -10.82024 $ ACTUAL -10.82025
166- 34 PX -10.82024 $ ACTUAL -10.82025
167- 35 PY 11.4300
168- 36 PX 11.4300
169- 37 PY -11.4300
170- 38 PX -11.4300
171- 39 PY 12.17930
172- 40 PX 12.17930
173- 41 PY -11.66876
174- 42 PX -11.66876
175- 43 PX 11.66876
176- 44 PY 11.66876
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177- 45 PX 11.94054
178- 46 PY 11.94054
179- C BLANK PIN CELL
180- 48 PX -0.7213
181- 49 PX 0.7213
182- 50 PY -0.7213
183- 51 PY 0.7213
184- 52 PY 0.0001
185- 53 PY -0.0001
186- 54 PY 0.0
187- 55 P 1. -1. 0. 0.
188- 56 P 1. 1. 0. 0. $ 24.35
189- C EXTRA CARDS
190- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
191- 58 PY 2.14376
192- 59 PX 1.9050
193- 60 PY 1.9050
194- 61 PX 1.270
195- 62 PY 1.270050
196- 64 PX -.0000005
197- 65 PY -.0000005
198- 66 PX 95.
199- 67 PY 95.
200- C OUTER BARRIER
201- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
202- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
203- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
204- 73 PZ 282.3500 $TOP OF OUTER BARRIER
205- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
206- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
207- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
208- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
209-
210- MODE N
211- C VOL 88J
212- KCODE 3000 1. 5 20
213- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
214- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
215- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
216- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
217- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
218- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
219- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.
220- C 22.19 13.53 10. 22.19 17.86 10. 22.19 22.19 10.
221- C 4.87 4.87 75. 4.87 9.20 75. 4.87 13.53 75.
222- C 4.87 17.86 75. 4.87 22.19 75. 9.20 4.87 75.
223- C 9.20 9.20 75. 9.20 13.53 75. 9.20 17.86 75.
224- C 9.20 22.19 75. 13.53 4.87 75. 13.53 9.20 75.
225- C 13.53 17.86 75. 13.53 22.19 75. 17.86 4.87 75.
226- C 17.86 9.20 75. 17.86 13.53 75. 17.86 17.86 75.
227- C 17.86 22.19 75. 22.19 4.87 75. 22.19 9.20 75.
228- C 22.19 13.53 75. 22.19 17.86 75. 22.19 22.19 75.
229- C 4.87 4.87 150. 4.87 9.20 150. 4.87 13.53 150.
230- C 4.87 17.86 150. 4.87 22.19 150. 9.20 4.87 150.
231- C 9.20 9.20 150. 9.20 13.53 150. 9.20 17.86 150.
232- C 9.20 22.19 150. 13.53 4.87 150. 13.53 9.20 150.
233- C 13.53 17.86 150. 13.53 22.19 150. 17.86 4.87 150.
234- C 17.86 9.20 150. 17.86 13.53 150. 17.86 17.86 150.
235- C 17.86 22.19 150. 22.19 4.87 150. 22.19 9.20 150.
236- C 22.19 13.53 150. 22.19 17.86 150. 22.19 22.19 150.

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237-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
238-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
239-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
240-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
241-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
242-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
243-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
244-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
245-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
246-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
247-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
248-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
249-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
250-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
251-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
252-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
253-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
254-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
255-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
256-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
257-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
258-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
259-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
260-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
261-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
262-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
263-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
264-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
265-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
266-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
267-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
268-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
269-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
270-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
271-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
272-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
273-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
274-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
275-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
276-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
277-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
278-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
279-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.
280-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
281-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
282-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
283-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
284-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
285-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
286-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
287-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
288-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
289-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
290-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
291-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
292-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
293-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
294-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
295-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
296-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.

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297- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
298- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
299- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
300- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
301- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
302- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
303- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
304- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
305- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
306- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
307- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
308- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
309- C      MATERIAL SPECIFICATIONS
310- C      WATER AT 300 K
311- M1     1001.50C 6.6878-2 8016.50C 3.3439-2
312- MT1    LWTR.01T
313- C      3.00%/20 GWD/5 YEAR -- UO2
314- M2     8016.50C 4.7767E-02
315-      45103.50C 1.7033E-05
316-      47109.50C 2.0436E-06
317-      62149.50C 1.3260E-07
318-      63151.55C 1.6963E-08
319-      63153.55C 2.1975E-06
320-      64155.50C 1.0128E-07
321-      92233.50C 3.2712E-11
322-      92234.50C 4.9053E-06
323-      92235.50C 3.1513E-04
324-      92236.50C 7.0520E-05
325-      92238.50C 2.2844E-02
326-      93237.55C 5.4646E-06
327-      94238.50C 9.9680E-07
328-      94239.55C 1.0790E-04
329-      94240.50C 3.0974E-05
330-      94241.50C 1.4571E-05
331-      94242.50C 3.7204E-06
332-      95241.50C 4.3471E-06
333-      95242.50C 1.3739E-08
334-      95243.50C 4.1755E-07
335-      96245.35C 1.4221E-09
336- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
337- M3     2004.50C 1.0
338- C      ZIRCALOY-4
339- M4     8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
340-      40000.50C -0.9818 50000.35C -0.0140
341- C      ALLOY 825
342- M5     6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
343-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
344-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
345-      29000.50C -0.0250 42000.50C -0.0300
346- C      1100 ALUMINUM ALLOY
347- M6     13027.50C -0.99880 29000.50C -0.00120
348- C      A516 CARBON STEEL
349- M7     6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
350-      16032.50C -0.00035 25055.50C -0.0090
351-      26000.55C -0.98535
352- C      SS316L
353- M8     6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
354-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
355-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
356-      42000.50C -0.02500

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357- C TALLIES
 358- PRINT
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	2883
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	2883
POINTS AFTER EXPANSION OR CONTRACTION	2997
NOMINAL SOURCE SIZE	3000
INITIAL GUESS FOR K(EFF.)	1.000000
CYCLES TO SKIP BEFORE TALLYING	5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	2	3	4	5	6	7	8
1001, .66667	8016, .33333						
8016, .67097	45103, .00024	47109, .00003	62149, .00000				
63151, .00000	63153, .00003	64155, .00000	92233, .00000				
92234, .00007	92235, .00443	92236, .00099	92238, .32088				
93237, .00008	94238, .00001	94239, .00152	94240, .00044				
94241, .00020	94242, .00005	95241, .00006	95242, .00000				
95243, .00001	96245, .00000						
2004, 1.00000							
8016, .00681	24000, .00175	26000, .00325	40000, .97748				
50000, .01071							
6000, .00234	13027, .00417	14000, .01001	16032, .00053				
22000, .01057	24000, .23247	25055, .01023	26000, .28763				
28000, .40235	29000, .02212	42000, .01758					
13027, .99949	29000, .00051						
6000, .01011	14000, .00541	15031, .00062	16032, .00060				
25055, .00905	26000, .97421						
6000, .00140	7014, .00399	14000, .01493	15031, .00081				
16032, .00052	24000, .18282	25055, .02036	26000, .64626				
28000, .11433	42000, .01457						

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001, .11191	8016, .88809					
2	8016, .12057	45103, .00028	47109, .00004	62149, .00000			
	63151, .00000	63153, .00005	64155, .00000	92233, .00000			
	92234, .00018	92235, .01169	92236, .00263	92238, .85819			
	93237, .00020	94238, .00004	94239, .00407	94240, .00117			

	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
8	10	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
9	11	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
10	12	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
11	13	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
12	32	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
13	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	INFINITE
14	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1
15	35	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
16	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	INFINITE
17	37	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
18	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	INFINITE
19	39	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
20	40	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
21	41	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
22	42	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
23	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	INFINITE
24	44	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
25	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	INFINITE
26	46	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
27	47	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
28	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	INFINITE
29	49	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
30	50	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
31	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	INFINITE
32	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	INFINITE
33	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	INFINITE
34	54	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
35	55	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE
36	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	INFINITE
37	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	INFINITE
38	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	INFINITE
39	59	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	INFINITE

40	60	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	62	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	63	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	65	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	66	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
50	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
51	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
52	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
53	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
54	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
55	76	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
56	77	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
57	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
58	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
59	82	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
60	83	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
61	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
62	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
63	86	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
64	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
65	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
66	89	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
67	90	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
68	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY

27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	NOT A BOUNDARY
47	49	.00000E+00	.00000E+00	NOT A BOUNDARY
48	50	.00000E+00	.00000E+00	NOT A BOUNDARY
49	51	.00000E+00	.00000E+00	NOT A BOUNDARY
50	52	.00000E+00	.00000E+00	NOT A BOUNDARY
51	53	.00000E+00	.00000E+00	NOT A BOUNDARY
52	54	.00000E+00	.00000E+00	NOT A BOUNDARY
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE

87 5029 .00000E+00 .00000E+00 INFINITE
 88 5030 .00000E+00 .00000E+00 INFINITE
 1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE	
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00	
2	2	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
3	3	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
4	4	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
5	5	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
6	6	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
7	8	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
8	10	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
9	11	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
10	12	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
11	13	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
12	32	1S	1.00309E-06	1.00000E-05	.00000E+00	0	1.0000E+00	
13	33	2	7.11920E-02	1.05224E+01	.00000E+00	0	1.0000E+00	
14	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
15	35	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
16	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
17	37	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
18	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	39	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
20	40	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
21	41	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
22	42	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
23	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	44	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
25	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	46	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
27	47	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
28	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	49	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
30	50	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
31	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
33	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
34	54	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
35	55	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
36	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	59	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
40	60	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
41	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	62	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
43	63	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
44	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	65	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
46	66	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
47	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00

54	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	76	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
56	77	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
57	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	82	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
60	83	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
61	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	86	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
64	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	89	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
67	90	1S	1.00309E-06	1.00000E-05	.00000E+00	.00000E+00	0	1.0000E+00
68	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE		TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01
15	15		PY	7.2135000E-01
16	16		PY	-7.2135000E-01
17	17		CZ	4.6812200E-01
18	18		CZ	4.7879000E-01
19	19		CZ	5.4610000E-01
20	20		CZ	5.0292000E-01
21	22		CZ	5.6007000E-01
22	23		CZ	6.3246000E-01
23	24		CZ	6.7310000E-01
24	25		CZ	5.6007000E-01
25	26		CZ	6.2611000E-01
26	27		PX	1.2809230E+01
27	28		PX	-1.2809230E+01
28	29		PY	1.2809230E+01
29	30		PY	-1.2809230E+01
30	31		PY	1.0820240E+01
31	32		PX	1.0820240E+01
32	33		PY	-1.0820240E+01
33	34		PX	-1.0820240E+01
34	35		PY	1.1430000E+01
35	36		PX	1.1430000E+01
36	37		PY	-1.1430000E+01
37	38		PX	-1.1430000E+01
38	39		PY	1.2179300E+01
39	40		PX	1.2179300E+01

40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	1001 PX	2.5991819E+01			
74	2042	1001 PX	2.1437590E+00			
75	2039	1001 PY	2.5991819E+01			
76	2041	1001 PY	2.1437590E+00			
77	3027	1002 PX	2.9032230E+01			
78	3028	1002 PX	3.4137700E+00			
79	3029	1002 PY	7.9232790E+01			
80	3030	1002 PY	5.3614330E+01			
81	4027	1003 PX	5.3515300E+01			
82	4028	1003 PX	2.7896840E+01			
83	4029	1003 PY	5.3515300E+01			
84	4030	1003 PY	2.7896840E+01			
85	5027	1004 PX	7.9232790E+01			
86	5028	1004 PX	5.3614330E+01			
87	5029	1004 PY	2.9032230E+01			
88	5030	1004 PY	3.4137700E+00			

WARNING. SURFACE 48 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 49 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 50 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 51 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 52 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 53 IS NOT USED FOR ANYTHING.

WARNING. SURFACE 54 IS NOT USED FOR ANYTHING.
1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08

75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

8 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.
94238.50C 16458 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU
TOTAL NU

(1314)	79/06/21.
(1340)	79/07/31.
(1394)	79/10/17.
(1396)	79/08/30.
(1338)	79/09/12.
(1381)	79/08/30.
(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
16032.50C	2684	NJOY
22000.50C	25231	NJOY
25055.50C	60097	NJOY

(1315)	79/10/29.
(1316)	79/10/29.
(1322)	79/06/21.
(1325)	79/06/21.

42000.50C 18467 NJOY
62149.50C 11116 NJOY
64155.50C 31471 NJOY

(1321) 79/08/01.
(1319) 02/12/85
(1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
47109.50C 10147 NJOY
93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
(1373) 11/01/85
(1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
63153.55C 30265

06/28/88
06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 91582
TALLIES 0
BANK 18403
CROSS SECTIONS 1347491

TOTAL 1457476

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

16 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .10

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12dr)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
-----	---	---	---	------	------	---	---	---	------	--------	--------

1	1.020E-01	1.512E-01	1.831E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.001E+00	9.440E-01
2	-4.215E-01	1.869E-01	2.629E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.001E+00	2.080E+00
3	3.092E-01	-2.785E-01	8.025E+00	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.001E+00	1.021E+00
4	-2.363E-01	-3.306E-01	3.630E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.001E+00	1.232E+00
5	7.625E-03	4.309E-01	3.297E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.001E+00	2.651E+00
6	-2.175E-01	2.326E-01	1.278E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.001E+00	2.967E-01
7	-1.523E-01	-1.671E-02	2.567E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.001E+00	4.000E+00
8	1.797E-01	3.820E-01	3.166E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.001E+00	1.434E+00
9	2.291E-01	3.724E-01	5.360E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.001E+00	7.314E+00
10	2.825E-01	-1.500E-01	5.103E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.001E+00	1.367E+00
11	-1.150E-01	2.764E-01	5.142E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.001E+00	7.172E+00
12	2.931E-01	-1.409E-01	5.399E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.001E+00	2.559E+00
13	-1.567E-03	4.067E-01	5.984E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.001E+00	1.310E+00
14	-3.459E-01	7.887E-02	1.592E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.001E+00	4.007E-01
15	2.340E-01	2.065E-01	6.287E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.001E+00	1.608E+00
16	2.083E-01	-2.716E-01	3.359E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.001E+00	4.708E-01
17	2.831E-01	-4.959E-02	6.189E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.001E+00	2.362E+00
18	-2.360E-01	-6.337E-02	6.574E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.001E+00	3.832E+00
19	7.281E-02	-2.719E-02	6.440E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.001E+00	7.672E-01
20	3.742E-01	-2.504E-01	8.350E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.001E+00	1.922E+00
21	-8.826E-02	2.335E-01	3.540E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.001E+00	2.850E+00
22	-1.309E-01	2.043E-01	3.499E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.001E+00	1.091E+00
23	-2.816E-01	3.294E-01	3.236E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.001E+00	1.281E+00
24	-6.276E-03	-4.331E-01	2.099E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.001E+00	3.481E+00
25	-6.235E-02	-8.233E-02	2.043E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.001E+00	3.190E+00
26	2.078E-01	3.023E-01	2.720E+01	33	0	-2.568E-01	-6.391E-01	7.249E-01	.000E+00	1.001E+00	2.651E+00
27	2.361E-01	3.710E-01	5.603E+00	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.001E+00	2.061E-01
28	-3.666E-01	2.108E-01	3.998E+00	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.001E+00	8.839E-01
29	1.847E-01	-7.997E-02	2.540E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.001E+00	2.789E+00
30	1.729E-01	-3.227E-01	2.558E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.001E+00	1.428E+00
31	2.649E-01	-3.251E-01	2.589E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.001E+00	2.267E+00
32	-5.617E-02	2.983E-01	2.979E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.001E+00	9.379E-02
33	-8.833E-02	-4.398E-01	3.947E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.001E+00	8.139E-01
34	3.564E-02	9.080E-02	2.661E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.001E+00	3.950E+00
35	1.688E-01	9.335E-02	4.690E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.001E+00	1.229E+00
36	1.688E-01	9.335E-02	4.690E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.001E+00	3.279E-01
37	2.256E-01	9.685E-02	4.737E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.001E+00	9.153E-01
38	-1.632E-01	4.257E-01	4.194E+00	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.001E+00	1.188E+00
39	-2.593E-01	-1.657E-01	1.999E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.001E+00	1.849E+00
40	-1.663E-01	-2.459E-02	1.998E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.001E+00	9.338E-01
41	2.366E-01	-1.189E-01	1.955E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.001E+00	3.753E+00
42	-1.791E-01	-4.059E-01	2.729E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.001E+00	4.205E+00
43	3.831E-01	-2.435E-01	1.753E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.001E+00	2.942E-01
44	-2.295E-01	3.285E-01	1.811E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.001E+00	2.143E+00
45	-3.190E-01	-2.513E-02	1.628E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.001E+00	3.459E+00
46	2.564E-01	-8.247E-02	1.482E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.001E+00	1.905E+00
47	-4.325E-02	-3.625E-01	1.600E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.001E+00	3.480E+00
48	8.087E-02	-4.219E-01	1.828E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.001E+00	1.569E+00
49	4.370E-01	1.471E-01	1.641E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.001E+00	9.963E-01
50	-1.861E-01	-1.844E-01	2.190E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.001E+00	4.356E-01

CYCLE	1	K(COLLISION)	.234266	REMOVAL LIFETIME(ABS)	2.0092E+02	SOURCE POINTS GENERATED	723
CYCLE	2	K(COLLISION)	.233759	REMOVAL LIFETIME(ABS)	1.8960E+02	SOURCE POINTS GENERATED	2959
CYCLE	3	K(COLLISION)	.240747	REMOVAL LIFETIME(ABS)	1.9022E+02	SOURCE POINTS GENERATED	3151
CYCLE	4	K(COLLISION)	.239445	REMOVAL LIFETIME(ABS)	1.8594E+02	SOURCE POINTS GENERATED	2961

CYCLE 5 K(COLLISION) .229585 REMOVAL LIFETIME(ABS) 1.8671E+02 SOURCE POINTS GENERATED 2861

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .238737 REMOVAL LIFETIME(ABS) 2.1559E+02 SOURCE POINTS GENERATED 3027

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.237752	.238245	.0021	K(COL/ABS)	.000000	.0000	.000000	.0000	.0000
K(ABSORPTION)	.241211	.239529	.0070	K(ABS/TK LN)	.000000	.0000	.000000	.0000	.0000
K(TRK LENGTH)	.236328	.238513	.0092	K(TK LN/COL)	.000000	.0000	.000000	.0000	.0000
REM LIFE(COL)	1.8723E+02	2.0212E+02	.0737	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000	.0000
REM LIFE(ABS)	1.9031E+02	2.0295E+02	.0623						
SOURCE POINTS GENERATED	2945								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.238913	.238468	.0015	K(COL/ABS)	.237892	.0044	.238330	.0009	-.8812
K(ABSORPTION)	.232891	.237316	.0102	K(ABS/TK LN)	.238111	.0039	.238387	.0042	-.6557
K(TRK LENGTH)	.239690	.238905	.0055	K(TK LN/COL)	.238686	.0035	.238327	.0010	.9348
REM LIFE(COL)	2.1729E+02	2.0718E+02	.0482	LIFE(COL/ABS)	2.0660E+02	.0432	2.0283E+02	.0314	.9912
REM LIFE(ABS)	2.1218E+02	2.0602E+02	.0384						
SOURCE POINTS GENERATED	3060								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.238211	.238404	.0011	K(COL/ABS)	.237165	.0044	.238240	.0011	-.5094
K(ABSORPTION)	.231754	.235926	.0093	K(ABS/TK LN)	.237603	.0035	.238318	.0028	-.7069
K(TRK LENGTH)	.240403	.239280	.0042	K(TK LN/COL)	.238842	.0025	.238237	.0011	.7511
REM LIFE(COL)	1.8507E+02	2.0165E+02	.0444	K(COL/ABS/TK LN)	.237870	.0023	.238212	.0018	
REM LIFE(ABS)	1.8497E+02	2.0076E+02	.0383	LIFE(COL/ABS)	2.0120E+02	.0413	1.9793E+02	.0341	.9909
SOURCE POINTS GENERATED	3015								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.241470	.239017	.0027	K(COL/ABS)	.237902	.0046	.238973	.0032	.2839
K(ABSORPTION)	.240231	.236787	.0081	K(ABS/TK LN)	.238245	.0038	.238992	.0034	-.3395
K(TRK LENGTH)	.241397	.239703	.0037	K(TK LN/COL)	.239360	.0029	.239076	.0032	.6613
REM LIFE(COL)	2.2278E+02	2.0588E+02	.0395	K(COL/ABS/TK LN)	.238502	.0032	.238999	.0044	
REM LIFE(ABS)	2.1845E+02	2.0430E+02	.0339	LIFE(COL/ABS)	2.0509E+02	.0366	1.9860E+02	.0262	.9933
SOURCE POINTS GENERATED	2985								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.241527	.239435	.0028	K(COL/ABS)	.238622	.0048	.239565	.0031	.5266
K(ABSORPTION)	.242923	.237810	.0078	K(ABS/TK LN)	.238696	.0036	.239213	.0027	-.3705
K(TRK LENGTH)	.238976	.239582	.0031	K(TK LN/COL)	.239509	.0025	.239498	.0027	.4086
REM LIFE(COL)	2.0422E+02	2.0560E+02	.0323	K(COL/ABS/TK LN)	.238942	.0032	.239280	.0035	
REM LIFE(ABS)	2.0687E+02	2.0473E+02	.0277	LIFE(COL/ABS)	2.0516E+02	.0299	2.0250E+02	.0245	.9865
SOURCE POINTS GENERATED	3007								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.233175	.238541	.0044	K(COL/ABS)	.237803	.0053	.238552	.0049	.6157

K(ABSORPTION) .232601 .237065 .0074
 K(TRK LENGTH) .235658 .239022 .0035
 REM LIFE(COL) 1.9564E+02 2.0418E+02 .0284
 REM LIFE(ABS) 1.9359E+02 2.0314E+02 .0249
 SOURCE POINTS GENERATED 2908

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .233950 .237967 .0045
 K(ABSORPTION) .236471 .236991 .0064
 K(TRK LENGTH) .236300 .238681 .0034
 REM LIFE(COL) 1.8487E+02 2.0176E+02 .0276
 REM LIFE(ABS) 1.8956E+02 2.0144E+02 .0233
 SOURCE POINTS GENERATED 3030

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .235221 .237662 .0042
 K(ABSORPTION) .231638 .236396 .0062
 K(TRK LENGTH) .236320 .238419 .0032
 REM LIFE(COL) 1.9238E+02 2.0072E+02 .0250
 REM LIFE(ABS) 1.9751E+02 2.0100E+02 .0207
 SOURCE POINTS GENERATED 3019

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .234366 .237332 .0040
 K(ABSORPTION) .230628 .235820 .0061
 K(TRK LENGTH) .230070 .237584 .0045
 REM LIFE(COL) 1.9432E+02 2.0008E+02 .0227
 REM LIFE(ABS) 1.9571E+02 2.0047E+02 .0187
 SOURCE POINTS GENERATED 2943

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .230495 .236711 .0045
 K(ABSORPTION) .226620 .234983 .0065
 K(TRK LENGTH) .231666 .237046 .0047
 REM LIFE(COL) 1.8785E+02 1.9897E+02 .0214
 REM LIFE(ABS) 1.8607E+02 1.9916E+02 .0183
 SOURCE POINTS GENERATED 2945

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .233170 .236416 .0043
 K(ABSORPTION) .235092 .234992 .0060
 K(TRK LENGTH) .235616 .236927 .0043
 REM LIFE(COL) 2.0513E+02 1.9948E+02 .0196
 REM LIFE(ABS) 2.0728E+02 1.9984E+02 .0170
 SOURCE POINTS GENERATED 3065

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 18 AVE OF 13 CYCLES
 K(COLLISION) .238551 .236580 .0040

K(ABS/TK LN) .238043 .0041 .238674 .0036 .0373
 K(TK LN/COL) .238781 .0037 .238973 .0038 .7282
 K(COL/ABS/TK LN) .238209 .0041 .238562 .0038 .0038
 LIFE(COL/ABS) 2.0366E+02 .0265 2.0073E+02 .0233 .9849

CYCLE = 12

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .237479 .0048 .237805 .0048 .5475
 K(ABS/TK LN) .237836 .0037 .238334 .0033 .0546
 K(TK LN/COL) .238324 .0037 .238743 .0036 .7843
 K(COL/ABS/TK LN) .237880 .0038 .238541 .0032 .0032
 LIFE(COL/ABS) 2.0160E+02 .0253 2.0068E+02 .0197 .9843

CYCLE = 13

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .237029 .0047 .237546 .0045 .6003
 K(ABS/TK LN) .237408 .0037 .238101 .0032 .1887
 K(TK LN/COL) .238040 .0035 .238508 .0034 .8063
 K(COL/ABS/TK LN) .237492 .0037 .238256 .0034 .0034
 LIFE(COL/ABS) 2.0086E+02 .0227 2.0155E+02 .0177 .9793

CYCLE = 14

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .236576 .0046 .237307 .0043 .6548
 K(ABS/TK LN) .236702 .0045 .237115 .0046 .4229
 K(TK LN/COL) .237458 .0040 .237403 .0042 .7437
 K(COL/ABS/TK LN) .236912 .0042 .237344 .0049 .0049
 LIFE(COL/ABS) 2.0028E+02 .0206 2.0125E+02 .0158 .9797

CYCLE = 15

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .235847 .0052 .236914 .0048 .7636
 K(ABS/TK LN) .236015 .0050 .236730 .0049 .5740
 K(TK LN/COL) .236878 .0044 .236842 .0046 .8111
 K(COL/ABS/TK LN) .236247 .0047 .236977 .0055 .0055
 LIFE(COL/ABS) 1.9907E+02 .0197 1.9949E+02 .0169 .9764

CYCLE = 16

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .235704 .0048 .236428 .0045 .7288
 K(ABS/TK LN) .235960 .0046 .236613 .0045 .5693
 K(TK LN/COL) .236671 .0041 .236666 .0043 .8048
 K(COL/ABS/TK LN) .236112 .0043 .236659 .0050 .0050
 LIFE(COL/ABS) 1.9966E+02 .0182 2.0038E+02 .0160 .9747

CYCLE = 17

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .235933 .0045 .236626 .0042 .7383

K(ABSORPTION)	.238816	.235286	.0056	K(ABS/TK LN)	.236108	.0042	.236682	.0041	.5557
K(TRK LENGTH)	.236960	.236929	.0040	K(TK LN/COL)	.236755	.0038	.236764	.0039	.7931
REM LIFE(COL)	1.9579E+02	1.9920E+02	.0181	K(COL/ABS/TK LN)	.236265	.0040	.236773	.0045	
REM LIFE(ABS)	1.9913E+02	1.9979E+02	.0156	LIFE(COL/ABS)	1.9949E+02	.0168	2.0063E+02	.0147	.9729
SOURCE POINTS GENERATED	2979								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.233136		.236334		.0039	K(COL/ABS)	.235736	.0043	.236334 .0040 .7381
K(ABSORPTION)	.233216		.235139		.0053	K(ABS/TK LN)	.235963	.0040	.236540 .0038 .5638
K(TRK LENGTH)	.234938		.236787		.0037	K(TK LN/COL)	.236561	.0036	.236600 .0037 .7972
REM LIFE(COL)	2.0684E+02		1.9974E+02		.0170	K(COL/ABS/TK LN)	.236087	.0038	.236574 .0043 .9720
REM LIFE(ABS)	2.0419E+02		2.0010E+02		.0145	LIFE(COL/ABS)	1.9992E+02	.0156	2.0061E+02 .0136 .9720
SOURCE POINTS GENERATED	2932								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

 DUMP NO. 2 ON FILE RUNTPE NPS = 54580 CTM = 240.47

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.224127		.235520		.0050	K(COL/ABS)	.235022	.0050	.235269 .0051 .7960
K(ABSORPTION)	.225922		.234524		.0056	K(ABS/TK LN)	.235426	.0044	.236197 .0041 .6643
K(TRK LENGTH)	.229887		.236327		.0040	K(TK LN/COL)	.235924	.0043	.236418 .0041 .8406
REM LIFE(COL)	1.9981E+02		1.9975E+02		.0158	K(COL/ABS/TK LN)	.235457	.0045	.236231 .0047 .9666
REM LIFE(ABS)	2.0445E+02		2.0039E+02		.0136	LIFE(COL/ABS)	2.0007E+02	.0146	2.0114E+02 .0130 .9666
SOURCE POINTS GENERATED	2917								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12dr)
 0

PROBID = 03/21/95 21:15:46
 03/21/95 16:57:08

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER PARTICLE)	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER PARTICLE)
SOURCE	57512	1.0433E+00	2.0409E+00	ESCAPE	33763	4.7203E-01	1.4833E-01
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	8.3686E-02	2.0490E-04	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	23881	8.3149E-02	1.6238E-04
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	6.6184E-10	FORCED COLLISIONS	0	0.	0.
(N,XN)	261	3.6310E-03	2.7248E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.6506E+00
TOTAL	57773	1.1306E+00	2.0439E+00	CAPTURE	0	4.8238E-01	8.7507E-02
				LOSS TO (N,XN)	129	1.7950E-03	1.4716E-02
				LOSS TO FISSION	0	9.1227E-02	1.4256E-01
				TOTAL	57773	1.1306E+00	2.0439E+00

NUMBER OF NEUTRONS BANKED 132
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0045E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 9.9289E+01
 TOTAL NEUTRON COLLISIONS 5710313

AVERAGE LIFETIME, SHAKES

ESCAPE 9.6216E+01
 CAPTURE 2.8087E+02
 CAPTURE OR ESCAPE 1.9751E+02

CUTOFFS

TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01

NET MULTIPLICATION 1.0018E+00 .0014 ANY TERMINATION 2.4333E+02 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 253.23 MINUTES MAXIMUM NUMBER EVER IN BANK 2
 COMPUTER TIME IN MCRUN 253.13 MINUTES BANK OVERFLOWS TO BACKUP FILE 0
 SOURCE PARTICLES PER MINUTE 2.2720E+02 FIELD LENGTH 0
 RANDOM NUMBERS GENERATED 88737149 MOST RANDOM NUMBERS USED WAS 6337 IN HISTORY 17212

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5208E-01 TO 4.1494E+00
 1 NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	344084	53100	2.7154E-04	5.0251E-02	3.6642E-01	7.1414E-01	1.4010E+05
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	3723712	57643	1.9262E+01	8.9436E-02	4.7235E-01	7.3524E-01	2.4608E+00
14	34	72430	4020	2.6165E-01	3.8712E-02	3.3062E-01	6.9889E-01	3.5028E+00
15	35	22030	2440	.0000E+00	2.6425E-02	2.6369E-01	6.8068E-01	1.2312E+05
16	36	7599705	57643	8.5767E-04	8.6928E-02	4.6531E-01	7.3446E-01	3.7345E+03
17	37	41805	2452	.0000E+00	2.7098E-02	2.6328E-01	6.8294E-01	1.2329E+05
18	38	8223658	57643	4.7852E+00	8.6590E-02	4.6448E-01	7.3423E-01	3.3838E+00
19	39	45485	2500	.0000E+00	2.6868E-02	2.6074E-01	6.7935E-01	1.2264E+05
20	40	11806602	57643	5.4654E-04	8.5701E-02	4.6232E-01	7.3391E-01	1.5469E+05
21	41	311534	49428	6.7440E-05	8.8654E-02	4.6997E-01	7.3553E-01	1.5598E+05
22	42	1802	1025	.0000E+00	2.9066E-02	3.0328E-01	6.8593E-01	1.2882E+05
23	43	661889	50207	3.2930E-01	8.7807E-02	4.7011E-01	7.3491E-01	3.3937E+00
24	44	742730	50879	1.1718E-05	8.8084E-02	4.7033E-01	7.3498E-01	1.5589E+05
25	45	813492	51248	2.8384E-01	8.7588E-02	4.6960E-01	7.3478E-01	3.3911E+00
26	46	992992	52680	5.8690E-05	8.7479E-02	4.6833E-01	7.3509E-01	1.5571E+05
27	47	21977	16025	1.2020E-05	9.4221E-02	4.8425E-01	7.3747E-01	1.5826E+05
28	48	46590	17568	2.6294E-02	9.5043E-02	4.8660E-01	7.3969E-01	3.4140E+00
29	49	60879	22530	.0000E+00	9.3009E-02	4.8118E-01	7.3845E-01	1.5777E+05
30	50	236185	48696	4.2514E-05	7.3423E-02	4.2996E-01	7.2500E-01	1.4983E+05
31	51	237050	48899	7.1756E-01	7.1996E-02	4.2270E-01	7.2477E-01	2.8538E+00
32	52	237119	48683	3.4744E-01	6.9913E-02	4.1423E-01	7.2509E-01	7.9116E+00
33	53	235517	48640	7.0184E-01	6.9594E-02	4.1395E-01	7.2451E-01	2.8814E+00
34	54	7148	2889	6.3261E-06	3.4350E-02	3.3062E-01	6.9331E-01	1.3399E+05
35	55	236055	48796	8.3568E-05	7.2714E-02	4.2938E-01	7.2665E-01	1.4979E+05
36	56	236868	49045	7.1502E-01	7.1908E-02	4.2470E-01	7.2778E-01	2.8711E+00
37	57	236600	48782	3.4746E-01	7.0518E-02	4.2241E-01	7.2871E-01	7.8268E+00
38	58	234775	48736	6.9802E-01	6.9659E-02	4.2026E-01	7.2722E-01	2.8931E+00
39	59	7273	2872	.0000E+00	2.7923E-02	2.7093E-01	6.8666E-01	1.2555E+05
40	60	306069	43343	7.1113E-05	8.3972E-02	4.2705E-01	7.3454E-01	1.4990E+05
41	61	309728	43511	9.2051E-01	8.3247E-02	4.1951E-01	7.3475E-01	2.9247E+00
42	62	7500	2405	.0000E+00	3.6715E-02	3.3027E-01	6.9189E-01	1.3400E+05
43	63	307408	43305	3.9273E-05	8.5024E-02	4.3109E-01	7.3501E-01	1.5027E+05
44	64	310866	43426	9.2452E-01	8.3561E-02	4.2485E-01	7.3385E-01	2.9229E+00
45	65	7857	2414	.0000E+00	3.6303E-02	3.0631E-01	7.0744E-01	1.3058E+05
46	66	229984	49999	3.3053E-04	4.6706E-02	3.5488E-01	7.1609E-01	1.3868E+05

47	67	152304	43848	159629	1.7004E+00	4.7300E-02	3.5345E-01	7.1425E-01	2.8792E+00
48	68	151886	43747	159753	1.6925E+00	4.6847E-02	3.5336E-01	7.1251E-01	2.8719E+00
49	70	238566	33540	64904	7.0970E-01	7.2362E-02	3.9498E-01	7.3175E-01	2.9174E+00
50	71	241897	33039	56888	7.9506E-01	7.1265E-02	3.8725E-01	7.2974E-01	8.1633E+00
51	72	126372	32422	344902	3.7347E+00	6.9142E-02	3.8139E-01	7.2777E-01	2.9657E+00
52	73	237711	33601	65584	7.1838E-01	7.0946E-02	3.9046E-01	7.3265E-01	2.9161E+00
53	74	241519	33090	56455	7.9056E-01	6.9848E-02	3.8456E-01	7.3073E-01	8.1145E+00
54	75	126345	32420	341083	3.7298E+00	6.9419E-02	3.8002E-01	7.3266E-01	2.9713E+00
55	76	3742	1857	0	.0000E+00	3.4802E-02	3.1090E-01	7.0065E-01	1.3113E+05
56	77	3588	1770	0	.0000E+00	3.2604E-02	2.9604E-01	6.8606E-01	1.2993E+05
57	80	8153	3353	24708	2.5005E-01	2.2918E-02	2.5955E-01	6.8536E-01	2.6742E+00
58	81	210300	50536	548540	5.8114E+00	3.6781E-02	3.1658E-01	7.1186E-01	2.8591E+00
59	82	196788	47385	4	4.1417E-05	3.2168E-02	2.9838E-01	7.1038E-01	1.3012E+05
60	83	7948	2591	1	1.5575E-05	1.9682E-02	2.4473E-01	6.8111E-01	1.2058E+05
61	84	5752	2422	22120	2.2787E-01	1.8717E-02	2.4504E-01	6.8940E-01	2.1696E+00
62	85	177970	47431	520574	5.5845E+00	2.9308E-02	2.9765E-01	7.1519E-01	2.3315E+00
63	86	5392	1785	0	.0000E+00	1.4350E-02	2.5057E-01	6.9333E-01	1.2138E+05
64	87	2655	1548	24065	2.4069E-01	1.5133E-02	2.5224E-01	7.0670E-01	5.3709E+00
65	88	96567	43774	833133	8.7505E+00	2.3979E-02	2.8030E-01	7.2977E-01	5.7115E+00
66	89	1008	1008	1	1.6898E-05	3.9393E-02	2.7253E-01	8.1639E-01	1.3104E+05
67	90	33008	33007	12	1.4052E-04	5.5184E-02	3.2023E-01	8.0371E-01	1.3897E+05

TOTAL 41186869 1755289 5710313 6.5060E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-4.7693E+00	-4.7693E+00
2	2	4.2782E+00	.0000E+00	.0000E+00	-6.3321E+00	-2.0539E+00
3	3	.0000E+00	.0000E+00	.0000E+00	-4.2836E-01	-4.2836E-01
4	4	.0000E+00	.0000E+00	.0000E+00	-8.1200E-01	-8.1200E-01
5	5	.0000E+00	.0000E+00	.0000E+00	-4.2560E-01	-4.2560E-01
6	6	.0000E+00	.0000E+00	.0000E+00	-2.1860E+00	-2.1860E+00
7	8	.0000E+00	.0000E+00	.0000E+00	-6.9381E+00	-6.9381E+00
8	10	.0000E+00	.0000E+00	.0000E+00	-1.4348E+00	-1.4348E+00
9	11	.0000E+00	.0000E+00	.0000E+00	-1.4421E+00	-1.4421E+00
10	12	.0000E+00	.0000E+00	.0000E+00	-2.1100E+00	-2.1100E+00
11	13	.0000E+00	.0000E+00	.0000E+00	-2.1219E+00	-2.1219E+00
12	32	.0000E+00	.0000E+00	.0000E+00	-9.5583E+01	-9.5583E+01
13	33	4.6800E+01	1.0433E+00	.0000E+00	-4.7439E+01	4.0483E-01
14	34	8.7983E-01	.0000E+00	.0000E+00	-8.7900E-01	8.2297E-04
15	35	2.5985E-01	.0000E+00	.0000E+00	-2.4976E-01	1.0081E-02
16	36	9.7016E+01	.0000E+00	.0000E+00	-9.7016E+01	.0000E+00
17	37	4.9330E-01	.0000E+00	.0000E+00	-4.9259E-01	7.1285E-04
18	38	1.0498E+02	.0000E+00	.0000E+00	-1.0496E+02	1.5736E-02
19	39	5.3638E-01	.0000E+00	.0000E+00	-5.3321E-01	3.1679E-03
20	40	1.5064E+02	.0000E+00	.0000E+00	-5.5889E+01	9.4747E+01
21	41	3.9855E+00	.0000E+00	.0000E+00	-3.9855E+00	1.0508E-09
22	42	2.1157E-02	.0000E+00	.0000E+00	-2.0251E-02	9.0657E-04
23	43	8.4625E+00	.0000E+00	.0000E+00	-8.4612E+00	1.2882E-03
24	44	9.4946E+00	.0000E+00	.0000E+00	-9.4941E+00	4.2483E-04
25	45	1.0399E+01	.0000E+00	.0000E+00	-1.0398E+01	9.6213E-04
26	46	1.2689E+01	.0000E+00	.0000E+00	-5.3626E+00	7.3266E+00
27	47	2.8196E-01	.0000E+00	.0000E+00	-2.8193E-01	2.4023E-05
28	48	5.9787E-01	.0000E+00	.0000E+00	-5.9779E-01	8.4121E-05
29	49	7.8054E-01	.0000E+00	.0000E+00	-3.1593E-01	4.6461E-01
30	50	2.9805E+00	.0000E+00	.0000E+00	-1.6591E+00	1.3214E+00
31	51	2.9934E+00	.0000E+00	.0000E+00	-2.9524E+00	4.1009E-02
32	52	2.9934E+00	.0000E+00	.0000E+00	-2.9532E+00	4.0189E-02

33	53	2.9724E+00	.0000E+00	.0000E+00	.0000E+00	-1.2913E+00	1.6811E+00
34	54	8.6168E-02	.0000E+00	.0000E+00	.0000E+00	-1.9543E-03	8.4214E-02
35	55	2.9851E+00	.0000E+00	.0000E+00	.0000E+00	-1.6619E+00	1.3231E+00
36	56	2.9985E+00	.0000E+00	.0000E+00	.0000E+00	-2.9550E+00	4.3436E-02
37	57	2.9940E+00	.0000E+00	.0000E+00	.0000E+00	-2.9542E+00	3.9826E-02
38	58	2.9707E+00	.0000E+00	.0000E+00	.0000E+00	-1.2924E+00	1.6783E+00
39	59	8.6840E-02	.0000E+00	.0000E+00	.0000E+00	-1.8389E-03	8.5001E-02
40	60	3.9100E+00	.0000E+00	.0000E+00	.0000E+00	-1.9030E+00	2.0070E+00
41	61	3.9582E+00	.0000E+00	.0000E+00	.0000E+00	-1.9678E+00	1.9904E+00
42	62	9.0541E-02	.0000E+00	.0000E+00	.0000E+00	-1.3994E-03	8.9142E-02
43	63	3.9253E+00	.0000E+00	.0000E+00	.0000E+00	-1.9070E+00	2.0183E+00
44	64	3.9698E+00	.0000E+00	.0000E+00	.0000E+00	-1.9779E+00	1.9919E+00
45	65	9.6106E-02	.0000E+00	.0000E+00	.0000E+00	-1.3332E-03	9.4773E-02
46	66	2.8537E+00	.0000E+00	.0000E+00	.0000E+00	-1.3816E+00	1.4721E+00
47	67	1.8941E+00	.0000E+00	.0000E+00	.0000E+00	-1.0053E+00	8.8882E-01
48	68	1.8864E+00	.0000E+00	.0000E+00	.0000E+00	-9.9521E-01	8.9124E-01
49	70	3.0305E+00	.0000E+00	.0000E+00	.0000E+00	-3.0281E+00	2.4765E-03
50	71	3.0694E+00	.0000E+00	.0000E+00	.0000E+00	-3.0688E+00	5.9263E-04
51	72	1.6046E+00	.0000E+00	.0000E+00	.0000E+00	-1.5913E+00	1.3317E-02
52	73	3.0282E+00	.0000E+00	.0000E+00	.0000E+00	-3.0256E+00	2.5206E-03
53	74	3.0742E+00	.0000E+00	.0000E+00	.0000E+00	-3.0736E+00	5.7553E-04
54	75	1.6103E+00	.0000E+00	.0000E+00	.0000E+00	-1.5971E+00	1.3225E-02
55	76	4.5875E-02	.0000E+00	.0000E+00	.0000E+00	-4.5875E-02	.0000E+00
56	77	4.3096E-02	.0000E+00	.0000E+00	.0000E+00	-4.3096E-02	.0000E+00
57	80	9.7281E-02	.0000E+00	.0000E+00	.0000E+00	-9.6008E-02	1.2727E-03
58	81	2.6126E+00	.0000E+00	.0000E+00	.0000E+00	-2.5879E+00	2.4655E-02
59	82	2.4414E+00	.0000E+00	.0000E+00	.0000E+00	-2.4414E+00	1.1107E-09
60	83	9.4668E-02	.0000E+00	.0000E+00	.0000E+00	-9.4668E-02	9.8324E-11
61	84	6.9586E-02	.0000E+00	.0000E+00	.0000E+00	-6.8508E-02	1.0784E-03
62	85	2.2197E+00	.0000E+00	.0000E+00	.0000E+00	-2.1944E+00	2.5357E-02
63	86	6.5745E-02	.0000E+00	.0000E+00	.0000E+00	-6.5745E-02	.0000E+00
64	87	3.3521E-02	.0000E+00	.0000E+00	.0000E+00	-3.2513E-02	1.0077E-03
65	88	1.2345E+00	.0000E+00	.0000E+00	.0000E+00	-1.2030E+00	3.1518E-02
66	89	1.4225E-02	.0000E+00	.0000E+00	.0000E+00	-1.4225E-02	1.3359E-10
67	90	4.6132E-01	.0000E+00	.0000E+00	.0000E+00	-4.6132E-01	1.0078E-08

TOTAL 5.2409E+02 1.0433E+00 .0000E+00 .0000E+00 -5.2456E+02 5.7123E-01
 1 NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	.0000E+00	.0000E+00	1.2504E-04	.0000E+00	.0000E+00	.0000E+00	1.2504E-04
14	34	.0000E+00	.0000E+00	1.7865E-05	.0000E+00	.0000E+00	.0000E+00	1.7865E-05
15	35	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	38	.0000E+00	.0000E+00	-2.0565E-05	.0000E+00	.0000E+00	.0000E+00	-2.0565E-05

19	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	40	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	41	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	43	.0000E+00	.0000E+00	3.2696E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2696E-05
24	44	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	45	.0000E+00	.0000E+00	2.6335E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6335E-05
26	46	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	47	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	48	.0000E+00	.0000E+00	1.1489E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1489E-05
29	49	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	50	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	51	.0000E+00	.0000E+00	5.6022E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6022E-05
32	52	.0000E+00	.0000E+00	3.6461E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.6461E-05
33	53	.0000E+00	.0000E+00	1.0996E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0996E-04
34	54	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
35	55	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	56	.0000E+00	.0000E+00	-2.7759E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7759E-05
37	57	.0000E+00	.0000E+00	-2.0081E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0081E-05
38	58	.0000E+00	.0000E+00	-6.5180E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5180E-05
39	59	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
40	60	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
41	61	.0000E+00	.0000E+00	6.8446E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8446E-05
42	62	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
43	63	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
44	64	.0000E+00	.0000E+00	-1.4961E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4961E-05
45	65	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
46	66	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
47	67	.0000E+00	.0000E+00	1.1901E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1901E-04
48	68	.0000E+00	.0000E+00	5.7493E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.7493E-05
49	70	.0000E+00	.0000E+00	2.8687E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8687E-05
50	71	.0000E+00	.0000E+00	-4.0546E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0546E-06
51	72	.0000E+00	.0000E+00	-3.4216E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4216E-05
52	73	.0000E+00	.0000E+00	1.0594E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0594E-05
53	74	.0000E+00	.0000E+00	1.3424E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3424E-05
54	75	.0000E+00	.0000E+00	1.1780E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1780E-04
55	76	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
56	77	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
57	80	.0000E+00	.0000E+00	-1.6664E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6664E-05
58	81	.0000E+00	.0000E+00	1.0088E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0088E-04
59	82	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
60	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
61	84	.0000E+00	.0000E+00	3.9032E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9032E-06
62	85	.0000E+00	.0000E+00	-2.5821E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5821E-04
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	-2.5234E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5234E-05
65	88	.0000E+00	.0000E+00	8.7471E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7471E-05
66	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
TOTAL		.0000E+00	.0000E+00	5.3665E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3665E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --				PHYSICAL EVENTS					PRINT TABLE 130
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			
2	2	.0000E+00	.0000E+00	-4.4422E-09	.0000E+00	-4.4422E-09			
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			

5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	33	3.4157E-03	.0000E+00	-3.1545E-01	-1.6873E-03	-9.1227E-02	-4.0495E-01
14	34	.0000E+00	.0000E+00	-8.4084E-04	.0000E+00	.0000E+00	-8.4084E-04
15	35	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	38	1.2215E-04	.0000E+00	-1.5776E-02	-6.1077E-05	.0000E+00	-1.5715E-02
19	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	40	.0000E+00	.0000E+00	-9.0542E-09	.0000E+00	.0000E+00	-9.0542E-09
21	41	.0000E+00	.0000E+00	-1.0508E-09	.0000E+00	.0000E+00	-1.0508E-09
22	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	43	.0000E+00	.0000E+00	-1.0019E-03	.0000E+00	.0000E+00	-1.0019E-03
24	44	.0000E+00	.0000E+00	-8.2915E-11	.0000E+00	.0000E+00	-8.2915E-11
25	45	.0000E+00	.0000E+00	-8.6992E-04	.0000E+00	.0000E+00	-8.6992E-04
26	46	.0000E+00	.0000E+00	-9.8654E-10	.0000E+00	.0000E+00	-9.8654E-10
27	47	.0000E+00	.0000E+00	-1.3004E-10	.0000E+00	.0000E+00	-1.3004E-10
28	48	.0000E+00	.0000E+00	-9.1017E-05	.0000E+00	.0000E+00	-9.1017E-05
29	49	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	50	.0000E+00	.0000E+00	-1.2891E-09	.0000E+00	.0000E+00	-1.2891E-09
31	51	.0000E+00	.0000E+00	-2.5162E-03	.0000E+00	.0000E+00	-2.5162E-03
32	52	.0000E+00	.0000E+00	-2.7139E-04	.0000E+00	.0000E+00	-2.7139E-04
33	53	.0000E+00	.0000E+00	-2.5767E-03	.0000E+00	.0000E+00	-2.5767E-03
34	54	.0000E+00	.0000E+00	-1.7359E-10	.0000E+00	.0000E+00	-1.7359E-10
35	55	.0000E+00	.0000E+00	-1.2093E-09	.0000E+00	.0000E+00	-1.2093E-09
36	56	.0000E+00	.0000E+00	-2.6333E-03	.0000E+00	.0000E+00	-2.6333E-03
37	57	.0000E+00	.0000E+00	-2.6541E-04	.0000E+00	.0000E+00	-2.6541E-04
38	58	.0000E+00	.0000E+00	-2.5700E-03	.0000E+00	.0000E+00	-2.5700E-03
39	59	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
40	60	.0000E+00	.0000E+00	-1.7375E-09	.0000E+00	.0000E+00	-1.7375E-09
41	61	3.3182E-05	.0000E+00	-3.1877E-03	-1.6591E-05	.0000E+00	-3.1711E-03
42	62	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
43	63	.0000E+00	.0000E+00	-4.2850E-10	.0000E+00	.0000E+00	-4.2850E-10
44	64	.0000E+00	.0000E+00	-3.2582E-03	.0000E+00	.0000E+00	-3.2582E-03
45	65	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
46	66	.0000E+00	.0000E+00	-1.0056E-08	.0000E+00	.0000E+00	-1.0056E-08
47	67	.0000E+00	.0000E+00	-6.7004E-03	.0000E+00	.0000E+00	-6.7004E-03
48	68	.0000E+00	.0000E+00	-6.7185E-03	.0000E+00	.0000E+00	-6.7185E-03
49	70	.0000E+00	.0000E+00	-2.5052E-03	.0000E+00	.0000E+00	-2.5052E-03
50	71	.0000E+00	.0000E+00	-5.8857E-04	.0000E+00	.0000E+00	-5.8857E-04
51	72	2.4791E-05	.0000E+00	-1.3295E-02	-1.2396E-05	.0000E+00	-1.3283E-02
52	73	.0000E+00	.0000E+00	-2.5312E-03	.0000E+00	.0000E+00	-2.5312E-03
53	74	.0000E+00	.0000E+00	-5.8896E-04	.0000E+00	.0000E+00	-5.8896E-04
54	75	.0000E+00	.0000E+00	-1.3343E-02	.0000E+00	.0000E+00	-1.3343E-02
55	76	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
56	77	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
57	80	.0000E+00	.0000E+00	-1.2560E-03	.0000E+00	.0000E+00	-1.2560E-03
58	81	3.5212E-05	.0000E+00	-2.4773E-02	-1.7606E-05	.0000E+00	-2.4756E-02
59	82	.0000E+00	.0000E+00	-1.1107E-09	.0000E+00	.0000E+00	-1.1107E-09
60	83	.0000E+00	.0000E+00	-9.8324E-11	.0000E+00	.0000E+00	-9.8324E-11
61	84	.0000E+00	.0000E+00	-1.0823E-03	.0000E+00	.0000E+00	-1.0823E-03
62	85	.0000E+00	.0000E+00	-2.5099E-02	.0000E+00	.0000E+00	-2.5099E-02
63	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
64	87	.0000E+00	.0000E+00	-9.8247E-04	.0000E+00	.0000E+00	-9.8247E-04

65	88	.0000E+00	.0000E+00	-3.1605E-02	.0000E+00	.0000E+00	-3.1605E-02
66	89	.0000E+00	.0000E+00	-1.3359E-10	.0000E+00	.0000E+00	-1.3359E-10
67	90	.0000E+00	.0000E+00	-1.0078E-08	.0000E+00	.0000E+00	-1.0078E-08

TOTAL 3.6310E-03 .0000E+00 -4.8238E-01 -1.7950E-03 -9.1227E-02 -5.7177E-01
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)	
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	17 1	2.5789E-04 1.3642E-05	4.4421E-09 1.5937E-13	.0000E+00 .0000E+00	
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
8	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
9	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
10	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
11	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
12	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	
13	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C	6.7097E-01 2.3926E-04 2.8706E-05 1.8626E-06 2.3827E-07 3.0867E-05 1.4226E-06 4.5949E-10 6.8903E-05 4.4265E-03 9.9057E-04 3.2088E-01 7.6759E-05 1.4002E-05 1.5156E-03 4.3508E-04 2.0467E-04	605902 541 73 8 4 97 4 0 221 14659 3434 935699 251 57 5047 1504 722	7.6970E+00 6.3436E-03 8.5107E-04 7.8783E-05 4.1052E-05 9.6265E-04 4.9842E-05 .0000E+00 2.6297E-03 1.9313E-01 3.9672E-02 1.1308E+01 2.9597E-03 6.8450E-04 6.8183E-02 1.7474E-02 1.0631E-02	2.1255E-03 6.2670E-04 8.9347E-05 2.1167E-05 1.3912E-05 3.0634E-04 8.6993E-06 .0000E+00 1.8722E-04 9.8828E-03 2.2790E-03 2.9346E-01 4.3438E-04 4.4035E-05 3.6801E-03 1.3576E-03 3.7100E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 6.4520E-05 3.0584E-02 3.2094E-04 4.7560E-02 1.0182E-04 6.1678E-05 9.9691E-03 5.2936E-04 1.8980E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.3488E-05 1.7149E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		94242.50C	5.2259E-05	169	1.9293E-03	1.2254E-04	4.3012E-05	.0000E+00
		95241.50C	6.1062E-05	225	2.6349E-03	4.2031E-04	7.9225E-05	.0000E+00
		95242.50C	1.9299E-07	1	1.7627E-05	4.5282E-08	4.1213E-06	.0000E+00
		95243.50C	5.8652E-06	17	2.0313E-04	2.0622E-05	1.1076E-05	.0000E+00
		96245.35C	1.9976E-08	0	2.2936E-07	.0000E+00	.0000E+00	.0000E+00
14	34	8016.50C	6.8138E-03	81	9.3947E-04	1.4968E-08	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	22	2.6984E-04	4.3340E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	55	5.9040E-04	9.1153E-07	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	20359	2.5769E-01	8.0944E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	176	2.1568E-03	2.6135E-05	.0000E+00	.0000E+00
15	35	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	36	2004.50C	1.0000E+00	59	8.5767E-04	.0000E+00	.0000E+00	.0000E+00
17	37	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	38	8016.50C	6.8138E-03	1187	1.5121E-02	2.6246E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	579	6.4070E-03	2.7078E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	843	9.7853E-03	2.7876E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	364122	4.7125E+00	1.5299E-02	.0000E+00	6.1077E-05
		50000.35C	1.0711E-02	3143	4.1434E-02	4.1995E-04	.0000E+00	.0000E+00
19	39	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	40	1001.50C	6.6667E-01	41	4.4871E-04	9.0505E-09	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	8	9.7836E-05	3.7519E-12	.0000E+00	.0000E+00
21	41	1001.50C	6.6667E-01	7	5.9165E-05	1.0506E-09	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	8.2748E-06	2.4528E-13	.0000E+00	.0000E+00
22	42	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	43	8016.50C	6.8138E-03	75	1.0498E-03	1.6126E-07	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	34	3.3517E-04	1.1333E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	57	6.6572E-04	8.6583E-07	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	24822	3.2430E-01	9.6854E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	226	2.9504E-03	3.1158E-05	.0000E+00	.0000E+00
24	44	1001.50C	6.6667E-01	1	1.1718E-05	8.2915E-11	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	45	8016.50C	6.8138E-03	71	8.4985E-04	3.7168E-11	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	23	2.1860E-04	9.1448E-07	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	57	5.6453E-04	3.4650E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	21518	2.8000E-01	8.4114E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	172	2.2091E-03	2.4405E-05	.0000E+00	.0000E+00
26	46	1001.50C	6.6667E-01	5	5.8690E-05	9.8654E-10	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	47	1001.50C	6.6667E-01	1	1.2020E-05	1.3004E-10	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	48	8016.50C	6.8138E-03	9	1.1332E-04	3.4167E-12	.0000E+00	.0000E+00

		24000.50C	1.7467E-03	5	4.9155E-05	1.9171E-07	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	6	7.7377E-05	2.5267E-07	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	2010	2.5899E-02	8.8982E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	12	1.5480E-04	1.5910E-06	.0000E+00	.0000E+00
29	49	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	50	1001.50C	6.6667E-01	3	4.2514E-05	1.2891E-09	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	51	6000.50C	1.3966E-03	62	6.8412E-04	5.5429E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	192	2.0842E-03	8.5633E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	475	6.3172E-03	7.6553E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	34	3.9920E-04	1.6021E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.1840E-04	1.0550E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	11679	1.2600E-01	4.5792E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4537	3.9355E-02	2.1763E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34277	3.8374E-01	1.0116E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	13951	1.4449E-01	4.1429E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1206	1.4375E-02	3.9584E-04	.0000E+00	.0000E+00
32	52	13027.50C	9.9949E-01	24949	3.4712E-01	2.6714E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	31	3.2671E-04	4.2550E-06	.0000E+00	.0000E+00
33	53	6000.50C	1.3966E-03	56	6.5939E-04	7.4834E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	238	2.4901E-03	8.0490E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	439	6.0541E-03	7.3922E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	34	3.9149E-04	5.6470E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	19	2.5885E-04	2.1305E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	11351	1.2456E-01	4.5512E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4600	3.9276E-02	2.1663E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33279	3.7011E-01	1.0567E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	13773	1.4288E-01	4.2442E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1263	1.5165E-02	4.0566E-04	.0000E+00	.0000E+00
34	54	1001.50C	6.6667E-01	1	6.3261E-06	1.7359E-10	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
35	55	1001.50C	6.6667E-01	4	8.3568E-05	1.2093E-09	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	56	6000.50C	1.3966E-03	61	7.8226E-04	1.2122E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	213	2.4738E-03	1.4461E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	432	5.6847E-03	4.4622E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	33	3.5991E-04	9.9979E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	13	2.1350E-04	6.1287E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	11488	1.2447E-01	4.5054E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4326	3.7536E-02	2.0842E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34286	3.8493E-01	1.1236E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	13834	1.4365E-01	4.1738E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1234	1.4920E-02	4.1281E-04	.0000E+00	.0000E+00
37	57	13027.50C	9.9949E-01	24945	3.4707E-01	2.6001E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	31	3.8973E-04	5.3955E-06	.0000E+00	.0000E+00
38	58	6000.50C	1.3966E-03	45	5.8145E-04	2.6635E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	180	1.9534E-03	1.4804E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	428	6.0777E-03	6.3962E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	19	1.9787E-04	2.6498E-07	.0000E+00	.0000E+00

		16032.50C	5.2467E-04	13	1.6329E-04	3.6643E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	11394	1.2500E-01	4.6575E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4356	3.7750E-02	2.1918E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33187	3.7092E-01	1.0350E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	13502	1.4057E-01	4.0428E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1226	1.4813E-02	4.2060E-04	.0000E+00	.0000E+00
39	59	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
40	60	1001.50C	6.6667E-01	6	7.1113E-05	1.7375E-09	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
41	61	6000.50C	1.3966E-03	86	1.1440E-03	7.7711E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	249	2.8028E-03	1.3719E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	600	8.1872E-03	1.1047E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	39	5.4256E-04	2.5023E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	13	1.6517E-04	5.4610E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	14861	1.6325E-01	5.8699E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	5599	4.9026E-02	2.4339E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	42584	4.8716E-01	1.3162E-03	.0000E+00	1.6591E-05
		28000.50C	1.1433E-01	17999	1.8799E-01	5.5730E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1622	2.0245E-02	4.5597E-04	.0000E+00	.0000E+00
42	62	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
43	63	1001.50C	6.6667E-01	3	2.9217E-05	4.2828E-10	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	1.0056E-05	2.1909E-13	.0000E+00	.0000E+00
44	64	6000.50C	1.3966E-03	68	8.3422E-04	5.6091E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	290	3.3320E-03	2.5998E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	610	8.5382E-03	7.3763E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	38	4.5464E-04	6.9857E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	16	2.0406E-04	1.2023E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	14821	1.6260E-01	5.9611E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	5643	4.9159E-02	2.5125E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	42865	4.8866E-01	1.3156E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	18111	1.9035E-01	6.0555E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1656	2.0385E-02	4.5440E-04	.0000E+00	.0000E+00
45	65	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
46	66	1001.50C	6.6667E-01	26	2.9142E-04	1.0053E-08	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	3.9112E-05	2.4270E-12	.0000E+00	.0000E+00
47	67	6000.50C	1.3966E-03	134	1.7257E-03	1.7507E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	507	5.4983E-03	2.1641E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	1014	1.3776E-02	1.0758E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	70	8.2768E-04	1.2515E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	26	3.8409E-04	2.2404E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	27911	3.0640E-01	1.2530E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	11606	1.0202E-01	6.2708E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	81229	8.7873E-01	2.5428E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	34015	3.5352E-01	9.9004E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	3117	3.7529E-02	1.2515E-03	.0000E+00	.0000E+00
48	68	6000.50C	1.3966E-03	160	2.0073E-03	1.9203E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	498	5.4853E-03	1.8664E-05	.0000E+00	.0000E+00

		14000.50C	1.4932E-02	1070	1.4159E-02	1.6534E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	75	1.0747E-03	2.1834E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	24	3.2610E-04	5.7263E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	27564	3.0145E-01	1.2418E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	11618	1.0230E-01	6.7198E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	81237	8.7273E-01	2.5351E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	34380	3.5642E-01	9.9506E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	3127	3.6538E-02	1.2314E-03	.0000E+00	.0000E+00
49	70	6000.50C	1.3966E-03	48	6.2188E-04	8.3071E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	223	2.5455E-03	1.2601E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	430	6.0254E-03	6.6688E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	27	3.1389E-04	4.1755E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.5064E-04	2.1886E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	11573	1.2710E-01	4.8221E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4256	3.7270E-02	1.9113E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	32975	3.7162E-01	1.0036E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	14095	1.4841E-01	4.0127E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1267	1.5652E-02	4.0507E-04	.0000E+00	.0000E+00
50	71	13027.50C	9.9949E-01	56796	7.9405E-01	5.8276E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	92	1.0121E-03	5.8141E-06	.0000E+00	.0000E+00
51	72	6000.50C	1.3966E-03	317	4.0877E-03	4.1336E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	1152	1.2712E-02	6.3232E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	2390	3.2285E-02	2.8685E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	161	1.8765E-03	3.2215E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	79	1.1694E-03	7.2878E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	62097	6.8081E-01	2.6772E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	23347	2.0441E-01	1.0545E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	172094	1.9150E+00	5.1338E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	76290	7.9691E-01	2.2328E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	6975	8.5481E-02	2.0944E-03	.0000E+00	1.2396E-05
52	73	6000.50C	1.3966E-03	50	6.0712E-04	7.8080E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	196	2.0621E-03	5.4414E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	404	5.5208E-03	3.5386E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	32	4.0459E-04	8.4826E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	13	1.9600E-04	2.1425E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	11373	1.2577E-01	4.8922E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4523	3.9091E-02	2.1568E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33643	3.7994E-01	1.0185E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	14063	1.4898E-01	4.0251E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1287	1.5811E-02	3.9331E-04	.0000E+00	.0000E+00
53	74	13027.50C	9.9949E-01	56375	7.8968E-01	5.8253E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	80	8.7552E-04	6.4240E-06	.0000E+00	.0000E+00
54	75	6000.50C	1.3966E-03	330	4.0072E-03	4.2266E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	1167	1.3161E-02	3.6139E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	2353	3.1965E-02	3.5512E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	152	1.9601E-03	3.4176E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	71	9.9089E-04	7.8133E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	61432	6.7870E-01	2.5349E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	23225	2.0523E-01	1.0403E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	170817	1.9210E+00	5.2147E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	74622	7.8815E-01	2.2667E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	6914	8.4686E-02	2.2034E-03	.0000E+00	.0000E+00
55	76	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
56	77	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
57	80	6000.50C	1.3966E-03	20	1.9760E-04	6.7089E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	80	8.6753E-04	1.7587E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	149	1.8642E-03	1.5250E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	4.7952E-05	5.4283E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3971	4.2299E-02	2.2092E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2018	1.7426E-02	1.4157E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	12922	1.3139E-01	4.6171E-04	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	5075	5.0697E-02	1.4260E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	468	5.2685E-03	2.8587E-04	.0000E+00	.0000E+00
58	81	6000.50C	1.3966E-03	501	5.9438E-03	9.4968E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	1859	1.9835E-02	9.2863E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	3464	4.6046E-02	4.2512E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	243	2.9430E-03	4.9575E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	97	1.2674E-03	9.2859E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	92668	1.0256E+00	4.3531E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	41727	3.7134E-01	2.4798E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	281537	3.0049E+00	9.5430E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	115599	1.2054E+00	3.3126E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	10845	1.2813E-01	4.9351E-03	.0000E+00	1.7606E-05
59	82	1001.50C	6.6667E-01	4	4.1417E-05	1.1107E-09	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
60	83	1001.50C	6.6667E-01	1	1.5575E-05	9.8324E-11	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
61	84	6000.50C	2.3404E-03	25	2.9142E-04	3.5131E-10	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	32	5.1709E-04	4.2879E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	84	1.1130E-03	6.6600E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	4	5.6961E-05	1.1595E-07	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	305	3.4119E-03	6.7815E-06	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	3465	3.8453E-02	1.7847E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	807	7.1136E-03	6.5217E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	4176	4.3022E-02	1.6407E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	12386	1.2444E-01	3.5984E-04	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	483	5.3852E-03	1.0517E-04	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	353	4.0731E-03	2.0155E-04	.0000E+00	.0000E+00
62	85	6000.50C	2.3404E-03	600	6.9082E-03	1.3288E-08	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	874	1.2435E-02	9.2905E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	1691	2.2544E-02	1.8091E-05	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	65	8.4573E-04	5.3872E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	7511	8.7390E-02	1.5458E-04	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	84721	9.6351E-01	4.3213E-03	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	17523	1.5751E-01	1.1752E-03	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	97679	1.0455E+00	3.8322E-03	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	288724	3.0434E+00	8.7386E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	11392	1.2799E-01	1.7113E-03	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	9794	1.1642E-01	5.1329E-03	.0000E+00	.0000E+00
63	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

64	87	6000.50C	1.0113E-02	196	2.2389E-03	7.2890E-09	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	61	7.3836E-04	6.9040E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	5	6.6657E-05	7.0414E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	3.6748E-05	6.9325E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	940	8.7891E-03	9.6715E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	22860	2.2882E-01	8.8429E-04	.0000E+00	.0000E+00
65	88	6000.50C	1.0113E-02	6866	8.4299E-02	2.0087E-07	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	2515	3.4647E-02	3.1870E-05	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	398	4.8618E-03	8.9770E-06	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	230	3.2220E-03	2.5358E-05	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	34351	3.2127E-01	3.1129E-03	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	788773	8.3022E+00	2.8426E-02	.0000E+00	.0000E+00
66	89	1001.50C	6.6667E-01	1	1.6898E-05	1.3359E-10	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
67	90	1001.50C	6.6667E-01	9	1.0545E-04	1.0075E-08	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	3.5072E-05	2.2774E-12	.0000E+00	.0000E+00
TOTAL				5710313	6.5151E+01	4.8238E-01	9.1227E-02	1.8360E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	130	1.5517E-03	4.2052E-08	.0000E+00	.0000E+00
2004.50C	59	8.5767E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	9625	1.1762E-01	2.4972E-07	.0000E+00	.0000E+00
7014.50C	7044	7.7302E-02	3.3793E-04	.0000E+00	.0000E+00
8016.50C	607342	7.7152E+00	2.1283E-03	.0000E+00	.0000E+00
13027.50C	163971	2.2909E+00	1.7022E-03	.0000E+00	.0000E+00
14000.50C	18609	2.5154E-01	2.4138E-04	.0000E+00	.0000E+00
15031.50C	1365	1.6723E-02	3.2032E-05	.0000E+00	.0000E+00
16032.50C	705	9.7692E-03	7.7450E-05	.0000E+00	.0000E+00
22000.50C	7816	9.0802E-02	1.6136E-04	.0000E+00	.0000E+00
24000.50C	463032	5.1233E+00	2.0798E-02	.0000E+00	.0000E+00
25055.50C	205002	1.8259E+00	1.2229E-02	.0000E+00	.0000E+00
26000.55C	2001438	2.1592E+01	6.7652E-02	.0000E+00	1.6591E-05
28000.50C	760419	7.9663E+00	2.2665E-02	.0000E+00	.0000E+00
29000.50C	12109	1.3598E-01	1.8383E-03	.0000E+00	.0000E+00
40000.50C	432831	5.6004E+00	1.8007E-02	.0000E+00	6.1077E-05
42000.50C	52354	6.2949E-01	2.0680E-02	.0000E+00	3.0001E-05
45103.50C	541	6.3436E-03	6.2670E-04	.0000E+00	.0000E+00
47109.50C	73	8.5107E-04	8.9347E-05	.0000E+00	.0000E+00
50000.35C	3729	4.8905E-02	5.0324E-04	.0000E+00	.0000E+00
62149.50C	8	7.8783E-05	2.1167E-05	.0000E+00	.0000E+00
63151.55C	4	4.1052E-05	1.3912E-05	.0000E+00	.0000E+00
63153.55C	97	9.6265E-04	3.0634E-04	.0000E+00	.0000E+00
64155.50C	4	4.9842E-05	8.6993E-06	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	221	2.6297E-03	1.8722E-04	6.4520E-05	.0000E+00
92235.50C	14659	1.9313E-01	9.8828E-03	3.0584E-02	.0000E+00
92236.50C	3434	3.9672E-02	2.2790E-03	3.2094E-04	1.3488E-05
92238.50C	935699	1.1308E+01	2.9346E-01	4.7560E-02	1.7149E-03
93237.55C	251	2.9597E-03	4.3438E-04	1.0182E-04	.0000E+00
94238.50C	57	6.8450E-04	4.4035E-05	6.1678E-05	.0000E+00
94239.55C	5047	6.8183E-02	3.6801E-03	9.9691E-03	.0000E+00
94240.50C	1504	1.7474E-02	1.3576E-03	5.2936E-04	.0000E+00
94241.50C	722	1.0631E-02	3.7100E-04	1.8980E-03	.0000E+00

94242.50C	169	1.9293E-03	1.2254E-04	4.3012E-05	.0000E+00
95241.50C	225	2.6349E-03	4.2031E-04	7.9225E-05	.0000E+00
95242.50C	1	1.7627E-05	4.5282E-08	4.1213E-06	.0000E+00
95243.50C	17	2.0313E-04	2.0622E-05	1.1076E-05	.0000E+00
96245.35C	0	2.2936E-07	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 3 ON FILE RUNTPE NPS = 57512 CTM = 253.13

16 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 253.23 MINUTES

MCNP VERSION 4A-B 10/04/91

03/21/95 21:15:46

PROBID = 03/21/95 16:57:08

1MCNP VERSION 4A-B LD=10/04/91

03/29/95 09:17:56

INP=mpc12tpb OUT=mpc12tbo

PROBID = 03/29/95 09:17:56

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12tpb)
2- C MULTI-PURPOSE CANISTER WITH FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -68 42 -69 41 TRCL=( 15.082519 15.082519 0.) $ SHIFTED EXTRA
7- IMP:N=1 LAT=1 U=1
8- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
9- C SS316L SPACERS WELDED TO MPC SHELL
10- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
11- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
12- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
13- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
14- C FULL ASSEMBLY LATTICE POSITION
15- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
16- C ASSEMBLY CELL TOP
17- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
18- IMP:N=1 FILL=9 U=11
19- C ASSEMBLY CELL BOTTOM
20- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
21- IMP:N=1 FILL=9 U=11
22- C TOP OF ASSEMBLY OUTSIDE LATTICE
23- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
24- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
25- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
26- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
27- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
28- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
29- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
30- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
31- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
32- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
33- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
34- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
35- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
36- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
37- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
38- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
39- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
40- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
41- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
42- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
43- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
44- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
45- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
46- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
47- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
48- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
49- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
50- C PIN LATTICE DESCRIPTION
51- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
52- C FUEL ROD
53- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
54- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
55- 35 1 -1.0000 -17 5 IMP:N=1 U=2
56- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
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57- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
58- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
59- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
60- 40 1 -1.0000 19 IMP:N=1 U=2
61- C CONTROL ROD/GUIDE TUBE
62- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
63- 42 1 -1.0000 -21 5 IMP:N=1 U=3
64- 43 4 -6.6000 21 -22 IMP:N=1 U=3
65- 44 1 -1.0000 22 -23 IMP:N=1 U=3
66- 45 4 -6.6000 23 -24 IMP:N=1 U=3
67- 46 1 -1.0000 24 IMP:N=1 U=3
68- C INSTRUMENTATION TUBE
69- 47 1 -1.0000 -25 IMP:N=1 U=4
70- 48 4 -6.6000 25 -26 IMP:N=1 U=4
71- 49 1 -1.0000 26 IMP:N=1 U=4
72- C WATER GAP - ASSEMBLY TOP
73- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
74- C SS TUBE WALL - ASSEMBLY TOP
75- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
76- C AL-B WALL - ASSEMBLY TOP
77- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
78- C SS WALL - ASSEMBLY TOP
79- 53 8 -8.2380 46 -4 -39 IMP:N=1 U=5
80- C FLUX TRAP .986" - ASSEMBLY TOP
81- 54 1 -1.0000 39 -4 IMP:N=1 U=5
82- C WATER ABOVE BASKET
83- 55 1 -1.000 4 IMP:N=1 U=5
84- C WATER GAP - ASSEMBLY RIGHT
85- 56 1 -1.0000 -36 -4 IMP:N=1 U=6
86- C SS TUBE WALL - ASSEMBLY RIGHT
87- 57 8 -8.2380 36 -43 -4 IMP:N=1 U=6
88- C AL-B WALL - ASSEMBLY RIGHT
89- 58 6 -2.7000 43 -45 -4 IMP:N=1 U=6
90- C SS WALL - ASSEMBLY RIGHT
91- 59 8 -8.2380 45 -4 -40 IMP:N=1 U=6
92- C FLUX TRAP - .986" - ASSEMBLY RIGHT
93- 60 1 -1.0000 40 -4 IMP:N=1 U=6
94- C WATER ABOVE BASKET
95- 61 1 -1.000 4 IMP:N=1 U=6
96- C WATER GAP - ASSEMBLY BOTTOM
97- 62 1 -1.0000 37 -4 IMP:N=1 U=7
98- C SS TUBE WALL - ASSEMBLY BOTTOM
99- 63 8 -8.2380 -37 -4 IMP:N=1 U=7
100- C WATER ABOVE BASKET
101- 64 1 -1.000 4 IMP:N=1 U=7
102- C WATER GAP - ASSEMBLY LEFT
103- 65 1 -1.0000 38 -4 IMP:N=1 U=8
104- C LOWER ST COMB - ASSEMBLY LEFT
105- 66 8 -8.2380 -38 -4 IMP:N=1 U=8
106- C WATER ABOVE BASKET
107- 67 1 -1.000 4 IMP:N=1 U=8
108- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
109- 68 1 -1.0000 74 75 IMP:N=1 U=10
110- 69 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
111- 70 5 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
112- C AXIS MATERIALS
113- 71 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
114- 72 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
115- 73 8 -8.2380 -61 82 -55 -9 3 -4 IMP:N=1
116- 74 1 -1.0000 -82 1 -9 -55 3 -4 IMP:N=1 $ FLUX TRAP

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117- 75 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
118- 76 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
119- 77 8 -8.2380 -62 83 55 -9 3 -4 IMP:N=1
120- 78 1 -1.0000 -83 2 55 -9 3 -4 IMP:N=1 $ FLUX TRAP
121- 79 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
122- 80 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
123- C SS316L MPC LID
124- 81 8 -8.2380 1 2 -9 6 -7 IMP:N=1
125- C SS316L MPC LINER
126- 82 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
127- C GAP SS316L/INNER 825 BARRIER
128- 83 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
129- C GAP BETWEEN MPC LID AND INNER BARRIER LID
130- 84 1 -1.0000 -10 1 2 7 -71 IMP:N=1
131- C INNER BARRIER LID - ALLOY 825
132- 85 5 -8.1400 1 2 -11 71 -8 IMP:N=1
133- C INNER BARRIER - ALLOY 825
134- 86 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
135- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
136- 87 1 -1.0000 8 -72 -12 1 2 IMP:N=1
137- C OUTER BARRIER LID A516 CARBON STEEL
138- 88 7 -7.832 -12 72 -73 1 2 IMP:N=1
139- C OUTER BARRIER - A516 CARBON STEEL
140- 89 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
141- C WATER, ENDS
142- 90 1 -1.0000 1 2 73 -80 -81 IMP:N=1
143- C WATER, SIDE
144- 91 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
145- C OUTSIDE WORLD
146- 92 0 -1:-2:-3:80:81 IMP:N=0
147-
148- C SURFACE SPECIFICATIONS
149- 1* PX 0.0
150- 2* PY 0.00
151- 3* PZ 0.00
152- 4 PZ 203.2000 $ TOP ACTIVE FUEL
153- 5 PZ 222.2500 $ TOP FUEL HARDWARE
154- 6 PZ 229.2500 $ TOP FUEL REGION
155- 7 PZ 231.7500 $ TOP ALLOY 825 LID
156- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
157- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
158- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
159- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
160- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
161- C PIN LATTICE BOUNDS
162- 13 PX 0.72135
163- 14 PX -0.72135
164- 15 PY 0.72135
165- 16 PY -0.72135
166- C FUEL ROD
167- 17 CZ 0.468122
168- 18 CZ 0.478790
169- 19 CZ 0.546100
170- C CONTROL ROD/GUIDE TUBE
171- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
172- 21 CZ 0.50292
173- 22 CZ 0.56007
174- 23 CZ 0.63246
175- 24 CZ 0.67310
176- C INSTRUMENTATION TUBE

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177- 25 CZ 0.56007
178- 26 CZ 0.62611
179- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
180- 27 PX 12.80923
181- 28 PX -12.80923
182- 29 PY 12.80923
183- 30 PY -12.80923
184- C ASSEMBLY LATTICE BOUNDS
185- 31 PY 10.82024 $ ACTUAL 10.82025
186- 32 PX 10.82024 $ ACTUAL 10.82025
187- 33 PY -10.82024 $ ACTUAL -10.82025
188- 34 PX -10.82024 $ ACTUAL -10.82025
189- 35 PY 11.4300
190- 36 PX 11.4300
191- 37 PY -11.4300
192- 38 PX -11.4300
193- 39 PY 12.17930
194- 40 PX 12.17930
195- 41 PY -11.66876
196- 42 PX -11.66876
197- 43 PX 11.66876
198- 44 PY 11.66876
199- 45 PX 11.94054
200- 46 PY 11.94054
201- C BLANK PIN CELL
202- 48 PX -0.7213
203- 49 PX 0.7213
204- 50 PY -0.7213
205- 51 PY 0.7213
206- 52 PY 0.0001
207- 53 PY -0.0001
208- 54 PY 0.0
209- 55 P 1. -1. 0. 0.
210- 56 P 1. 1. 0. 0. $ 24.35
211- C EXTRA CARDS
212- 57 PX 3.41376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
213- 58 PY 3.41376
214- 59 PX 3.17500
215- 60 PY 3.17500
216- 61 PX 2.540
217- 62 PY 2.540
218- 64 PX -.0000005
219- 65 PY -.0000005
220- 66 PX 95.
221- 67 PY 95.
222- 68 PX 14.68374 $ FLUX TRAP WATER GAP
223- 69 PY 14.68374 $ FLUX TRAP WATER GAP
224- C OUTER BARRIER
225- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
226- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
227- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
228- 73 PZ 282.3500 $TOP OF OUTER BARRIER
229- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
230- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
231- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
232- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
233- C ADDED OFFSET (.5") FOR CENTRAL FLUX TRAP
234- 82 PX 1.270
235- 83 PY 1.270
236-
```

MODE	N	VOL	88J
KCODE	3000	1. 5 20	
237-	C	KSRC	4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
238-	C		4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
239-	C		9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
240-	C		9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
241-	C		13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
242-	C		17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
243-	C		17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.
244-	C		22.19 13.53 10. 22.19 17.86 10. 22.19 22.19 10.
245-	C		4.87 4.87 75. 4.87 9.20 75. 4.87 13.53 75.
246-	C		4.87 17.86 75. 4.87 22.19 75. 9.20 4.87 75.
247-	C		9.20 9.20 75. 9.20 13.53 75. 9.20 17.86 75.
248-	C		9.20 22.19 75. 13.53 4.87 75. 13.53 9.20 75.
249-	C		13.53 17.86 75. 13.53 22.19 75. 17.86 4.87 75.
250-	C		17.86 9.20 75. 17.86 13.53 75. 17.86 17.86 75.
251-	C		17.86 22.19 75. 22.19 4.87 75. 22.19 9.20 75.
252-	C		22.19 13.53 75. 22.19 17.86 75. 22.19 22.19 75.
253-	C		4.87 4.87 150. 4.87 9.20 150. 4.87 13.53 150.
254-	C		4.87 17.86 150. 4.87 22.19 150. 9.20 4.87 150.
255-	C		9.20 9.20 150. 9.20 13.53 150. 9.20 17.86 150.
256-	C		9.20 22.19 150. 13.53 4.87 150. 13.53 9.20 150.
257-	C		13.53 17.86 150. 13.53 22.19 150. 17.86 4.87 150.
258-	C		17.86 9.20 150. 17.86 13.53 150. 17.86 17.86 150.
259-	C		17.86 22.19 150. 22.19 4.87 150. 22.19 9.20 150.
260-	C		22.19 13.53 150. 22.19 17.86 150. 22.19 22.19 150.
261-	C		4.87 4.87 200. 4.87 9.20 200. 4.87 13.53 200.
262-	C		4.87 17.86 200. 4.87 22.19 200. 9.20 4.87 200.
263-	C		9.20 9.20 200. 9.20 13.53 200. 9.20 17.86 200.
264-	C		9.20 22.19 200. 13.53 4.87 200. 13.53 9.20 200.
265-	C		13.53 17.86 200. 13.53 22.19 200. 17.86 4.87 200.
266-	C		17.86 9.20 200. 17.86 13.53 200. 17.86 17.86 200.
267-	C		17.86 22.19 200. 22.19 4.87 200. 22.19 9.20 200.
268-	C		22.19 13.53 200. 22.19 17.86 200. 22.19 22.19 200.
269-	C		4.87 30.24 10. 4.87 34.57 10. 4.87 38.90 10.
270-	C		4.87 43.23 10. 4.87 47.55 10. 9.20 30.24 10.
271-	C		9.20 34.57 10. 9.20 38.90 10. 9.20 43.23 10.
272-	C		9.20 47.55 10. 13.53 30.24 10. 13.53 34.57 10.
273-	C		13.53 38.90 10. 13.53 43.23 10. 17.86 30.24 10.
274-	C		17.86 34.57 10. 17.86 38.90 10. 17.86 43.23 10.
275-	C		17.86 47.55 10. 22.19 30.24 10. 22.19 34.57 10.
276-	C		22.19 38.90 10. 22.19 43.23 10. 22.19 47.55 10.
277-	C		4.87 30.24 75. 4.87 34.57 75. 4.87 38.90 75.
278-	C		4.87 43.23 75. 4.87 47.55 75. 9.20 30.24 75.
279-	C		9.20 34.57 75. 9.20 38.90 75. 9.20 43.23 75.
280-	C		9.20 47.55 75. 13.53 30.24 75. 13.53 34.57 75.
281-	C		13.53 38.90 75. 13.53 43.23 75. 17.86 30.24 75.
282-	C		17.86 34.57 75. 17.86 38.90 75. 17.86 43.23 75.
283-	C		17.86 47.55 75. 22.19 30.24 75. 22.19 34.57 75.
284-	C		22.19 38.90 75. 22.19 43.23 75. 22.19 47.55 75.
285-	C		4.87 30.24 150. 4.87 34.57 150. 4.87 38.90 150.
286-	C		4.87 43.23 150. 4.87 47.55 150. 9.20 30.24 150.
287-	C		9.20 34.57 150. 9.20 38.90 150. 9.20 43.23 150.
288-	C		9.20 47.55 150. 13.53 30.24 150. 13.53 34.57 150.
289-	C		13.53 38.90 150. 13.53 43.23 150. 17.86 30.24 150.
290-	C		17.86 34.57 150. 17.86 38.90 150. 17.86 43.23 150.
291-	C		17.86 47.55 150. 22.19 30.24 150. 22.19 34.57 150.
292-	C		22.19 38.90 15

297-	C		4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
298-	C		9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
299-	C		9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
300-	C		13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
301-	C		17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
302-	C		17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
303-	C		22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
304-	C		30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
305-	C		30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
306-	C		34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.
307-	C		34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
308-	C		38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
309-	C		43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
310-	C		43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
311-	C		47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
312-	C		30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
313-	C		30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
314-	C		34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
315-	C		34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
316-	C		38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
317-	C		43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
318-	C		43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
319-	C		47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
320-	C		30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
321-	C		30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
322-	C		34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
323-	C		34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
324-	C		38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
325-	C		43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
326-	C		43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
327-	C		47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
328-	C		30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
329-	C		30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
330-	C		34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
331-	C		34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
332-	C		38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
333-	C		43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
334-	C		43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
335-	C		47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
336-	C		MATERIAL SPECIFICATIONS								

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357-      93237.55C  5.4646E-06
358-      94238.50C  9.9680E-07
359-      94239.55C  1.0790E-04
360-      94240.50C  3.0974E-05
361-      94241.50C  1.4571E-05
362-      94242.50C  3.7204E-06
363-      95241.50C  4.3471E-06
364-      95242.50C  1.3739E-08
365-      95243.50C  4.1755E-07
366-      96245.35C  1.4221E-09
367-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
368-      M3      2004.50C  1.0
369-      C      ZIRCALOY-4
370-      M4      8016.50C -0.0012  24000.50C -0.0010  26000.55C -0.0020
371-      40000.50C -0.9818  50000.35C -0.0140
372-      C      ALLOY 825
373-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
374-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
375-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
376-      29000.50C -0.0250  42000.50C -0.0300
377-      C      1100 ALUMINUM ALLOY
378-      M6      13027.50C -0.99880  29000.50C -0.00120
379-      C      A516 CARBON STEEL
380-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
381-      16032.50C -0.00035  25055.50C -0.0090
382-      26000.55C -0.98535
383-      C      SS316L
384-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
385-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
386-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
387-      42000.50C -0.02500
388-      C      TALLIES
389-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.

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SURFACES 20049 AND 23049 OF CELL 8 ARE THE SAME. 23049 WILL BE DELETED.
 SURFACES 24048 AND 27048 OF CELL 9 ARE THE SAME. 27048 WILL BE DELETED.
 SURFACES 24049 AND 27049 OF CELL 9 ARE THE SAME. 27049 WILL BE DELETED.
 SURFACES 24050 AND 25050 OF CELL 9 ARE THE SAME. 25050 WILL BE DELETED.
 SURFACES 24050 AND 28050 OF CELL 9 ARE THE SAME. 28050 WILL BE DELETED.
 SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3085
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3085
POINTS AFTER EXPANSION OR CONTRACTION	3006
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

PRINT TABLE 40

1	1001,	.66667	8016,	.33333				
	ASSOCIATED THERMAL S(A,B) DATA SETS: LWTR.01T							
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00000	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00007	92235,	.00443	92236,	.00099	92238,	.32088
	93237,	.00008	94238,	.00001	94239,	.00152	94240,	.00044
	94241,	.00020	94242,	.00005	95241,	.00006	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.

WARNING. 1 OF THE MATERIALS APPEAR AT MORE THAN ONE DENSITY.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	69	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

69	70	8.80188E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
70	71	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	72	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	74	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	76	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	77	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	78	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	79	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	80	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	82	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	84	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	86	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	87	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
88	89	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
89	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
90	91	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
91	92	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE

33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	INFINITE
39	40	.00000E+00	.00000E+00	INFINITE
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	68	.00000E+00	.00000E+00	NOT A BOUNDARY
66	69	.00000E+00	.00000E+00	NOT A BOUNDARY
67	70	.00000E+00	.00000E+00	ASYMMETRIC
68	71	.00000E+00	.00000E+00	ASYMMETRIC
69	72	.00000E+00	.00000E+00	ASYMMETRIC
70	73	.00000E+00	.00000E+00	ASYMMETRIC
71	74	.00000E+00	.00000E+00	INFINITE
72	75	.00000E+00	.00000E+00	INFINITE
73	80	.00000E+00	.00000E+00	ASYMMETRIC
74	81	.00000E+00	.00000E+00	ASYMMETRIC
75	82	.00000E+00	.00000E+00	ASYMMETRIC
76	83	.00000E+00	.00000E+00	ASYMMETRIC
77	2068	.00000E+00	.00000E+00	INFINITE
78	2042	.00000E+00	.00000E+00	INFINITE
79	2069	.00000E+00	.00000E+00	INFINITE
80	2041	.00000E+00	.00000E+00	INFINITE
81	3027	.00000E+00	.00000E+00	INFINITE
82	3028	.00000E+00	.00000E+00	INFINITE
83	3029	.00000E+00	.00000E+00	INFINITE
84	3030	.00000E+00	.00000E+00	INFINITE
85	4027	.00000E+00	.00000E+00	INFINITE
86	4028	.00000E+00	.00000E+00	INFINITE
87	4029	.00000E+00	.00000E+00	INFINITE
88	4030	.00000E+00	.00000E+00	INFINITE
89	5027	.00000E+00	.00000E+00	INFINITE
90	5028	.00000E+00	.00000E+00	INFINITE
91	5029	.00000E+00	.00000E+00	INFINITE
92	5030	.00000E+00	.00000E+00	INFINITE

93	16048	.00000E+00	.00000E+00	INFINITE
94	16049	.00000E+00	.00000E+00	INFINITE
95	16050	.00000E+00	.00000E+00	INFINITE
96	16051	.00000E+00	.00000E+00	INFINITE
97	17048	.00000E+00	.00000E+00	INFINITE
98	17049	.00000E+00	.00000E+00	INFINITE
99	18048	.00000E+00	.00000E+00	INFINITE
100	18049	.00000E+00	.00000E+00	INFINITE
101	18050	.00000E+00	.00000E+00	INFINITE
102	18051	.00000E+00	.00000E+00	INFINITE
103	19050	.00000E+00	.00000E+00	INFINITE
104	19051	.00000E+00	.00000E+00	INFINITE
105	20048	.00000E+00	.00000E+00	INFINITE
106	20049	.00000E+00	.00000E+00	INFINITE
107	21048	.00000E+00	.00000E+00	INFINITE
108	21049	.00000E+00	.00000E+00	INFINITE
109	22048	.00000E+00	.00000E+00	INFINITE
110	22049	.00000E+00	.00000E+00	INFINITE
111	24048	.00000E+00	.00000E+00	INFINITE
112	24049	.00000E+00	.00000E+00	INFINITE
113	24050	.00000E+00	.00000E+00	INFINITE
114	24051	.00000E+00	.00000E+00	INFINITE
115	25048	.00000E+00	.00000E+00	INFINITE
116	25049	.00000E+00	.00000E+00	INFINITE
117	26048	.00000E+00	.00000E+00	INFINITE
118	26049	.00000E+00	.00000E+00	INFINITE
119	26050	.00000E+00	.00000E+00	INFINITE
120	26051	.00000E+00	.00000E+00	INFINITE
121	27050	.00000E+00	.00000E+00	INFINITE
122	27051	.00000E+00	.00000E+00	INFINITE
123	28048	.00000E+00	.00000E+00	INFINITE
124	28049	.00000E+00	.00000E+00	INFINITE
125	29048	.00000E+00	.00000E+00	INFINITE
126	29049	.00000E+00	.00000E+00	INFINITE
127	30048	.00000E+00	.00000E+00	INFINITE
128	30049	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00

20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	69	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	70	5	8.80188E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	71	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	72	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	74	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	76	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	77	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	78	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	79	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	80	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

80	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	82	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	84	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	86	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	87	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
88	89	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
89	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
90	91	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
91	92	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1.31148E+01 8.65579E+01
1SURFACES

PRINT TABLE 70

SURFACE		TRANS	TYPE	SURFACE COEFFICIENTS	
1	1	REFL.	PX	.0000000E+00	
2	2	REFL.	PY	.0000000E+00	
3	3	REFL.	PZ	.0000000E+00	
4	4		PZ	2.0320000E+02	
5	5		PZ	2.2225000E+02	
6	6		PZ	2.2925000E+02	
7	7		PZ	2.3175000E+02	
8	8		PZ	2.4885000E+02	
9	9		CZ	6.0794900E+01	
10	10		CZ	6.3017400E+01	
11	11		CZ	6.4525000E+01	
12	12		CZ	6.6525000E+01	
13	13		PX	7.2135000E-01	
14	14		PX	-7.2135000E-01	
15	15		PY	7.2135000E-01	
16	16		PY	-7.2135000E-01	
17	17		CZ	4.6812200E-01	
18	18		CZ	4.7879000E-01	
19	19		CZ	5.4610000E-01	
20	20		CZ	5.0292000E-01	
21	21		CZ	5.6007000E-01	
22	22		CZ	6.3246000E-01	
23	23		CZ	6.7310000E-01	
24	24		CZ	5.6007000E-01	
25	25		CZ	6.2611000E-01	
26	26		PX	1.2809230E+01	
27	27		PX	-1.2809230E+01	
28	28		PY	1.2809230E+01	
29	29		PY	-1.2809230E+01	
30	30		PY	1.0820240E+01	
31	31		PX	1.0820240E+01	
32	32		PY	-1.0820240E+01	
33	33		PX	-1.0820240E+01	
34	34		PY	1.1430000E+01	
35	35		PX	1.1430000E+01	
36	36		PY	-1.1430000E+01	
37	37		PX	-1.1430000E+01	
38	38		PY	1.2179300E+01	
39	39		PX	1.2179300E+01	
40	40		PY	-1.1668760E+01	
41	41		PX	-1.1668760E+01	
42	42		PX	1.1668760E+01	
43	43		PX	1.1668760E+01	

43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	3.4137600E+00			
56	58	PY	3.4137600E+00			
57	59	PX	3.1750000E+00			
58	60	PY	3.1750000E+00			
59	61	PX	2.5400000E+00			
60	62	PY	2.5400000E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	68	PX	1.4683740E+01			
66	69	PY	1.4683740E+01			
67	70	CZ	7.6525000E+01			
68	71	PZ	2.4635000E+02			
69	72	PZ	2.7135000E+02			
70	73	PZ	2.8235000E+02			
71	74	PX	-1.1856720E+01			
72	75	PY	-1.1856720E+01			
73	80	PZ	3.1235000E+02			
74	81	CZ	1.0652500E+02			
75	82	PX	1.2700000E+00			
76	83	PY	1.2700000E+00			
77	2068	1001 PX	2.9766259E+01			
78	2042	1001 PX	3.4137590E+00			
79	2069	1001 PY	2.9766259E+01			
80	2041	1001 PY	3.4137590E+00			
81	3027	1002 PX	2.9032230E+01			
82	3028	1002 PX	3.4137700E+00			
83	3029	1002 PY	7.9232790E+01			
84	3030	1002 PY	5.3614330E+01			
85	4027	1003 PX	5.3515300E+01			
86	4028	1003 PX	2.7896840E+01			
87	4029	1003 PY	5.3515300E+01			
88	4030	1003 PY	2.7896840E+01			
89	5027	1004 PX	7.9232790E+01			
90	5028	1004 PX	5.3614330E+01			
91	5029	1004 PY	2.9032230E+01			
92	5030	1004 PY	3.4137700E+00			
93	16048	1005 PX	2.1641000E+00			
94	16049	1005 PX	3.6067000E+00			
95	16050	1005 PY	2.1641000E+00			
96	16051	1005 PY	3.6067000E+00			
97	17048	1006 PX	6.4922000E+00			
98	17049	1006 PX	7.9348000E+00			
99	18048	1007 PX	5.0495000E+00			
100	18049	1007 PX	6.4921000E+00			
101	18050	1007 PY	5.0495000E+00			
102	18051	1007 PY	6.4921000E+00			

103	19050	1008	PY	6.4922000E+00
104	19051	1008	PY	7.9348000E+00
105	20048	1009	PX	-3.6067000E+00
106	20049	1009	PX	-2.1641000E+00
107	21048	1010	PX	-7.9348000E+00
108	21049	1010	PX	-6.4922000E+00
109	22048	1011	PX	-6.4921000E+00
110	22049	1011	PX	-5.0495000E+00
111	24048	1013	PX	-3.6067000E+00
112	24049	1013	PX	-2.1641000E+00
113	24050	1013	PY	-3.6067000E+00
114	24051	1013	PY	-2.1641000E+00
115	25048	1014	PX	-7.9348000E+00
116	25049	1014	PX	-6.4922000E+00
117	26048	1015	PX	-6.4921000E+00
118	26049	1015	PX	-5.0495000E+00
119	26050	1015	PY	-6.4921000E+00
120	26051	1015	PY	-5.0495000E+00
121	27050	1016	PY	-7.9348000E+00
122	27051	1016	PY	-6.4922000E+00
123	28048	1017	PX	2.1641000E+00
124	28049	1017	PX	3.6067000E+00
125	29048	1018	PX	6.4922000E+00
126	29049	1018	PX	7.9348000E+00
127	30048	1019	PX	5.0495000E+00
128	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08

32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
69	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
78	2.5300E-08
79	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08
91	2.5300E-08

3 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
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WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.
94238.50C 16458 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

(1338)	79/09/12.
(1381)	79/08/30.
(1342)	79/09/06.

TOTAL NU
TOTAL NU

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
16032.50C	2684	NJOY
22000.50C	25231	NJOY
25055.50C	60097	NJOY
42000.50C	18467	NJOY
62149.50C	11116	NJOY
64155.50C	31471	NJOY

(1315)	79/10/29.
(1316)	79/10/29.
(1322)	79/06/21.
(1325)	79/06/21.
(1321)	79/08/01.
(1319)	02/12/85
(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361)	79/08/29.
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WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369)	79/09/24.
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WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363)	79/08/30.
---------	-----------

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 103722
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1469616

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

11 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12tpb)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	7.531E-02	-1.826E-01	2.379E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.980E-01	4.017E+00
2	1.132E-01	-2.477E-01	1.029E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.980E-01	8.336E-01
3	2.929E-01	-2.601E-01	1.447E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.980E-01	7.771E-01
4	-1.547E-01	1.864E-01	2.979E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.980E-01	2.371E+00
5	1.774E-01	-8.154E-02	1.683E+00	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.980E-01	5.984E-01
6	8.874E-02	2.089E-01	4.894E-01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.980E-01	5.915E-01
7	1.589E-01	-3.280E-01	7.459E+00	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.980E-01	4.960E+00
8	-1.405E-02	-2.372E-01	1.583E+00	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.980E-01	1.331E+00
9	6.242E-02	4.470E-01	1.866E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.980E-01	5.718E+00
10	6.242E-02	4.470E-01	1.866E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.980E-01	4.601E+00
11	-8.665E-02	-4.852E-02	1.882E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.980E-01	4.558E+00
12	5.262E-02	2.328E-01	1.877E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.980E-01	2.588E+00
13	2.060E-01	2.124E-01	1.763E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.980E-01	2.425E+00

14	4.098E-02	-1.872E-01	1.786E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.980E-01	4.742E-01
15	-2.893E-01	2.575E-01	1.896E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.980E-01	1.655E+00
16	3.807E-01	4.685E-02	1.932E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.980E-01	1.770E+00
17	1.999E-02	-3.697E-01	1.932E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.980E-01	7.725E+00
18	2.255E-01	-1.772E-01	3.334E+00	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.980E-01	2.928E+00
19	-2.556E-01	2.992E-01	4.272E+00	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.980E-01	1.284E+00
20	4.324E-01	-1.213E-01	1.388E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.980E-01	9.166E-01
21	-2.391E-01	2.841E-01	7.817E+00	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.980E-01	9.307E-01
22	2.919E-01	-2.046E-01	1.424E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.980E-01	1.359E+00
23	1.713E-01	1.128E-03	2.578E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.980E-01	3.246E+00
24	7.558E-03	-1.099E-01	7.743E+00	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.980E-01	3.477E+00
25	2.959E-01	-1.204E-01	3.485E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.980E-01	6.301E-01
26	1.313E-01	3.872E-02	1.958E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.980E-01	4.496E+00
27	-6.294E-02	-4.691E-02	4.882E+00	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.980E-01	9.988E-01
28	-2.257E-01	-1.989E-01	9.675E+00	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.980E-01	5.709E+00
29	4.540E-01	7.335E-02	2.848E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.980E-01	2.286E+00
30	-2.116E-01	-2.424E-01	1.250E+00	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.980E-01	3.440E+00
31	-2.445E-01	-1.247E-01	4.538E-01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.980E-01	4.597E+00
32	4.704E-02	3.736E-01	6.434E+00	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.980E-01	2.377E+00
33	-1.207E-01	2.628E-01	4.766E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.980E-01	1.052E+00
34	-3.585E-01	-2.755E-01	5.406E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.980E-01	2.650E+00
35	-1.112E-01	-2.047E-01	6.640E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.980E-01	3.056E+00
36	-3.906E-01	2.218E-01	4.581E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.980E-01	3.965E+00
37	1.326E-01	-2.358E-01	5.422E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.980E-01	3.470E-01
38	1.025E-01	9.414E-02	5.680E+00	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.980E-01	2.111E+00
39	2.924E-01	3.010E-01	6.655E+00	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.980E-01	8.726E-01
40	1.326E-01	-3.573E-01	1.678E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.980E-01	4.543E-01
41	-1.581E-01	-2.350E-01	5.527E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.980E-01	2.483E+00
42	-3.648E-01	-1.739E-01	5.508E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.980E-01	4.368E+00
43	1.380E-02	-3.361E-01	5.796E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.980E-01	7.332E-01
44	-1.643E-01	-2.322E-01	5.171E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.980E-01	2.552E+00
45	-3.731E-01	-7.642E-02	4.773E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.980E-01	1.355E+00
46	-3.248E-01	2.699E-02	4.794E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.980E-01	2.475E+00
47	1.008E-01	2.192E-01	5.624E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.980E-01	8.979E-01
48	2.320E-01	1.187E-01	5.623E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.980E-01	2.272E+00
49	1.974E-01	-2.051E-01	5.883E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.980E-01	1.380E+00
50	-1.707E-01	-3.091E-02	4.866E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.980E-01	2.866E+00

CYCLE 1 K(COLLISION) .843391 REMOVAL LIFETIME(ABS) 3.9377E+03 SOURCE POINTS GENERATED 2537

CYCLE 2 K(COLLISION) .850682 REMOVAL LIFETIME(ABS) 3.7388E+03 SOURCE POINTS GENERATED 3115

CYCLE 3 K(COLLISION) .830316 REMOVAL LIFETIME(ABS) 3.8545E+03 SOURCE POINTS GENERATED 2928

CYCLE 4 K(COLLISION) .848157 REMOVAL LIFETIME(ABS) 3.8362E+03 SOURCE POINTS GENERATED 3001

CYCLE 5 K(COLLISION) .855118 REMOVAL LIFETIME(ABS) 3.6940E+03 SOURCE POINTS GENERATED 3049

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .816715 REMOVAL LIFETIME(ABS) 3.6775E+03 SOURCE POINTS GENERATED 2849

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.833433		.825074	.0101	.000000	.0000	.0000
K(ABSORPTION)		.844078		.829136	.0180	.000000	.0000	.0000
K(TRK LENGTH)		.850770		.832653	.0218	.000000	.0000	.0000
REM LIFE(COL)	3.9017E+03			3.7990E+03	.0270			
REM LIFE(ABS)	3.9189E+03			3.7982E+03	.0318			
				LIFE(COL/ABS)		.0000E+00	.0000	.0000

SOURCE POINTS GENERATED 3071

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 7

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.862298	.837482	.0159	K(COL/ABS)	.839007 .0163	.836341 .0235	.9619
K(ABSORPTION)	.863324	.840532	.0170	K(ABS/TK LN)	.841856 .0173	.836741 .0268	.9910
K(TRK LENGTH)	.864231	.843179	.0176	K(TK LN/COL)	.840331 .0164	.836862 .0241	.9166
REM LIFE(COL)	3.9521E+03	3.8501E+03	.0203				
REM LIFE(ABS)	3.9461E+03	3.8475E+03	.0222	LIFE(COL/ABS)	3.8488E+03 .0212	3.8621E+03 .0221	.9955

SOURCE POINTS GENERATED 3102

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 8

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.855866	.842078	.0124	K(COL/ABS)	.843872 .0128	.839676 .0160	.9693
K(ABSORPTION)	.861072	.845667	.0134	K(ABS/TK LN)	.845196 .0128	.844691 .0154	.9401
K(TRK LENGTH)	.849365	.844726	.0126	K(TK LN/COL)	.843402 .0121	.843267 .0150	.8788
REM LIFE(COL)	3.9074E+03	3.8644E+03	.0148	K(COL/ABS/TK LN)	.844157 .0125	.837293 .0237	
REM LIFE(ABS)	3.8777E+03	3.8551E+03	.0158	LIFE(COL/ABS)	3.8597E+03 .0152	3.8797E+03 .0179	.9873

SOURCE POINTS GENERATED 2897

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 9

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.836147	.840892	.0098	K(COL/ABS)	.843726 .0099	.840424 .0122	.9395
K(ABSORPTION)	.850138	.846561	.0104	K(ABS/TK LN)	.844740 .0099	.843939 .0116	.8917
K(TRK LENGTH)	.835693	.842919	.0100	K(TK LN/COL)	.841905 .0096	.841691 .0111	.8804
REM LIFE(COL)	3.6504E+03	3.8216E+03	.0161	K(COL/ABS/TK LN)	.843457 .0097	.839984 .0185	
REM LIFE(ABS)	3.6782E+03	3.8197E+03	.0154	LIFE(COL/ABS)	3.8206E+03 .0157	3.8180E+03 .0176	.9849

SOURCE POINTS GENERATED 2959

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.875250	.846618	.0104	K(COL/ABS)	.845908 .0085	.845608 .0093	.5809
K(ABSORPTION)	.838385	.845198	.0087	K(ABS/TK LN)	.846354 .0083	.845993 .0092	.6252
K(TRK LENGTH)	.870461	.847509	.0097	K(TK LN/COL)	.847064 .0099	.847403 .0109	.9174
REM LIFE(COL)	3.8320E+03	3.8233E+03	.0132	K(COL/ABS/TK LN)	.846442 .0087	.845944 .0108	
REM LIFE(ABS)	3.7943E+03	3.8155E+03	.0127	LIFE(COL/ABS)	3.8194E+03 .0128	3.8125E+03 .0142	.9775

SOURCE POINTS GENERATED 3194

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.843541	.846178	.0088	K(COL/ABS)	.845640 .0072	.845411 .0077	.5807
K(ABSORPTION)	.844523	.845102	.0073	K(ABS/TK LN)	.846229 .0070	.845877 .0076	.6253
K(TRK LENGTH)	.846436	.847356	.0082	K(TK LN/COL)	.846767 .0083	.847223 .0090	.9169
REM LIFE(COL)	3.7116E+03	3.8074E+03	.0119	K(COL/ABS/TK LN)	.846212 .0073	.845815 .0087	
REM LIFE(ABS)	3.7157E+03	3.8012E+03	.0114	LIFE(COL/ABS)	3.8043E+03 .0116	3.7972E+03 .0124	.9799

SOURCE POINTS GENERATED 2901

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.837230	.845060	.0078	K(COL/ABS)	.845012 .0063	.844990 .0066	.5764
K(ABSORPTION)	.844000	.844964	.0064	K(ABS/TK LN)	.846012 .0061	.845682 .0065	.6256
K(TRK LENGTH)	.844994	.847061	.0071	K(TK LN/COL)	.846060 .0073	.846922 .0078	.9107
REM LIFE(COL)	3.8081E+03	3.8075E+03	.0103	K(COL/ABS/TK LN)	.845695 .0064	.845627 .0075	
REM LIFE(ABS)	3.8325E+03	3.8051E+03	.0099	LIFE(COL/ABS)	3.8063E+03 .0100	3.8043E+03 .0107	.9748

SOURCE POINTS GENERATED 2983

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	AVE OF	9 CYCLES
K(COLLISION)	.845160	.845071	.0068
K(ABSORPTION)	.862440	.846906	.0060
K(TRK LENGTH)	.837602	.846010	.0064
REM LIFE(COL)	3.6939E+03	3.7949E+03	.0097
REM LIFE(ABS)	3.7182E+03	3.7955E+03	.0091

SOURCE POINTS GENERATED 3035

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.845989 .0056	.846225 .0060	.5340
K(ABS/TK LN)	.846458 .0054	.846512 .0058	.4947
K(TK LN/COL)	.845540 .0065	.845802 .0068	.8932
K(COL/ABS/TK LN)	.845996 .0056	.846589 .0063	
LIFE(COL/ABS)	3.7952E+03 .0094	3.7959E+03 .0096	.9751

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	AVE OF	10 CYCLES
K(COLLISION)	.842249	.844789	.0061
K(ABSORPTION)	.833293	.845545	.0056
K(TRK LENGTH)	.845516	.845961	.0058
REM LIFE(COL)	3.9020E+03	3.8056E+03	.0091
REM LIFE(ABS)	3.8727E+03	3.8032E+03	.0084

SOURCE POINTS GENERATED 3041

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.845167 .0051	.845231 .0054	.5267
K(ABS/TK LN)	.845753 .0049	.845745 .0052	.4771
K(TK LN/COL)	.845375 .0058	.845706 .0061	.8924
K(COL/ABS/TK LN)	.845431 .0051	.845838 .0056	
LIFE(COL/ABS)	3.8044E+03 .0087	3.8009E+03 .0086	.9746

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	AVE OF	11 CYCLES
K(COLLISION)	.850832	.845338	.0056
K(ABSORPTION)	.819837	.843208	.0058
K(TRK LENGTH)	.868226	.847985	.0057
REM LIFE(COL)	3.8849E+03	3.8128E+03	.0084
REM LIFE(ABS)	3.8842E+03	3.8106E+03	.0078

SOURCE POINTS GENERATED 3014

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.844273 .0048	.844345 .0050	.4047
K(ABS/TK LN)	.845596 .0044	.845636 .0047	.1826
K(TK LN/COL)	.846661 .0054	.846417 .0058	.8539
K(COL/ABS/TK LN)	.845510 .0046	.845789 .0052	
LIFE(COL/ABS)	3.8117E+03 .0081	3.8084E+03 .0080	.9758

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	AVE OF	12 CYCLES
K(COLLISION)	.849368	.845674	.0051
K(ABSORPTION)	.866452	.845145	.0058
K(TRK LENGTH)	.850200	.848169	.0052
REM LIFE(COL)	3.8409E+03	3.8151E+03	.0077
REM LIFE(ABS)	3.8605E+03	3.8147E+03	.0072

SOURCE POINTS GENERATED 2981

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.845409 .0046	.845463 .0047	.4012
K(ABS/TK LN)	.846657 .0042	.846838 .0044	.1840
K(TK LN/COL)	.846922 .0050	.846710 .0052	.8539
K(COL/ABS/TK LN)	.846329 .0043	.846903 .0049	
LIFE(COL/ABS)	3.8149E+03 .0074	3.8144E+03 .0074	.9735

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	AVE OF	13 CYCLES
K(COLLISION)	.844105	.845553	.0047
K(ABSORPTION)	.825630	.843644	.0056
K(TRK LENGTH)	.844572	.847892	.0048
REM LIFE(COL)	3.8449E+03	3.8174E+03	.0071
REM LIFE(ABS)	3.8498E+03	3.8174E+03	.0067

SOURCE POINTS GENERATED 3065

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.844598 .0043	.844868 .0044	.3900
K(ABS/TK LN)	.845768 .0040	.846157 .0042	.1956
K(TK LN/COL)	.846723 .0046	.846510 .0048	.8536
K(COL/ABS/TK LN)	.845696 .0040	.846067 .0046	
LIFE(COL/ABS)	3.8174E+03 .0068	3.8174E+03 .0069	.9735

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	AVE OF	14 CYCLES
K(COLLISION)	.817754	.843568	.0050
K(ABSORPTION)	.808679	.841146	.0060
K(TRK LENGTH)	.807414	.845001	.0056
REM LIFE(COL)	3.8792E+03	3.8218E+03	.0067
REM LIFE(ABS)	3.8484E+03	3.8196E+03	.0062

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.842357 .0048	.842830 .0049	.5332
K(ABS/TK LN)	.843074 .0049	.843274 .0051	.4356
K(TK LN/COL)	.844284 .0051	.843530 .0052	.8852
K(COL/ABS/TK LN)	.843238 .0047	.842871 .0052	
LIFE(COL/ABS)	3.8207E+03 .0064	3.8180E+03 .0063	.9708

SOURCE POINTS GENERATED 2880

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR		
K(COLLISION)		.816886		.841789	.0051	K(COL/ABS)	.840651	.0049	.841063	.0050	.5945
K(ABSORPTION)		.816654		.839513	.0059	K(ABS/TK LN)	.842213	.0047	.842745	.0049	.4180
K(TRK LENGTH)		.843678		.844913	.0052	K(TK LN/COL)	.843351	.0049	.843062	.0051	.8132
REM LIFE(COL)	3.8295E+03		3.8223E+03		.0062	K(COL/ABS/TK LN)	.842072	.0046	.842386	.0053	
REM LIFE(ABS)	3.8798E+03		3.8236E+03		.0058	LIFE(COL/ABS)	3.8230E+03	.0060	3.8239E+03	.0061	.9587

SOURCE POINTS GENERATED 2985

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12tpb)

PROBID = 03/29/95 11:02:13
03/29/95 09:17:56

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59608	1.0066E+00	2.0582E+00	ESCAPE	4	4.8579E-05	1.4964E-07
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	8.1409E-02	3.6193E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59673	8.0489E-02	3.9473E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.5882E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	138	1.8507E-03	1.3688E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9547E+00
TOTAL	59746	1.0898E+00	2.0596E+00	CAPTURE	0	6.8783E-01	3.1818E-02
				LOSS TO (N,XN)	69	9.2536E-04	7.9092E-03
				LOSS TO FISSION	0	3.2055E-01	6.5133E-02
				TOTAL	59746	1.0898E+00	2.0596E+00

NUMBER OF NEUTRONS BANKED 69
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0023E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.5807E+01
 TOTAL NEUTRON COLLISIONS 3922619
 NET MULTIPLICATION 1.0009E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 7.7008E+03
 CAPTURE 3.8136E+03
 CAPTURE OR ESCAPE 3.8138E+03
 ANY TERMINATION 4.2744E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 103.93 MINUTES
 COMPUTER TIME IN MCRUN 103.82 MINUTES
 SOURCE PARTICLES PER MINUTE 5.7417E+02
 RANDOM NUMBERS GENERATED 44533513

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 11256 IN HISTORY 5852

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3926E-01 TO 1.1825E+00
 WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120.

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
85	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
88	NO DATA AVAILABLE YET FOR THIS CELL.						
90	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	865	431	.0000E+00	5.5526E-04	5.5471E-01	7.5345E-01	1.5166E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	33	644473	59676	260862	3.6748E+00	7.2431E-04	7.8001E-01	8.8228E-01
34	34	4603	253	1015	1.0909E-02	7.2678E-05	3.5965E-01	6.3168E-01
35	35	243	27	691	5.0488E-03	1.7589E-05	1.1275E-01	4.6073E-01
36	36	1147782	59676	15	2.4406E-04	6.2387E-04	7.3612E-01	8.7801E-01
37	37	459	27	28	1.9907E-04	3.2031E-05	2.4114E-01	4.6228E-01
38	38	1244039	59676	44549	6.6557E-01	6.0129E-04	7.2365E-01	8.7746E-01
39	39	501	30	227	1.6296E-03	2.4316E-05	1.8059E-01	4.5948E-01
40	40	1989756	59676	1282271	1.6787E+01	5.1910E-04	6.8777E-01	8.7421E-01
41	41	50858	28406	80254	1.0637E+00	3.9535E-04	6.2495E-01	8.7562E-01
42	42	30	10	76	5.4017E-04	1.3584E-07	3.0972E-06	4.5780E-01
43	43	107475	30042	3365	5.0203E-02	4.2556E-04	6.4074E-01	8.7657E-01
44	44	120253	32292	26606	3.5289E-01	4.3325E-04	6.4374E-01	8.7727E-01
45	45	131336	33221	2870	4.2616E-02	4.4410E-04	6.4587E-01	8.7663E-01
46	46	160199	38192	62870	8.3329E-01	4.4379E-04	6.5087E-01	8.7735E-01
47	47	6528	3056	7043	9.3568E-02	3.8446E-04	6.3737E-01	8.7443E-01
48	48	8780	3337	333	4.9617E-03	3.8157E-04	6.1395E-01	8.7881E-01
49	49	11334	4580	6056	8.0768E-02	3.8818E-04	6.1138E-01	8.7769E-01
50	50	30878	13635	64661	7.3986E-01	2.9097E-04	5.5906E-01	8.0288E-01
51	51	30692	12787	11851	1.4228E-01	3.1398E-04	5.5698E-01	7.8378E-01
52	52	30249	12444	2137	3.0185E-02	3.0592E-04	5.4590E-01	7.7874E-01
53	53	30425	12447	11797	1.4069E-01	2.9207E-04	5.3441E-01	7.7728E-01
54	54	31174	13356	235178	2.6058E+00	1.4197E-04	4.1816E-01	7.6099E-01
55	55	274	74	3290	2.8567E-02	5.1237E-05	2.3522E-01	5.9458E-01

55	56	30990	13866	63754	7.3893E-01	3.0229E-04	5.5105E-01	8.0729E-01	1.4398E+00
56	57	30896	13020	11716	1.4066E-01	3.3024E-04	5.5551E-01	7.8680E-01	2.0218E+00
57	58	30599	12697	2055	2.9264E-02	3.1992E-04	5.3944E-01	7.8343E-01	9.2902E+00
58	59	30654	12704	12174	1.4599E-01	2.9531E-04	5.1732E-01	7.8117E-01	1.9734E+00
59	60	31645	13693	233268	2.5995E+00	1.4564E-04	4.1519E-01	7.6625E-01	1.1772E+00
60	61	271	80	4997	4.1610E-02	4.0267E-05	1.9333E-01	5.5725E-01	7.3835E-01
61	62	42614	16356	86736	1.0157E+00	3.0983E-04	5.5053E-01	8.1430E-01	1.4434E+00
62	63	43046	15462	16362	2.0153E-01	3.3613E-04	5.4310E-01	7.9799E-01	2.0364E+00
63	64	361	78	1568	1.3773E-02	3.6719E-05	2.0009E-01	5.7515E-01	7.3833E-01
64	65	43004	16613	87362	1.0252E+00	3.1011E-04	5.5949E-01	8.1579E-01	1.4525E+00
65	66	43566	15706	16583	2.0239E-01	3.3780E-04	5.5179E-01	7.9893E-01	2.0591E+00
66	67	439	93	1930	1.5913E-02	4.5703E-05	2.5119E-01	5.6978E-01	7.7184E-01
67	68	14439	7202	596000	5.6836E+00	6.3577E-05	2.7420E-01	6.4393E-01	8.8777E-01
68	69	12556	5426	17267	1.9771E-01	3.1710E-04	5.2208E-01	7.5483E-01	2.0324E+00
69	70	12594	5527	19547	2.2669E-01	3.6020E-04	5.2979E-01	7.6613E-01	1.8460E+00
70	71	27148	8453	9499	1.1745E-01	5.6995E-04	5.8713E-01	8.1032E-01	2.2342E+00
71	72	26907	8164	4659	6.7349E-02	5.6882E-04	5.7357E-01	8.0695E-01	9.1790E+00
72	73	28810	7994	51527	6.1808E-01	4.5758E-04	5.4477E-01	7.8943E-01	2.1763E+00
73	74	14657	6458	156597	1.7548E+00	1.6819E-04	4.0672E-01	7.7200E-01	1.1907E+00
74	75	27281	8485	9936	1.2262E-01	5.4509E-04	5.7521E-01	8.0691E-01	2.1838E+00
75	76	26942	8214	4497	6.4351E-02	5.3213E-04	5.6816E-01	7.9900E-01	9.1046E+00
76	77	28936	8086	52644	6.3508E-01	4.4504E-04	5.2975E-01	7.9116E-01	2.1455E+00
77	78	14700	6466	159104	1.7959E+00	1.6094E-04	3.8562E-01	7.7420E-01	1.1674E+00
78	79	243	61	5538	4.7331E-02	4.0264E-05	2.1637E-01	5.6208E-01	7.2788E-01
79	80	136	52	3841	3.3656E-02	4.2485E-05	2.7378E-01	5.6936E-01	8.2256E-01
80	81	8	5	22	2.3200E-04	1.1265E-03	6.3952E-01	7.1505E-01	2.7976E+00
81	82	7046	2967	20892	2.3521E-01	3.5948E-04	4.7461E-01	7.4602E-01	2.0966E+00
82	83	4828	1893	27150	2.9124E-01	2.3833E-04	4.1238E-01	7.5539E-01	1.2526E+00
83	84	4	2	1158	8.1396E-03	9.7555E-06	2.5145E-02	4.4942E-01	4.4993E-01
84	85	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	3843	1535	11840	1.4399E-01	7.9338E-04	4.9146E-01	7.8957E-01	2.0333E+00
86	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	2291	1011	19423	2.2632E-01	2.1135E-03	4.8410E-01	8.0133E-01	4.4878E+00
89	90	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	820	473	104928	8.9139E-01	2.5088E-05	1.0370E-01	5.5456E-01	6.0348E-01

TOTAL 6365480 696193 3922619 4.6687E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-4.8675E-01	-4.8675E-01
2	2	1.0898E-02	.0000E+00	.0000E+00	-4.8224E-01	-4.7134E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-2.5015E-02	-2.5015E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-6.4290E-02	-6.4290E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-2.6770E-02	-2.6770E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-2.0457E-01	-2.0457E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.5508E+00	-1.5508E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.7446E+00	-1.7446E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-1.8502E-01	-1.8502E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.8745E-01	-1.8745E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-2.7324E-01	-2.7324E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-2.7610E-01	-2.7610E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.1068E-02	-7.1068E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.1546E-02	-7.1546E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.7918E-02	-8.7918E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.0726E-02	-7.0726E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.1940E-02	-7.1940E-02

18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2950E-02	-7.2950E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4068E-02	-9.4068E-02
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9516E-02	-8.9516E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9599E-02	-7.9599E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8974E-02	-7.8974E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.7545E-02	-9.7545E-02
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2633E-02	-9.2633E-02
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1372E-02	-9.1372E-02
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2171E-02	-9.2171E-02
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6363E-02	-9.6363E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9526E-02	-7.9526E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1870E-02	-8.1870E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2201E-02	-8.2201E-02
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6892E+01	-1.6892E+01
32	33	8.5859E+00	1.0066E+00	.0000E+00	.0000E+00	-8.4979E+00	1.0945E+00
33	34	4.8602E-02	.0000E+00	.0000E+00	.0000E+00	-4.5983E-02	2.6191E-03
34	35	1.8983E-03	.0000E+00	.0000E+00	.0000E+00	-1.8655E-03	3.2794E-05
35	36	1.6913E+01	.0000E+00	.0000E+00	.0000E+00	-1.6903E+01	1.0301E-02
36	37	3.5934E-03	.0000E+00	.0000E+00	.0000E+00	-3.5923E-03	1.1069E-06
37	38	1.8327E+01	.0000E+00	.0000E+00	.0000E+00	-1.8258E+01	6.9163E-02
38	39	3.8906E-03	.0000E+00	.0000E+00	.0000E+00	-3.8653E-03	2.5305E-05
39	40	2.9241E+01	.0000E+00	.0000E+00	.0000E+00	-9.5377E+00	1.9703E+01
40	41	7.4943E-01	.0000E+00	.0000E+00	.0000E+00	-7.4617E-01	3.2615E-03
41	42	2.3662E-04	.0000E+00	.0000E+00	.0000E+00	-2.2712E-04	9.5013E-06
42	43	1.5802E+00	.0000E+00	.0000E+00	.0000E+00	-1.5797E+00	4.8442E-04
43	44	1.7686E+00	.0000E+00	.0000E+00	.0000E+00	-1.7675E+00	1.0597E-03
44	45	1.9318E+00	.0000E+00	.0000E+00	.0000E+00	-1.9313E+00	4.7623E-04
45	46	2.3600E+00	.0000E+00	.0000E+00	.0000E+00	-9.9817E-01	1.3618E+00
46	47	9.6120E-02	.0000E+00	.0000E+00	.0000E+00	-5.8746E-02	3.7374E-02
47	48	1.2933E-01	.0000E+00	.0000E+00	.0000E+00	-1.2486E-01	4.4678E-03
48	49	1.6753E-01	.0000E+00	.0000E+00	.0000E+00	-6.6178E-02	1.0136E-01
49	50	4.1853E-01	.0000E+00	.0000E+00	.0000E+00	-2.4308E-01	1.7545E-01
50	51	4.0786E-01	.0000E+00	.0000E+00	.0000E+00	-3.9250E-01	1.5364E-02
51	52	3.9788E-01	.0000E+00	.0000E+00	.0000E+00	-3.9314E-01	4.7322E-03
52	53	4.0031E-01	.0000E+00	.0000E+00	.0000E+00	-3.8565E-01	1.4661E-02
53	54	4.0985E-01	.0000E+00	.0000E+00	.0000E+00	-1.6426E-01	2.4560E-01
54	55	2.7558E-03	.0000E+00	.0000E+00	.0000E+00	-2.6383E-04	2.4920E-03
55	56	4.2263E-01	.0000E+00	.0000E+00	.0000E+00	-2.4463E-01	1.7800E-01
56	57	4.1336E-01	.0000E+00	.0000E+00	.0000E+00	-3.9847E-01	1.4887E-02
57	58	4.0524E-01	.0000E+00	.0000E+00	.0000E+00	-4.0046E-01	4.7794E-03
58	59	4.0595E-01	.0000E+00	.0000E+00	.0000E+00	-3.9061E-01	1.5345E-02
59	60	4.1919E-01	.0000E+00	.0000E+00	.0000E+00	-1.6700E-01	2.5219E-01
60	61	2.5678E-03	.0000E+00	.0000E+00	.0000E+00	-2.7572E-04	2.2921E-03
61	62	5.8441E-01	.0000E+00	.0000E+00	.0000E+00	-3.1596E-01	2.6845E-01
62	63	5.8189E-01	.0000E+00	.0000E+00	.0000E+00	-2.5375E-01	3.2814E-01
63	64	3.5996E-03	.0000E+00	.0000E+00	.0000E+00	-1.1354E-04	3.4861E-03
64	65	5.9087E-01	.0000E+00	.0000E+00	.0000E+00	-3.1938E-01	2.7150E-01
65	66	5.8930E-01	.0000E+00	.0000E+00	.0000E+00	-2.5557E-01	3.3373E-01
66	67	4.2526E-03	.0000E+00	.0000E+00	.0000E+00	-1.1460E-04	4.1380E-03
67	68	1.8819E-01	.0000E+00	.0000E+00	.0000E+00	-1.0448E-01	8.3711E-02
68	69	1.6107E-01	.0000E+00	.0000E+00	.0000E+00	-8.5924E-02	7.5151E-02
69	70	1.6385E-01	.0000E+00	.0000E+00	.0000E+00	-8.7316E-02	7.6532E-02
70	71	3.7017E-01	.0000E+00	.0000E+00	.0000E+00	-3.6387E-01	6.3047E-03
71	72	3.6452E-01	.0000E+00	.0000E+00	.0000E+00	-3.6364E-01	8.7384E-04
72	73	3.8691E-01	.0000E+00	.0000E+00	.0000E+00	-3.4951E-01	3.7406E-02
73	74	1.9437E-01	.0000E+00	.0000E+00	.0000E+00	-1.8762E-01	6.7551E-03
74	75	3.7168E-01	.0000E+00	.0000E+00	.0000E+00	-3.6496E-01	6.7141E-03
75	76	3.6442E-01	.0000E+00	.0000E+00	.0000E+00	-3.6355E-01	8.6878E-04
76	77	3.8886E-01	.0000E+00	.0000E+00	.0000E+00	-3.5074E-01	3.8119E-02
77	78	1.9618E-01	.0000E+00	.0000E+00	.0000E+00	-1.8920E-01	6.9841E-03

78	79	2.4249E-03	.0000E+00	.0000E+00	.0000E+00	-2.1804E-03	2.4454E-04
79	80	1.5244E-03	.0000E+00	.0000E+00	.0000E+00	-1.3293E-03	1.9507E-04
80	81	9.7154E-05	.0000E+00	.0000E+00	.0000E+00	-8.3656E-05	1.3497E-05
81	82	8.9093E-02	.0000E+00	.0000E+00	.0000E+00	-7.3348E-02	1.5745E-02
82	83	6.2369E-02	.0000E+00	.0000E+00	.0000E+00	-6.1439E-02	9.2938E-04
83	84	5.8100E-05	.0000E+00	.0000E+00	.0000E+00	-3.0613E-05	2.7487E-05
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	5.0927E-02	.0000E+00	.0000E+00	.0000E+00	-4.5450E-02	5.4768E-03
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	2.9627E-02	.0000E+00	.0000E+00	.0000E+00	-2.5355E-02	4.2714E-03
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	1.0809E-02	.0000E+00	.0000E+00	.0000E+00	-6.1298E-03	4.6790E-03

TOTAL	9.1777E+01	1.0066E+00	.0000E+00	.0000E+00	-9.1777E+01	1.0065E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	3.3641E-04	.0000E+00	.0000E+00	.0000E+00	3.3641E-04
33	34	.0000E+00	.0000E+00	-4.7508E-05	.0000E+00	.0000E+00	.0000E+00	-4.7508E-05
34	35	.0000E+00	.0000E+00	-4.1177E-06	.0000E+00	.0000E+00	.0000E+00	-4.1177E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	5.6821E-05	.0000E+00	.0000E+00	.0000E+00	5.6821E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	2.3725E-04	.0000E+00	.0000E+00	.0000E+00	2.3725E-04
40	41	.0000E+00	.0000E+00	4.9082E-06	.0000E+00	.0000E+00	.0000E+00	4.9082E-06

41	42	.0000E+00	.0000E+00	4.1967E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1967E-06
42	43	.0000E+00	.0000E+00	2.1982E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1982E-05
43	44	.0000E+00	.0000E+00	1.7270E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7270E-07
44	45	.0000E+00	.0000E+00	-1.6230E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6230E-05
45	46	.0000E+00	.0000E+00	8.9964E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.9964E-06
46	47	.0000E+00	.0000E+00	-4.1537E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1537E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	4.0739E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.0739E-08
49	50	.0000E+00	.0000E+00	-4.0032E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0032E-05
50	51	.0000E+00	.0000E+00	1.2839E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2839E-05
51	52	.0000E+00	.0000E+00	-3.2452E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2452E-05
52	53	.0000E+00	.0000E+00	-3.1724E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.1724E-05
53	54	.0000E+00	.0000E+00	-8.4719E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4719E-05
54	55	.0000E+00	.0000E+00	2.1275E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1275E-05
55	56	.0000E+00	.0000E+00	5.9712E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.9712E-06
56	57	.0000E+00	.0000E+00	-1.3401E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3401E-06
57	58	.0000E+00	.0000E+00	-4.8902E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.8902E-05
58	59	.0000E+00	.0000E+00	-4.7779E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.7779E-05
59	60	.0000E+00	.0000E+00	1.5805E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5805E-04
60	61	.0000E+00	.0000E+00	2.9725E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9725E-05
61	62	.0000E+00	.0000E+00	6.1252E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.1252E-05
62	63	.0000E+00	.0000E+00	-9.9934E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9934E-05
63	64	.0000E+00	.0000E+00	-1.6656E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6656E-05
64	65	.0000E+00	.0000E+00	-1.0413E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0413E-05
65	66	.0000E+00	.0000E+00	-2.1593E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1593E-05
66	67	.0000E+00	.0000E+00	4.2535E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2535E-06
67	68	.0000E+00	.0000E+00	6.3320E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.3320E-05
68	69	.0000E+00	.0000E+00	1.3131E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3131E-04
69	70	.0000E+00	.0000E+00	4.7648E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7648E-05
70	71	.0000E+00	.0000E+00	-1.0254E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0254E-04
71	72	.0000E+00	.0000E+00	1.5733E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5733E-05
72	73	.0000E+00	.0000E+00	2.7528E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.7528E-04
73	74	.0000E+00	.0000E+00	8.0258E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.0258E-07
74	75	.0000E+00	.0000E+00	4.2030E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2030E-06
75	76	.0000E+00	.0000E+00	6.8397E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8397E-05
76	77	.0000E+00	.0000E+00	5.9920E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.9920E-06
77	78	.0000E+00	.0000E+00	-4.5808E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.5808E-05
78	79	.0000E+00	.0000E+00	4.6387E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6387E-06
79	80	.0000E+00	.0000E+00	-1.2314E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2314E-05
80	81	.0000E+00	.0000E+00	-3.8484E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8484E-06
81	82	.0000E+00	.0000E+00	-6.5869E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5869E-05
82	83	.0000E+00	.0000E+00	2.2099E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2099E-05
83	84	.0000E+00	.0000E+00	1.6948E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6948E-05
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	.0000E+00	.0000E+00	9.7997E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.7997E-05
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	.0000E+00	.0000E+00	-5.5175E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.5175E-05
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	.0000E+00	.0000E+00	-5.3400E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3400E-06
TOTAL		.0000E+00	.0000E+00	9.2006E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.2006E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --				PHYSICAL EVENTS					
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSIION	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			

PRINT TABLE 130

4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.7190E-03	.0000E+00	-3.2057E-01	-8.5951E-04	-3.2055E-01	-6.4025E-01
33	34	.0000E+00	.0000E+00	-2.2401E-04	.0000E+00	.0000E+00	-2.2401E-04
34	35	.0000E+00	.0000E+00	-2.8677E-05	.0000E+00	.0000E+00	-2.8677E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.1069E-06	.0000E+00	.0000E+00	-1.1069E-06
37	38	3.9544E-05	.0000E+00	-5.9288E-03	-1.9772E-05	.0000E+00	-5.9091E-03
38	39	.0000E+00	.0000E+00	-8.9352E-06	.0000E+00	.0000E+00	-8.9352E-06
39	40	.0000E+00	.0000E+00	-4.6682E-02	.0000E+00	.0000E+00	-4.6682E-02
40	41	.0000E+00	.0000E+00	-3.2664E-03	.0000E+00	.0000E+00	-3.2664E-03
41	42	.0000E+00	.0000E+00	-3.0868E-06	.0000E+00	.0000E+00	-3.0868E-06
42	43	.0000E+00	.0000E+00	-5.0640E-04	.0000E+00	.0000E+00	-5.0640E-04
43	44	.0000E+00	.0000E+00	-1.0598E-03	.0000E+00	.0000E+00	-1.0598E-03
44	45	.0000E+00	.0000E+00	-4.6000E-04	.0000E+00	.0000E+00	-4.6000E-04
45	46	.0000E+00	.0000E+00	-2.4519E-03	.0000E+00	.0000E+00	-2.4519E-03
46	47	.0000E+00	.0000E+00	-2.9116E-04	.0000E+00	.0000E+00	-2.9116E-04
47	48	.0000E+00	.0000E+00	-4.7102E-05	.0000E+00	.0000E+00	-4.7102E-05
48	49	.0000E+00	.0000E+00	-2.4214E-04	.0000E+00	.0000E+00	-2.4214E-04
49	50	.0000E+00	.0000E+00	-2.5207E-03	.0000E+00	.0000E+00	-2.5207E-03
50	51	.0000E+00	.0000E+00	-1.1268E-02	.0000E+00	.0000E+00	-1.1268E-02
51	52	.0000E+00	.0000E+00	-6.7257E-04	.0000E+00	.0000E+00	-6.7257E-04
52	53	.0000E+00	.0000E+00	-1.1381E-02	.0000E+00	.0000E+00	-1.1381E-02
53	54	.0000E+00	.0000E+00	-1.0940E-02	.0000E+00	.0000E+00	-1.0940E-02
54	55	.0000E+00	.0000E+00	-1.4461E-04	.0000E+00	.0000E+00	-1.4461E-04
55	56	.0000E+00	.0000E+00	-2.4337E-03	.0000E+00	.0000E+00	-2.4337E-03
56	57	.0000E+00	.0000E+00	-1.0982E-02	.0000E+00	.0000E+00	-1.0982E-02
57	58	.0000E+00	.0000E+00	-5.7833E-04	.0000E+00	.0000E+00	-5.7833E-04
58	59	.0000E+00	.0000E+00	-1.1443E-02	.0000E+00	.0000E+00	-1.1443E-02
59	60	.0000E+00	.0000E+00	-1.0793E-02	.0000E+00	.0000E+00	-1.0793E-02
60	61	.0000E+00	.0000E+00	-2.1702E-04	.0000E+00	.0000E+00	-2.1702E-04
61	62	.0000E+00	.0000E+00	-3.3108E-03	.0000E+00	.0000E+00	-3.3108E-03
62	63	.0000E+00	.0000E+00	-1.5074E-02	.0000E+00	.0000E+00	-1.5074E-02
63	64	.0000E+00	.0000E+00	-7.4083E-05	.0000E+00	.0000E+00	-7.4083E-05

64	65	.0000E+00	.0000E+00	-3.3932E-03	.0000E+00	.0000E+00	-3.3932E-03
65	66	.0000E+00	.0000E+00	-1.5462E-02	.0000E+00	.0000E+00	-1.5462E-02
66	67	.0000E+00	.0000E+00	-8.4720E-05	.0000E+00	.0000E+00	-8.4720E-05
67	68	.0000E+00	.0000E+00	-2.8079E-02	.0000E+00	.0000E+00	-2.8079E-02
68	69	.0000E+00	.0000E+00	-1.4845E-02	.0000E+00	.0000E+00	-1.4845E-02
69	70	.0000E+00	.0000E+00	-1.6489E-02	.0000E+00	.0000E+00	-1.6489E-02
70	71	.0000E+00	.0000E+00	-6.2022E-03	.0000E+00	.0000E+00	-6.2022E-03
71	72	.0000E+00	.0000E+00	-8.8957E-04	.0000E+00	.0000E+00	-8.8957E-04
72	73	9.2156E-05	.0000E+00	-3.7727E-02	-4.6078E-05	.0000E+00	-3.7681E-02
73	74	.0000E+00	.0000E+00	-6.7560E-03	.0000E+00	.0000E+00	-6.7560E-03
74	75	.0000E+00	.0000E+00	-6.7183E-03	.0000E+00	.0000E+00	-6.7183E-03
75	76	.0000E+00	.0000E+00	-9.3717E-04	.0000E+00	.0000E+00	-9.3717E-04
76	77	.0000E+00	.0000E+00	-3.8125E-02	.0000E+00	.0000E+00	-3.8125E-02
77	78	.0000E+00	.0000E+00	-6.9383E-03	.0000E+00	.0000E+00	-6.9383E-03
78	79	.0000E+00	.0000E+00	-2.4918E-04	.0000E+00	.0000E+00	-2.4918E-04
79	80	.0000E+00	.0000E+00	-1.8276E-04	.0000E+00	.0000E+00	-1.8276E-04
80	81	.0000E+00	.0000E+00	-9.6490E-06	.0000E+00	.0000E+00	-9.6490E-06
81	82	.0000E+00	.0000E+00	-1.5679E-02	.0000E+00	.0000E+00	-1.5679E-02
82	83	.0000E+00	.0000E+00	-9.5148E-04	.0000E+00	.0000E+00	-9.5148E-04
83	84	.0000E+00	.0000E+00	-4.4435E-05	.0000E+00	.0000E+00	-4.4435E-05
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	.0000E+00	.0000E+00	-5.5748E-03	.0000E+00	.0000E+00	-5.5748E-03
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	.0000E+00	.0000E+00	-4.2162E-03	.0000E+00	.0000E+00	-4.2162E-03
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	.0000E+00	.0000E+00	-4.6737E-03	.0000E+00	.0000E+00	-4.6737E-03

TOTAL 1.8507E-03 .0000E+00 -6.8783E-01 -9.2536E-04 -3.2055E-01 -1.0074E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7097E-01 2.3926E-04 2.8706E-05 1.8626E-06 2.3827E-07 3.0867E-05 1.4226E-06 4.5949E-10 6.8903E-05 4.4265E-03 9.9057E-04 3.2088E-01 7.6759E-05 1.4002E-05 1.5156E-03 4.3508E-04 2.0467E-04 5.2259E-05 6.1062E-05 1.9299E-07 5.8652E-06 1.9976E-08	86781 474 67 817 14 98 394 0 104 20860 731 130783 186 57 14248 2623 2174 91 337 15 8 0	1.2705E+00 6.1271E-03 9.2954E-04 8.8036E-03 1.3233E-04 1.1911E-03 4.0997E-03 .0000E+00 1.3938E-03 4.0141E-01 1.0585E-02 1.9208E+00 2.3646E-03 6.0874E-04 2.8272E-01 3.4687E-02 4.4030E-02 1.3019E-03 4.0954E-03 2.9671E-04 1.1720E-04 4.1087E-06	1.1895E-03 5.1334E-03 7.9547E-04 8.6777E-03 1.3218E-04 1.0554E-03 4.0797E-03 .0000E+00 9.3015E-04 3.5063E-02 3.5889E-03 1.6415E-01 1.8252E-03 4.5539E-04 5.1855E-02 3.0632E-02 6.2420E-03 8.5862E-04 3.7700E-03 2.5228E-05 1.1208E-04 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 0 8 995 10	1.7534E-05 .0000E+00 8.6603E-05 1.0711E-02 9.3914E-05	5.9007E-10 .0000E+00 9.4103E-06 2.0821E-04 6.3931E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	656 35	4.7588E-03 2.8997E-04	2.8667E-05 9.7348E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	15	2.4406E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	25 3	1.8327E-04 1.5805E-05	1.1064E-06 4.4122E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	172 76 215 43650 436	2.5400E-03 1.0500E-03 2.9897E-03 6.5253E-01 6.4583E-03	2.9152E-06 9.5161E-05 1.4471E-04 5.5440E-03 1.4207E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.9772E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	214 13	1.5312E-03 9.8352E-05	8.9315E-06 3.6827E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1179649 102622	1.5298E+01 1.4891E+00	4.5541E-02 1.1408E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	74205 6049	9.7556E-01 8.8181E-02	3.2096E-03 5.6736E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	72 4	5.0306E-04 3.7109E-05	3.0857E-06 1.1553E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C	6.8138E-03	12	1.8487E-04	2.1817E-06	.0000E+00	.0000E+00

		24000.50C	1.7467E-03	10	1.7019E-04	6.7837E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	16	2.0410E-04	1.0221E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3287	4.9047E-02	4.7298E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	40	5.9665E-04	1.4236E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	24530	3.2252E-01	1.0281E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2076	3.0369E-02	3.1741E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	14	2.0974E-04	5.9430E-07	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	4	5.1636E-05	7.5217E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	16	2.3799E-04	1.0585E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	2812	4.1756E-02	4.3224E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	24	3.6103E-04	9.0679E-06	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	57950	7.6140E-01	2.3995E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4920	7.1891E-02	5.2384E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	6500	8.5642E-02	2.8552E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	543	7.9268E-03	5.6405E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	6	7.5806E-05	1.4331E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	1	1.6503E-05	3.1772E-07	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	322	4.8102E-03	4.6164E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	4	5.9249E-05	6.1880E-07	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	5626	7.4410E-02	2.3951E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	430	6.3583E-03	2.6254E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	60406	6.8335E-01	2.4876E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4255	5.6510E-02	3.3058E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	9	1.2631E-04	1.3838E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	5.1318E-04	3.1283E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	6.5643E-04	7.9153E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.7649E-05	4.2028E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4260E-05	1.2257E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1365	1.7081E-02	2.0502E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	474	6.4734E-03	1.0559E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7639	8.9953E-02	5.9281E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2121	2.5336E-02	1.8841E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	148	2.0487E-03	3.0840E-04	.0000E+00	.0000E+00
51	52	13027.50C	9.9949E-01	2134	3.0153E-02	6.6827E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	3	3.2045E-05	4.2965E-06	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	3	4.4394E-05	5.9018E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.5283E-04	3.0099E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	5.7905E-04	1.0012E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.9837E-05	8.8128E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	7.5014E-06	2.4037E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1368	1.7087E-02	2.1541E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	452	6.3009E-03	9.3258E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7473	8.7855E-02	5.9937E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2253	2.6100E-02	1.9786E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	161	2.2178E-03	2.7861E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	221834	2.4373E+00	1.0850E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	13344	1.6842E-01	8.9388E-05	.0000E+00	.0000E+00

54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	3135 155	2.7159E-02 1.4072E-03	1.4457E-04 4.0174E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59455 4299	6.8134E-01 5.7597E-02	2.4038E-03 2.9897E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
56	57	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	6 35 52 4 3 1344 484 7473 2187 128	6.6657E-05 4.2561E-04 7.1605E-04 4.5772E-05 2.9693E-05 1.6872E-02 6.6387E-03 8.8122E-02 2.6046E-02 1.6952E-03	2.0034E-08 2.5082E-05 1.3081E-05 7.1795E-07 3.3544E-06 2.0732E-03 1.0181E-03 5.8168E-03 1.7874E-03 2.4444E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
57	58	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2052 3	2.9238E-02 2.5649E-05	5.7551E-04 2.8159E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
58	59	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 37 46 3 3 1394 438 7676 2399 171	9.3489E-05 4.6575E-04 6.0361E-04 3.0581E-05 4.1360E-05 1.7428E-02 6.0413E-03 9.0679E-02 2.8349E-02 2.2561E-03	8.9049E-09 2.7944E-05 9.2850E-06 3.6285E-07 2.5294E-06 2.0436E-03 1.0234E-03 6.0493E-03 1.9643E-03 3.2209E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
59	60	1001.50C 8016.50C	6.6667E-01 3.3333E-01	220129 13139	2.4329E+00 1.6663E-01	1.0704E-02 8.9301E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
60	61	1001.50C 8016.50C	6.6667E-01 3.3333E-01	4780 217	3.9503E-02 2.1077E-03	2.1696E-04 6.2814E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
61	62	1001.50C 8016.50C	6.6667E-01 3.3333E-01	80766 5970	9.3449E-01 8.1249E-02	3.2688E-03 4.1998E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
62	63	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	12 63 79 3 2 1943 663 10224 3192 181	1.6880E-04 7.5335E-04 1.0865E-03 4.9656E-05 2.8265E-05 2.5191E-02 9.3997E-03 1.2303E-01 3.9373E-02 2.4569E-03	3.3079E-06 5.1739E-05 1.5773E-05 3.3443E-07 4.1100E-06 2.7030E-03 1.4307E-03 7.8873E-03 2.5898E-03 3.8767E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
63	64	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1504 64	1.3163E-02 6.1053E-04	7.4061E-05 2.2573E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
64	65	1001.50C 8016.50C	6.6667E-01 3.3333E-01	81470 5892	9.4603E-01 7.9169E-02	3.3427E-03 5.0530E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
65	66	6000.50C 7014.50C 14000.50C	1.3966E-03 3.9931E-03 1.4932E-02	13 56 60	1.7221E-04 6.8132E-04 7.5364E-04	2.9152E-08 4.0546E-05 1.1218E-05	.0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00

		15031.50C	8.1237E-04	7	1.0301E-04	8.3109E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.8020E-05	1.5205E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1909	2.4301E-02	2.8360E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	656	9.1439E-03	1.5330E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10613	1.2730E-01	8.1079E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3059	3.7115E-02	2.5595E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	207	2.7867E-03	3.7105E-04	.0000E+00	.0000E+00
66	67	1001.50C	6.6667E-01	1833	1.4966E-02	8.4691E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	97	9.4780E-04	2.8515E-08	.0000E+00	.0000E+00
67	68	1001.50C	6.6667E-01	567844	5.3834E+00	2.7964E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	28156	3.0016E-01	1.1431E-04	.0000E+00	.0000E+00
68	69	6000.50C	1.3966E-03	7	9.1783E-05	7.8070E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	58	6.7242E-04	3.7008E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	78	9.8640E-04	1.4334E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.8930E-05	2.4830E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	6.9052E-05	6.5738E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1977	2.4150E-02	2.6422E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	616	8.3113E-03	1.4531E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11143	1.2493E-01	7.8786E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3191	3.6048E-02	2.4762E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	190	2.4268E-03	3.3696E-04	.0000E+00	.0000E+00
69	70	6000.50C	2.3404E-03	16	2.0036E-04	4.0538E-08	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	16	2.1961E-04	2.9316E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	46	6.3293E-04	6.9005E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	1.6550E-05	7.5189E-08	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	159	1.9945E-03	3.5469E-04	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	2500	3.0609E-02	3.1919E-03	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	317	4.2780E-03	6.1776E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	4789	5.4684E-02	3.2117E-03	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	11092	1.2658E-01	8.3601E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	366	4.2307E-03	4.3964E-04	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	245	3.2438E-03	3.0299E-04	.0000E+00	.0000E+00
70	71	6000.50C	1.3966E-03	4	4.4364E-05	6.4425E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	4.2068E-04	1.4109E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	7.5142E-04	6.6068E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	8.5261E-05	8.3243E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6417E-05	8.3497E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1091	1.4252E-02	1.0715E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	395	5.7632E-03	5.4223E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5966	7.2017E-02	3.2553E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1830	2.2406E-02	1.1133E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	117	1.6926E-03	1.9739E-04	.0000E+00	.0000E+00
71	72	13027.50C	9.9949E-01	4649	6.7211E-02	8.8440E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	10	1.3766E-04	5.1687E-06	.0000E+00	.0000E+00
72	73	6000.50C	1.3966E-03	37	4.6477E-04	5.8452E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	183	2.1443E-03	1.1501E-04	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	210	2.8409E-03	2.3950E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	21	2.6154E-04	3.2518E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	7.5771E-05	5.3737E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6001	7.6424E-02	6.8220E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1902	2.6488E-02	3.3897E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	32602	3.8264E-01	1.9783E-02	.0000E+00	2.9209E-05
		28000.50C	1.1433E-01	9893	1.1764E-01	6.4052E-03	.0000E+00	.0000E+00

		42000.50C	1.4572E-02	672	9.1016E-03	1.1798E-03	.0000E+00	1.6869E-05
73	74	1001.50C	6.6667E-01	147284	1.6350E+00	6.6987E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9313	1.1978E-01	5.7291E-05	.0000E+00	.0000E+00
74	75	6000.50C	1.3966E-03	10	1.1844E-04	2.1970E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	3.4700E-04	2.2329E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	32	4.3741E-04	4.6974E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	2.9729E-05	6.1208E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6646E-05	9.6256E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1190	1.5478E-02	1.2162E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	391	5.5058E-03	6.1133E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6208	7.5307E-02	3.4675E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1949	2.3818E-02	1.1929E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	118	1.5591E-03	2.0276E-04	.0000E+00	.0000E+00
75	76	13027.50C	9.9949E-01	4481	6.4155E-02	9.2582E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	16	1.9623E-04	1.1354E-05	.0000E+00	.0000E+00
76	77	6000.50C	1.3966E-03	24	3.0483E-04	2.9499E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	161	1.9372E-03	9.0746E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	237	3.3987E-03	2.9717E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	14	1.7039E-04	1.7128E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.1875E-04	7.7623E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6107	7.7956E-02	6.9648E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2007	2.7906E-02	3.4328E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33545	3.9609E-01	2.0194E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	9878	1.1843E-01	6.2852E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	663	8.7696E-03	1.1180E-03	.0000E+00	.0000E+00
77	78	1001.50C	6.6667E-01	149637	1.6738E+00	6.8951E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9467	1.2215E-01	4.3148E-05	.0000E+00	.0000E+00
78	79	1001.50C	6.6667E-01	5290	4.4981E-02	2.4907E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	248	2.3497E-03	1.0145E-07	.0000E+00	.0000E+00
79	80	1001.50C	6.6667E-01	3685	3.2232E-02	1.8246E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	156	1.4236E-03	2.9095E-07	.0000E+00	.0000E+00
80	81	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	3.6874E-05	1.5908E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	13	1.4130E-04	3.6864E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6	5.3829E-05	4.3718E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	82	6000.50C	1.3966E-03	14	2.0445E-04	7.1880E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	80	8.9810E-04	4.4919E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	7.6763E-04	9.1762E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.0655E-05	3.9098E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	1.6451E-05	1.2536E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2299	2.7345E-02	2.8091E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	727	9.7321E-03	1.4760E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	13349	1.4700E-01	8.0961E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	4077	4.5803E-02	2.7098E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	277	3.3608E-03	5.3192E-04	.0000E+00	.0000E+00

82	83	1001.50C 8016.50C	6.6667E-01 3.3333E-01	25362 1788	2.6893E-01 2.2304E-02	9.4283E-04 8.6520E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
83	84	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1114 44	7.8077E-03 3.3195E-04	4.4425E-05 9.6203E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
84	85	6000.50C 13027.50C 14000.50C 16032.50C 22000.50C 24000.50C 25055.50C 26000.55C 28000.50C 29000.50C 42000.50C	2.3404E-03 4.1674E-03 1.0009E-02 5.2754E-04 1.0568E-02 2.3247E-01 1.0234E-02 2.8763E-01 4.0235E-01 2.2119E-02 1.7582E-02	0 0 0 0 0 0 0 0 0 0 0	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
85	86	6000.50C 13027.50C 14000.50C 16032.50C 22000.50C 24000.50C 25055.50C 26000.55C 28000.50C 29000.50C 42000.50C	2.3404E-03 4.1674E-03 1.0009E-02 5.2754E-04 1.0568E-02 2.3247E-01 1.0234E-02 2.8763E-01 4.0235E-01 2.2119E-02 1.7582E-02	8 6 35 2 94 1616 219 2825 6614 242 179	1.2067E-04 8.0656E-05 5.0229E-04 2.8938E-05 1.2638E-03 2.0832E-02 3.0695E-03 3.3468E-02 7.9257E-02 2.9513E-03 2.4158E-03	2.0365E-09 1.7319E-06 2.3252E-06 3.6410E-08 6.8223E-05 1.0757E-03 1.7394E-04 1.0807E-03 2.7430E-03 1.6432E-04 2.6472E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
86	87	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
87	88	6000.50C 14000.50C 15031.50C 16032.50C 25055.50C 26000.55C	1.0113E-02 5.4063E-03 6.2391E-04 6.0443E-04 9.0452E-03 9.7421E-01	0 0 0 0 0 0	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
88	89	6000.50C 14000.50C 15031.50C 16032.50C 25055.50C 26000.55C	1.0113E-02 5.4063E-03 6.2391E-04 6.0443E-04 9.0452E-03 9.7421E-01	116 39 2 7 449 18810	1.4681E-03 5.4495E-04 2.5196E-05 9.4970E-05 5.9859E-03 2.1820E-01	3.1487E-07 1.9561E-06 3.1666E-08 3.2710E-06 2.5030E-04 3.9603E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
89	90	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
90	91	1001.50C 8016.50C	6.6667E-01 3.3333E-01	100328 4600	8.4911E-01 4.2284E-02	4.6704E-03 3.2574E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
TOTAL				3922619	4.7008E+01	6.8783E-01	3.2055E-01	9.2536E-04

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

TOTAL
COLLISIONSCOLLISIONS
* WEIGHTWEIGHT LOST
TO CAPTUREWEIGHT GAIN
BY FISSIONWEIGHT GAIN
BY (N,XN)

1001.50C	3085283	3.5630E+01	1.3397E-01	.0000E+00	.0000E+00
2004.50C	15	2.4406E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	286	3.6896E-03	3.8745E-06	.0000E+00	.0000E+00
7014.50C	820	9.7117E-03	5.3081E-04	.0000E+00	.0000E+00
8016.50C	304886	4.1932E+00	3.0465E-03	.0000E+00	.0000E+00
13027.50C	13338	1.9106E-01	3.0587E-03	.0000E+00	.0000E+00
14000.50C	1123	1.5258E-02	1.6695E-04	.0000E+00	.0000E+00
15031.50C	79	1.0382E-03	1.0628E-05	.0000E+00	.0000E+00
16032.50C	46	6.1264E-04	4.0334E-05	.0000E+00	.0000E+00
22000.50C	253	3.2583E-03	4.2291E-04	.0000E+00	.0000E+00
24000.50C	32197	4.0631E-01	3.9765E-02	.0000E+00	.0000E+00
25055.50C	10190	1.4104E-01	1.8941E-02	.0000E+00	.0000E+00
26000.55C	180604	2.1149E+00	1.1089E-01	.0000E+00	2.9209E-05
28000.50C	63741	7.5236E-01	4.4054E-02	.0000E+00	.0000E+00
29000.50C	640	7.5736E-03	6.2760E-04	.0000E+00	.0000E+00
40000.50C	51066	7.5885E-01	6.7036E-03	.0000E+00	1.9772E-05
42000.50C	3457	4.6031E-02	6.0468E-03	.0000E+00	1.6869E-05
45103.50C	474	6.1271E-03	5.1334E-03	.0000E+00	.0000E+00
47109.50C	67	9.2954E-04	7.9547E-04	.0000E+00	.0000E+00
50000.35C	514	7.5692E-03	1.7238E-04	.0000E+00	.0000E+00
62149.50C	817	8.8036E-03	8.6777E-03	.0000E+00	.0000E+00
63151.55C	14	1.3233E-04	1.3218E-04	.0000E+00	.0000E+00
63153.55C	98	1.1911E-03	1.0554E-03	.0000E+00	.0000E+00
64155.50C	394	4.0997E-03	4.0797E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	104	1.3938E-03	9.3015E-04	2.1153E-05	.0000E+00
92235.50C	20860	4.0141E-01	3.5063E-02	1.7656E-01	.0000E+00
92236.50C	731	1.0585E-02	3.5889E-03	1.6614E-04	.0000E+00
92238.50C	130783	1.9208E+00	1.6415E-01	1.9456E-02	8.5951E-04
93237.55C	186	2.3646E-03	1.8252E-03	2.6872E-05	.0000E+00
94238.50C	57	6.0874E-04	4.5539E-04	1.8569E-05	.0000E+00
94239.55C	14248	2.8272E-01	5.1855E-02	1.0677E-01	.0000E+00
94240.50C	2623	3.4687E-02	3.0632E-02	1.4821E-04	.0000E+00
94241.50C	2174	4.4030E-02	6.2420E-03	1.7207E-02	.0000E+00
94242.50C	91	1.3019E-03	8.5862E-04	1.5799E-05	.0000E+00
95241.50C	337	4.0954E-03	3.7700E-03	3.7447E-05	.0000E+00
95242.50C	15	2.9671E-04	2.5228E-05	1.2532E-04	.0000E+00
95243.50C	8	1.1720E-04	1.1208E-04	.0000E+00	.0000E+00
96245.35C	0	4.1087E-06	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59608 CTM = 103.82

11 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 103.93 MINUTES

MCNP VERSION 4A-B 10/04/91

03/29/95 11:02:13

PROBID = 03/29/95 09:17:56

1MCNP VERSION 4A-B LD=10/04/91

02/16/95 07:06:24

PROBID = 02/16/95 07:06:24

INP=mpc12a OUTP=mpc12a.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1 year (mpc12a)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL.
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 -72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.75%/0 GWD/0 YEAR -- U02								
331-	C	M2	8016.50C	4.6973E-02						
332-	C	92235.50C	8.9111E-04							
333-	C	92238.50C	2.2583E-02							
334-	C	3.00%/20 GWD/1 YEAR -- U02								
335-	M2	8016.50C	4.7767E-02							
336-		45103.50C	1.7027E-05							
337-		47109.50C	2.0436E-06							
338-		62149.50C	1.3260E-07							
339-		63151.55C	3.7258E-09							
340-		63153.55C	2.1975E-06							
341-		64155.50C	2.7269E-08							
342-		92233.50C	2.5047E-11							
343-		92234.50C	4.8712E-06							
344-		92235.50C	3.1513E-04							
345-		92236.50C	7.0520E-05							
346-		92238.50C	2.2844E-02							
347-		93237.55C	5.4454E-06							
348-		94238.50C	1.0104E-06							
349-		94239.55C	1.0792E-04							
350-		94240.50C	3.0974E-05							
351-		94241.50C	1.7667E-05							
352-		94242.50C	3.7204E-06							
353-		95241.50C	1.2695E-06							
354-		95242.50C	1.3993E-08							
355-		95243.50C	4.1779E-07							
356-	C	96245.52C	1.4228E-09							

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357-      96245.35C 1.4228E-09
358-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
359-      M3      2004.50C 1.0
360-      C      ZIRCALOY-4
361-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
362-      40000.50C -0.9818 50000.35C -0.0140
363-      C      ALLOY 825
364-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
365-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
366-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
367-      29000.50C -0.0250 42000.50C -0.0300
368-      C      1100 ALUMINUM ALLOY
369-      M6      13027.50C -0.99880 29000.50C -0.00120
370-      C      A516 CARBON STEEL
371-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
372-      16032.50C -0.00035 25055.50C -0.0090
373-      26000.55C -0.98535
374-      C      SS316L
375-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
376-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
377-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
378-      42000.50C -0.02500
379-      C      TALLIES
380-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME. 19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME. 19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME. 17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME. 20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME. 21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME. 17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME. 20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME. 21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME. 22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME. 22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME. 23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME. 23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME. 23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME. 23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME. 27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME. 27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME. 25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME. 28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	1428
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	1428
POINTS AFTER EXPANSION OR CONTRACTION	3013
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119139E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T				
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,
	63151,	.00000	63153,	.00003	64155,	.00000	92233,
	92234,	.00007	92235,	.00443	92236,	.00099	92238,
	93237,	.00008	94238,	.00001	94239,	.00152	94240,
	94241,	.00025	94242,	.00005	95241,	.00002	95242,
	95243,	.00001	96245,	.00000			.00000

3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85820
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00067	94242,	.00014	95241,	.00005	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE

48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE

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108 24049 .00000E+00 .00000E+00 INFINITE
109 24050 .00000E+00 .00000E+00 INFINITE
110 24051 .00000E+00 .00000E+00 INFINITE
111 25048 .00000E+00 .00000E+00 INFINITE
112 25049 .00000E+00 .00000E+00 INFINITE
113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

```

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02

6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			

66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08

59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314) 79/06/21.
(1340) 79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394) 79/10/17.

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396) 79/08/30.

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.
94238.50C 16458 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU
TOTAL NU

(1338) 79/09/12.
(1381) 79/08/30.
(1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
16032.50C 2684 NJOY
22000.50C 25231 NJOY
25055.50C 60097 NJOY
42000.50C 18467 NJOY
62149.50C 11116 NJOY
64155.50C 31471 NJOY

(1315) 79/10/29.
(1316) 79/10/29.
(1322) 79/06/21.
(1325) 79/06/21.
(1321) 79/08/01.
(1319) 02/12/85
(1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
47109.50C 10147 NJOY
93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
(1373) 11/01/85
(1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
63153.55C 30265

06/28/88
06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
TALLIES 0
BANK 18403
CROSS SECTIONS 1347491

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.951139		.953807	.0066	K(COL/ABS)	.955070 .0055	.954772 .0062	.0961
K(ABSORPTION)	.977234		.956333	.0082	K(ABS/TK LN)	.950664 .0058	.949626 .0069	.1509
K(TRK LENGTH)	.951150		.944995	.0071	K(TK LN/COL)	.949401 .0066	.951443 .0088	.8728
REM LIFE(COL)	3.1491E+03		3.1588E+03	.0112	K(COL/ABS/TK LN)	.951712 .0055	.954262 .0131	
REM LIFE(ABS)	3.1360E+03		3.1546E+03	.0103	LIFE(COL/ABS)	3.1567E+03 .0107	3.1415E+03 .0104	.9916
SOURCE POINTS	GENERATED	3050						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES
K(COLLISION)	.957936	.954495	.0055		
K(ABSORPTION)	.944925	.954432	.0070		
K(TRK LENGTH)	.962441	.947903	.0065		
REM LIFE(COL)	3.2224E+03	3.1694E+03	.0097		
REM LIFE(ABS)	3.1973E+03	3.1617E+03	.0087		
SOURCE POINTS GENERATED	3025				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.954463 .0046	.954472 .0049	.0538
K(ABS/TK LN)	.951167 .0048	.950923 .0054	-.0053
K(TK LN/COL)	.951199 .0057	.954262 .0065	.8262
K(COL/ABS/TK LN)	.952277 .0045	.953904 .0075	
LIFE(COL/ABS)	3.1656E+03 .0092	3.1410E+03 .0084	.9885

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES
K(COLLISION)	.946635	.953372	.0048		
K(ABSORPTION)	.955751	.954620	.0059		
K(TRK LENGTH)	.952434	.948550	.0056		
REM LIFE(COL)	3.4243E+03	3.2058E+03	.0140		
REM LIFE(ABS)	3.4395E+03	3.2014E+03	.0143		
SOURCE POINTS GENERATED	2892				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.953996 .0039	.953856 .0042	.0439
K(ABS/TK LN)	.951585 .0041	.951378 .0045	-.0012
K(TK LN/COL)	.950961 .0049	.952439 .0053	.7643
K(COL/ABS/TK LN)	.952181 .0038	.953095 .0053	
LIFE(COL/ABS)	3.2036E+03 .0141	3.2109E+03 .0152	.9923

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES
K(COLLISION)	.970496	.955513	.0047		
K(ABSORPTION)	.933044	.951923	.0059		
K(TRK LENGTH)	.965425	.950660	.0053		
REM LIFE(COL)	3.4237E+03	3.2331E+03	.0146		
REM LIFE(ABS)	3.4151E+03	3.2281E+03	.0148		
SOURCE POINTS GENERATED	3092				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.953718 .0034	.954047 .0036	-.1965
K(ABS/TK LN)	.951291 .0035	.951237 .0038	-.2027
K(TK LN/COL)	.953086 .0048	.954538 .0051	.8098
K(COL/ABS/TK LN)	.952698 .0034	.953302 .0046	
LIFE(COL/ABS)	3.2306E+03 .0147	3.2358E+03 .0159	.9946

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES
K(COLLISION)	.964875	.956553	.0043		
K(ABSORPTION)	.950692	.951786	.0052		
K(TRK LENGTH)	.947391	.950296	.0047		
REM LIFE(COL)	3.2648E+03	3.2366E+03	.0130		
REM LIFE(ABS)	3.2291E+03	3.2282E+03	.0131		
SOURCE POINTS GENERATED	2998				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.954170 .0030	.954542 .0032	-.1971
K(ABS/TK LN)	.951041 .0031	.950979 .0033	-.1997
K(TK LN/COL)	.953425 .0042	.954547 .0046	.7598
K(COL/ABS/TK LN)	.952879 .0030	.953289 .0042	
LIFE(COL/ABS)	3.2324E+03 .0130	3.2362E+03 .0141	.9913

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES
K(COLLISION)	.946873	.955585	.0040		
K(ABSORPTION)	.939453	.950553	.0048		
K(TRK LENGTH)	.944336	.949700	.0042		
REM LIFE(COL)	3.2389E+03	3.2368E+03	.0116		
REM LIFE(ABS)	3.2774E+03	3.2332E+03	.0118		
SOURCE POINTS GENERATED	2910				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.953069 .0029	.953499 .0031	-.1146
K(ABS/TK LN)	.950127 .0030	.950080 .0031	-.1505
K(TK LN/COL)	.952643 .0039	.953442 .0042	.7642
K(COL/ABS/TK LN)	.951946 .0028	.952020 .0040	
LIFE(COL/ABS)	3.2350E+03 .0116	3.2368E+03 .0123	.9838

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES
K(COLLISION)	.916996	.952077	.0051		
K(ABSORPTION)	.929941	.948679	.0048		
K(TRK LENGTH)	.905310	.945665	.0058		
REM LIFE(COL)	3.2773E+03	3.2405E+03	.0105		
REM LIFE(ABS)	3.2633E+03	3.2359E+03	.0107		
SOURCE POINTS GENERATED	2906				

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.950378 .0039	.950217 .0041	.2221
K(ABS/TK LN)	.947172 .0041	.947510 .0043	.2136
K(TK LN/COL)	.948871 .0053	.951756 .0056	.8889
K(COL/ABS/TK LN)	.948807 .0042	.950262 .0056	
LIFE(COL/ABS)	3.2382E+03 .0106	3.2401E+03 .0111	.9835

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.946330		.951598	.0047	K(COL/ABS)	.950540 .0036	.950459 .0037	.1966
K(ABSORPTION)	.958307		.949481	.0045	K(ABS/TK LN)	.947637 .0038	.948010 .0039	.2145
K(TRK LENGTH)	.947204		.945793	.0053	K(TK LN/COL)	.948696 .0048	.951023 .0051	.8808
REM LIFE(COL)	3.2012E+03		3.2372E+03	.0097	K(COL/ABS/TK LN)	.948958 .0038	.950625 .0049	
REM LIFE(ABS)	3.1672E+03		3.2302E+03	.0099	LIFE(COL/ABS)	3.2337E+03 .0098	3.2382E+03 .0102	.9811
SOURCE POINTS GENERATED	3093							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.965929		.952700	.0045	K(COL/ABS)	.950932 .0033	.950737 .0034	.1684
K(ABSORPTION)	.945357		.949164	.0041	K(ABS/TK LN)	.947399 .0035	.947751 .0036	.2165
K(TRK LENGTH)	.943730		.945634	.0048	K(TK LN/COL)	.949167 .0045	.950614 .0048	.8417
REM LIFE(COL)	3.1674E+03		3.2319E+03	.0091	K(COL/ABS/TK LN)	.949166 .0035	.950466 .0046	
REM LIFE(ABS)	3.1596E+03		3.2247E+03	.0093	LIFE(COL/ABS)	3.2283E+03 .0091	3.2329E+03 .0095	.9817
SOURCE POINTS GENERATED	3109							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.927214		.950880	.0046	K(COL/ABS)	.949789 .0033	.949546 .0034	.2051
K(ABSORPTION)	.942647		.948699	.0038	K(ABS/TK LN)	.945891 .0036	.946981 .0036	.2499
K(TRK LENGTH)	.909905		.943082	.0052	K(TK LN/COL)	.946981 .0048	.950540 .0049	.8705
REM LIFE(COL)	3.3262E+03		3.2386E+03	.0086	K(COL/ABS/TK LN)	.947554 .0037	.950411 .0047	
REM LIFE(ABS)	3.3219E+03		3.2317E+03	.0089	LIFE(COL/ABS)	3.2351E+03 .0087	3.2399E+03 .0090	.9828
SOURCE POINTS GENERATED	2894							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.967556		.951992	.0044	K(COL/ABS)	.949654 .0031	.949301 .0031	.0835
K(ABSORPTION)	.927954		.947316	.0039	K(ABS/TK LN)	.946757 .0035	.946973 .0033	.0201
K(TRK LENGTH)	.989825		.946199	.0059	K(TK LN/COL)	.949095 .0049	.953261 .0046	.8433
REM LIFE(COL)	3.5530E+03		3.2595E+03	.0103	K(COL/ABS/TK LN)	.948502 .0036	.949209 .0039	
REM LIFE(ABS)	3.4442E+03		3.2459E+03	.0093	LIFE(COL/ABS)	3.2527E+03 .0097	3.2328E+03 .0094	.9703
SOURCE POINTS GENERATED	3136							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1 year (mpc12a)

PROBID = 02/16/95 09:03:04
02/16/95 07:06:24

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59917	1.0014E+00	2.0607E+00	ESCAPE	1	6.1683E-06	4.1751E-13
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.7293E-02	5.2581E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59994	6.5802E-02	4.6559E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
				DXTRAN	0	0.	0.
				FORCED COLLISIONS	0	0.	0.

EXP. TRANSFORM 0 0. 0.
 UPSCATTERING 0 0. 1.2543E-07
 (N,XN) 156 2.1194E-03 1.4989E-03
 FISSION 0 0. 0.
 TOTAL 60073 1.0708E+00 2.0622E+00

EXP. TRANSFORM 0 0. 0.
 DOWNSCATTERING 0 0. 1.9528E+00
 CAPTURE 0 6.4406E-01 3.2517E-02
 LOSS TO (N,XN) 78 1.0597E-03 8.8303E-03
 LOSS TO FISSION 0 3.5987E-01 6.8006E-02
 TOTAL 60073 1.0708E+00 2.0622E+00

NUMBER OF NEUTRONS BANKED 78
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0026E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 5.7485E+01
 TOTAL NEUTRON COLLISIONS 3444356
 NET MULTIPLICATION 1.0011E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 4.6150E+04
 CAPTURE 3.2113E+03
 CAPTURE OR ESCAPE 3.2116E+03
 ANY TERMINATION 3.5483E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 116.38 MINUTES
 COMPUTER TIME IN MCRUN 116.28 MINUTES
 SOURCE PARTICLES PER MINUTE 5.1527E+02
 RANDOM NUMBERS GENERATED 41852440

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 8537 IN HISTORY 33796

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6494E-01 TO 1.0650E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25235	9396	3.1513E+00	1.2227E-04	3.8247E-01	7.2766E-01	1.1146E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

86 90 396 215 47498 4.0327E-01 2.8587E-05 1.0299E-01 5.6466E-01 6.2287E-01
 TOTAL 7111768 698544 3444356 4.2036E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.4932E-01	-5.4932E-01
2	2	3.1766E-01	.0000E+00	.0000E+00	-8.9408E-01	-5.7641E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.6246E-02	-1.6246E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0092E-02	-5.0092E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.6073E-02	-1.6073E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4634E-01	-1.4634E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6304E+00	-1.6304E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0181E+00	-2.0181E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1227E-01	-2.1227E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1425E-01	-2.1425E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8934E-01	-3.8934E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.8491E-01	-3.8491E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.4532E-02	-7.4532E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.7640E-02	-7.7640E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.7697E-02	-8.7697E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.1873E-02	-7.1873E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.0331E-02	-7.0331E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.3962E-02	-7.3962E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.8845E-02	-9.8845E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-9.6995E-02	-9.6995E-02
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9264E-02	-8.9264E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.1478E-02	-8.1478E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1147E-01	-1.1147E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1049E-01	-1.1049E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1655E-01	-1.1655E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1176E-01	-1.1176E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0038E-01	-1.0038E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.2654E-02	-8.2654E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.1784E-02	-9.1784E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0237E-01	-1.0237E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8916E+01	-1.8916E+01
32	33	9.7155E+00	1.0014E+00	.0000E+00	-9.5105E+00	1.2064E+00
33	34	3.5977E-02	.0000E+00	.0000E+00	-3.4358E-02	1.6185E-03
34	35	1.4505E-03	.0000E+00	.0000E+00	-1.3242E-03	1.2622E-04
35	36	1.9028E+01	.0000E+00	.0000E+00	-1.9017E+01	1.0571E-02
36	37	2.4945E-03	.0000E+00	.0000E+00	-2.4936E-03	8.9528E-07
37	38	2.0627E+01	.0000E+00	.0000E+00	-2.0551E+01	7.5848E-02
38	39	2.8046E-03	.0000E+00	.0000E+00	-2.7730E-03	3.1630E-05
39	40	3.2856E+01	.0000E+00	.0000E+00	-1.0806E+01	2.2050E+01
40	41	8.2350E-01	.0000E+00	.0000E+00	-8.1984E-01	3.6626E-03
41	42	5.2282E-05	.0000E+00	.0000E+00	-5.1470E-05	8.1162E-07
42	43	1.7367E+00	.0000E+00	.0000E+00	-1.7362E+00	5.2244E-04
43	44	1.9432E+00	.0000E+00	.0000E+00	-1.9420E+00	1.1598E-03
44	45	2.1237E+00	.0000E+00	.0000E+00	-2.1233E+00	4.6243E-04
45	46	2.5992E+00	.0000E+00	.0000E+00	-1.0985E+00	1.5006E+00
46	47	1.0179E-01	.0000E+00	.0000E+00	-6.2022E-02	3.9770E-02
47	48	1.3590E-01	.0000E+00	.0000E+00	-1.3126E-01	4.6427E-03
48	49	1.7766E-01	.0000E+00	.0000E+00	-6.9318E-02	1.0834E-01
49	50	4.6823E-01	.0000E+00	.0000E+00	-2.6323E-01	2.0500E-01
50	51	4.5663E-01	.0000E+00	.0000E+00	-4.4114E-01	1.5488E-02
51	52	4.4712E-01	.0000E+00	.0000E+00	-4.4181E-01	5.3093E-03
52	53	4.4798E-01	.0000E+00	.0000E+00	-1.8843E-01	2.5956E-01

53	54	2.7132E-03	.0000E+00	.0000E+00	.0000E+00	-1.0420E-04	2.6090E-03
54	55	4.7094E-01	.0000E+00	.0000E+00	.0000E+00	-2.6376E-01	2.0718E-01
55	56	4.5910E-01	.0000E+00	.0000E+00	.0000E+00	-4.4376E-01	1.5345E-02
56	57	4.5084E-01	.0000E+00	.0000E+00	.0000E+00	-4.4513E-01	5.7030E-03
57	58	4.5296E-01	.0000E+00	.0000E+00	.0000E+00	-1.8928E-01	2.6368E-01
58	59	2.1214E-03	.0000E+00	.0000E+00	.0000E+00	-1.3033E-04	1.9911E-03
59	60	7.6107E-01	.0000E+00	.0000E+00	.0000E+00	-3.8059E-01	3.8049E-01
60	61	7.5270E-01	.0000E+00	.0000E+00	.0000E+00	-3.5639E-01	3.9631E-01
61	62	3.3979E-03	.0000E+00	.0000E+00	.0000E+00	-1.1428E-04	3.2836E-03
62	63	7.5420E-01	.0000E+00	.0000E+00	.0000E+00	-3.7744E-01	3.7677E-01
63	64	7.4555E-01	.0000E+00	.0000E+00	.0000E+00	-3.5305E-01	3.9250E-01
64	65	3.4284E-03	.0000E+00	.0000E+00	.0000E+00	-7.5702E-05	3.3527E-03
65	66	1.2039E-01	.0000E+00	.0000E+00	.0000E+00	-7.3433E-02	4.6954E-02
66	67	1.1694E-01	.0000E+00	.0000E+00	.0000E+00	-5.8998E-02	5.7942E-02
67	68	1.1565E-01	.0000E+00	.0000E+00	.0000E+00	-5.9212E-02	5.6440E-02
68	70	4.8323E-01	.0000E+00	.0000E+00	.0000E+00	-4.7768E-01	5.5495E-03
69	71	4.8250E-01	.0000E+00	.0000E+00	.0000E+00	-4.8180E-01	6.9758E-04
70	72	2.6154E-01	.0000E+00	.0000E+00	.0000E+00	-2.3959E-01	2.1951E-02
71	73	4.9757E-01	.0000E+00	.0000E+00	.0000E+00	-4.9212E-01	5.4534E-03
72	74	4.9919E-01	.0000E+00	.0000E+00	.0000E+00	-4.9854E-01	6.4651E-04
73	75	2.6990E-01	.0000E+00	.0000E+00	.0000E+00	-2.4787E-01	2.2031E-02
74	76	1.4795E-03	.0000E+00	.0000E+00	.0000E+00	-1.3924E-03	8.7067E-05
75	77	1.5313E-03	.0000E+00	.0000E+00	.0000E+00	-1.4048E-03	1.2653E-04
76	80	7.8073E-05	.0000E+00	.0000E+00	.0000E+00	-5.7655E-05	2.0419E-05
77	81	4.4317E-02	.0000E+00	.0000E+00	.0000E+00	-3.6014E-02	8.3025E-03
78	82	2.8948E-02	.0000E+00	.0000E+00	.0000E+00	-2.8502E-02	4.4614E-04
79	83	4.8820E-05	.0000E+00	.0000E+00	.0000E+00	-4.8074E-05	7.4583E-07
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.3024E-02	.0000E+00	.0000E+00	.0000E+00	-2.0872E-02	2.1515E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.4318E-02	.0000E+00	.0000E+00	.0000E+00	-1.2266E-02	2.0522E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	5.1385E-03	.0000E+00	.0000E+00	.0000E+00	-3.0818E-03	2.0566E-03

TOTAL	1.0187E+02	1.0014E+00	.0000E+00	.0000E+00	-1.0187E+02	1.0014E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	9.2271E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.2271E-04
33	34	.0000E+00	.0000E+00	-2.1358E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1358E-06
34	35	.0000E+00	.0000E+00	-1.2472E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2472E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	1.2731E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2731E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	1.5207E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5207E-04
40	41	.0000E+00	.0000E+00	-4.9276E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.9276E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-1.2062E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2062E-05
43	44	.0000E+00	.0000E+00	2.9477E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9477E-05
44	45	.0000E+00	.0000E+00	4.9373E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.9373E-06
45	46	.0000E+00	.0000E+00	6.3346E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.3346E-05
46	47	.0000E+00	.0000E+00	-4.1561E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1561E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	3.4896E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4896E-08
49	50	.0000E+00	.0000E+00	1.2682E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2682E-04
50	51	.0000E+00	.0000E+00	-2.5513E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5513E-04
51	52	.0000E+00	.0000E+00	-6.8834E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.8834E-05
52	53	.0000E+00	.0000E+00	8.8663E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8663E-05

80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	2.9200E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9200E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	6.5456E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5456E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	3.2226E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2226E-05
TOTAL		.0000E+00	.0000E+00	1.4913E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4913E-03
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3594E-02	.0000E+00	-1.3594E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.9993E-03	.0000E+00	-3.6429E-01	-9.9963E-04	-3.5987E-01
33	34	.0000E+00	.0000E+00	-1.7485E-04	.0000E+00	-1.7485E-04
34	35	.0000E+00	.0000E+00	-2.1022E-05	.0000E+00	-2.1022E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-8.9528E-07	.0000E+00	-8.9528E-07
37	38	1.2011E-04	.0000E+00	-6.7657E-03	-6.0053E-05	-6.7057E-03
38	39	.0000E+00	.0000E+00	-5.4175E-06	.0000E+00	-5.4175E-06
39	40	.0000E+00	.0000E+00	-5.1005E-02	.0000E+00	-5.1005E-02
40	41	.0000E+00	.0000E+00	-3.6133E-03	.0000E+00	-3.6133E-03
41	42	.0000E+00	.0000E+00	-8.1162E-07	.0000E+00	-8.1162E-07
42	43	.0000E+00	.0000E+00	-5.1038E-04	.0000E+00	-5.1038E-04
43	44	.0000E+00	.0000E+00	-1.1893E-03	.0000E+00	-1.1893E-03
44	45	.0000E+00	.0000E+00	-4.6736E-04	.0000E+00	-4.6736E-04
45	46	.0000E+00	.0000E+00	-2.8152E-03	.0000E+00	-2.8152E-03
46	47	.0000E+00	.0000E+00	-3.0138E-04	.0000E+00	-3.0138E-04

47	48	.0000E+00	.0000E+00	-4.3350E-05	.0000E+00	.0000E+00	-4.3350E-05
48	49	.0000E+00	.0000E+00	-2.3410E-04	.0000E+00	.0000E+00	-2.3410E-04
49	50	.0000E+00	.0000E+00	-2.4118E-03	.0000E+00	.0000E+00	-2.4118E-03
50	51	.0000E+00	.0000E+00	-1.0367E-02	.0000E+00	.0000E+00	-1.0367E-02
51	52	.0000E+00	.0000E+00	-6.0754E-04	.0000E+00	.0000E+00	-6.0754E-04
52	53	.0000E+00	.0000E+00	-1.0422E-02	.0000E+00	.0000E+00	-1.0422E-02
53	54	.0000E+00	.0000E+00	-1.0844E-04	.0000E+00	.0000E+00	-1.0844E-04
54	55	.0000E+00	.0000E+00	-2.4537E-03	.0000E+00	.0000E+00	-2.4537E-03
55	56	.0000E+00	.0000E+00	-1.0564E-02	.0000E+00	.0000E+00	-1.0564E-02
56	57	.0000E+00	.0000E+00	-6.2655E-04	.0000E+00	.0000E+00	-6.2655E-04
57	58	.0000E+00	.0000E+00	-1.0764E-02	.0000E+00	.0000E+00	-1.0764E-02
58	59	.0000E+00	.0000E+00	-6.9512E-05	.0000E+00	.0000E+00	-6.9512E-05
59	60	.0000E+00	.0000E+00	-2.8722E-03	.0000E+00	.0000E+00	-2.8722E-03
60	61	.0000E+00	.0000E+00	-1.0797E-02	.0000E+00	.0000E+00	-1.0797E-02
61	62	.0000E+00	.0000E+00	-7.0339E-05	.0000E+00	.0000E+00	-7.0339E-05
62	63	.0000E+00	.0000E+00	-2.9828E-03	.0000E+00	.0000E+00	-2.9828E-03
63	64	.0000E+00	.0000E+00	-1.1092E-02	.0000E+00	.0000E+00	-1.1092E-02
64	65	.0000E+00	.0000E+00	-7.9273E-05	.0000E+00	.0000E+00	-7.9273E-05
65	66	.0000E+00	.0000E+00	-2.0347E-02	.0000E+00	.0000E+00	-2.0347E-02
66	67	.0000E+00	.0000E+00	-1.5743E-02	.0000E+00	.0000E+00	-1.5743E-02
67	68	.0000E+00	.0000E+00	-1.4961E-02	.0000E+00	.0000E+00	-1.4961E-02
68	70	.0000E+00	.0000E+00	-5.4556E-03	.0000E+00	.0000E+00	-5.4556E-03
69	71	.0000E+00	.0000E+00	-7.0685E-04	.0000E+00	.0000E+00	-7.0685E-04
70	72	.0000E+00	.0000E+00	-2.1867E-02	.0000E+00	.0000E+00	-2.1867E-02
71	73	.0000E+00	.0000E+00	-5.4909E-03	.0000E+00	.0000E+00	-5.4909E-03
72	74	.0000E+00	.0000E+00	-6.7435E-04	.0000E+00	.0000E+00	-6.7435E-04
73	75	.0000E+00	.0000E+00	-2.2097E-02	.0000E+00	.0000E+00	-2.2097E-02
74	76	.0000E+00	.0000E+00	-8.7126E-05	.0000E+00	.0000E+00	-8.7126E-05
75	77	.0000E+00	.0000E+00	-1.4341E-04	.0000E+00	.0000E+00	-1.4341E-04
76	80	.0000E+00	.0000E+00	-1.4032E-05	.0000E+00	.0000E+00	-1.4032E-05
77	81	.0000E+00	.0000E+00	-8.3609E-03	.0000E+00	.0000E+00	-8.3609E-03
78	82	.0000E+00	.0000E+00	-4.0075E-04	.0000E+00	.0000E+00	-4.0075E-04
79	83	.0000E+00	.0000E+00	-7.4583E-07	.0000E+00	.0000E+00	-7.4583E-07
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1807E-03	.0000E+00	.0000E+00	-2.1807E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.1176E-03	.0000E+00	.0000E+00	-2.1176E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0889E-03	.0000E+00	.0000E+00	-2.0889E-03

TOTAL 2.1194E-03 .0000E+00 -6.4406E-01 -1.0597E-03 -3.5987E-01 -1.0029E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	283821 16182	2.9568E+00 1.9441E-01	1.3517E-02 7.6520E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7097E-01	99656	1.4385E+00	1.2202E-03	.0000E+00	.0000E+00
		45103.50C	2.3917E-04	573	7.2100E-03	6.1961E-03	.0000E+00	.0000E+00
		47109.50C	2.8706E-05	76	1.0085E-03	8.8296E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	941	1.0379E-02	1.0277E-02	.0000E+00	.0000E+00
		63151.55C	5.2335E-08	2	2.6278E-05	2.6270E-05	.0000E+00	.0000E+00
		63153.55C	3.0867E-05	123	1.4614E-03	1.2938E-03	.0000E+00	.0000E+00
		64155.50C	3.8304E-07	120	1.2866E-03	1.2850E-03	.0000E+00	.0000E+00
		92233.50C	3.5183E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	6.8424E-05	118	1.5929E-03	1.0516E-03	.0000E+00	.0000E+00
		92235.50C	4.4265E-03	23121	4.4341E-01	3.9431E-02	1.9414E-01	1.3459E-05
		92236.50C	9.9057E-04	829	1.1877E-02	4.3041E-03	1.8626E-04	.0000E+00
		92238.50C	3.2088E-01	150634	2.1827E+00	1.8864E-01	2.0410E-02	9.8618E-04
		93237.55C	7.6490E-05	198	2.6182E-03	1.9536E-03	5.2499E-05	.0000E+00
		94238.50C	1.4193E-05	62	7.1936E-04	5.3443E-04	2.4461E-05	.0000E+00
		94239.55C	1.5159E-03	16212	3.1922E-01	5.9337E-02	1.2108E-01	.0000E+00
		94240.50C	4.3508E-04	3205	4.1685E-02	3.6757E-02	1.3006E-04	.0000E+00
		94241.50C	2.4816E-04	2988	6.0323E-02	8.5869E-03	2.3695E-02	.0000E+00
		94242.50C	5.2259E-05	112	1.5900E-03	1.0908E-03	1.6084E-05	.0000E+00
		95241.50C	1.7832E-05	112	1.4111E-03	1.3306E-03	7.1993E-06	.0000E+00
		95242.50C	1.9655E-07	10	2.7188E-04	1.9426E-05	9.4957E-05	.0000E+00
		95243.50C	5.8685E-06	8	1.0712E-04	7.4925E-05	1.6115E-08	.0000E+00
		96245.35C	1.9986E-08	1	1.0764E-05	1.1493E-06	5.6770E-06	.0000E+00
33	34	8016.50C	6.8138E-03	1	5.8470E-06	3.8333E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	2	1.7538E-05	1.0296E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	3	3.6002E-05	1.9690E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	757	7.8724E-03	1.5858E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	6	5.2281E-05	4.0001E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	488	3.5275E-03	2.1016E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	26	2.1057E-04	5.9111E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	18	2.6948E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	20	1.4558E-04	8.9528E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	208	2.8527E-03	1.3745E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	64	8.9683E-04	9.5390E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	212	2.8783E-03	1.5322E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	50211	7.4055E-01	6.3546E-03	.0000E+00	6.0053E-05
		50000.35C	1.0711E-02	481	7.0053E-03	1.6109E-04	.0000E+00	.0000E+00

38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	124 7	9.3255E-04 5.0528E-05	5.4161E-06 1.3480E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1333469 118348	1.7209E+01 1.6981E+00	4.9762E-02 1.2428E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	82860 6914	1.0778E+00 9.8309E-02	3.5369E-03 7.6417E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	16 0	1.4103E-04 .0000E+00	8.1162E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	13 2 22 3497 31	1.8946E-04 2.6367E-05 3.1371E-04 5.1501E-02 4.6521E-04	1.4001E-09 6.8897E-06 2.2027E-05 4.6810E-04 1.3363E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	27846 2235	3.6071E-01 3.2086E-02	1.1681E-03 2.1214E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 3 18 3097 27	1.7525E-04 4.6890E-05 2.6978E-04 4.5689E-02 3.7463E-04	5.9969E-09 4.8417E-06 7.6394E-06 4.4200E-04 1.2874E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	66114 5595	8.5756E-01 8.0152E-02	2.7518E-03 6.3397E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6860 586	9.0363E-02 8.4412E-03	2.9857E-04 2.8111E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 0 3 345 2	3.2359E-05 .0000E+00 3.3626E-05 5.1035E-03 3.1340E-05	2.2066E-12 .0000E+00 1.9025E-06 4.0252E-05 1.1953E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5678 524	7.4836E-02 7.4685E-03	2.3113E-04 2.9710E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61396 4706	7.2049E-01 6.3634E-02	2.3817E-03 3.0096E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	4 36 54 7 1 1497 495 7791 2418 174	5.3075E-05 4.5097E-04 7.4639E-04 9.0370E-05 1.7189E-05 1.9137E-02 6.9553E-03 9.5247E-02 2.9833E-02 2.3626E-03	2.8089E-09 2.6278E-05 1.0936E-05 3.5207E-07 6.8759E-09 1.9077E-03 8.7339E-04 5.3868E-03 1.7977E-03 3.6362E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2367 6	3.3683E-02 5.7639E-05	5.9933E-04 8.2072E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C	1.3966E-03	5	7.7820E-05	7.2875E-10	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	47	5.2959E-04	3.2841E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	7.6535E-04	8.6714E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	9	1.2130E-04	1.0193E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4666E-05	1.0907E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1427	1.8355E-02	1.8164E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	485	6.7305E-03	8.9659E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7936	9.5895E-02	5.5596E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2327	2.7842E-02	1.8103E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	168	2.2844E-03	2.9513E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	2073	1.8840E-02	1.0842E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	87	8.1618E-04	2.6047E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	61752	7.2550E-01	2.4192E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4807	6.5477E-02	3.4449E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	5	5.7635E-05	7.0108E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	6.4812E-04	2.8551E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.6776E-04	6.8304E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.2672E-05	1.3169E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1476	1.8926E-02	1.9537E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	499	6.9734E-03	9.4090E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8075	9.8610E-02	5.5714E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2322	2.8690E-02	1.7231E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.1755E-03	3.3908E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2402	3.4220E-02	6.1635E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.0560E-04	1.0202E-05	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	7	9.3442E-05	1.4085E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	58	6.7485E-04	4.1300E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	6.4271E-04	8.8886E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.1988E-05	1.0873E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5615E-05	3.3303E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1475	1.9214E-02	1.8680E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	526	7.3399E-03	1.0221E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8003	9.6316E-02	5.6339E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2464	2.9544E-02	1.9500E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	144	1.8711E-03	2.3850E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1384	1.2333E-02	6.9495E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	61	6.1627E-04	1.7462E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	84968	1.0460E+00	2.8166E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7488	1.0416E-01	5.5578E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.6621E-04	1.9665E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	67	8.1547E-04	3.1561E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	80	1.1781E-03	1.0111E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.2332E-05	2.7133E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.9910E-05	1.0299E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2294	3.1228E-02	1.9780E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	824	1.1858E-02	8.7094E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11276	1.4251E-01	5.6664E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3379	4.3508E-02	1.8170E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	282	3.9549E-03	4.2151E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1476	1.2648E-02	7.0297E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	71	6.3548E-04	4.2171E-08	.0000E+00	.0000E+00

62	63	1001.50C 8016.50C	6.6667E-01 3.3333E-01	86847 7432	1.0644E+00 1.0364E-01	2.9279E-03 5.4841E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
63	64	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	19 70 76 6 1 2247 807 11389 3331 266	2.4695E-04 9.2094E-04 1.1078E-03 7.6630E-05 8.3449E-06 3.0192E-02 1.1695E-02 1.4504E-01 4.3098E-02 3.7233E-03	2.2581E-08 3.1958E-05 6.2473E-06 1.6472E-06 2.5694E-06 2.0106E-03 9.9883E-04 5.8928E-03 1.7229E-03 4.2413E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
64	65	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1590 83	1.4019E-02 8.1167E-04	7.8608E-05 6.6421E-07	.0000E+00 .0000E+00	.0000E+00 .0000E+00
65	66	1001.50C 8016.50C	6.6667E-01 3.3333E-01	419154 20004	3.7946E+00 2.0102E-01	2.0276E-02 7.0914E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
66	67	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	5 54 49 4 0 1686 407 9841 2859 171	3.2803E-05 5.8171E-04 5.9060E-04 3.8428E-05 .0000E+00 1.8568E-02 5.1609E-03 9.9932E-02 2.9283E-02 1.9368E-03	1.8208E-08 4.0192E-05 1.1594E-05 9.5624E-07 .0000E+00 2.8896E-03 1.1097E-03 8.6444E-03 2.6924E-03 3.5407E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
67	68	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	3 44 56 2 2 1533 460 9532 2752 127	2.3806E-05 4.8911E-04 6.5524E-04 3.2009E-05 2.1166E-05 1.6813E-02 5.8749E-03 9.7032E-02 2.8483E-02 1.5060E-03	9.4038E-09 3.9118E-05 9.3989E-06 6.5596E-08 1.2472E-06 2.7021E-03 1.3033E-03 8.1424E-03 2.5176E-03 2.4566E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
68	70	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 37 61 8 4 1470 477 6960 2243 159	8.8107E-05 4.4901E-04 8.7815E-04 1.0848E-04 5.0978E-05 2.0109E-02 6.8402E-03 8.7504E-02 2.9013E-02 2.1735E-03	1.0306E-08 1.5357E-05 2.5160E-06 1.1882E-06 3.8576E-06 9.6355E-04 4.8135E-04 2.7769E-03 9.4606E-04 2.6484E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
69	71	13027.50C 29000.50C	9.9949E-01 5.0987E-04	6272 8	9.2647E-02 1.1862E-04	6.9910E-04 7.7502E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
70	72	6000.50C 7014.50C 14000.50C	1.3966E-03 3.9931E-03 1.4932E-02	53 218 310	6.7053E-04 2.8421E-03 4.4072E-03	4.6524E-08 6.3627E-05 1.9114E-05	.0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00

		15031.50C	8.1237E-04	16	2.4859E-04	9.7235E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	8.6204E-05	1.7030E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7520	1.0276E-01	3.8280E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2489	3.5372E-02	2.2538E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35466	4.4364E-01	1.0843E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11189	1.4207E-01	3.6587E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	851	1.1703E-02	1.1981E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	10	1.2906E-04	6.6797E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	44	5.7191E-04	1.6035E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	69	9.6372E-04	8.3037E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.7989E-05	6.4680E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.2378E-05	2.2624E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1465	2.0172E-02	9.8107E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	511	7.2452E-03	5.3668E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7087	8.9283E-02	2.7966E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2285	2.9039E-02	9.2627E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	181	2.5608E-03	2.2356E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6517	9.6545E-02	6.6546E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.7909E-04	8.8910E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	39	5.2917E-04	3.5808E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	187	2.3100E-03	5.7767E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	338	4.8304E-03	2.1365E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.9616E-04	1.9333E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.5886E-04	6.8328E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7572	1.0313E-01	3.9901E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2498	3.5961E-02	1.9203E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36053	4.4951E-01	1.1074E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11424	1.4423E-01	3.7672E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	920	1.2930E-02	1.2574E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	1759	1.6898E-02	8.7089E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	96	1.0708E-03	3.6584E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3057	2.6710E-02	1.4337E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	162	1.6793E-03	3.8786E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	4.4803E-06	1.7804E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	2.5655E-05	4.1862E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9	8.5987E-05	9.5630E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3	4.2445E-05	1.0466E-07	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	8	9.1748E-05	1.2359E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	5.2804E-04	2.0099E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	38	4.6251E-04	6.7397E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.0151E-05	1.9681E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1216	1.4113E-02	1.4453E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	365	4.7603E-03	6.9187E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7080	7.4232E-02	4.5428E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2043	2.1776E-02	1.4076E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	1.9572E-03	2.4451E-04	.0000E+00	.0000E+00

78	82	1001.50C 8016.50C	6.6667E-01 3.3333E-01	11213 837	1.1446E-01 1.0000E-02	3.9204E-04 8.7109E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
79	83	1001.50C 8016.50C	6.6667E-01 3.3333E-01	19 3	2.5699E-04 3.4709E-05	7.4565E-07 1.7977E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
80	84	6000.50C 13027.50C 14000.50C 16032.50C 22000.50C 24000.50C 25055.50C 26000.55C 28000.50C 29000.50C 42000.50C	2.3404E-03 4.1674E-03 1.0009E-02 5.2754E-04 1.0568E-02 2.3247E-01 1.0234E-02 2.8763E-01 4.0235E-01 2.2119E-02 1.7582E-02	0 0 0 0 0 0 0 0 0 0 0	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	
81	85	6000.50C 13027.50C 14000.50C 16032.50C 22000.50C 24000.50C 25055.50C 26000.55C 28000.50C 29000.50C 42000.50C	2.3404E-03 4.1674E-03 1.0009E-02 5.2754E-04 1.0568E-02 2.3247E-01 1.0234E-02 2.8763E-01 4.0235E-01 2.2119E-02 1.7582E-02	3 6 17 1 37 624 67 1187 2727 98 76	3.5542E-05 9.3305E-05 2.4605E-04 4.6246E-06 4.5424E-04 7.9629E-03 8.6189E-04 1.3930E-02 3.2488E-02 1.2019E-03 1.0712E-03	4.7427E-09 1.1196E-07 9.6899E-07 9.6391E-07 2.6099E-05 3.8356E-04 1.0859E-04 4.3923E-04 1.0546E-03 6.1519E-05 1.0510E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
82	86	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
83	87	6000.50C 14000.50C 15031.50C 16032.50C 25055.50C 26000.55C	1.0113E-02 5.4063E-03 6.2391E-04 6.0443E-04 9.0452E-03 9.7421E-01	0 0 0 0 0 0	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
84	88	6000.50C 14000.50C 15031.50C 16032.50C 25055.50C 26000.55C	1.0113E-02 5.4063E-03 6.2391E-04 6.0443E-04 9.0452E-03 9.7421E-01	61 18 2 2 227 8174	7.9758E-04 2.6042E-04 2.0162E-05 2.9668E-05 3.0798E-03 9.5439E-02	3.3444E-08 3.9089E-07 1.3500E-07 7.8110E-07 1.3524E-04 1.9810E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
85	89	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
86	90	1001.50C 8016.50C	6.6667E-01 3.3333E-01	45429 2069	3.8402E-01 1.9256E-02	2.0867E-03 2.1924E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
TOTAL				3444356	4.2396E+01	6.4406E-01	3.5987E-01	1.0597E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)

1001.50C	2589413	3.0583E+01	1.0515E-01	.0000E+00	.0000E+00
2004.50C	18	2.6948E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	241	3.0935E-03	2.4435E-07	.0000E+00	.0000E+00
7014.50C	954	1.1812E-02	4.4469E-04	.0000E+00	.0000E+00
8016.50C	298215	4.1338E+00	2.9653E-03	.0000E+00	.0000E+00
13027.50C	17564	2.5719E-01	2.5804E-03	.0000E+00	.0000E+00
14000.50C	1313	1.8402E-02	1.3208E-04	.0000E+00	.0000E+00
15031.50C	99	1.3517E-03	1.1726E-05	.0000E+00	.0000E+00
16032.50C	32	4.4960E-04	2.2378E-05	.0000E+00	.0000E+00
22000.50C	37	4.5424E-04	2.6099E-05	.0000E+00	.0000E+00
24000.50C	33576	4.4170E-01	2.8839E-02	.0000E+00	.0000E+00
25055.50C	11137	1.5671E-01	1.4143E-02	.0000E+00	.0000E+00
26000.55C	176117	2.1277E+00	8.5148E-02	.0000E+00	.0000E+00
28000.50C	53766	6.5894E-01	2.7791E-02	.0000E+00	.0000E+00
29000.50C	133	1.6628E-03	9.6569E-05	.0000E+00	.0000E+00
40000.50C	57907	8.5072E-01	7.4636E-03	.0000E+00	6.0053E-05
42000.50C	3842	5.2209E-02	5.9752E-03	.0000E+00	.0000E+00
45103.50C	573	7.2100E-03	6.1961E-03	.0000E+00	.0000E+00
47109.50C	76	1.0085E-03	8.8296E-04	.0000E+00	.0000E+00
50000.35C	547	7.9287E-03	1.9253E-04	.0000E+00	.0000E+00
62149.50C	941	1.0379E-02	1.0277E-02	.0000E+00	.0000E+00
63151.55C	2	2.6278E-05	2.6270E-05	.0000E+00	.0000E+00
63153.55C	123	1.4614E-03	1.2938E-03	.0000E+00	.0000E+00
64155.50C	120	1.2866E-03	1.2850E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	118	1.5929E-03	1.0516E-03	2.7823E-05	.0000E+00
92235.50C	23121	4.4341E-01	3.9431E-02	1.9414E-01	1.3459E-05
92236.50C	829	1.1877E-02	4.3041E-03	1.8626E-04	.0000E+00
92238.50C	150634	2.1827E+00	1.8864E-01	2.0410E-02	9.8618E-04
93237.55C	198	2.6182E-03	1.9536E-03	5.2499E-05	.0000E+00
94238.50C	62	7.1936E-04	5.3443E-04	2.4461E-05	.0000E+00
94239.55C	16212	3.1922E-01	5.9337E-02	1.2108E-01	.0000E+00
94240.50C	3205	4.1685E-02	3.6757E-02	1.3006E-04	.0000E+00
94241.50C	2988	6.0323E-02	8.5869E-03	2.3695E-02	.0000E+00
94242.50C	112	1.5900E-03	1.0908E-03	1.6084E-05	.0000E+00
95241.50C	112	1.4111E-03	1.3306E-03	7.1993E-06	.0000E+00
95242.50C	10	2.7188E-04	1.9426E-05	9.4957E-05	.0000E+00
95243.50C	8	1.0712E-04	7.4925E-05	1.6115E-08	.0000E+00
96245.35C	1	1.0764E-05	1.1493E-06	5.6770E-06	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59917 CTM = 116.28

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 116.38 MINUTES

MCNP VERSION 4A-B 10/04/91

02/16/95 09:03:05

PROBID = 02/16/95 07:06:24

1MCNP VERSION 4A-B LD=10/04/91 02/16/95 15:27:54

INP=mpc12c OUTP=mpc12c.o

PROBID = 02/16/95 15:27:54

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/10 year (mpc12c)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.


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297- C 34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C 38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C 43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C 43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C 47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C 30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C 30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C 34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C 34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C 38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C 43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C 43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C 47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C 30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C 30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C 34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C 34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C 38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C 43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C 43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C 47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C 30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C 30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C 34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C 34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C 38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C 43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C 43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C 47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C MATERIAL SPECIFICATIONS
327- C WATER AT 300 K
328- M1 1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1 LWTR.01T
330- C 3.00%/20 GWD/10 YEAR -- UO2
331- M2 8016.50C 4.7767E-02
332- 45103.50C 1.7033E-05
333- 47109.50C 2.0435E-06
334- 62149.50C 1.3260E-07
335- 63151.55C 3.2946E-08
336- 63153.55C 2.1975E-06
337- 64155.50C 1.5092E-07
338- 92233.50C 4.1598E-11
339- 92234.50C 4.9441E-06
340- 92235.50C 3.1513E-04
341- 92236.50C 7.0544E-05
342- 92238.50C 2.2844E-02
343- 93237.55C 5.5126E-06
344- 94238.50C 9.5832E-07
345- 94239.55C 1.0790E-04
346- 94240.50C 3.0974E-05
347- 94241.50C 1.1455E-05
348- 94242.50C 3.7204E-06
349- 95241.50C 7.4151E-06
350- 95242.50C 1.3432E-08
351- 95243.50C 4.1732E-07
352- 96245.35C 1.4216E-09
353- C He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3 2004.50C 1.0
355- C ZIRCALLOY-4
356- M4 8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	2980
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	2980
POINTS AFTER EXPANSION OR CONTRACTION	2996
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119158E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

1	1001, .66667	8016, .33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:		LWTR.01T			
2	8016, .67096	45103, .00024	47109, .00003	62149, .00000	
	63151, .00000	63153, .00003	64155, .00000	92233, .00000	
	92234, .00007	92235, .00443	92236, .00099	92238, .32088	
	93237, .00008	94238, .00001	94239, .00152	94240, .00044	
	94241, .00016	94242, .00005	95241, .00010	95242, .00000	
	95243, .00001	96245, .00000			
3	2004, 1.00000				
4	8016, .00681	24000, .00175	26000, .00325	40000, .97748	
	50000, .01071				
5	6000, .00234	13027, .00417	14000, .01001	16032, .00053	
	22000, .01057	24000, .23247	25055, .01023	26000, .28763	

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00021	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00044	94242,	.00014	95241,	.00028	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	7	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
---------	-----------

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0

CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/10 year (mpc12c)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-1.569E-01	2.443E-01	1.172E+02	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.001E+00	2.822E+00
2	2.252E-01	1.189E-02	1.183E+02	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.001E+00	1.414E+00
3	-2.960E-01	-1.446E-01	1.186E+02	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.001E+00	2.180E-01
4	-3.143E-01	-2.006E-01	1.194E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.001E+00	6.202E-02
5	-1.762E-01	2.900E-01	1.119E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.001E+00	4.447E-02
6	-3.168E-01	1.024E-01	1.117E+02	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.001E+00	2.162E+00
7	2.054E-01	2.099E-01	4.272E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.001E+00	9.658E-01
8	1.909E-01	1.782E-01	5.307E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.001E+00	1.930E+00
9	1.643E-01	-1.375E-01	1.256E+02	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.001E+00	7.517E+00
10	-1.264E-01	-7.200E-02	1.240E+02	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.001E+00	4.105E+00
11	-5.820E-02	-7.323E-02	1.119E+02	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.001E+00	2.907E+00
12	-1.817E-02	4.653E-01	1.017E+02	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.001E+00	1.235E+00
13	4.595E-01	-3.293E-02	1.008E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.001E+00	2.427E+00
14	1.979E-01	7.800E-02	9.649E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.001E+00	5.073E+00
15	-2.783E-01	2.801E-02	5.642E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.001E+00	2.984E+00
16	-8.996E-02	-1.172E-01	5.627E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.001E+00	8.817E-01
17	-2.907E-01	2.369E-01	1.547E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.001E+00	3.336E-01
18	2.225E-01	-1.308E-01	1.236E+02	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.001E+00	9.441E-01
19	2.582E-01	1.758E-01	1.057E+02	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.001E+00	3.663E+00
20	1.543E-01	-6.656E-02	1.062E+02	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.001E+00	2.866E+00
21	-2.538E-01	-2.056E-01	1.085E+02	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.001E+00	4.844E-01
22	-3.467E-01	1.272E-01	1.201E+02	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.001E+00	4.528E-01
23	1.789E-01	-4.023E-01	1.139E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.001E+00	7.306E-01
24	1.189E-01	-4.015E-01	1.160E+02	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.001E+00	2.241E+00
25	-2.973E-02	-3.261E-01	1.194E+02	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.001E+00	1.152E-01
26	1.460E-01	-3.754E-01	1.163E+02	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.001E+00	6.725E-01
27	3.402E-01	1.678E-01	1.147E+02	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.001E+00	2.223E+00
28	-2.790E-02	2.011E-01	1.382E+02	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.001E+00	2.726E+00
29	1.654E-01	1.997E-01	1.073E+02	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.001E+00	1.703E+00
30	-1.605E-04	3.381E-01	1.059E+02	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.001E+00	3.522E+00
31	-3.128E-01	-8.207E-02	1.210E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.001E+00	4.987E+00
32	2.935E-01	-3.642E-01	1.161E+02	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.001E+00	2.323E+00
33	-2.378E-01	5.461E-02	1.178E+02	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.001E+00	1.322E+00
34	2.828E-02	9.736E-02	1.197E+02	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.001E+00	7.497E-01
35	5.700E-02	4.175E-01	1.168E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.001E+00	1.358E+00
36	-2.861E-01	2.215E-02	1.211E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.001E+00	2.112E+00
37	-1.594E-01	-2.309E-01	1.022E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.001E+00	7.041E+00
38	-3.950E-01	-1.291E-01	1.074E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.001E+00	3.126E+00
39	2.655E-02	-1.927E-01	2.712E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.001E+00	2.805E+00
40	-6.967E-02	-4.092E-01	1.417E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.001E+00	4.807E+00
41	-1.410E-01	3.278E-01	1.465E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.001E+00	1.822E+00
42	-3.943E-01	1.776E-01	1.405E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.001E+00	1.216E+00
43	-3.857E-01	-1.169E-01	2.697E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.001E+00	1.751E+00
44	1.533E-01	-2.943E-01	4.802E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.001E+00	2.344E+00
45	2.670E-01	-1.620E-01	4.765E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.001E+00	4.193E-02
46	1.867E-01	5.430E-02	1.503E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.001E+00	1.066E+00
47	-2.494E-01	3.276E-01	1.575E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.001E+00	1.038E+00
48	3.602E-01	-3.826E-02	1.647E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.001E+00	4.007E+00
49	1.110E-01	1.560E-01	1.638E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.001E+00	4.317E+00

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50 8.581E-02 -3.940E-01 1.318E+02 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 1.001E+00 3.485E+00

CYCLE 1 K(COLLISION) .922814 REMOVAL LIFETIME(ABS) 3.1688E+03 SOURCE POINTS GENERATED 2781
CYCLE 2 K(COLLISION) .940730 REMOVAL LIFETIME(ABS) 3.2222E+03 SOURCE POINTS GENERATED 3142
CYCLE 3 K(COLLISION) .920563 REMOVAL LIFETIME(ABS) 3.2557E+03 SOURCE POINTS GENERATED 2878
CYCLE 4 K(COLLISION) .938302 REMOVAL LIFETIME(ABS) 3.2719E+03 SOURCE POINTS GENERATED 3082
CYCLE 5 K(COLLISION) .925349 REMOVAL LIFETIME(ABS) 3.2790E+03 SOURCE POINTS GENERATED 2904

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .898428 REMOVAL LIFETIME(ABS) 3.0079E+03 SOURCE POINTS GENERATED 2915

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .925363 .911896 .0148 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .937402 .936252 .0012 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .945458 .924300 .0229 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.1580E+03 3.0677E+03 .0294 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.1966E+03 3.1023E+03 .0304
SOURCE POINTS GENERATED 3118

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .921877 .915223 .0092 K(COL/ABS) .921714 .0052 .921942 .0080 .3165
K(ABSORPTION) .912110 .928205 .0087 K(ABS/TK LN) .929364 .0070 .928942 .0085 .3791
K(TRK LENGTH) .942968 .930523 .0147 K(TK LN/COL) .922873 .0120 .891181 .0036 .9978
REM LIFE(COL) 3.1843E+03 3.1066E+03 .0209 LIFE(COL/ABS) 3.1163E+03 .0198 3.1453E+03 .0291 .9738
REM LIFE(ABS) 3.1735E+03 3.1260E+03 .0190
SOURCE POINTS GENERATED 2940

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .897164 .910708 .0082 K(COL/ABS) .917031 .0063 .917033 .0083 .1976
K(ABSORPTION) .908805 .923355 .0081 K(ABS/TK LN) .925117 .0068 .924587 .0079 .0427
K(TRK LENGTH) .915952 .926880 .0112 K(TK LN/COL) .918794 .0096 .890899 .0126 .9574
REM LIFE(COL) 3.1756E+03 3.1238E+03 .0157 K(COL/ABS/TK LN) .920314 .0071 .904360 .0761
REM LIFE(ABS) 3.2168E+03 3.1487E+03 .0152 LIFE(COL/ABS) 3.1362E+03 .0153 3.1475E+03 .0216 .9691
SOURCE POINTS GENERATED 2918

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .957916 .920150 .0120 K(COL/ABS) .923549 .0086 .926485 .0086 .5364
K(ABSORPTION) .941319 .926948 .0074 K(ABS/TK LN) .930813 .0080 .928275 .0083 .3409
K(TRK LENGTH) .965874 .934679 .0120 K(TK LN/COL) .927414 .0119 .925950 .0190 .9533
REM LIFE(COL) 3.2906E+03 3.1572E+03 .0160 K(COL/ABS/TK LN) .927259 .0093 .946743 .0204
REM LIFE(ABS) 3.2385E+03 3.1667E+03 .0130 LIFE(COL/ABS) 3.1619E+03 .0143 3.1746E+03 .0140 .9434
SOURCE POINTS GENERATED 3187

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .919584 .920055 .0098 K(COL/ABS) .920947 .0076 .921209 .0083 .4024

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K(ABSORPTION) .896292 .921838 .0082
 K(TRK LENGTH) .950481 .937312 .0101
 REM LIFE(COL) 3.4897E+03 3.2126E+03 .0215
 REM LIFE(ABS) 3.4769E+03 3.2184E+03 .0192
 SOURCE POINTS GENERATED 2886

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .927462 .921113 .0084
 K(ABSORPTION) .915085 .920874 .0070
 K(TRK LENGTH) .932866 .936677 .0086
 REM LIFE(COL) 3.2130E+03 3.2126E+03 .0182
 REM LIFE(ABS) 3.1770E+03 3.2125E+03 .0163
 SOURCE POINTS GENERATED 3029

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.920994 .0064	.920960 .0069	.3737
K(ABS/TK LN)	.928775 .0057	.926941 .0063	.0652
K(TK LN/COL)	.928895 .0083	.925860 .0108	.8908
K(COL/ABS/TK LN)	.926221 .0065	.935782 .0131	
LIFE(COL/ABS)	3.2125E+03 .0171	3.2122E+03 .0170	.9732

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .909356 .919644 .0074
 K(ABSORPTION) .935902 .922752 .0064
 K(TRK LENGTH) .918247 .934373 .0079
 REM LIFE(COL) 3.2399E+03 3.2161E+03 .0158
 REM LIFE(ABS) 3.2664E+03 3.2192E+03 .0143
 SOURCE POINTS GENERATED 2880

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.921198 .0055	.921513 .0059	.2777
K(ABS/TK LN)	.928563 .0050	.927357 .0053	-.0410
K(TK LN/COL)	.927009 .0075	.922205 .0093	.8935
K(COL/ABS/TK LN)	.925590 .0056	.936287 .0115	
LIFE(COL/ABS)	3.2176E+03 .0149	3.2221E+03 .0149	.9703

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .946889 .922671 .0073
 K(ABSORPTION) .928215 .923359 .0057
 K(TRK LENGTH) .941971 .935218 .0070
 REM LIFE(COL) 3.3215E+03 3.2278E+03 .0143
 REM LIFE(ABS) 3.3053E+03 3.2288E+03 .0129
 SOURCE POINTS GENERATED 3113

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.923015 .0053	.923135 .0054	.2985
K(ABS/TK LN)	.929288 .0045	.928031 .0047	-.0254
K(TK LN/COL)	.928944 .0069	.930306 .0079	.8499
K(COL/ABS/TK LN)	.927083 .0052	.933096 .0073	
LIFE(COL/ABS)	3.2283E+03 .0135	3.2298E+03 .0132	.9717

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .931424 .923546 .0066
 K(ABSORPTION) .915892 .922612 .0051
 K(TRK LENGTH) .924951 .934191 .0064
 REM LIFE(COL) 3.1775E+03 3.2227E+03 .0129
 REM LIFE(ABS) 3.1684E+03 3.2227E+03 .0117
 SOURCE POINTS GENERATED 2910

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.923079 .0047	.922924 .0048	.2692
K(ABS/TK LN)	.928402 .0041	.927125 .0043	.0024
K(TK LN/COL)	.928869 .0062	.929623 .0068	.8037
K(COL/ABS/TK LN)	.926783 .0047	.928804 .0061	
LIFE(COL/ABS)	3.2227E+03 .0122	3.2227E+03 .0119	.9715

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .917153 .922965 .0060
 K(ABSORPTION) .919094 .922292 .0047
 K(TRK LENGTH) .907221 .931739 .0063
 REM LIFE(COL) 3.2355E+03 3.2239E+03 .0117
 REM LIFE(ABS) 3.2448E+03 3.2247E+03 .0106
 SOURCE POINTS GENERATED 2996

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.922629 .0043	.922515 .0044	.2747
K(ABS/TK LN)	.927016 .0040	.925526 .0041	.0331
K(TK LN/COL)	.927352 .0058	.926189 .0062	.7705
K(COL/ABS/TK LN)	.925666 .0044	.925798 .0052	
LIFE(COL/ABS)	3.2243E+03 .0111	3.2255E+03 .0108	.9712

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .948904 .925127 .0060

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.924019 .0042	.923525 .0041	.3106

K(ABSORPTION)	.929713	.922911	.0043	K(ABS/TK LN)	.927340	.0037	.925993	.0037	.0335
K(TRK LENGTH)	.932101	.931769	.0058	K(TK LN/COL)	.928448	.0054	.928704	.0057	.7110
REM LIFE(COL)	3.3974E+03	3.2384E+03	.0115	K(COL/ABS/TK LN)	.926602	.0041	.926356	.0043	
REM LIFE(ABS)	3.3596E+03	3.2360E+03	.0102	LIFE(COL/ABS)	3.2372E+03	.0108	3.2329E+03	.0101	.9737
SOURCE POINTS GENERATED	3053								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.906705		.923710	.0057	K(COL/ABS)	.922973	.0040	.922610
K(ABSORPTION)		.914136		.922236	.0040	K(ABS/TK LN)	.925362	.0040	.923820
K(TRK LENGTH)		.889113		.928488	.0064	K(TK LN/COL)	.926099	.0056	.925085
REM LIFE(COL)		3.1389E+03		3.2307E+03	.0109	K(COL/ABS/TK LN)	.924811	.0043	.923750
REM LIFE(ABS)		3.1452E+03		3.2290E+03	.0097	LIFE(COL/ABS)	3.2299E+03	.0102	3.2267E+03
SOURCE POINTS GENERATED		2947						.0094	.9749

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.908112		.922596	.0054	K(COL/ABS)	.921714	.0040	.921307
K(ABSORPTION)		.902578		.920832	.0040	K(ABS/TK LN)	.923952	.0040	.922410
K(TRK LENGTH)		.908674		.927073	.0061	K(TK LN/COL)	.924834	.0054	.923780
REM LIFE(COL)		3.4172E+03		3.2440E+03	.0108	K(COL/ABS/TK LN)	.923500	.0042	.922263
REM LIFE(ABS)		3.3924E+03		3.2407E+03	.0096	LIFE(COL/ABS)	3.2424E+03	.0102	3.2353E+03
SOURCE POINTS GENERATED		2983						.0092	.9785

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.934932		.923418	.0051	K(COL/ABS)	.922071	.0037	.921434
K(ABSORPTION)		.919215		.920724	.0038	K(ABS/TK LN)	.923966	.0037	.922366
K(TRK LENGTH)		.929114		.927209	.0057	K(TK LN/COL)	.925313	.0050	.924541
REM LIFE(COL)		3.2310E+03		3.2432E+03	.0101	K(COL/ABS/TK LN)	.923784	.0039	.922272
REM LIFE(ABS)		3.2232E+03		3.2395E+03	.0090	LIFE(COL/ABS)	3.2413E+03	.0095	3.2337E+03
SOURCE POINTS GENERATED		3072						.0086	.9784

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/10 year (mpc12c)

PROBID = 02/16/95 17:48:56
02/16/95 15:27:54

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59658	1.0057E+00	2.0538E+00	ESCAPE	1	4.4817E-06	8.0690E-14
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.5965E-02	4.7542E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59754	6.5853E-02	4.7720E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2708E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	194	2.6562E-03	2.0736E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9427E+00
				CAPTURE	0	6.5587E-01	3.2722E-02
				LOSS TO (N,XN)	97	1.3281E-03	1.1119E-02
				LOSS TO FISSION	0	3.5129E-01	6.9319E-02

1
0
0
8699 IN HISTORY 25194

PRINT TABLE 120

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26038	9677	3.3685E+00	1.1556E-04	3.6704E-01	7.2890E-01	1.0911E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	724709	59755	297496	4.1829E+00	7.0585E-04	7.3918E-01	2.5047E+00

33	34	4795	255	985	1.0260E-02	5.7917E-05	2.5230E-01	6.1680E-01	4.2933E+00
34	35	281	28	671	5.5839E-03	3.4870E-05	2.3648E-01	5.4342E-01	7.2418E-01
35	36	1300526	59755	16	2.6218E-04	6.0843E-04	7.0065E-01	8.7472E-01	3.5040E+03
36	37	509	28	32	2.9375E-04	3.9566E-05	3.1155E-01	5.3092E-01	7.8816E-01
37	38	1409822	59755	50962	7.5826E-01	5.8484E-04	6.8763E-01	8.7406E-01	4.1102E+00
38	39	544	28	195	1.5662E-03	3.2548E-05	2.0564E-01	5.3228E-01	6.8560E-01
39	40	2252658	59755	1452358	1.9059E+01	5.0905E-04	6.5641E-01	8.7129E-01	1.6245E+00
40	41	56324	30903	88971	1.1721E+00	3.7981E-04	6.0423E-01	8.6931E-01	1.5264E+00
41	42	29	10	76	5.3483E-04	1.4155E-05	1.1948E-02	5.1293E-01	4.9965E-01
42	43	119354	32675	3544	5.2750E-02	4.0121E-04	6.2048E-01	8.6928E-01	4.1370E+00
43	44	134064	34972	30110	3.9604E-01	4.0000E-04	6.2080E-01	8.6965E-01	1.5528E+00
44	45	146737	36006	3140	4.6428E-02	4.0687E-04	6.2211E-01	8.7053E-01	4.1338E+00
45	46	178670	41153	72543	9.5569E-01	4.0811E-04	6.2143E-01	8.7107E-01	1.5565E+00
46	47	6993	3284	7330	9.9535E-02	4.1712E-04	6.3676E-01	8.8240E-01	1.5800E+00
47	48	9316	3587	310	4.5803E-03	4.4007E-04	6.3444E-01	8.7970E-01	4.1110E+00
48	49	12151	4935	6087	8.1994E-02	4.7130E-04	6.6538E-01	8.8216E-01	1.6180E+00
49	50	33317	14988	65231	7.7810E-01	3.4749E-04	5.8027E-01	8.2411E-01	1.4923E+00
50	51	33027	14244	12275	1.5295E-01	4.0170E-04	5.8884E-01	8.0855E-01	2.0951E+00
51	52	32607	13894	2394	3.4707E-02	4.0290E-04	5.7742E-01	8.0582E-01	9.1344E+00
52	53	32722	13932	12023	1.4814E-01	3.9248E-04	5.7543E-01	8.0276E-01	2.1033E+00
53	54	261	67	1554	1.4745E-02	6.8899E-05	3.0709E-01	6.4330E-01	9.2295E-01
54	55	34541	15339	69164	8.1905E-01	3.3406E-04	5.6226E-01	8.2089E-01	1.4676E+00
55	56	34233	14564	12924	1.5951E-01	3.8535E-04	5.6944E-01	8.0335E-01	2.0898E+00
56	57	33750	14208	2496	3.5954E-02	3.9159E-04	5.6218E-01	8.0184E-01	9.1483E+00
57	58	33794	14258	12656	1.5357E-01	3.6859E-04	5.5169E-01	7.9731E-01	2.0845E+00
58	59	281	64	2000	1.7252E-02	2.4261E-05	1.3512E-01	5.5644E-01	6.1340E-01
59	60	52465	18826	90843	1.1380E+00	4.9042E-04	5.6449E-01	8.4656E-01	1.5097E+00
60	61	51858	17965	17470	2.2839E-01	7.0410E-04	5.9820E-01	8.4002E-01	2.2698E+00
61	62	434	90	1902	1.6436E-02	5.9797E-05	2.4691E-01	5.9249E-01	8.7427E-01
62	63	52696	19005	92295	1.1534E+00	4.7159E-04	5.6262E-01	8.4453E-01	1.5051E+00
63	64	52125	18105	17652	2.2952E-01	6.7669E-04	5.9084E-01	8.3786E-01	2.2838E+00
64	65	409	94	1747	1.5416E-02	5.8921E-05	3.0117E-01	5.8830E-01	8.9552E-01
65	66	10134	5015	430784	3.9635E+00	5.4708E-05	2.5695E-01	6.1780E-01	8.4328E-01
66	67	9864	3900	14731	1.5493E-01	1.7452E-04	4.2609E-01	6.9642E-01	1.7852E+00
67	68	10159	4023	15036	1.5918E-01	1.8767E-04	4.5072E-01	6.9821E-01	1.8200E+00
68	70	34021	9043	11131	1.4353E-01	9.3340E-04	5.8380E-01	8.3563E-01	2.3671E+00
69	71	34152	8707	6263	9.3254E-02	1.0129E-03	5.7692E-01	8.3423E-01	8.9407E+00
70	72	18360	8467	57045	7.3206E-01	1.3342E-03	5.8952E-01	8.3608E-01	2.4934E+00
71	73	34012	9060	11225	1.4528E-01	9.6852E-04	5.9921E-01	8.3836E-01	2.3903E+00
72	74	34128	8758	6329	9.4279E-02	1.0551E-03	5.9093E-01	8.3817E-01	8.8558E+00
73	75	18381	8584	56048	7.2258E-01	1.3716E-03	6.0015E-01	8.3833E-01	2.5353E+00
74	76	161	50	3347	2.9919E-02	4.7267E-05	2.7476E-01	5.9136E-01	8.2434E-01
75	77	177	51	4114	3.7323E-02	3.1692E-05	1.7207E-01	5.9730E-01	6.8276E-01
76	80	12	8	14	9.7425E-05	8.3623E-04	1.7063E+00	5.5825E-01	2.7588E+00
77	81	3580	1480	10658	1.1630E-01	3.4463E-04	5.0616E-01	7.2906E-01	2.0777E+00
78	82	2238	897	12961	1.3775E-01	2.3761E-04	4.0539E-01	7.4969E-01	1.2369E+00
79	83	4	4	313	2.2176E-03	3.1554E-04	1.3259E+00	5.4059E-01	2.3350E+00
80	84	3	1	16	1.0146E-04	1.1655E-04	2.3546E-01	4.0890E-01	1.6739E+00
81	85	1662	684	4823	5.8844E-02	8.7025E-04	5.4464E-01	7.9154E-01	2.0766E+00
82	86	2	1	44	3.9540E-04	1.2003E-04	1.4864E-01	5.5023E-01	9.0121E-01
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1033	458	8459	9.7866E-02	1.9674E-03	5.6239E-01	7.9320E-01	4.4064E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	377	219	50313	4.1875E-01	2.4534E-05	9.1314E-02	5.4295E-01	5.9292E-01
TOTAL		7074500	695614	3451166	4.2399E+01				
1NEUTRON WEIGHT BALANCE IN EACH CELL --				EXTERNAL EVENTS					
CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL			

PRINT TABLE 130

1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3968E-01	-5.3968E-01
2	2	3.2876E-01	.0000E+00	.0000E+00	.0000E+00	-8.9777E-01	-5.6901E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5725E-02	-1.5725E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3763E-02	-5.3763E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6168E-02	-1.6168E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5042E-01	-1.5042E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6562E+00	-1.6562E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0007E+00	-2.0007E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1038E-01	-2.1038E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1670E-01	-2.1670E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8187E-01	-3.8187E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8305E-01	-3.8305E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6391E-02	-7.6391E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7261E-02	-7.7261E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9759E-02	-8.9759E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6310E-02	-7.6310E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2449E-02	-7.2449E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4345E-02	-7.4345E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8445E-02	-9.8445E-02
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8884E-02	-9.8884E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9756E-02	-8.9756E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1042E-02	-8.1042E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0994E-01	-1.0994E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1047E-01	-1.1047E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1269E-01	-1.1269E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0989E-01	-1.0989E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0340E-01	-1.0340E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4043E-02	-8.4043E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9091E-02	-8.9091E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9945E-02	-9.9945E-02
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8989E+01	-1.8989E+01
32	33	9.7275E+00	1.0057E+00	.0000E+00	.0000E+00	-9.5231E+00	1.2101E+00
33	34	4.9851E-02	.0000E+00	.0000E+00	.0000E+00	-4.7175E-02	2.6764E-03
34	35	2.5150E-03	.0000E+00	.0000E+00	.0000E+00	-2.3131E-03	2.0187E-04
35	36	1.9076E+01	.0000E+00	.0000E+00	.0000E+00	-1.9065E+01	1.0988E-02
36	37	4.5225E-03	.0000E+00	.0000E+00	.0000E+00	-4.5210E-03	1.5257E-06
37	38	2.0674E+01	.0000E+00	.0000E+00	.0000E+00	-2.0598E+01	7.5771E-02
38	39	4.8506E-03	.0000E+00	.0000E+00	.0000E+00	-4.8300E-03	2.0540E-05
39	40	3.2956E+01	.0000E+00	.0000E+00	.0000E+00	-1.0828E+01	2.2128E+01
40	41	8.2222E-01	.0000E+00	.0000E+00	.0000E+00	-8.1869E-01	3.5325E-03
41	42	2.4264E-04	.0000E+00	.0000E+00	.0000E+00	-2.3584E-04	6.7966E-06
42	43	1.7390E+00	.0000E+00	.0000E+00	.0000E+00	-1.7385E+00	5.8241E-04
43	44	1.9547E+00	.0000E+00	.0000E+00	.0000E+00	-1.9535E+00	1.1771E-03
44	45	2.1402E+00	.0000E+00	.0000E+00	.0000E+00	-2.1397E+00	4.6739E-04
45	46	2.6101E+00	.0000E+00	.0000E+00	.0000E+00	-1.1068E+00	1.5033E+00
46	47	1.0343E-01	.0000E+00	.0000E+00	.0000E+00	-6.3043E-02	4.0388E-02
47	48	1.3788E-01	.0000E+00	.0000E+00	.0000E+00	-1.3339E-01	4.4825E-03
48	49	1.7979E-01	.0000E+00	.0000E+00	.0000E+00	-7.0426E-02	1.0937E-01
49	50	4.6249E-01	.0000E+00	.0000E+00	.0000E+00	-2.5948E-01	2.0302E-01
50	51	4.5199E-01	.0000E+00	.0000E+00	.0000E+00	-4.3642E-01	1.5569E-02
51	52	4.4299E-01	.0000E+00	.0000E+00	.0000E+00	-4.3797E-01	5.0171E-03
52	53	4.4474E-01	.0000E+00	.0000E+00	.0000E+00	-1.8683E-01	2.5791E-01
53	54	2.8635E-03	.0000E+00	.0000E+00	.0000E+00	-5.6355E-05	2.8071E-03
54	55	4.7790E-01	.0000E+00	.0000E+00	.0000E+00	-2.6821E-01	2.0968E-01
55	56	4.6554E-01	.0000E+00	.0000E+00	.0000E+00	-4.4956E-01	1.5975E-02
56	57	4.5632E-01	.0000E+00	.0000E+00	.0000E+00	-4.5037E-01	5.9508E-03
57	58	4.5680E-01	.0000E+00	.0000E+00	.0000E+00	-1.9151E-01	2.6529E-01
58	59	2.5520E-03	.0000E+00	.0000E+00	.0000E+00	-5.5739E-05	2.4963E-03
59	60	7.4741E-01	.0000E+00	.0000E+00	.0000E+00	-3.7383E-01	3.7358E-01

60	61	7.3453E-01	.0000E+00	.0000E+00	.0000E+00	-3.4825E-01	3.8628E-01
61	62	4.3366E-03	.0000E+00	.0000E+00	.0000E+00	-8.5866E-05	4.2507E-03
62	63	7.4927E-01	.0000E+00	.0000E+00	.0000E+00	-3.7408E-01	3.7520E-01
63	64	7.3709E-01	.0000E+00	.0000E+00	.0000E+00	-3.4947E-01	3.8762E-01
64	65	4.1747E-03	.0000E+00	.0000E+00	.0000E+00	-1.3784E-04	4.0369E-03
65	66	1.2177E-01	.0000E+00	.0000E+00	.0000E+00	-7.4987E-02	4.6781E-02
66	67	1.1790E-01	.0000E+00	.0000E+00	.0000E+00	-5.9382E-02	5.8519E-02
67	68	1.2103E-01	.0000E+00	.0000E+00	.0000E+00	-6.1401E-02	5.9634E-02
68	70	4.7985E-01	.0000E+00	.0000E+00	.0000E+00	-4.7432E-01	5.5283E-03
69	71	4.8013E-01	.0000E+00	.0000E+00	.0000E+00	-4.7951E-01	6.2535E-04
70	72	2.5947E-01	.0000E+00	.0000E+00	.0000E+00	-2.3758E-01	2.1891E-02
71	73	4.8100E-01	.0000E+00	.0000E+00	.0000E+00	-4.7558E-01	5.4195E-03
72	74	4.8128E-01	.0000E+00	.0000E+00	.0000E+00	-4.8056E-01	7.2058E-04
73	75	2.6118E-01	.0000E+00	.0000E+00	.0000E+00	-2.3941E-01	2.1778E-02
74	76	1.7123E-03	.0000E+00	.0000E+00	.0000E+00	-1.5382E-03	1.7418E-04
75	77	1.8208E-03	.0000E+00	.0000E+00	.0000E+00	-1.5960E-03	2.2483E-04
76	80	1.0274E-04	.0000E+00	.0000E+00	.0000E+00	-8.0024E-05	2.2715E-05
77	81	4.3548E-02	.0000E+00	.0000E+00	.0000E+00	-3.5417E-02	8.1315E-03
78	82	2.8901E-02	.0000E+00	.0000E+00	.0000E+00	-2.8446E-02	4.5559E-04
79	83	4.1614E-05	.0000E+00	.0000E+00	.0000E+00	-2.9944E-05	1.1671E-05
80	84	2.4150E-05	.0000E+00	.0000E+00	.0000E+00	-1.5911E-05	8.2387E-06
81	85	2.2283E-02	.0000E+00	.0000E+00	.0000E+00	-2.0027E-02	2.2557E-03
82	86	1.5911E-05	.0000E+00	.0000E+00	.0000E+00	-1.4557E-05	1.3547E-06
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.3410E-02	.0000E+00	.0000E+00	.0000E+00	-1.1405E-02	2.0047E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	4.8213E-03	.0000E+00	.0000E+00	.0000E+00	-2.6792E-03	2.1422E-03

TOTAL	1.0207E+02	1.0057E+00	.0000E+00	.0000E+00	-1.0207E+02	1.0057E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	2.3519E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3519E-04
33	34	.0000E+00	.0000E+00	2.3167E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3167E-05
34	35	.0000E+00	.0000E+00	-4.1568E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1568E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-4.3651E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.3651E-05
38	39	.0000E+00	.0000E+00	-4.1786E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1786E-06
39	40	.0000E+00	.0000E+00	-1.2741E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2741E-04
40	41	.0000E+00	.0000E+00	4.2631E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2631E-05
41	42	.0000E+00	.0000E+00	-4.1733E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1733E-06
42	43	.0000E+00	.0000E+00	-1.7606E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7606E-06
43	44	.0000E+00	.0000E+00	1.7031E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7031E-05
44	45	.0000E+00	.0000E+00	2.4747E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4747E-06
45	46	.0000E+00	.0000E+00	1.3165E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3165E-05
46	47	.0000E+00	.0000E+00	4.2765E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2765E-06
47	48	.0000E+00	.0000E+00	-1.6841E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6841E-06
48	49	.0000E+00	.0000E+00	-4.1751E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1751E-06
49	50	.0000E+00	.0000E+00	3.8902E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8902E-05
50	51	.0000E+00	.0000E+00	-3.7987E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7987E-06
51	52	.0000E+00	.0000E+00	-6.6839E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.6839E-06
52	53	.0000E+00	.0000E+00	-1.3232E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3232E-04
53	54	.0000E+00	.0000E+00	-1.6613E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6613E-05
54	55	.0000E+00	.0000E+00	-6.5993E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5993E-06
55	56	.0000E+00	.0000E+00	-3.8434E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8434E-05
56	57	.0000E+00	.0000E+00	-3.0942E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.0942E-05
57	58	.0000E+00	.0000E+00	5.2884E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2884E-05
58	59	.0000E+00	.0000E+00	-1.2396E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2396E-05
59	60	.0000E+00	.0000E+00	1.8084E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8084E-05
60	61	.0000E+00	.0000E+00	-3.8117E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8117E-05
61	62	.0000E+00	.0000E+00	1.4103E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4103E-07
62	63	.0000E+00	.0000E+00	7.7130E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.7130E-05
63	64	.0000E+00	.0000E+00	1.5737E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5737E-04
64	65	.0000E+00	.0000E+00	4.2336E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2336E-06
65	66	.0000E+00	.0000E+00	-4.0272E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0272E-04
66	67	.0000E+00	.0000E+00	-4.7234E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.7234E-05
67	68	.0000E+00	.0000E+00	2.5951E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5951E-04
68	70	.0000E+00	.0000E+00	-1.9000E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9000E-05
69	71	.0000E+00	.0000E+00	6.7358E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.7358E-05
70	72	.0000E+00	.0000E+00	-2.0416E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0416E-04
71	73	.0000E+00	.0000E+00	2.6041E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6041E-05
72	74	.0000E+00	.0000E+00	-5.6141E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6141E-06
73	75	.0000E+00	.0000E+00	6.6062E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6062E-05
74	76	.0000E+00	.0000E+00	-1.6476E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6476E-05
75	77	.0000E+00	.0000E+00	-2.4881E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4881E-05
76	80	.0000E+00	.0000E+00	-1.1534E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1534E-05
77	81	.0000E+00	.0000E+00	1.4713E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4713E-04
78	82	.0000E+00	.0000E+00	-1.2151E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2151E-05
79	83	.0000E+00	.0000E+00	4.2466E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2466E-08
80	84	.0000E+00	.0000E+00	5.1867E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.1867E-06
81	85	.0000E+00	.0000E+00	2.4690E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4690E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.2563E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2563E-06
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	4.1323E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1323E-05

TOTAL .0000E+00 .0000E+00 1.1210E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.1210E-04
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4727E-02	.0000E+00	-1.4727E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.4727E-03	.0000E+00	-3.7352E-01	-1.2363E-03	-3.5129E-01
33	34	.0000E+00	.0000E+00	-2.0002E-04	.0000E+00	-2.0002E-04
34	35	.0000E+00	.0000E+00	-3.0777E-05	.0000E+00	-3.0777E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.5257E-06	.0000E+00	-1.5257E-06
37	38	9.5066E-05	.0000E+00	-6.7446E-03	-4.7533E-05	-6.6970E-03
38	39	.0000E+00	.0000E+00	-8.3518E-06	.0000E+00	-8.3518E-06
39	40	.0000E+00	.0000E+00	-5.1843E-02	.0000E+00	-5.1843E-02
40	41	.0000E+00	.0000E+00	-3.5752E-03	.0000E+00	-3.5752E-03
41	42	.0000E+00	.0000E+00	-2.6234E-06	.0000E+00	-2.6234E-06
42	43	.0000E+00	.0000E+00	-5.8065E-04	.0000E+00	-5.8065E-04
43	44	.0000E+00	.0000E+00	-1.1942E-03	.0000E+00	-1.1942E-03
44	45	.0000E+00	.0000E+00	-4.6986E-04	.0000E+00	-4.6986E-04
45	46	.0000E+00	.0000E+00	-2.8583E-03	.0000E+00	-2.8583E-03
46	47	.0000E+00	.0000E+00	-2.9522E-04	.0000E+00	-2.9522E-04
47	48	.0000E+00	.0000E+00	-5.7637E-05	.0000E+00	-5.7637E-05
48	49	.0000E+00	.0000E+00	-2.2864E-04	.0000E+00	-2.2864E-04
49	50	.0000E+00	.0000E+00	-2.4479E-03	.0000E+00	-2.4479E-03
50	51	.0000E+00	.0000E+00	-1.0444E-02	.0000E+00	-1.0444E-02
51	52	.0000E+00	.0000E+00	-5.9884E-04	.0000E+00	-5.9884E-04
52	53	.0000E+00	.0000E+00	-1.0300E-02	.0000E+00	-1.0300E-02
53	54	.0000E+00	.0000E+00	-7.4733E-05	.0000E+00	-7.4733E-05

54	55	.0000E+00	.0000E+00	-2.5920E-03	.0000E+00	.0000E+00	-2.5920E-03
55	56	.0000E+00	.0000E+00	-1.1185E-02	.0000E+00	.0000E+00	-1.1185E-02
56	57	.0000E+00	.0000E+00	-6.2091E-04	.0000E+00	.0000E+00	-6.2091E-04
57	58	.0000E+00	.0000E+00	-1.1320E-02	.0000E+00	.0000E+00	-1.1320E-02
58	59	.0000E+00	.0000E+00	-9.4462E-05	.0000E+00	.0000E+00	-9.4462E-05
59	60	.0000E+00	.0000E+00	-2.8544E-03	.0000E+00	.0000E+00	-2.8544E-03
60	61	.0000E+00	.0000E+00	-1.0514E-02	.0000E+00	.0000E+00	-1.0514E-02
61	62	.0000E+00	.0000E+00	-8.2533E-05	.0000E+00	.0000E+00	-8.2533E-05
62	63	.0000E+00	.0000E+00	-2.9637E-03	.0000E+00	.0000E+00	-2.9637E-03
63	64	.0000E+00	.0000E+00	-1.1009E-02	.0000E+00	.0000E+00	-1.1009E-02
64	65	.0000E+00	.0000E+00	-7.9530E-05	.0000E+00	.0000E+00	-7.9530E-05
65	66	.0000E+00	.0000E+00	-2.0115E-02	.0000E+00	.0000E+00	-2.0115E-02
66	67	.0000E+00	.0000E+00	-1.5223E-02	.0000E+00	.0000E+00	-1.5223E-02
67	68	.0000E+00	.0000E+00	-1.5493E-02	.0000E+00	.0000E+00	-1.5493E-02
68	70	.0000E+00	.0000E+00	-5.5093E-03	.0000E+00	.0000E+00	-5.5093E-03
69	71	.0000E+00	.0000E+00	-6.9271E-04	.0000E+00	.0000E+00	-6.9271E-04
70	72	5.7567E-05	.0000E+00	-2.1716E-02	-2.8784E-05	.0000E+00	-2.1687E-02
71	73	3.0861E-05	.0000E+00	-5.4610E-03	-1.5431E-05	.0000E+00	-5.4456E-03
72	74	.0000E+00	.0000E+00	-7.1496E-04	.0000E+00	.0000E+00	-7.1496E-04
73	75	.0000E+00	.0000E+00	-2.1844E-02	.0000E+00	.0000E+00	-2.1844E-02
74	76	.0000E+00	.0000E+00	-1.5770E-04	.0000E+00	.0000E+00	-1.5770E-04
75	77	.0000E+00	.0000E+00	-1.9995E-04	.0000E+00	.0000E+00	-1.9995E-04
76	80	.0000E+00	.0000E+00	-1.1180E-05	.0000E+00	.0000E+00	-1.1180E-05
77	81	.0000E+00	.0000E+00	-8.2787E-03	.0000E+00	.0000E+00	-8.2787E-03
78	82	.0000E+00	.0000E+00	-4.4343E-04	.0000E+00	.0000E+00	-4.4343E-04
79	83	.0000E+00	.0000E+00	-1.1713E-05	.0000E+00	.0000E+00	-1.1713E-05
80	84	.0000E+00	.0000E+00	-1.3425E-05	.0000E+00	.0000E+00	-1.3425E-05
81	85	.0000E+00	.0000E+00	-2.2804E-03	.0000E+00	.0000E+00	-2.2804E-03
82	86	.0000E+00	.0000E+00	-1.3547E-06	.0000E+00	.0000E+00	-1.3547E-06
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.0024E-03	.0000E+00	.0000E+00	-2.0024E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.1835E-03	.0000E+00	.0000E+00	-2.1835E-03

TOTAL 2.6562E-03 .0000E+00 -6.5587E-01 -1.3281E-03 -3.5129E-01 -1.0058E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	301145 16915	3.1653E+00 2.0319E-01	1.4643E-02 8.4781E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7096E-01 2.3926E-04 2.8704E-05 1.8626E-06 4.6278E-07 3.0867E-05 2.1199E-06 5.8431E-10 6.9448E-05 4.4265E-03 9.9090E-04 3.2088E-01 7.7433E-05 1.3461E-05 1.5156E-03 4.3508E-04 1.6090E-04 5.2259E-05 1.0416E-04 1.8867E-07 5.8619E-06 1.9969E-08	99295 523 81 969 40 119 612 0 119 23005 880 149741 180 54 15836 3163 1930 131 775 14 29 0	1.4477E+00 6.7438E-03 1.0431E-03 1.0502E-02 4.6009E-04 1.3766E-03 6.5541E-03 .0000E+00 1.5580E-03 4.4579E-01 1.2676E-02 2.1887E+00 2.3346E-03 6.7572E-04 3.1665E-01 4.1780E-02 3.9035E-02 1.9185E-03 9.4540E-03 3.2920E-04 4.1388E-04 .0000E+00	1.1998E-03 5.8828E-03 8.7984E-04 1.0414E-02 4.5259E-04 1.2081E-03 6.5317E-03 .0000E+00 1.0733E-03 3.9498E-02 4.3942E-03 1.8856E-01 1.8341E-03 4.7842E-04 5.8431E-02 3.6815E-02 5.5043E-03 1.3543E-03 8.6208E-03 2.9314E-05 3.6307E-04 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.0792E-05 1.9519E-01 1.8524E-04 2.0636E-02 1.9248E-05 2.8652E-05 1.1948E-01 1.6844E-04 1.5339E-02 1.1028E-05 7.8093E-05 1.4315E-04 1.8053E-08 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.4536E-05 .0000E+00 1.2118E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	4 1 3 967 10	2.8228E-05 6.4154E-06 2.1380E-05 1.0114E-02 9.0009E-05	1.1569E-09 1.5891E-06 3.0476E-06 1.8920E-04 6.1785E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	638 33	5.2888E-03 2.9514E-04	3.0766E-05 1.0396E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	16	2.6218E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	31 1	2.8279E-04 1.0957E-05	1.5253E-06 4.1319E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	190 85 233 49959 495	2.6542E-03 1.1756E-03 3.2382E-03 7.4377E-01 7.4139E-03	5.0746E-07 9.8108E-05 1.5697E-04 6.3222E-03 1.6684E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 3.3666E-05 1.3867E-05
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	188 7	1.5019E-03 6.4305E-05	8.3503E-06 1.5081E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1334638 117720	1.7356E+01 1.7023E+00	5.0461E-02 1.3823E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C	6.6667E-01	82192	1.0740E+00	3.5131E-03	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	6779	9.8064E-02	6.2019E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	74	5.2502E-04	2.6230E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	9.8171E-06	3.9254E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	11	1.6211E-04	5.5318E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	6	8.9582E-05	1.8392E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	16	2.4253E-04	1.2301E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3482	5.1858E-02	5.4770E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	29	3.9812E-04	1.8809E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	27778	3.6228E-01	1.1748E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2332	3.3758E-02	1.9366E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	7	8.1471E-05	9.5885E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	7	1.0450E-04	1.0815E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	20	2.7613E-04	1.2622E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3065	4.5397E-02	4.2848E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	41	5.6920E-04	1.7942E-05	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	67004	8.7571E-01	2.7997E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5539	7.9983E-02	5.8595E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	6764	9.1201E-02	2.8977E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	566	8.3334E-03	5.4491E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	1	8.7562E-06	7.5804E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	2	2.6841E-05	5.3068E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	2	2.9432E-05	1.6117E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	300	4.4350E-03	4.8326E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	5	8.0272E-05	2.3913E-06	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	5568	7.4417E-02	2.1793E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	519	7.5764E-03	1.0706E-05	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	60627	7.1529E-01	2.4157E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4604	6.2807E-02	3.2158E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	8	8.5723E-05	2.6118E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.6961E-04	3.2526E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.2921E-04	8.0113E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.5603E-05	6.4740E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.9327E-05	4.0141E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1423	1.8700E-02	1.7895E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	470	6.5081E-03	1.0403E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7787	9.5788E-02	5.4559E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2340	2.8724E-02	1.8169E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	1.9409E-03	2.9591E-04	.0000E+00	.0000E+00
51	52	13027.50C	9.9949E-01	2391	3.4660E-02	5.9512E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	3	4.7032E-05	3.7201E-06	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	10	1.5579E-04	7.4124E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	4.7263E-04	2.7790E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	68	9.5973E-04	1.3158E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.9206E-05	9.1240E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.3437E-05	9.9625E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1430	1.8618E-02	1.9025E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	464	6.4874E-03	9.8314E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7585	9.1543E-02	5.3576E-03	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	2292	2.8070E-02	1.8035E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	130	1.7704E-03	2.1081E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1481	1.3986E-02	7.4714E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	73	7.5859E-04	1.9789E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	64480	7.5519E-01	2.5626E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4684	6.3855E-02	2.9453E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	12	1.6987E-04	1.7819E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	4.3281E-04	2.4123E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	6.1734E-04	6.9191E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.8371E-05	7.9261E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.4896E-05	1.9782E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1559	2.0327E-02	2.0865E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	567	7.9708E-03	1.1327E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8110	9.7863E-02	5.8459E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2431	2.9888E-02	1.8540E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	2.1355E-03	2.3245E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2490	3.5891E-02	6.1199E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	6	6.2347E-05	8.9262E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	9	1.1742E-04	1.3058E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	5.6136E-04	1.9985E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	7.1013E-04	8.0683E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.2483E-05	1.4472E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1492	1.8698E-02	2.1660E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	502	7.0972E-03	9.9640E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7972	9.5000E-02	5.9423E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2423	2.9210E-02	1.9052E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	156	2.1175E-03	2.8032E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1908	1.6452E-02	9.4433E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	92	8.0067E-04	2.8614E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	83543	1.0349E+00	2.7831E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7300	1.0313E-01	7.1274E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	15	2.0995E-04	8.7741E-07	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	5.9843E-04	1.2511E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	76	1.1409E-03	8.6391E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.2804E-05	9.4004E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	5.2973E-05	7.9344E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2146	2.9261E-02	1.9110E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	808	1.1827E-02	9.7435E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10952	1.4077E-01	5.5085E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3201	4.1369E-02	1.7045E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	217	3.0843E-03	3.9215E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1795	1.5495E-02	8.2505E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	107	9.4046E-04	2.8837E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	84977	1.0507E+00	2.8981E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7318	1.0278E-01	6.5618E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	4	4.3584E-05	9.6166E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	6.4785E-04	2.7987E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	94	1.3675E-03	1.1716E-05	.0000E+00	.0000E+00

		15031.50C	8.1237E-04	8	9.8251E-05	6.9035E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.8082E-05	2.0170E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2145	2.9338E-02	1.9968E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	760	1.1037E-02	9.9945E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11060	1.4101E-01	5.6671E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3293	4.2610E-02	1.8816E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	239	3.3466E-03	4.2327E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1664	1.4695E-02	7.9508E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	83	7.2050E-04	2.1818E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	410722	3.7595E+00	2.0045E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20062	2.0398E-01	6.9947E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	7	9.5507E-05	1.8553E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	5.4021E-04	4.0906E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	65	7.5814E-04	1.8710E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	3.2645E-05	6.5559E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6316E-05	4.2701E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1632	1.7930E-02	2.8644E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	406	5.0402E-03	1.2391E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9587	9.9010E-02	8.1010E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2812	2.9557E-02	2.6205E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	167	1.9483E-03	3.3773E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	13	1.4906E-04	2.8662E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	4.2927E-04	3.6214E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	6.9731E-04	1.1822E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.4105E-05	5.3715E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	4.0784E-05	3.5286E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1652	1.8449E-02	2.8129E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	478	6.1167E-03	1.3064E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9805	1.0173E-01	8.4359E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2832	2.9751E-02	2.6194E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	1.7679E-03	2.6642E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	9	1.1255E-04	7.3615E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	30	3.7309E-04	1.3504E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	8.7698E-04	7.8059E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	8.1340E-05	1.6442E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.6697E-05	1.5030E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1344	1.8250E-02	9.5291E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	479	6.7797E-03	5.4877E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6961	8.7987E-02	2.7831E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2078	2.6747E-02	9.0149E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	2.2638E-03	2.9857E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6256	9.3168E-02	6.8383E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	8.5815E-05	8.8791E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	40	5.6005E-04	2.5353E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	204	2.5485E-03	5.0091E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	301	4.4064E-03	1.8045E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.6121E-04	2.6811E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0272E-04	4.1480E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7089	9.6870E-02	3.8608E-03	.0000E+00	1.5262E-05
		25055.50C	2.0356E-02	2389	3.4217E-02	1.8822E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35297	4.4293E-01	1.1098E-02	.0000E+00	1.3522E-05
		28000.50C	1.1433E-01	10852	1.3827E-01	3.6488E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	838	1.1799E-02	1.1509E-03	.0000E+00	.0000E+00

71	73	6000.50C	1.3966E-03	8	1.1196E-04	1.3554E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.6607E-04	1.7673E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	62	8.9768E-04	8.8138E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.0350E-05	7.1858E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6992E-05	7.5501E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1419	1.9445E-02	1.0111E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	479	6.8800E-03	5.4079E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6920	8.7600E-02	2.7311E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2148	2.7715E-02	8.8054E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	148	2.0919E-03	2.6947E-04	.0000E+00	1.5431E-05
72	74	13027.50C	9.9949E-01	6317	9.4121E-02	7.0846E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.5845E-04	6.4988E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	38	5.3681E-04	2.1351E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	179	2.2997E-03	6.4424E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	276	4.0189E-03	1.5362E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	11	1.7074E-04	4.1132E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	6.5640E-05	2.6468E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7099	9.7265E-02	3.8700E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2373	3.3908E-02	2.1212E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34482	4.3461E-01	1.0909E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10750	1.3780E-01	3.7044E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	835	1.1898E-02	1.1561E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3217	2.8592E-02	1.5766E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	130	1.3277E-03	3.6363E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3926	3.5463E-02	1.9989E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	188	1.8605E-03	5.7770E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1	4.6114E-06	1.1298E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11	6.7914E-05	8.5179E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1	8.8884E-06	1.4381E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1	1.6011E-05	9.4580E-08	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	8	6.5772E-05	1.8501E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	31	3.4079E-04	2.0011E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	31	3.7674E-04	6.1577E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.8668E-05	5.4554E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5463E-05	2.1863E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1174	1.3508E-02	1.5315E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	379	4.9397E-03	8.4514E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6871	7.3434E-02	4.3523E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2052	2.2289E-02	1.3356E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	109	1.3008E-03	1.8731E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	12106	1.2718E-01	4.3511E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	855	1.0565E-02	8.3241E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	300	2.1192E-03	1.1710E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	13	9.8410E-05	2.8893E-09	.0000E+00	.0000E+00

80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1	5.7775E-06	1.5654E-06	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	4	3.0444E-05	3.6959E-06	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	11	6.5238E-05	8.1642E-06	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	7.2712E-05	8.7855E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	5	7.6832E-05	1.2088E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	15	2.0602E-04	1.2793E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	32	4.1705E-04	3.6029E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	602	7.8543E-03	4.0240E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	114	1.6056E-03	1.1039E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1180	1.4057E-02	4.4708E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2711	3.2527E-02	1.0838E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	93	1.1793E-03	7.0033E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	65	8.4905E-04	1.2938E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	41	3.6669E-04	1.3547E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	2.8708E-05	7.0331E-11	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	45	5.4223E-04	1.9163E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	16	2.0010E-04	1.7507E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	1	1.1369E-05	4.0106E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	4.5478E-05	2.2427E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	169	2.2688E-03	1.3544E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8225	9.4799E-02	1.8650E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	48034	3.9813E-01	2.1822E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2279	2.0615E-02	1.3005E-06	.0000E+00	.0000E+00
TOTAL				3451166	4.2752E+01	6.5587E-01	3.5129E-01	1.3281E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE								
			TOTAL COLLISIONS		COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C	2604841		3.0975E+01	1.0717E-01	.0000E+00	.0000E+00
		2004.50C	16		2.6218E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C	232		3.0290E-03	1.1127E-06	.0000E+00	.0000E+00
		7014.50C	833		1.0180E-02	3.8775E-04	.0000E+00	.0000E+00
		8016.50C	297712		4.1585E+00	3.1018E-03	.0000E+00	.0000E+00
		13027.50C	17459		2.5792E-01	2.5994E-03	.0000E+00	.0000E+00
		14000.50C	1260		1.7863E-02	1.4626E-04	.0000E+00	.0000E+00

15031.50C	93	1.2271E-03	1.1842E-05	.0000E+00	.0000E+00
16032.50C	35	5.0880E-04	2.0672E-05	.0000E+00	.0000E+00
22000.50C	32	4.1705E-04	3.6029E-05	.0000E+00	.0000E+00
24000.50C	32309	4.2593E-01	2.9279E-02	.0000E+00	1.5262E-05
25055.50C	10837	1.5268E-01	1.4856E-02	.0000E+00	.0000E+00
26000.55C	173083	2.1020E+00	8.4699E-02	.0000E+00	1.3522E-05
28000.50C	52227	6.4460E-01	2.7770E-02	.0000E+00	.0000E+00
29000.50C	121	1.5329E-03	9.8058E-05	.0000E+00	.0000E+00
40000.50C	57773	8.5558E-01	7.5359E-03	.0000E+00	3.3666E-05
42000.50C	3522	4.8330E-02	5.6309E-03	.0000E+00	1.5431E-05
45103.50C	523	6.7438E-03	5.8828E-03	.0000E+00	.0000E+00
47109.50C	81	1.0431E-03	8.7984E-04	.0000E+00	.0000E+00
50000.35C	580	8.5515E-03	2.1216E-04	.0000E+00	1.3867E-05
62149.50C	969	1.0502E-02	1.0414E-02	.0000E+00	.0000E+00
63151.55C	40	4.6009E-04	4.5259E-04	.0000E+00	.0000E+00
63153.55C	119	1.3766E-03	1.2081E-03	.0000E+00	.0000E+00
64155.50C	612	6.5541E-03	6.5317E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	119	1.5580E-03	1.0733E-03	2.0792E-05	.0000E+00
92235.50C	23005	4.4579E-01	3.9498E-02	1.9519E-01	2.4536E-05
92236.50C	880	1.2676E-02	4.3942E-03	1.8524E-04	.0000E+00
92238.50C	149741	2.1887E+00	1.8856E-01	2.0636E-02	1.2118E-03
93237.55C	180	2.3346E-03	1.8341E-03	1.9248E-05	.0000E+00
94238.50C	54	6.7572E-04	4.7842E-04	2.8652E-05	.0000E+00
94239.55C	15836	3.1665E-01	5.8431E-02	1.1948E-01	.0000E+00
94240.50C	3163	4.1780E-02	3.6815E-02	1.6844E-04	.0000E+00
94241.50C	1930	3.9035E-02	5.5043E-03	1.5339E-02	.0000E+00
94242.50C	131	1.9185E-03	1.3543E-03	1.1028E-05	.0000E+00
95241.50C	775	9.4540E-03	8.6208E-03	7.8093E-05	.0000E+00
95242.50C	14	3.2920E-04	2.9314E-05	1.4315E-04	.0000E+00
95243.50C	29	4.1388E-04	3.6307E-04	1.8053E-08	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59658 CTM = 117.87

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 117.98 MINUTES

MCNP VERSION 4A-B 10/04/91

02/16/95 17:48:57

PROBID = 02/16/95 15:27:54

1MCNP VERSION 4A-B LD=10/04/91

02/16/95 17:48:57

INP=mpc12d OUTP=mpc12d.o

PROBID = 02/16/95 17:48:57

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/50 year (mpc12d)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP -.00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1191-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1    1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1   LWTR.01T
330- C      3.00%/20 GWD/50 YEAR -- UO2
331- M2    8016.50C 4.7766E-02
332-      45103.50C 1.7033E-05
333-      47109.50C 2.0435E-06
334-      62149.50C 1.3260E-07
335-      63151.55C 1.4087E-07
336-      63153.55C 2.1975E-06
337-      64155.50C 1.9984E-07
338-      92233.50C 1.1801E-10
339-      92234.50C 5.2091E-06
340-      92235.50C 3.1537E-04
341-      92236.50C 7.0664E-05
342-      92238.50C 2.2844E-02
343-      93237.55C 6.3741E-06
344-      94238.50C 7.0021E-07
345-      94239.55C 1.0776E-04
346-      94240.50C 3.0879E-05
347-      94241.50C 1.6699E-06
348-      94242.50C 3.7204E-06
349-      95241.50C 1.6338E-05
350-      95242.50C 1.1192E-08
351-      95243.50C 4.1591E-07
352-      96245.35C 1.4167E-09
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3    2004.50C 1.0
355- C      ZIRCALOY-4
356- M4    8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
1 INITIAL SOURCE FROM FILE SRCTP

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INITIAL GUESS FOR K(EFF.)          1.000000
CYCLES TO SKIP BEFORE TALLYING      5
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PRINT TABLE 40

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
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1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B)	DATA SETS:	WTR.01T						
2	8016,	.67096	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00000	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00007	92235,	.00443	92236,	.00099	92238,	.32088
	93237,	.00009	94238,	.00001	94239,	.00151	94240,	.00043
	94241,	.00002	94242,	.00005	95241,	.00023	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00019	92235,	.01170	92236,	.00263	92238,	.85819
	93237,	.00024	94238,	.00003	94239,	.00407	94240,	.00117
	94241,	.00006	94242,	.00014	95241,	.00062	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11910E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11910E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
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26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
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37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
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49	2.5300E-08
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52	2.5300E-08
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56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE	LENGTH
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TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

(1314)	79/06/21.
(1340)	79/07/31.
(1394)	79/10/17.
(1396)	79/08/30.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

(1310) 11/01/85
 (1373) 11/01/85
 TOTAL NU (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/50 year (mpc12d)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-1.887E-01	-7.836E-02	1.629E+02	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.977E-01	2.436E+00
2	-1.862E-01	-3.336E-01	1.187E+02	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.977E-01	2.274E+00
3	-2.019E-02	-1.170E-01	1.324E+02	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.977E-01	8.945E-01
4	4.024E-01	2.125E-01	1.212E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.977E-01	3.197E-01
5	-1.009E-01	-4.483E-01	1.335E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.977E-01	7.117E-01
6	-3.835E-01	-9.021E-02	1.348E+02	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.977E-01	5.748E+00
7	4.095E-01	1.658E-01	1.499E+02	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.977E-01	2.464E+00
8	2.044E-01	-4.142E-01	4.433E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.977E-01	4.299E+00
9	-4.212E-01	-7.536E-03	4.841E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.977E-01	2.730E-01
10	-4.231E-01	1.513E-01	4.824E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.977E-01	1.185E+00
11	1.337E-01	-3.592E-01	5.124E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.977E-01	9.511E-01
12	-3.582E-01	-1.800E-01	3.310E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.977E-01	5.738E-01
13	-1.722E-01	1.043E-01	3.354E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.977E-01	3.767E+00
14	-2.700E-01	1.518E-01	3.687E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.977E-01	1.091E-01
15	8.847E-02	4.479E-01	2.749E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.977E-01	2.397E+00
16	-2.494E-01	-3.393E-01	2.218E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.977E-01	3.323E+00
17	7.596E-02	-9.981E-02	4.787E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.977E-01	1.592E+00
18	3.579E-02	-3.464E-01	5.510E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.977E-01	5.743E-01
19	-2.253E-01	-1.684E-01	6.618E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.977E-01	2.149E+00
20	-3.488E-01	7.383E-02	6.348E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.977E-01	3.270E+00
21	-5.869E-02	-3.641E-01	6.173E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.977E-01	2.302E+00
22	3.172E-01	1.647E-01	1.059E+02	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.977E-01	5.805E+00
23	-3.016E-01	2.659E-01	1.025E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.977E-01	2.100E-01
24	3.170E-02	1.944E-02	9.800E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.977E-01	1.837E+00
25	1.172E-01	2.780E-01	9.775E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.977E-01	2.254E+00
26	3.015E-01	-2.521E-03	8.977E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.977E-01	9.928E+00
27	3.051E-01	-1.078E-03	8.977E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.977E-01	1.038E+00
28	-2.348E-01	-1.483E-01	8.231E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.977E-01	9.402E-01
29	1.138E-01	-3.155E-01	8.022E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.977E-01	5.92E-01
30	3.100E-01	1.447E-01	7.680E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.977E-01	2.709E+00
31	-4.130E-02	-2.457E-01	1.257E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.977E-01	1.933E+00
32	2.528E-01	-3.331E-02	1.107E+02	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.977E-01	8.753E-01
33	1.095E-02	-3.524E-01	9.399E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.977E-01	1.207E+00
34	-1.520E-01	4.154E-02	1.127E+02	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.977E-01	2.439E+00
35	-2.152E-01	-1.709E-01	1.186E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.977E-01	4.702E+00
36	2.101E-01	4.082E-01	1.586E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.977E-01	8.451E-02
37	-1.508E-01	-1.607E-01	1.590E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.977E-01	2.374E-01
38	-1.960E-01	3.295E-02	1.373E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.977E-01	2.812E+00
39	9.098E-02	1.503E-01	1.378E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.977E-01	1.910E+00
40	1.705E-01	2.387E-01	1.380E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.977E-01	5.210E+00
41	3.330E-03	2.426E-01	1.459E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.977E-01	1.336E+00
42	8.150E-02	-1.311E-01	1.461E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.977E-01	3.335E-01
43	1.874E-01	-4.239E-01	1.271E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.977E-01	1.724E+00
44	1.355E-02	-1.753E-01	1.341E+02	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.977E-01	1.513E+00
45	-7.146E-02	-3.218E-01	1.384E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.977E-01	4.654E+00
46	-3.342E-01	9.828E-02	1.390E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.977E-01	4.335E+00
47	9.447E-02	-3.590E-01	1.344E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.977E-01	5.569E+00
48	-2.683E-01	-3.250E-01	1.361E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.977E-01	1.212E+00
49	6.432E-02	2.354E-01	1.539E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.977E-01	6.368E+00

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50 -1.106E-01 3.909E-01 1.535E+02 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.977E-01 1.409E+00

CYCLE 1 K(COLLISION) .880859 REMOVAL LIFETIME(ABS) 3.2929E+03 SOURCE POINTS GENERATED 2645
CYCLE 2 K(COLLISION) .879326 REMOVAL LIFETIME(ABS) 3.1256E+03 SOURCE POINTS GENERATED 2935
CYCLE 3 K(COLLISION) .885582 REMOVAL LIFETIME(ABS) 3.2685E+03 SOURCE POINTS GENERATED 3023
CYCLE 4 K(COLLISION) .903100 REMOVAL LIFETIME(ABS) 3.1486E+03 SOURCE POINTS GENERATED 3087
CYCLE 5 K(COLLISION) .890298 REMOVAL LIFETIME(ABS) 3.2917E+03 SOURCE POINTS GENERATED 3021
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .876674 REMOVAL LIFETIME(ABS) 3.4233E+03 SOURCE POINTS GENERATED 2949
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6
ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .849647 .863160 .0157 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .886609 .880410 .0070 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .843215 .866892 .0273 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.2322E+03 3.3384E+03 .0318
REM LIFE(ABS) 3.2480E+03 3.3357E+03 .0263 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
SOURCE POINTS GENERATED 2842
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7
ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .885601 .870641 .0124 K(COL/ABS) .876840 .0062 .880773 .0066 -.1720
K(ABSORPTION) .888297 .883039 .0050 K(ABS/TK LN) .876636 .0067 .880467 .0047 -.6423
K(TRK LENGTH) .876915 .870233 .0162 K(TK LN/COL) .870437 .0138 .870758 .0172 .8655
REM LIFE(COL) 3.2650E+03 3.3139E+03 .0199
REM LIFE(ABS) 3.2711E+03 3.3141E+03 .0166 LIFE(COL/ABS) 3.3140E+03 .0183 3.3152E+03 .0031 .9997
SOURCE POINTS GENERATED 3172
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8
ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .890048 .875492 .0103 K(COL/ABS) .882525 .0078 .885151 .0102 .4198
K(ABSORPTION) .909109 .889557 .0081 K(ABS/TK LN) .882199 .0079 .885473 .0093 .1256
K(TRK LENGTH) .888667 .874842 .0125 K(TK LN/COL) .875167 .0111 .875649 .0126 .8883
REM LIFE(COL) 3.2421E+03 3.2960E+03 .0152 K(COL/ABS/TK LN) .879964 .0085 .887069 .0175
REM LIFE(ABS) 3.2812E+03 3.3059E+03 .0120 LIFE(COL/ABS) 3.3009E+03 .0136 3.3302E+03 .0095 .9873
SOURCE POINTS GENERATED 3014
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9
ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .903482 .881090 .0102 K(COL/ABS) .888246 .0088 .890490 .0111 .6774
K(ABSORPTION) .918782 .895402 .0090 K(ABS/TK LN) .888296 .0091 .891923 .0106 .5018
K(TRK LENGTH) .906582 .881190 .0120 K(TK LN/COL) .881140 .0109 .881041 .0115 .9295
REM LIFE(COL) 3.2412E+03 3.2850E+03 .0123 K(COL/ABS/TK LN) .885894 .0094 .890963 .0193
REM LIFE(ABS) 3.2384E+03 3.2924E+03 .0102 LIFE(COL/ABS) 3.2887E+03 .0112 3.3068E+03 .0097 .9793
SOURCE POINTS GENERATED 3035
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10
ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .875957 .880235 .0084 K(COL/ABS) .887936 .0072 .890422 .0088 .6683

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K(ABSORPTION) .896811 .895637 .0074
 K(TRK LENGTH) .865129 .878513 .0103
 REM LIFE(COL) 3.1529E+03 3.2630E+03 .0121
 REM LIFE(ABS) 3.1373E+03 3.2666E+03 .0115
 SOURCE POINTS GENERATED 2870

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .907791 .884171 .0083
 K(ABSORPTION) .903536 .896765 .0064
 K(TRK LENGTH) .893441 .880646 .0090
 REM LIFE(COL) 3.2177E+03 3.2565E+03 .0105
 REM LIFE(ABS) 3.2482E+03 3.2639E+03 .0098
 SOURCE POINTS GENERATED 3152

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .902291 .886436 .0076
 K(ABSORPTION) .901010 .897296 .0055
 K(TRK LENGTH) .899106 .882953 .0082
 REM LIFE(COL) 3.2621E+03 3.2572E+03 .0091
 REM LIFE(ABS) 3.2623E+03 3.2637E+03 .0085
 SOURCE POINTS GENERATED 3020

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .887980 .886608 .0067
 K(ABSORPTION) .888361 .896303 .0050
 K(TRK LENGTH) .884648 .883142 .0073
 REM LIFE(COL) 3.2099E+03 3.2520E+03 .0082
 REM LIFE(ABS) 3.2414E+03 3.2612E+03 .0075
 SOURCE POINTS GENERATED 2954

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .903688 .888316 .0063
 K(ABSORPTION) .896469 .896320 .0045
 K(TRK LENGTH) .908283 .885656 .0071
 REM LIFE(COL) 3.1658E+03 3.2434E+03 .0078
 REM LIFE(ABS) 3.1612E+03 3.2512E+03 .0074
 SOURCE POINTS GENERATED 3058

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .908855 .890183 .0061
 K(ABSORPTION) .893938 .896103 .0041
 K(TRK LENGTH) .901102 .887060 .0066
 REM LIFE(COL) 3.3123E+03 3.2496E+03 .0073
 REM LIFE(ABS) 3.2838E+03 3.2542E+03 .0068
 SOURCE POINTS GENERATED 3045

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .879556 .889297 .0056

K(ABS/TK LN) .887075 .0076 .891787 .0085 .4686
 K(TK LN/COL) .879374 .0092 .881075 .0091 .9163
 K(COL/ABS/TK LN) .884795 .0078 .890659 .0150
 LIFE(COL/ABS) 3.2648E+03 .0118 3.2679E+03 .0129 .9738

CYCLE = 11

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .890468 .0067 .894841 .0073 .6595
 K(ABS/TK LN) .888705 .0067 .893573 .0072 .4956
 K(TK LN/COL) .882408 .0084 .883585 .0092 .8896
 K(COL/ABS/TK LN) .887194 .0071 .893991 .0104
 LIFE(COL/ABS) 3.2602E+03 .0100 3.2672E+03 .0107 .9685

CYCLE = 12

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .891866 .0060 .896201 .0062 .6537
 K(ABS/TK LN) .890124 .0060 .895000 .0061 .5011
 K(TK LN/COL) .884695 .0077 .885891 .0083 .9012
 K(COL/ABS/TK LN) .888895 .0064 .895249 .0083
 LIFE(COL/ABS) 3.2605E+03 .0087 3.2666E+03 .0092 .9680

CYCLE = 13

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .891455 .0053 .894877 .0055 .6309
 K(ABS/TK LN) .889722 .0053 .893823 .0054 .4820
 K(TK LN/COL) .884875 .0068 .886066 .0073 .9013
 K(COL/ABS/TK LN) .888684 .0057 .893901 .0072
 LIFE(COL/ABS) 3.2566E+03 .0078 3.2659E+03 .0080 .9640

CYCLE = 14

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .892318 .0048 .895318 .0048 .6023
 K(ABS/TK LN) .890988 .0049 .894703 .0047 .4431
 K(TK LN/COL) .886986 .0065 .888474 .0067 .9085
 K(COL/ABS/TK LN) .890097 .0053 .894818 .0058
 LIFE(COL/ABS) 3.2473E+03 .0075 3.2525E+03 .0079 .9660

CYCLE = 15

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .893143 .0045 .895388 .0043 .5437
 K(ABS/TK LN) .891581 .0045 .894747 .0042 .4150
 K(TK LN/COL) .888621 .0062 .889898 .0065 .9107
 K(COL/ABS/TK LN) .891115 .0049 .894559 .0050
 LIFE(COL/ABS) 3.2519E+03 .0070 3.2557E+03 .0071 .9587

CYCLE = 16

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .892059 .0043 .894000 .0041 .5628

K(ABSORPTION)	.880706	.894820	.0040	K(ABS/TK LN)	.890659	.0043	.893292	.0041	.4227
K(TRK LENGTH)	.880323	.886499	.0060	K(TK LN/COL)	.887898	.0057	.888885	.0059	.9099
REM LIFE(COL)	3.2394E+03	3.2488E+03	.0067	K(COL/ABS/TK LN)	.890205	.0046	.893105	.0047	
REM LIFE(ABS)	3.2353E+03	3.2526E+03	.0062	LIFE(COL/ABS)	3.2507E+03	.0064	3.2538E+03	.0065	.9581
SOURCE POINTS GENERATED	2883								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.889628		.889323	.0052	K(COL/ABS)	.891008	.891525	.4691
K(ABSORPTION)		.867165		.892693	.0044	K(ABS/TK LN)	.890291	.891068	.1933
K(TRK LENGTH)		.904573		.887889	.0058	K(TK LN/COL)	.888606	.889185	.8772
REM LIFE(COL)		3.2324E+03		3.2475E+03	.0061	K(COL/ABS/TK LN)	.889968	.891068	
REM LIFE(ABS)		3.1945E+03		3.2482E+03	.0059	LIFE(COL/ABS)	3.2478E+03	3.2481E+03	.9443
SOURCE POINTS GENERATED		3069							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.906357		.890540	.0050	K(COL/ABS)	.892054	.892579	.5029
K(ABSORPTION)		.904948		.893568	.0042	K(ABS/TK LN)	.891118	.891897	.2235
K(TRK LENGTH)		.898783		.888667	.0054	K(TK LN/COL)	.889603	.890180	.8769
REM LIFE(COL)		3.2090E+03		3.2448E+03	.0058	K(COL/ABS/TK LN)	.890925	.891699	
REM LIFE(ABS)		3.1956E+03		3.2444E+03	.0056	LIFE(COL/ABS)	3.2446E+03	3.2445E+03	.9442
SOURCE POINTS GENERATED		3055							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.895377		.890862	.0047	K(COL/ABS)	.892576	.893116	.5067
K(ABSORPTION)		.904397		.894290	.0040	K(ABS/TK LN)	.891751	.892535	.2419
K(TRK LENGTH)		.896837		.889212	.0051	K(TK LN/COL)	.890037	.890574	.8772
REM LIFE(COL)		3.1805E+03		3.2405E+03	.0055	K(COL/ABS/TK LN)	.891455	.892479	
REM LIFE(ABS)		3.2047E+03		3.2417E+03	.0053	LIFE(COL/ABS)	3.2411E+03	3.2417E+03	.9429
SOURCE POINTS GENERATED		2944							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/50 year (mpc12d)

PROBID = 02/16/95 19:45:07
02/16/95 17:48:57

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59836	1.0027E+00	2.0656E+00	ESCAPE	1	1.1056E-05	2.7815E-13
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.5792E-02	4.4390E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59916	6.6093E-02	4.9222E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2633E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	161	2.0723E-03	1.5986E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9565E+00
				CAPTURE	0	6.6159E-01	3.1951E-02
				LOSS TO (N,XN)	80	1.0313E-03	8.8528E-03
				LOSS TO FISSION	0	3.4188E-01	6.9840E-02

TOTAL	59997	1.0706E+00	2.0672E+00	TOTAL	59997	1.0706E+00	2.0672E+00
NUMBER OF NEUTRONS BANKED	81			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0027E+00			ESCAPE	1.1064E+04	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.7548E+01			CAPTURE	3.2352E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3443449			CAPTURE OR ESCAPE	3.2353E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0010E+00	.0002		ANY TERMINATION	3.5805E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	115.87 MINUTES			MAXIMUM NUMBER EVER IN BANK	2		
COMPUTER TIME IN MCRUN	115.75 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.1694E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	41753340			MOST RANDOM NUMBERS USED WAS	7928	IN HISTORY	7105

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4578E-01 TO 1.1342E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25422	9429	3.1420E+00	1.2085E-04	3.8312E-01	7.2781E-01	1.1120E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	729563	59917	298444	4.1759E+00	7.1114E-04	7.4268E-01	8.7674E-01	2.5115E+00
33	34	5504	269	1080	1.0709E-02	4.7137E-05	2.2871E-01	5.9049E-01	4.3085E+00
34	35	219	24	591	4.9694E-03	2.6042E-05	2.0791E-01	5.2606E-01	6.1829E-01
35	36	1309919	59917	12	1.8181E-04	6.1620E-04	7.0648E-01	8.7228E-01	3.4932E+03
36	37	391	24	18	1.4331E-04	2.4103E-05	1.6496E-01	5.1273E-01	5.9385E-01
37	38	1419771	59917	50755	7.5104E-01	5.9169E-04	6.9315E-01	8.7171E-01	4.1129E+00
38	39	406	24	131	1.1248E-03	1.9998E-05	1.4595E-01	5.2931E-01	5.5993E-01
39	40	2267567	59917	1457907	1.9034E+01	5.1346E-04	6.5869E-01	8.6934E-01	1.6310E+00
40	41	56871	31089	90061	1.1803E+00	3.8073E-04	6.0121E-01	8.6678E-01	1.5297E+00
41	42	9	7	9	1.0452E-04	8.5730E-05	1.3583E-01	7.9609E-01	7.7092E-01
42	43	120255	32894	3688	5.4484E-02	4.0314E-04	6.1818E-01	8.6808E-01	4.1322E+00
43	44	134728	35241	29917	3.9296E-01	4.0754E-04	6.1856E-01	8.6836E-01	1.5576E+00
44	45	147175	36234	3229	4.7589E-02	4.1658E-04	6.2116E-01	8.6902E-01	4.1234E+00
45	46	179360	41321	71940	9.4204E-01	4.1799E-04	6.1852E-01	8.6908E-01	1.5616E+00
46	47	7210	3361	7845	1.0200E-01	3.8541E-04	6.2513E-01	8.6256E-01	1.5613E+00
47	48	9576	3669	330	4.8348E-03	4.3665E-04	6.5626E-01	8.6756E-01	4.1340E+00
48	49	12586	5081	6502	8.5301E-02	4.1734E-04	6.2833E-01	8.6670E-01	1.5767E+00
49	50	33497	15118	64999	7.7754E-01	3.5409E-04	5.6915E-01	8.2682E-01	1.4791E+00
50	51	33099	14325	12346	1.5238E-01	4.0615E-04	5.7941E-01	8.0759E-01	2.1058E+00
51	52	32725	13994	2425	3.5007E-02	4.1839E-04	5.8381E-01	8.0667E-01	9.0806E+00
52	53	32850	14048	12156	1.4857E-01	3.9023E-04	5.7017E-01	8.0164E-01	2.1065E+00
53	54	378	92	2545	2.3241E-02	3.7637E-05	1.8836E-01	5.9806E-01	7.1443E-01
54	55	34014	15083	67068	7.9773E-01	3.4378E-04	5.7266E-01	8.2254E-01	1.4808E+00
55	56	33815	14296	12512	1.5461E-01	3.8695E-04	5.7705E-01	8.0288E-01	2.0987E+00
56	57	33356	13965	2362	3.4010E-02	3.9067E-04	5.7880E-01	7.9981E-01	9.1086E+00
57	58	33429	14035	12442	1.5082E-01	3.7954E-04	5.6961E-01	7.9806E-01	2.0869E+00
58	59	230	65	1441	1.3176E-02	2.7929E-05	1.7733E-01	5.9339E-01	6.4292E-01
59	60	52357	18920	90518	1.1300E+00	4.8859E-04	5.7596E-01	8.4541E-01	1.5228E+00
60	61	52000	18023	17595	2.2878E-01	6.7594E-04	5.9880E-01	8.3770E-01	2.2756E+00
61	62	541	102	2541	2.1915E-02	2.2598E-05	1.1262E-01	5.6722E-01	6.0077E-01
62	63	52738	18979	92486	1.1499E+00	4.7822E-04	5.6040E-01	8.4261E-01	1.5021E+00
63	64	52046	17996	17919	2.3121E-01	6.6878E-04	5.7987E-01	8.3540E-01	2.2777E+00
64	65	482	104	2166	1.9206E-02	3.5858E-05	1.7937E-01	5.8611E-01	6.9636E-01
65	66	9916	4916	446692	4.0440E+00	5.5116E-05	2.6685E-01	6.0882E-01	8.5019E-01
66	67	9784	3824	14027	1.4890E-01	1.8445E-04	4.4561E-01	7.0273E-01	1.8019E+00
67	68	9736	3891	14585	1.5187E-01	1.7669E-04	4.4570E-01	6.9009E-01	1.8046E+00
68	70	33564	8948	11305	1.4619E-01	9.3680E-04	5.8325E-01	8.3774E-01	2.3799E+00
69	71	33562	8635	6183	9.1743E-02	1.0155E-03	5.8503E-01	8.3924E-01	8.8352E+00
70	72	18002	8438	55221	7.0743E-01	1.3159E-03	5.8597E-01	8.3600E-01	2.4962E+00
71	73	33671	9034	10933	1.4076E-01	9.5699E-04	6.0167E-01	8.3763E-01	2.3813E+00
72	74	33811	8708	6349	9.4035E-02	1.0466E-03	6.0002E-01	8.3556E-01	8.7884E+00
73	75	18155	8518	55651	7.1319E-01	1.3608E-03	6.0249E-01	8.3666E-01	2.5073E+00
74	76	205	59	4146	3.6389E-02	4.0184E-05	2.0800E-01	5.8688E-01	7.4943E-01
75	77	183	45	3244	2.5947E-02	3.3577E-05	1.5191E-01	5.2597E-01	6.9742E-01
76	80	20	8	49	4.9263E-04	3.5067E-04	6.9465E-01	6.9254E-01	2.2044E+00
77	81	3404	1491	10055	1.0667E-01	3.4182E-04	5.1433E-01	7.1394E-01	2.1353E+00
78	82	2091	865	11547	1.2011E-01	2.8229E-04	4.7018E-01	7.4395E-01	1.3391E+00
79	83	12	5	786	7.1294E-03	3.3256E-05	1.2969E-01	5.8690E-01	6.3971E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1655	681	4559	5.5100E-02	1.0661E-03	5.4954E-01	7.9768E-01	2.1960E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1051	455	9349	1.1153E-01	2.4780E-03	5.1995E-01	8.1719E-01	4.8175E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	368	222	44608	3.8708E-01	3.0130E-05	1.3406E-01	5.7082E-01	6.4370E-01

TOTAL 7113279 696223 3443449 4.2086E+01
1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

	CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3162E-01	-5.3162E-01
2	2	3.1908E-01	.0000E+00	.0000E+00	.0000E+00	-8.9352E-01	-5.7444E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5498E-02	-1.5498E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.2147E-02	-5.2147E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4529E-02	-1.4529E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4652E-01	-1.4652E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6555E+00	-1.6555E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0051E+00	-2.0051E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1218E-01	-2.1218E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1282E-01	-2.1282E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7961E-01	-3.7961E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8204E-01	-3.8204E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8325E-02	-7.8325E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9535E-02	-7.9535E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.6518E-02	-8.6518E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4207E-02	-7.4207E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2124E-02	-7.2124E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3929E-02	-7.3929E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6905E-02	-9.6905E-02
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0040E-01	-1.0040E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1535E-02	-9.1535E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3070E-02	-8.3070E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0751E-01	-1.0751E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1119E-01	-1.1119E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1547E-01	-1.1547E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1513E-01	-1.1513E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8931E-02	-9.8931E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0295E-02	-8.0295E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1214E-02	-9.1214E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0329E-01	-1.0329E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9021E+01	-1.9021E+01
32	33	9.7447E+00	1.0027E+00	.0000E+00	.0000E+00	-9.5321E+00	1.2153E+00
33	34	5.4829E-02	.0000E+00	.0000E+00	.0000E+00	-5.1828E-02	3.0001E-03
34	35	1.9384E-03	.0000E+00	.0000E+00	.0000E+00	-1.8064E-03	1.3196E-04
35	36	1.9105E+01	.0000E+00	.0000E+00	.0000E+00	-1.9094E+01	1.0854E-02
36	37	3.4028E-03	.0000E+00	.0000E+00	.0000E+00	-3.3946E-03	8.2134E-06
37	38	2.0701E+01	.0000E+00	.0000E+00	.0000E+00	-2.0624E+01	7.7873E-02
38	39	3.5422E-03	.0000E+00	.0000E+00	.0000E+00	-3.5221E-03	2.0059E-05
39	40	3.2998E+01	.0000E+00	.0000E+00	.0000E+00	-1.0840E+01	2.2157E+01
40	41	8.2666E-01	.0000E+00	.0000E+00	.0000E+00	-8.2306E-01	3.6012E-03
41	42	1.0747E-04	.0000E+00	.0000E+00	.0000E+00	-9.0622E-05	1.6851E-05
42	43	1.7446E+00	.0000E+00	.0000E+00	.0000E+00	-1.7441E+00	5.2558E-04
43	44	1.9555E+00	.0000E+00	.0000E+00	.0000E+00	-1.9544E+00	1.1463E-03
44	45	2.1369E+00	.0000E+00	.0000E+00	.0000E+00	-2.1364E+00	4.7640E-04
45	46	2.6084E+00	.0000E+00	.0000E+00	.0000E+00	-1.1039E+00	1.5045E+00
46	47	1.0435E-01	.0000E+00	.0000E+00	.0000E+00	-6.2981E-02	4.1368E-02
47	48	1.3861E-01	.0000E+00	.0000E+00	.0000E+00	-1.3372E-01	4.8909E-03
48	49	1.8296E-01	.0000E+00	.0000E+00	.0000E+00	-7.0770E-02	1.1219E-01
49	50	4.6455E-01	.0000E+00	.0000E+00	.0000E+00	-2.6024E-01	2.0431E-01
50	51	4.5242E-01	.0000E+00	.0000E+00	.0000E+00	-4.3706E-01	1.5359E-02
51	52	4.4369E-01	.0000E+00	.0000E+00	.0000E+00	-4.3793E-01	5.7651E-03
52	53	4.4498E-01	.0000E+00	.0000E+00	.0000E+00	-1.8661E-01	2.5837E-01
53	54	3.9214E-03	.0000E+00	.0000E+00	.0000E+00	-2.2329E-04	3.6981E-03
54	55	4.6953E-01	.0000E+00	.0000E+00	.0000E+00	-2.6432E-01	2.0521E-01
55	56	4.5904E-01	.0000E+00	.0000E+00	.0000E+00	-4.4306E-01	1.5985E-02
56	57	4.4873E-01	.0000E+00	.0000E+00	.0000E+00	-4.4303E-01	5.6975E-03
57	58	4.4969E-01	.0000E+00	.0000E+00	.0000E+00	-1.8825E-01	2.6144E-01

TOTAL	1.0210E+02	1.0027E+00	.0000E+00	.0000E+00	-1.0210E+02	1.0027E+00
1 NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	.0000E+00	.0000E+00	2.6827E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6827E-04
34	35	.0000E+00	.0000E+00	1.0791E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0791E-05
35	36	.0000E+00	.0000E+00	-1.2483E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2483E-05
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	4.1856E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1856E-06
38	39	.0000E+00	.0000E+00	4.8352E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8352E-05
39	40	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
40	41	.0000E+00	.0000E+00	-1.8175E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8175E-04
41	42	.0000E+00	.0000E+00	6.3622E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.3622E-07
42	43	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
43	44	.0000E+00	.0000E+00	-7.7927E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7927E-06
44	45	.0000E+00	.0000E+00	8.5706E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5706E-06
45	46	.0000E+00	.0000E+00	8.7372E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7372E-06
46	47	.0000E+00	.0000E+00	-3.4915E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4915E-06
47	48	.0000E+00	.0000E+00	2.0975E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0975E-05
48	49	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
49	50	.0000E+00	.0000E+00	-4.1039E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1039E-06
50	51	.0000E+00	.0000E+00	-3.6433E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6433E-05
51	52	.0000E+00	.0000E+00	-1.5810E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5810E-04
52	53	.0000E+00	.0000E+00	9.8582E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.8582E-06
53	54	.0000E+00	.0000E+00	-1.0642E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0642E-04
54	55	.0000E+00	.0000E+00	8.4752E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4752E-06
55	56	.0000E+00	.0000E+00	4.3207E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3207E-05
56	57	.0000E+00	.0000E+00	-1.6607E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6607E-05
57	58	.0000E+00	.0000E+00	-2.3670E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3670E-05
58	59	.0000E+00	.0000E+00	-8.0557E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0557E-05
59	60	.0000E+00	.0000E+00	-1.6588E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6588E-05
60	61	.0000E+00	.0000E+00	-1.9493E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9493E-05
61	62	.0000E+00	.0000E+00	-1.6384E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6384E-05
62	63	.0000E+00	.0000E+00	-8.1920E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1920E-06
63	64	.0000E+00	.0000E+00	1.5080E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5080E-06
64	65	.0000E+00	.0000E+00	1.3436E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3436E-04
65	66	.0000E+00	.0000E+00	4.2228E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2228E-06
66	67	.0000E+00	.0000E+00	3.1360E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.1360E-04
67	68	.0000E+00	.0000E+00	-3.3400E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.3400E-04
68	70	.0000E+00	.0000E+00	-1.1971E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1971E-04
69	71	.0000E+00	.0000E+00	8.8079E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8079E-05
70	72	.0000E+00	.0000E+00	-1.4103E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4103E-05
71	73	.0000E+00	.0000E+00	-1.4291E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4291E-04
72	74	.0000E+00	.0000E+00	6.4416E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.4416E-05
73	75	.0000E+00	.0000E+00	-1.9116E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9116E-05
74	76	.0000E+00	.0000E+00	1.0323E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0323E-04
75	77	.0000E+00	.0000E+00	4.3984E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3984E-06
76	80	.0000E+00	.0000E+00	-3.9753E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9753E-06
77	81	.0000E+00	.0000E+00	-8.6043E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.6043E-06
78	82	.0000E+00	.0000E+00	-3.4236E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4236E-05
79	83	.0000E+00	.0000E+00	4.7297E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7297E-06
80	84	.0000E+00	.0000E+00	-4.1316E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1316E-06
81	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
82	86	.0000E+00	.0000E+00	-2.3514E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3514E-05
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
				-6.5238E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5238E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-7.6694E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6694E-05
TOTAL		.0000E+00	.0000E+00	-3.0074E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.0074E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS									PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3660E-02	.0000E+00	-1.3660E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.9308E-03	.0000E+00	-3.8312E-01	-9.6056E-04	-3.4188E-01
33	34	.0000E+00	.0000E+00	-2.4295E-04	.0000E+00	-2.4295E-04
34	35	.0000E+00	.0000E+00	-2.6989E-05	.0000E+00	-2.6989E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-8.1074E-07	.0000E+00	-8.1074E-07
37	38	8.9246E-05	.0000E+00	-6.7411E-03	-4.4623E-05	-6.6965E-03
38	39	.0000E+00	.0000E+00	-5.8485E-06	.0000E+00	-5.8485E-06
39	40	.0000E+00	.0000E+00	-5.1542E-02	.0000E+00	-5.1542E-02
40	41	.0000E+00	.0000E+00	-3.6018E-03	.0000E+00	-3.6018E-03
41	42	.0000E+00	.0000E+00	-5.4717E-07	.0000E+00	-5.4717E-07
42	43	2.2716E-05	.0000E+00	-5.2915E-04	-1.1358E-05	-5.1779E-04
43	44	.0000E+00	.0000E+00	-1.1548E-03	.0000E+00	-1.1548E-03
44	45	.0000E+00	.0000E+00	-4.8514E-04	.0000E+00	-4.8514E-04
45	46	.0000E+00	.0000E+00	-2.7816E-03	.0000E+00	-2.7816E-03
46	47	.0000E+00	.0000E+00	-3.1075E-04	.0000E+00	-3.1075E-04
47	48	.0000E+00	.0000E+00	-4.1814E-05	.0000E+00	-4.1814E-05
48	49	.0000E+00	.0000E+00	-2.5378E-04	.0000E+00	-2.5378E-04
49	50	.0000E+00	.0000E+00	-2.3980E-03	.0000E+00	-2.3980E-03
50	51	.0000E+00	.0000E+00	-1.0524E-02	.0000E+00	-1.0524E-02
51	52	.0000E+00	.0000E+00	-5.9022E-04	.0000E+00	-5.9022E-04

52	53	.0000E+00	.0000E+00	-1.0357E-02	.0000E+00	.0000E+00	-1.0357E-02
53	54	.0000E+00	.0000E+00	-1.2026E-04	.0000E+00	.0000E+00	-1.2026E-04
54	55	.0000E+00	.0000E+00	-2.5122E-03	.0000E+00	.0000E+00	-2.5122E-03
55	56	.0000E+00	.0000E+00	-1.0819E-02	.0000E+00	.0000E+00	-1.0819E-02
56	57	.0000E+00	.0000E+00	-5.7224E-04	.0000E+00	.0000E+00	-5.7224E-04
57	58	.0000E+00	.0000E+00	-1.0623E-02	.0000E+00	.0000E+00	-1.0623E-02
58	59	.0000E+00	.0000E+00	-7.4196E-05	.0000E+00	.0000E+00	-7.4196E-05
59	60	.0000E+00	.0000E+00	-2.8662E-03	.0000E+00	.0000E+00	-2.8662E-03
60	61	.0000E+00	.0000E+00	-1.0965E-02	.0000E+00	.0000E+00	-1.0965E-02
61	62	.0000E+00	.0000E+00	-1.1550E-04	.0000E+00	.0000E+00	-1.1550E-04
62	63	.0000E+00	.0000E+00	-2.9282E-03	.0000E+00	.0000E+00	-2.9282E-03
63	64	.0000E+00	.0000E+00	-1.1062E-02	.0000E+00	.0000E+00	-1.1062E-02
64	65	.0000E+00	.0000E+00	-9.7825E-05	.0000E+00	.0000E+00	-9.7825E-05
65	66	.0000E+00	.0000E+00	-2.0625E-02	.0000E+00	.0000E+00	-2.0625E-02
66	67	.0000E+00	.0000E+00	-1.4787E-02	.0000E+00	.0000E+00	-1.4787E-02
67	68	.0000E+00	.0000E+00	-1.5496E-02	.0000E+00	.0000E+00	-1.5496E-02
68	70	.0000E+00	.0000E+00	-5.5860E-03	.0000E+00	.0000E+00	-5.5860E-03
69	71	.0000E+00	.0000E+00	-6.9206E-04	.0000E+00	.0000E+00	-6.9206E-04
70	72	.0000E+00	.0000E+00	-2.1312E-02	.0000E+00	.0000E+00	-2.1312E-02
71	73	.0000E+00	.0000E+00	-5.3881E-03	.0000E+00	.0000E+00	-5.3881E-03
72	74	.0000E+00	.0000E+00	-7.1646E-04	.0000E+00	.0000E+00	-7.1646E-04
73	75	2.9572E-05	.0000E+00	-2.1174E-02	-1.4786E-05	.0000E+00	-2.1159E-02
74	76	.0000E+00	.0000E+00	-1.8476E-04	.0000E+00	.0000E+00	-1.8476E-04
75	77	.0000E+00	.0000E+00	-1.4051E-04	.0000E+00	.0000E+00	-1.4051E-04
76	80	.0000E+00	.0000E+00	-4.1557E-05	.0000E+00	.0000E+00	-4.1557E-05
77	81	.0000E+00	.0000E+00	-7.8638E-03	.0000E+00	.0000E+00	-7.8638E-03
78	82	.0000E+00	.0000E+00	-3.8480E-04	.0000E+00	.0000E+00	-3.8480E-04
79	83	.0000E+00	.0000E+00	-3.4104E-05	.0000E+00	.0000E+00	-3.4104E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1028E-03	.0000E+00	.0000E+00	-2.1028E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9229E-03	.0000E+00	.0000E+00	-1.9229E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0137E-03	.0000E+00	.0000E+00	-2.0137E-03

TOTAL 2.0723E-03 .0000E+00 -6.6159E-01 -1.0313E-03 -3.4188E-01 -1.0024E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	282125 16055	2.9497E+00 1.9231E-01	1.3572E-02 8.8285E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7096E-01 2.3926E-04 2.8705E-05 1.8626E-06 1.9788E-06 3.0868E-05 2.8071E-06 1.6577E-09 7.3171E-05 4.4299E-03 9.9260E-04 3.2088E-01 8.9535E-05 9.8357E-06 1.5137E-03 4.3375E-04 2.3457E-05 5.2260E-05 2.2950E-04 1.5721E-07 5.8422E-06 1.9900E-08	98770 595 78 976 107 94 805 0 151 23152 825 151165 239 50 16201 3196 295 118 1594 12 20 1	1.4331E+00 7.4890E-03 9.9848E-04 1.0747E-02 1.1433E-03 1.1691E-03 8.4140E-03 .0000E+00 2.0320E-03 4.4791E-01 1.1913E-02 2.1981E+00 3.1532E-03 6.0884E-04 3.2014E-01 4.1597E-02 5.7843E-03 1.6666E-03 1.9478E-02 2.4789E-04 2.4749E-04 1.3753E-05	1.1788E-03 6.4943E-03 7.9451E-04 1.0641E-02 1.1292E-03 1.0709E-03 8.4022E-03 .0000E+00 1.4106E-03 3.9730E-02 4.1178E-03 1.8921E-01 2.4753E-03 4.4153E-04 5.9268E-02 3.6916E-02 8.4884E-04 1.0539E-03 1.7697E-02 2.2467E-05 2.1759E-04 2.1445E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.0764E-05 1.9618E-01 1.9019E-04 2.0854E-02 2.1659E-05 3.8935E-05 1.2173E-01 1.4833E-04 2.3742E-03 2.1914E-05 1.7438E-04 1.1656E-04 1.9653E-08 1.1355E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 9.7021E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	7 2 11 1053 7	7.2668E-05 1.9048E-05 1.0767E-04 1.0440E-02 6.8987E-05	1.5793E-09 8.0280E-06 1.6051E-05 2.1209E-04 6.7819E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	562 29	4.7431E-03 2.2629E-04	2.6981E-05 8.6502E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	12	1.8181E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	18 0	1.4331E-04 .0000E+00	8.1074E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	195 75 184 49802 499	2.8866E-03 1.1181E-03 2.5402E-03 7.3708E-01 7.4210E-03	2.6355E-08 9.7986E-05 1.1610E-04 6.3675E-03 1.5949E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 4.4623E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	123 8	1.0555E-03 6.9274E-05	5.8454E-06 3.1264E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1340353 117554	1.7342E+01 1.6921E+00	5.0340E-02 1.2019E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	83166 6895	1.0815E+00 9.8834E-02	3.5304E-03 7.1447E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	9 0	1.0452E-04 .0000E+00	5.4717E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	5 9 17 3623 34	7.0235E-05 1.4621E-04 2.2781E-04 5.3548E-02 4.9207E-04	9.8739E-10 5.1482E-07 1.9162E-05 4.9557E-04 1.3897E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.1358E-05 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	27648 2269	3.6042E-01 3.2547E-02	1.1383E-03 1.6566E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	11 5 18 3165 30	1.4092E-04 7.1836E-05 2.6439E-04 4.6672E-02 4.4024E-04	2.0032E-09 3.2945E-06 1.2817E-05 4.5872E-04 1.0310E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	66408 5532	8.6262E-01 7.9416E-02	2.7348E-03 4.6738E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7256 589	9.3522E-02 8.4799E-03	3.0620E-04 4.5521E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 0 2 323 3	3.3059E-05 .0000E+00 3.1236E-05 4.7226E-03 4.7940E-05	1.0840E-10 .0000E+00 2.4322E-07 4.0627E-05 9.4330E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6000 502	7.8154E-02 7.1469E-03	2.4784E-04 5.9402E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	60294 4705	7.1359E-01 6.3945E-02	2.3694E-03 2.8648E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	4 46 63 2 2 1472 503 7774 2321 159	6.2351E-05 5.7730E-04 8.3569E-04 2.7473E-05 3.1849E-05 1.8811E-02 7.2121E-03 9.4181E-02 2.8611E-02 2.0328E-03	4.0242E-10 3.4751E-05 1.4235E-05 2.2341E-07 4.1135E-06 2.0031E-03 8.3818E-04 5.5716E-03 1.7745E-03 2.8323E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2420 5	3.4938E-02 6.8793E-05	5.8271E-04 7.5122E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	6 38 56 4 1 1485	8.5623E-05 4.3993E-04 6.9143E-04 4.7413E-05 4.8266E-06 1.9321E-02	3.5787E-09 2.3204E-05 1.0737E-05 9.7783E-07 1.2078E-06 1.8031E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	471	6.6126E-03	9.5035E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7647	9.1543E-02	5.5854E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2309	2.7976E-02	1.7429E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	139	1.8526E-03	2.3888E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	2423	2.2009E-02	1.2022E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	122	1.2322E-03	3.2982E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	62306	7.3275E-01	2.4645E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4762	6.4979E-02	4.7673E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	7	9.8832E-05	7.9936E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	5.4841E-04	2.1232E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	7.0340E-04	1.1600E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.1092E-05	8.5847E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5833E-05	4.2756E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1457	1.8782E-02	1.9271E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	544	7.7886E-03	1.0052E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7914	9.5764E-02	5.7717E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2329	2.8704E-02	1.7585E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	2.1438E-03	3.2295E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2359	3.3962E-02	5.6887E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	3	4.7866E-05	3.3758E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	10	1.2049E-04	1.6658E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	6.2254E-04	4.2672E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	6.3945E-04	6.7554E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.5600E-05	5.6558E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	2.8288E-05	3.2653E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1435	1.8290E-02	1.9609E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	460	6.3529E-03	8.8244E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7839	9.3459E-02	5.6148E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2443	2.9322E-02	1.8446E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	148	1.9547E-03	2.6643E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1391	1.2714E-02	7.4179E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	50	4.6189E-04	1.7503E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	83295	1.0287E+00	2.8050E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7223	1.0124E-01	6.1230E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	14	1.9187E-04	2.5464E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	6.7850E-04	2.5416E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	77	1.0579E-03	1.4149E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.3709E-05	1.8233E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1648E-05	2.5024E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2055	2.8135E-02	1.8880E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	836	1.2201E-02	1.0243E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10962	1.4000E-01	5.7285E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3337	4.2840E-02	1.8521E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	255	3.5681E-03	4.2837E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2428	2.0841E-02	1.1546E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	113	1.0742E-03	3.6195E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	85154	1.0477E+00	2.8665E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7332	1.0220E-01	6.1733E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	16	2.3204E-04	1.1578E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	88	1.1563E-03	4.0140E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	88	1.2499E-03	9.7063E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.7650E-05	9.4743E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6407E-05	1.0181E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2138	2.8802E-02	1.9707E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	803	1.1487E-02	9.2204E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11178	1.4173E-01	5.8462E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3317	4.2495E-02	1.7845E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	286	3.9853E-03	4.8755E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2060	1.8158E-02	9.7792E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	106	1.0486E-03	3.3162E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	426209	3.8388E+00	2.0538E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20483	2.0518E-01	8.6581E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	10	1.0528E-04	3.0792E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	55	5.8941E-04	4.4964E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	56	7.3768E-04	1.3596E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4243E-05	5.6149E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	5.9432E-06	1.1410E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1661	1.8364E-02	2.8922E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	430	5.3643E-03	1.3829E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9111	9.4764E-02	7.8007E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2555	2.7136E-02	2.3591E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	144	1.7826E-03	2.9179E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	8	8.7519E-05	4.3875E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	55	5.8708E-04	4.8540E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	5.1358E-04	1.1559E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	3.9970E-05	7.4982E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.3009E-05	1.8343E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1573	1.7118E-02	2.7496E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	431	5.3369E-03	1.5430E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9488	9.6794E-02	8.2149E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2812	2.9385E-02	2.5892E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	1.9886E-03	3.3684E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	5	6.8869E-05	1.9884E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.5898E-04	1.1148E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	8.8344E-04	3.8348E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.2263E-05	1.2517E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.5865E-05	1.1004E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1387	1.8951E-02	9.5240E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	449	6.3657E-03	5.7384E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7051	8.9480E-02	2.8004E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2144	2.7477E-02	9.2694E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	169	2.4292E-03	3.1621E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6175	9.1660E-02	6.8586E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	8.3318E-05	6.2031E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	44	5.6036E-04	5.9564E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	172	2.1941E-03	4.6674E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	280	4.0009E-03	2.8183E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.7379E-04	1.5360E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.0230E-04	5.0608E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7016	9.5698E-02	3.7444E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2352	3.3080E-02	2.0592E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33880	4.2469E-01	1.0749E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10611	1.3518E-01	3.6035E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	838	1.1645E-02	1.0743E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	5	7.5183E-05	3.8273E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	27	3.4374E-04	1.3975E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	7.3597E-04	9.8039E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1330	1.8101E-02	9.2014E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	507	7.2167E-03	4.7599E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6811	8.6006E-02	2.8234E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2011	2.5694E-02	8.7205E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	188	2.5911E-03	2.7268E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6342	9.3939E-02	7.0995E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	9.6319E-05	6.5095E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	36	4.7809E-04	3.1814E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	194	2.4024E-03	4.8974E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	289	4.1636E-03	2.3711E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	23	3.3239E-04	2.0188E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.3844E-04	9.7497E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7328	1.0031E-01	3.8978E-03	.0000E+00	1.4786E-05
		25055.50C	2.0356E-02	2448	3.4938E-02	1.9528E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34032	4.2630E-01	1.0687E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10457	1.3240E-01	3.5034E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	835	1.1726E-02	1.0576E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3953	3.4474E-02	1.8470E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	193	1.9152E-03	5.6887E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3110	2.4664E-02	1.4047E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	134	1.2830E-03	3.4247E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6	6.1663E-05	9.3955E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33	3.5171E-04	2.1455E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10	7.9260E-05	1.0707E-05	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	8	7.2695E-05	1.5538E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	4.3090E-04	2.1530E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	5.4569E-04	7.5550E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4907E-05	3.5221E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1102	1.2570E-02	1.3957E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	344	4.4481E-03	6.6557E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6425	6.6388E-02	4.2085E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1958	2.0714E-02	1.3475E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	132	1.4824E-03	2.1380E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10764	1.1059E-01	3.8283E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	783	9.5216E-03	1.9733E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	756	6.8438E-03	3.4098E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	30	2.8556E-04	6.1801E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	4	5.5653E-05	1.1515E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	6	9.0352E-05	1.1501E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	11	1.4884E-04	1.0424E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	40	5.4778E-04	3.0892E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	653	8.2571E-03	4.4408E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	96	1.2827E-03	8.1511E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1058	1.2548E-02	3.7228E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2535	3.0064E-02	1.0217E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	81	1.0751E-03	2.7973E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	75	1.0306E-03	1.2219E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	71	9.4243E-04	3.8176E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	18	2.7183E-04	4.0069E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	5	6.8579E-05	1.0706E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	4	6.6650E-05	8.0420E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	237	3.2274E-03	1.0215E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9014	1.0695E-01	1.8202E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	42646	3.6883E-01	2.0119E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1962	1.8254E-02	1.7923E-06	.0000E+00	.0000E+00
TOTAL				3443449	4.2426E+01	6.6159E-01	3.4188E-01	1.0410E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2600457	3.0755E+01	1.0611E-01	.0000E+00	.0000E+00
		2004.50C		12	1.8181E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		248	3.2373E-03	2.9240E-07	.0000E+00	.0000E+00
		7014.50C		896	1.1030E-02	4.2322E-04	.0000E+00	.0000E+00
		8016.50C		296421	4.1200E+00	2.9041E-03	.0000E+00	.0000E+00

13027.50C	17302	2.5459E-01	2.5485E-03	.0000E+00	.0000E+00
14000.50C	1247	1.7179E-02	1.6687E-04	.0000E+00	.0000E+00
15031.50C	82	1.1042E-03	1.0494E-05	.0000E+00	.0000E+00
16032.50C	38	5.2597E-04	2.4818E-05	.0000E+00	.0000E+00
22000.50C	40	5.4778E-04	3.0892E-05	.0000E+00	.0000E+00
24000.50C	32189	4.2293E-01	2.8668E-02	.0000E+00	1.4786E-05
25055.50C	10911	1.5291E-01	1.4459E-02	.0000E+00	.0000E+00
26000.55C	170449	2.0641E+00	8.3780E-02	.0000E+00	.0000E+00
28000.50C	51149	6.2807E-01	2.6991E-02	.0000E+00	.0000E+00
29000.50C	104	1.3714E-03	5.1574E-05	.0000E+00	.0000E+00
40000.50C	57966	8.5246E-01	7.5745E-03	.0000E+00	5.5981E-05
42000.50C	3691	5.0213E-02	5.7129E-03	.0000E+00	.0000E+00
45103.50C	595	7.4890E-03	6.4943E-03	.0000E+00	.0000E+00
47109.50C	78	9.9848E-04	7.9451E-04	.0000E+00	.0000E+00
50000.35C	573	8.4702E-03	1.9142E-04	.0000E+00	.0000E+00
62149.50C	976	1.0747E-02	1.0641E-02	.0000E+00	.0000E+00
63151.55C	107	1.1433E-03	1.1292E-03	.0000E+00	.0000E+00
63153.55C	94	1.1691E-03	1.0709E-03	.0000E+00	.0000E+00
64155.50C	805	8.4140E-03	8.4022E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	151	2.0320E-03	1.4106E-03	2.0764E-05	.0000E+00
92235.50C	23152	4.4791E-01	3.9730E-02	1.9618E-01	.0000E+00
92236.50C	825	1.1913E-02	4.1178E-03	1.9019E-04	.0000E+00
92238.50C	151165	2.1981E+00	1.8921E-01	2.0854E-02	9.7021E-04
93237.55C	239	3.1532E-03	2.4753E-03	2.1659E-05	.0000E+00
94238.50C	50	6.0884E-04	4.4153E-04	3.8935E-05	.0000E+00
94239.55C	16201	3.2014E-01	5.9268E-02	1.2173E-01	.0000E+00
94240.50C	3196	4.1597E-02	3.6916E-02	1.4833E-04	.0000E+00
94241.50C	295	5.7843E-03	8.4884E-04	2.3742E-03	.0000E+00
94242.50C	118	1.6666E-03	1.0539E-03	2.1914E-05	.0000E+00
95241.50C	1594	1.9478E-02	1.7697E-02	1.7438E-04	.0000E+00
95242.50C	12	2.4789E-04	2.2467E-05	1.1656E-04	.0000E+00
95243.50C	20	2.4749E-04	2.1759E-04	1.9653E-08	.0000E+00
96245.35C	1	1.3753E-05	2.1445E-06	1.1355E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59836 CTM = 115.75

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 115.87 MINUTES

MCNP VERSION 4A-B 10/04/91

02/16/95 19:45:07

PROBID = 02/16/95 17:48:57

1MCNP VERSION 4A-B LD=10/04/91 02/16/95 19:45:08

PROBID = 02/16/95 19:45:08

INP=mpc12e OUTP=mpc12e.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/300 year (mpc12e)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1191-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923
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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      3.00%/20 GWD/300 YEAR -- UO2
331- M2      8016.50C 4.7766E-02
332-      45103.50C 1.7032E-05
333-      47109.50C 2.0435E-06
334-      62149.50C 1.3260E-07
335-      63151.55C 3.9617E-07
336-      63153.55C 2.1975E-06
337-      64155.50C 2.0005E-07
338-      92233.50C 8.8736E-10
339-      92234.50C 5.8264E-06
340-      92235.50C 3.1634E-04
341-      92236.50C 7.1483E-05
342-      92238.50C 2.2844E-02
343-      93237.55C 1.2290E-05
344-      94238.50C 9.9463E-08
345-      94239.55C 1.0699E-04
346-      94240.50C 3.0073E-05
347-      94241.50C 1.2352E-11
348-      94242.50C 3.7204E-06
349-      95241.50C 1.2100E-05
350-      95242.50C 3.5793E-09
351-      95243.50C 4.0608E-07
352-      96245.35C 1.3884E-09
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3      2004.50C 1.0
355- C      ZIRCALOY-4
356- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-		40000.50C	-0.9818	50000.35C	-0.0140	
358-	C	ALLOY 825				
359-	M5	6000.50C	-0.0005	13027.50C	-0.0020	14000.50C -0.0050
360-		16032.50C	-0.0003	22000.50C	-0.0090	24000.50C -0.2150
361-		25055.50C	-0.0100	26000.55C	-0.2857	28000.50C -0.4200
362-		29000.50C	-0.0250	42000.50C	-0.0300	
363-	C	1100 ALUMINUM ALLOY				
364-	M6	13027.50C	-0.99880	29000.50C	-0.00120	
365-	C	A516 CARBON STEEL				
366-	M7	6000.50C	-0.0022	14000.50C	-0.00275	15031.50C -0.00035
367-		16032.50C	-0.00035	25055.50C	-0.0090	
368-		26000.55C	-0.98535			
369-	C	SS316L				
370-	M8	6000.50C	-0.00030	7014.50C	-0.00100	14000.50C -0.00750
371-		15031.50C	-0.00045	16032.50C	-0.00030	24000.50C -0.17000
372-		25055.50C	-0.02000	26000.55C	-0.64545	28000.50C -0.12000
373-		42000.50C	-0.02500			
374-	C	TALLIES				
375-	PRINT					

SURFACES	16048 AND	19048 OF CELL	8 ARE THE SAME.	19048 WILL BE DELETED.
SURFACES	16049 AND	19049 OF CELL	8 ARE THE SAME.	19049 WILL BE DELETED.
SURFACES	16050 AND	17050 OF CELL	8 ARE THE SAME.	17050 WILL BE DELETED.
SURFACES	16050 AND	20050 OF CELL	8 ARE THE SAME.	20050 WILL BE DELETED.
SURFACES	16050 AND	21050 OF CELL	8 ARE THE SAME.	21050 WILL BE DELETED.
SURFACES	16051 AND	17051 OF CELL	8 ARE THE SAME.	17051 WILL BE DELETED.
SURFACES	16051 AND	20051 OF CELL	8 ARE THE SAME.	20051 WILL BE DELETED.
SURFACES	16051 AND	21051 OF CELL	8 ARE THE SAME.	21051 WILL BE DELETED.
SURFACES	18050 AND	22050 OF CELL	8 ARE THE SAME.	22050 WILL BE DELETED.
SURFACES	18051 AND	22051 OF CELL	8 ARE THE SAME.	22051 WILL BE DELETED.
SURFACES	19050 AND	23050 OF CELL	8 ARE THE SAME.	23050 WILL BE DELETED.
SURFACES	19051 AND	23051 OF CELL	8 ARE THE SAME.	23051 WILL BE DELETED.
SURFACES	20048 AND	23048 OF CELL	8 ARE THE SAME.	23048 WILL BE DELETED.
SURFACES	20049 AND	23049 OF CELL	8 ARE THE SAME.	23049 WILL BE DELETED.
SURFACES	24048 AND	27048 OF CELL	9 ARE THE SAME.	27048 WILL BE DELETED.
SURFACES	24049 AND	27049 OF CELL	9 ARE THE SAME.	27049 WILL BE DELETED.
SURFACES	24050 AND	25050 OF CELL	9 ARE THE SAME.	25050 WILL BE DELETED.
SURFACES	24050 AND	28050 OF CELL	9 ARE THE SAME.	28050 WILL BE DELETED.
SURFACES	24050 AND	29050 OF CELL	9 ARE THE SAME.	29050 WILL BE DELETED.
SURFACES	24051 AND	25051 OF CELL	9 ARE THE SAME.	25051 WILL BE DELETED.

1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B)	DATA SETS:		LWTR.01T					
2	8016,	.67095	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00001	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00008	92235,	.00444	92236,	.00100	92238,	.32088
	93237,	.00017	94238,	.00000	94239,	.00150	94240,	.00042
	94241,	.00000	94242,	.00005	95241,	.00017	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763

6	28000, .40235	29000, .02212	42000, .01758		
7	13027, .99949	29000, .00051			
	6000, .01011	14000, .00541	15031, .00062	16032, .00060	
8	25055, .00905	26000, .97421			
	6000, .00140	7014, .00399	14000, .01493	15031, .00081	
	16032, .00052	24000, .18282	25055, .02036	26000, .64626	
	28000, .11433	42000, .01457			

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001, .11191	8016, .88809			
2	8016, .12057	45103, .00028	47109, .00004	62149, .00000	
	63151, .00001	63153, .00005	64155, .00000	92233, .00000	
	92234, .00022	92235, .01173	92236, .00266	92238, .85818	
	93237, .00046	94238, .00000	94239, .00404	94240, .00114	
	94241, .00000	94242, .00014	95241, .00046	95242, .00000	
	95243, .00002	96245, .00000			
3	2004, 1.00000				
4	8016, .00120	24000, .00100	26000, .00200	40000, .98180	
	50000, .01400				
5	6000, .00050	13027, .00200	14000, .00499	16032, .00030	
	22000, .00898	24000, .21446	25055, .00998	26000, .28499	
	28000, .41895	29000, .02494	42000, .02993		
6	13027, .99880	29000, .00120			
7	6000, .00220	14000, .00275	15031, .00035	16032, .00035	
	25055, .00900	26000, .98535			
8	6000, .00030	7014, .00101	14000, .00758	15031, .00045	
	16032, .00030	24000, .17172	25055, .02020	26000, .65197	
	28000, .12121	42000, .02525			

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1 .00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	7 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	8 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	9 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	10 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	11 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	12 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	13 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	14 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	15 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	16 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	17 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	18 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	19 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	20 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	21 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	22 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	23 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	24 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	25 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11910E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS PRINT, TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11910E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314) 79/06/21.
(1340) 79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394) 79/10/17.

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396) 79/08/30.

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 TOTAL NU (1373) 11/01/85
 TOTAL NU (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1 DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/300 year (mpc12e)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-4.393E-01	-3.820E-02	2.378E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.997E-01	4.528E+00
2	3.274E-01	2.988E-01	2.449E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.997E-01	9.425E-01
3	2.049E-01	3.604E-01	1.432E+00	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.997E-01	1.898E+00
4	6.464E-02	-4.362E-01	2.074E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.997E-01	7.726E-01
5	3.938E-01	-2.248E-01	2.085E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.997E-01	7.896E-01
6	3.892E-02	2.958E-01	2.316E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.997E-01	7.248E-01
7	9.075E-02	2.400E-01	2.412E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.997E-01	9.095E-01
8	1.623E-01	3.353E-02	2.370E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.997E-01	1.082E+00
9	-3.516E-01	2.910E-01	6.887E+00	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.997E-01	2.128E+00
10	6.240E-02	-4.072E-01	8.913E-01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.997E-01	6.196E-01
11	-3.558E-01	-2.980E-01	1.730E+00	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.997E-01	3.573E+00
12	3.207E-01	8.766E-02	3.157E+00	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.997E-01	9.639E-01
13	1.213E-01	1.545E-01	4.604E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.997E-01	3.712E+00
14	2.094E-01	-3.272E-01	3.912E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.997E-01	1.019E+00
15	-9.951E-02	-2.881E-01	4.123E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.997E-01	3.299E+00
16	2.376E-01	8.927E-02	7.450E+00	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.997E-01	4.831E+00
17	2.978E-01	2.888E-01	1.705E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.997E-01	4.011E+00
18	1.268E-01	-1.504E-02	2.380E+00	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.997E-01	3.330E+00
19	2.965E-01	-2.213E-01	4.317E+00	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.997E-01	3.563E-01
20	-3.811E-02	1.631E-01	1.288E+02	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.997E-01	3.479E+00
21	1.353E-01	2.121E-01	9.498E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.997E-01	3.186E+00
22	-1.319E-01	-4.069E-01	1.009E+02	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.997E-01	1.512E+00
23	-1.258E-01	-3.789E-01	1.009E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.997E-01	2.620E-01
24	-4.641E-03	1.353E-01	9.698E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.997E-01	4.384E+00
25	2.226E-01	-1.929E-01	9.779E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.997E-01	2.531E+00
26	-1.449E-01	1.083E-02	1.133E+02	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.997E-01	5.442E+00
27	-3.572E-01	1.045E-01	1.121E+02	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.997E-01	6.704E-01
28	-1.591E-02	9.553E-02	1.132E+02	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.997E-01	4.522E-01
29	8.487E-02	1.579E-01	9.936E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.997E-01	7.441E+00
30	-1.226E-01	-3.177E-01	1.095E+02	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.997E-01	1.391E+00
31	1.079E-01	5.082E-02	1.043E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.997E-01	1.777E-01
32	-2.174E-01	1.935E-01	1.039E+02	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.997E-01	4.878E+00
33	2.822E-01	8.110E-02	9.218E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.997E-01	5.067E-01
34	-4.896E-02	2.134E-01	1.637E+02	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.997E-01	2.228E+00
35	-2.929E-01	2.818E-01	1.608E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.997E-01	3.501E+00
36	-2.807E-01	3.123E-01	1.787E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.997E-01	6.952E-01
37	1.530E-01	-2.297E-01	1.084E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.997E-01	1.829E+00
38	-3.362E-01	1.993E-01	1.087E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.997E-01	1.563E+00
39	-3.489E-01	1.483E-01	9.657E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.997E-01	3.916E+00
40	2.296E-01	-1.546E-01	1.030E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.997E-01	1.813E+00
41	5.866E-03	3.339E-01	1.052E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.997E-01	1.320E+00
42	1.908E-01	1.729E-01	2.722E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.997E-01	1.277E+00
43	-8.128E-02	3.312E-01	2.714E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.997E-01	2.946E+00
44	-2.105E-01	-2.841E-01	2.765E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.997E-01	2.925E-01
45	3.216E-01	3.323E-01	2.520E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.997E-01	1.754E+00
46	-3.540E-01	5.659E-02	5.169E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.997E-01	3.680E+00
47	4.090E-01	2.224E-01	5.267E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.997E-01	3.654E+00
48	-5.775E-02	-1.431E-02	6.345E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.997E-01	3.055E+00
49	-8.775E-02	1.716E-02	4.407E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.997E-01	1.668E+00

50 -1.162E-01 -1.395E-02 3.209E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.997E-01 1.427E+00

CYCLE 1 K(COLLISION) .917445 REMOVAL LIFETIME(ABS) 3.1191E+03 SOURCE POINTS GENERATED 2738

CYCLE 2 K(COLLISION) .871608 REMOVAL LIFETIME(ABS) 3.0234E+03 SOURCE POINTS GENERATED 2826

CYCLE 3 K(COLLISION) .885379 REMOVAL LIFETIME(ABS) 3.0790E+03 SOURCE POINTS GENERATED 2982

CYCLE 4 K(COLLISION) .894548 REMOVAL LIFETIME(ABS) 3.1546E+03 SOURCE POINTS GENERATED 3016

CYCLE 5 K(COLLISION) .903594 REMOVAL LIFETIME(ABS) 3.2825E+03 SOURCE POINTS GENERATED 3079

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .886046 REMOVAL LIFETIME(ABS) 3.2088E+03 SOURCE POINTS GENERATED 2910

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.891041	.888544	.0028	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	.878470	.887767	.0105	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	.900113	.890287	.0110	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.1072E+03	3.1648E+03	.0182				
REM LIFE(ABS)	3.1016E+03	3.1552E+03	.0170	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	3103						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.894300	.890462	.0027	K(COL/ABS)	.892646 .0055	.890459 .0039	.2730
K(ABSORPTION)	.908958	.894830	.0099	K(ABS/TK LN)	.892975 .0044	.892445 .0056	-.4831
K(TRK LENGTH)	.892783	.891119	.0064	K(TK LN/COL)	.890791 .0043	.890324 .0035	.7104
REM LIFE(COL)	3.2044E+03	3.1780E+03	.0113				
REM LIFE(ABS)	3.1756E+03	3.1620E+03	.0100	LIFE(COL/ABS)	3.1700E+03 .0106	3.1220E+03 .0168	.9871
SOURCE POINTS GENERATED	2993						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.881236	.888156	.0032	K(COL/ABS)	.892098 .0039	.889462 .0038	.0064
K(ABSORPTION)	.899670	.896040	.0071	K(ABS/TK LN)	.891785 .0034	.891312 .0042	-.4807
K(TRK LENGTH)	.876759	.887529	.0061	K(TK LN/COL)	.887842 .0045	.888434 .0034	.8492
REM LIFE(COL)	3.2525E+03	3.1966E+03	.0098	K(COL/ABS/TK LN)	.890575 .0032	.886871 .0083	
REM LIFE(ABS)	3.2836E+03	3.1924E+03	.0118	LIFE(COL/ABS)	3.1945E+03 .0107	3.2003E+03 .0113	.9489
SOURCE POINTS GENERATED	2850						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.901984	.890922	.0040	K(COL/ABS)	.893045 .0032	.892411 .0035	-.1315
K(ABSORPTION)	.891679	.895168	.0056	K(ABS/TK LN)	.893703 .0034	.893931 .0038	-.4445
K(TRK LENGTH)	.911072	.892238	.0071	K(TK LN/COL)	.891580 .0054	.889873 .0032	.9359
REM LIFE(COL)	3.3469E+03	3.2267E+03	.0120	K(COL/ABS/TK LN)	.892776 .0035	.888016 .0075	
REM LIFE(ABS)	3.3425E+03	3.2224E+03	.0130	LIFE(COL/ABS)	3.2246E+03 .0124	3.2303E+03 .0136	.9734
SOURCE POINTS GENERATED	3076						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.893966	.891429	.0033	K(COL/ABS)	.893326 .0026	.892781 .0028	-.1272

K(ABSORPTION)	.895495	.895222	.0046	K(ABS/TK LN)	.893877	.0028	.894089	.0030	-.4430
K(TRK LENGTH)	.894008	.892533	.0058	K(TK LN/COL)	.891981	.0045	.890572	.0026	.9302
REM LIFE(COL)	3.2094E+03	3.2238E+03	.0098	K(COL/ABS/TK LN)	.893061	.0029	.890309	.0053	
REM LIFE(ABS)	3.2312E+03	3.2239E+03	.0106	LIFE(COL/ABS)	3.2239E+03	.0101	3.2238E+03	.0109	.9646
SOURCE POINTS GENERATED 3013									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE 12	AVE OF 7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.912038	.894373	.0043	K(COL/ABS)	.895977	.0037	.895764	.0041
K(ABSORPTION)	.911731	.897581	.0047	K(ABS/TK LN)	.896024	.0034	.896204	.0036
K(TRK LENGTH)	.906073	.894467	.0053	K(TK LN/COL)	.894420	.0046	.894359	.0047
REM LIFE(COL)	3.2175E+03	3.2229E+03	.0083	K(COL/ABS/TK LN)	.895474	.0036	.897714	.0040
REM LIFE(ABS)	3.1938E+03	3.2196E+03	.0091	LIFE(COL/ABS)	3.2213E+03	.0086	3.2245E+03	.0090
SOURCE POINTS GENERATED 3134								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE 13	AVE OF 8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.869427	.891255	.0051	K(COL/ABS)	.894147	.0038	.895107	.0041
K(ABSORPTION)	.893250	.897039	.0041	K(ABS/TK LN)	.893160	.0043	.895308	.0040
K(TRK LENGTH)	.852977	.889281	.0075	K(TK LN/COL)	.890268	.0062	.892856	.0047
REM LIFE(COL)	3.1975E+03	3.2197E+03	.0073	K(COL/ABS/TK LN)	.892525	.0046	.895536	.0049
REM LIFE(ABS)	3.1919E+03	3.2161E+03	.0080	LIFE(COL/ABS)	3.2179E+03	.0075	3.2215E+03	.0078
SOURCE POINTS GENERATED 2899								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE 14	AVE OF 9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.893909	.891550	.0045	K(COL/ABS)	.893330	.0035	.893498	.0037
K(ABSORPTION)	.879676	.895110	.0042	K(ABS/TK LN)	.893610	.0039	.894251	.0036
K(TRK LENGTH)	.914742	.892110	.0073	K(TK LN/COL)	.891830	.0057	.891284	.0044
REM LIFE(COL)	3.2819E+03	3.2266E+03	.0068	K(COL/ABS/TK LN)	.892923	.0040	.895264	.0045
REM LIFE(ABS)	3.2580E+03	3.2208E+03	.0072	LIFE(COL/ABS)	3.2237E+03	.0069	3.2272E+03	.0073
SOURCE POINTS GENERATED 3100								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE 15	AVE OF 10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.889588	.891354	.0041	K(COL/ABS)	.893010	.0031	.893151	.0033
K(ABSORPTION)	.890669	.894666	.0038	K(ABS/TK LN)	.893023	.0035	.893735	.0032
K(TRK LENGTH)	.884821	.891381	.0066	K(TK LN/COL)	.891367	.0051	.891341	.0039
REM LIFE(COL)	3.3193E+03	3.2359E+03	.0067	K(COL/ABS/TK LN)	.892467	.0037	.894095	.0038
REM LIFE(ABS)	3.3212E+03	3.2308E+03	.0071	LIFE(COL/ABS)	3.2334E+03	.0068	3.2374E+03	.0071
SOURCE POINTS GENERATED 2958								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE 16	AVE OF 11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.882798	.890576	.0038	K(COL/ABS)	.891957	.0031	.891965	.0033
K(ABSORPTION)	.880061	.893338	.0038	K(ABS/TK LN)	.892049	.0034	.892560	.0032
K(TRK LENGTH)	.884546	.890760	.0060	K(TK LN/COL)	.890668	.0047	.890492	.0036
REM LIFE(COL)	3.1977E+03	3.2324E+03	.0061	K(COL/ABS/TK LN)	.891558	.0035	.892622	.0037
REM LIFE(ABS)	3.2059E+03	3.2286E+03	.0065	LIFE(COL/ABS)	3.2305E+03	.0062	3.2330E+03	.0065
SOURCE POINTS GENERATED 2962								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE 17	AVE OF 12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.898615	.891246	.0035	K(COL/ABS)	.892502	.0029	.892537	.0030

K(ABSORPTION)	.898389	.893759	.0035	K(ABS/TK LN)	.892822	.0032	.893217	.0030	-.0702
K(TRK LENGTH)	.904268	.891885	.0056	K(TK LN/COL)	.891566	.0044	.890936	.0033	.8655
REM LIFE(COL)	3.3505E+03	3.2423E+03	.0064	K(COL/ABS/TK LN)	.892297	.0033	.893098	.0035	
REM LIFE(ABS)	3.3666E+03	3.2401E+03	.0069	LIFE(COL/ABS)	3.2412E+03	.0066	3.2438E+03	.0066	.9704
SOURCE POINTS GENERATED 3018									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.911897		.892834	.0037	K(COL/ABS)	.894528	.0035	.894041
K(ABSORPTION)		.925765		.896221	.0042	K(ABS/TK LN)	.894314	.0034	.894712
K(TRK LENGTH)		.898661		.892406	.0052	K(TK LN/COL)	.892620	.0042	.892916
REM LIFE(COL)	3.2731E+03		3.2446E+03		.0059	K(COL/ABS/TK LN)	.893821	.0034	.895336
REM LIFE(ABS)	3.2677E+03		3.2422E+03		.0063	LIFE(COL/ABS)	3.2434E+03	.0061	3.2463E+03
SOURCE POINTS GENERATED 3124									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.892879		.892838	.0034	K(COL/ABS)	.894215	.0032	.893781
K(ABSORPTION)		.887431		.895593	.0039	K(ABS/TK LN)	.893710	.0032	.894100
K(TRK LENGTH)		.884280		.891826	.0048	K(TK LN/COL)	.892332	.0039	.893020
REM LIFE(COL)	3.2031E+03		3.2417E+03		.0055	K(COL/ABS/TK LN)	.893419	.0032	.894038
REM LIFE(ABS)	3.1934E+03		3.2387E+03		.0060	LIFE(COL/ABS)	3.2402E+03	.0057	3.2438E+03
SOURCE POINTS GENERATED 2907									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.876946		.891778	.0034	K(COL/ABS)	.893539	.0031	.893215
K(ABSORPTION)		.891194		.895300	.0037	K(ABS/TK LN)	.893401	.0030	.893795
K(TRK LENGTH)		.886966		.891502	.0045	K(TK LN/COL)	.891640	.0037	.891791
REM LIFE(COL)	3.2533E+03		3.2424E+03		.0052	K(COL/ABS/TK LN)	.892860	.0031	.893953
REM LIFE(ABS)	3.2018E+03		3.2362E+03		.0056	LIFE(COL/ABS)	3.2393E+03	.0053	3.2448E+03
SOURCE POINTS GENERATED 2945									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/300 year (mpc12e)

PROBID = 02/16/95 21:40:53
02/16/95 19:45:08

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59689	1.0052E+00	2.0751E+00	ESCAPE	2	2.6819E-05	1.9559E-10
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.4965E-02	5.1957E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59774	6.5527E-02	4.9961E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2538E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	174	2.3499E-03	1.8474E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9639E+00
				CAPTURE	0	6.6222E-01	3.2867E-02
				LOSS TO (N,XN)	87	1.1750E-03	1.0016E-02
				LOSS TO FISSION	0	3.4358E-01	7.0187E-02

TOTAL	59863	1.0725E+00	2.0769E+00	TOTAL	59863	1.0725E+00	2.0769E+00
NUMBER OF NEUTRONS BANKED	87			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0029E+00			ESCAPE	9.1285E+01	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.7218E+01			CAPTURE	3.2082E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3415280			CAPTURE OR ESCAPE	3.2082E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0012E+00	.0002		ANY TERMINATION	3.5340E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	115.55 MINUTES			MAXIMUM NUMBER EVER IN BANK	1		
COMPUTER TIME IN MCRUN	115.43 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.1709E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	41569697			MOST RANDOM NUMBERS USED WAS	8520	IN HISTORY	13891

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5724E-01 TO 1.0957E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	24229	9180	3.1025E+00	1.1675E-04	3.6891E-01	7.2499E-01	1.0893E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	730789	59775	298973	4.1962E+00	7.0135E-04	7.4355E-01	8.7777E-01	2.5085E+00
33	34	2448	127	517	5.5334E-03	5.7556E-05	2.4174E-01	6.1274E-01	4.2326E+00
34	35	108	10	316	2.6145E-03	1.0550E-05	3.2056E-02	5.1511E-01	4.3336E-01
35	36	1307416	59775	16	2.5608E-04	6.0868E-04	7.0336E-01	8.7465E-01	3.5037E+03
36	37	202	10	13	1.1607E-04	6.6664E-06	1.5800E-02	5.1908E-01	3.9892E-01
37	38	1417319	59775	50934	7.5641E-01	5.8859E-04	6.9375E-01	8.7421E-01	4.1152E+00
38	39	224	10	93	7.7739E-04	5.5090E-06	1.3188E-02	5.1768E-01	3.9514E-01
39	40	2264665	59775	1460434	1.9157E+01	5.0946E-04	6.5943E-01	8.7136E-01	1.6286E+00
40	41	57523	31192	91935	1.2133E+00	3.7601E-04	6.1122E-01	8.6950E-01	1.5323E+00
41	42	14	6	41	4.5492E-04	5.9504E-06	1.1286E-02	6.2171E-01	4.1779E-01
42	43	121597	32938	3745	5.5592E-02	3.9678E-04	6.1829E-01	8.7014E-01	4.1405E+00
43	44	135916	35224	30423	4.0180E-01	4.0504E-04	6.2402E-01	8.7132E-01	1.5570E+00
44	45	148318	36284	3194	4.7351E-02	4.0975E-04	6.2841E-01	8.7126E-01	4.1386E+00
45	46	180467	41436	72778	9.6017E-01	4.1740E-04	6.3305E-01	8.7224E-01	1.5715E+00
46	47	7249	3344	7927	1.0432E-01	3.5442E-04	6.0419E-01	8.6942E-01	1.5216E+00
47	48	9702	3636	315	4.6713E-03	3.7376E-04	6.2759E-01	8.7448E-01	4.1424E+00
48	49	12529	4929	6516	8.6557E-02	3.9888E-04	6.2932E-01	8.7568E-01	1.5675E+00
49	50	32640	14545	64303	7.6663E-01	3.2784E-04	5.5767E-01	8.2146E-01	1.4556E+00
50	51	32442	13807	11929	1.4768E-01	3.7627E-04	5.5315E-01	8.0588E-01	2.0658E+00
51	52	32029	13497	2326	3.3327E-02	3.8702E-04	5.5659E-01	8.0439E-01	9.1611E+00
52	53	32065	13533	11899	1.4563E-01	3.7424E-04	5.5413E-01	8.0018E-01	2.0872E+00
53	54	108	31	843	8.4045E-03	3.6394E-05	1.6732E-01	6.4641E-01	6.9474E-01
54	55	34029	15193	66645	7.9483E-01	3.4493E-04	5.6262E-01	8.2264E-01	1.4711E+00
55	56	34021	14417	12859	1.6006E-01	3.9898E-04	5.7403E-01	8.0555E-01	2.0889E+00
56	57	33724	14104	2464	3.5181E-02	3.9287E-04	5.6273E-01	8.0202E-01	9.2431E+00
57	58	33723	14170	12712	1.5600E-01	3.8677E-04	5.6264E-01	7.9989E-01	2.0762E+00
58	59	87	33	507	4.8836E-03	5.9696E-05	1.5351E-01	6.6062E-01	7.8913E-01
59	60	54694	19408	94834	1.1883E+00	4.8622E-04	5.6214E-01	8.4642E-01	1.5034E+00
60	61	54119	18467	18503	2.4227E-01	6.8161E-04	5.7290E-01	8.4029E-01	2.2677E+00
61	62	174	50	674	6.1214E-03	5.1629E-05	2.1808E-01	6.1272E-01	7.9444E-01
62	63	53113	19129	94313	1.1679E+00	4.5916E-04	5.6058E-01	8.4157E-01	1.5029E+00
63	64	52550	18241	18205	2.3537E-01	6.6773E-04	5.8960E-01	8.3527E-01	2.2676E+00
64	65	226	41	1049	8.6011E-03	3.3268E-05	2.3512E-01	5.3090E-01	7.0730E-01
65	66	9509	4728	426109	3.8964E+00	5.2600E-05	2.5228E-01	6.1291E-01	8.2672E-01
66	67	9185	3645	13509	1.4179E-01	1.8462E-04	4.4176E-01	6.9814E-01	1.8484E+00
67	68	9578	3733	14285	1.4843E-01	1.6886E-04	4.0140E-01	6.9012E-01	1.8198E+00
68	69	33466	8964	11100	1.4313E-01	9.2474E-04	5.7976E-01	8.3561E-01	2.3862E+00
69	70	33639	8642	6047	8.9670E-02	9.8615E-04	5.7840E-01	8.3396E-01	8.8644E+00
70	71	18179	8446	56076	7.1730E-01	1.2912E-03	5.8631E-01	8.3441E-01	2.4999E+00
71	72	36487	9729	12118	1.5752E-01	9.5914E-04	5.7891E-01	8.4077E-01	2.3546E+00
72	73	36687	9377	6715	1.0007E-01	1.0589E-03	5.8356E-01	8.4108E-01	8.9087E+00
73	74	19761	9166	60141	7.7995E-01	1.3552E-03	5.8373E-01	8.4124E-01	2.4900E+00
74	75	119	28	2440	1.9914E-02	1.5711E-05	1.3086E-01	5.1973E-01	5.5770E-01
75	76	68	24	1046	9.7284E-03	7.5950E-05	2.9832E-01	6.2600E-01	9.6306E-01
76	77	10	4	51	4.1011E-04	3.0958E-06	9.5051E-05	5.2791E-01	9.6088E-01
77	78	3266	1448	9636	1.0337E-01	3.2036E-04	4.9888E-01	7.1942E-01	2.0881E+00
78	79	1860	800	10120	1.0951E-01	2.7002E-04	4.7800E-01	7.5710E-01	1.3320E+00
79	80	3	2	31	2.3021E-04	8.9497E-08	7.1537E-06	4.4452E-01	2.7253E-01
80	81	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	82	1409	590	4095	4.9508E-02	8.9172E-04	5.7868E-01	7.8301E-01	2.0962E+00
82	83	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	860	398	7716	8.8671E-02	2.1234E-03	6.0857E-01	7.8673E-01	4.3843E+00
85	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	87	321	190	36903	3.1646E-01	3.5101E-05	1.7346E-01	5.6528E-01	6.9186E-01

TOTAL 7114866 696006 3415280 4.2069E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

	CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.4939E-01	-5.4939E-01
2	2	3.0567E-01	.0000E+00	.0000E+00	.0000E+00	-8.8029E-01	-5.7462E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3695E-02	-1.3695E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.9518E-02	-4.9518E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6012E-02	-1.6012E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4129E-01	-1.4129E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6313E+00	-1.6313E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0484E+00	-2.0484E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0440E-01	-2.0440E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1322E-01	-2.1322E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9576E-01	-3.9576E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8396E-01	-3.8396E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7465E-02	-7.7465E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9887E-02	-7.9887E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7841E-02	-8.7841E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4712E-02	-7.4712E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.0025E-02	-7.0025E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4853E-02	-7.4853E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6531E-02	-9.6531E-02
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.7590E-02	-9.7590E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7805E-02	-8.7805E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3340E-02	-8.3340E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1317E-01	-1.1317E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1102E-01	-1.1102E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1477E-01	-1.1477E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1711E-01	-1.1711E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0417E-01	-1.0417E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.6073E-02	-8.6073E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4462E-02	-9.4462E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0308E-01	-1.0308E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9080E+01	-1.9080E+01
32	33	9.8005E+00	1.0052E+00	.0000E+00	.0000E+00	-9.5898E+00	1.2159E+00
33	34	2.5114E-02	.0000E+00	.0000E+00	.0000E+00	-2.3811E-02	1.3038E-03
34	35	9.2732E-04	.0000E+00	.0000E+00	.0000E+00	-9.0747E-04	1.9847E-05
35	36	1.9166E+01	.0000E+00	.0000E+00	.0000E+00	-1.9155E+01	1.0698E-02
36	37	1.7487E-03	.0000E+00	.0000E+00	.0000E+00	-1.7439E-03	4.7772E-06
37	38	2.0771E+01	.0000E+00	.0000E+00	.0000E+00	-2.0696E+01	7.5381E-02
38	39	1.9567E-03	.0000E+00	.0000E+00	.0000E+00	-1.9332E-03	2.3417E-05
39	40	3.3122E+01	.0000E+00	.0000E+00	.0000E+00	-1.0881E+01	2.2241E+01
40	41	8.4109E-01	.0000E+00	.0000E+00	.0000E+00	-8.3734E-01	3.7493E-03
41	42	1.4154E-04	.0000E+00	.0000E+00	.0000E+00	-1.3905E-04	2.4930E-06
42	43	1.7742E+00	.0000E+00	.0000E+00	.0000E+00	-1.7736E+00	6.1247E-04
43	44	1.9840E+00	.0000E+00	.0000E+00	.0000E+00	-1.9828E+00	1.2137E-03
44	45	2.1654E+00	.0000E+00	.0000E+00	.0000E+00	-2.1649E+00	5.1305E-04
45	46	2.6388E+00	.0000E+00	.0000E+00	.0000E+00	-1.1194E+00	1.5194E+00
46	47	1.0589E-01	.0000E+00	.0000E+00	.0000E+00	-6.4325E-02	4.1564E-02
47	48	1.4171E-01	.0000E+00	.0000E+00	.0000E+00	-1.3683E-01	4.8796E-03
48	49	1.8410E-01	.0000E+00	.0000E+00	.0000E+00	-7.2542E-02	1.1156E-01
49	50	4.5198E-01	.0000E+00	.0000E+00	.0000E+00	-2.5413E-01	1.9785E-01
50	51	4.4275E-01	.0000E+00	.0000E+00	.0000E+00	-4.2727E-01	1.5485E-02
51	52	4.3397E-01	.0000E+00	.0000E+00	.0000E+00	-4.2877E-01	5.2014E-03
52	53	4.3499E-01	.0000E+00	.0000E+00	.0000E+00	-1.8236E-01	2.5263E-01
53	54	1.2486E-03	.0000E+00	.0000E+00	.0000E+00	-1.6126E-04	1.0873E-03
54	55	4.7105E-01	.0000E+00	.0000E+00	.0000E+00	-2.6448E-01	2.0657E-01
55	56	4.6401E-01	.0000E+00	.0000E+00	.0000E+00	-4.4820E-01	1.5809E-02
56	57	4.5604E-01	.0000E+00	.0000E+00	.0000E+00	-4.5091E-01	5.1230E-03
57	58	4.5707E-01	.0000E+00	.0000E+00	.0000E+00	-1.9335E-01	2.6372E-01

TOTAL	1.0264E+02	1.0052E+00	.0000E+00	.0000E+00	-1.0264E+02	1.0052E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	2.1293E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1293E-04
33	34	.0000E+00	.0000E+00	-7.2851E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2851E-06
34	35	.0000E+00	.0000E+00	8.4050E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4050E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-4.1597E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1597E-06
37	38	.0000E+00	.0000E+00	-4.5618E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.5618E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	1.6894E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6894E-04
40	41	.0000E+00	.0000E+00	-1.6057E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6057E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-1.3990E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3990E-06
43	44	.0000E+00	.0000E+00	-1.2189E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2189E-05
44	45	.0000E+00	.0000E+00	3.2573E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2573E-06
45	46	.0000E+00	.0000E+00	-3.6143E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6143E-06
46	47	.0000E+00	.0000E+00	-8.2767E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2767E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	4.5961E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.5961E-08
49	50	.0000E+00	.0000E+00	3.4990E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4990E-05
50	51	.0000E+00	.0000E+00	-2.0125E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0125E-04
51	52	.0000E+00	.0000E+00	-1.6185E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6185E-05
52	53	.0000E+00	.0000E+00	1.1553E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1553E-04
53	54	.0000E+00	.0000E+00	-4.1849E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1849E-06
54	55	.0000E+00	.0000E+00	6.8766E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8766E-05
55	56	.0000E+00	.0000E+00	-1.0648E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0648E-04
56	57	.0000E+00	.0000E+00	-4.1012E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1012E-05
57	58	.0000E+00	.0000E+00	-7.0313E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.8464E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8464E-05
TOTAL		.0000E+00	.0000E+00	-5.6269E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6269E-04

1 NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3495E-02	.0000E+00	-1.3495E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.2641E-03	.0000E+00	-3.8331E-01	-1.1321E-03	-3.4358E-01
33	34	.0000E+00	.0000E+00	-1.1986E-04	.0000E+00	-1.1986E-04
34	35	.0000E+00	.0000E+00	-1.5157E-05	.0000E+00	-1.5157E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-6.1745E-07	.0000E+00	-6.1745E-07
37	38	6.0027E-05	.0000E+00	-6.6892E-03	-3.0014E-05	-6.6592E-03
38	39	.0000E+00	.0000E+00	-4.5764E-06	.0000E+00	-4.5764E-06
39	40	.0000E+00	.0000E+00	-5.2135E-02	.0000E+00	-5.2135E-02
40	41	.0000E+00	.0000E+00	-3.7332E-03	.0000E+00	-3.7332E-03
41	42	.0000E+00	.0000E+00	-2.4930E-06	.0000E+00	-2.4930E-06
42	43	.0000E+00	.0000E+00	-6.0279E-04	.0000E+00	-6.0279E-04
43	44	.0000E+00	.0000E+00	-1.2015E-03	.0000E+00	-1.2015E-03
44	45	.0000E+00	.0000E+00	-5.1631E-04	.0000E+00	-5.1631E-04
45	46	.0000E+00	.0000E+00	-2.8671E-03	.0000E+00	-2.8671E-03
46	47	.0000E+00	.0000E+00	-3.2910E-04	.0000E+00	-3.2910E-04
47	48	.0000E+00	.0000E+00	-4.1395E-05	.0000E+00	-4.1395E-05
48	49	.0000E+00	.0000E+00	-2.6929E-04	.0000E+00	-2.6929E-04
49	50	.0000E+00	.0000E+00	-2.4125E-03	.0000E+00	-2.4125E-03
50	51	.0000E+00	.0000E+00	-1.0405E-02	.0000E+00	-1.0405E-02
51	52	.0000E+00	.0000E+00	-6.1559E-04	.0000E+00	-6.1559E-04

52	53	.0000E+00	.0000E+00	-1.0315E-02	.0000E+00	.0000E+00	-1.0315E-02
53	54	.0000E+00	.0000E+00	-4.3726E-05	.0000E+00	.0000E+00	-4.3726E-05
54	55	.0000E+00	.0000E+00	-2.4528E-03	.0000E+00	.0000E+00	-2.4528E-03
55	56	.0000E+00	.0000E+00	-1.0763E-02	.0000E+00	.0000E+00	-1.0763E-02
56	57	.0000E+00	.0000E+00	-6.4523E-04	.0000E+00	.0000E+00	-6.4523E-04
57	58	.0000E+00	.0000E+00	-1.0767E-02	.0000E+00	.0000E+00	-1.0767E-02
58	59	.0000E+00	.0000E+00	-2.3966E-05	.0000E+00	.0000E+00	-2.3966E-05
59	60	.0000E+00	.0000E+00	-2.9930E-03	.0000E+00	.0000E+00	-2.9930E-03
60	61	.0000E+00	.0000E+00	-1.1166E-02	.0000E+00	.0000E+00	-1.1166E-02
61	62	.0000E+00	.0000E+00	-2.8762E-05	.0000E+00	.0000E+00	-2.8762E-05
62	63	.0000E+00	.0000E+00	-3.0741E-03	.0000E+00	.0000E+00	-3.0741E-03
63	64	.0000E+00	.0000E+00	-1.1546E-02	.0000E+00	.0000E+00	-1.1546E-02
64	65	.0000E+00	.0000E+00	-4.4964E-05	.0000E+00	.0000E+00	-4.4964E-05
65	66	.0000E+00	.0000E+00	-1.9804E-02	.0000E+00	.0000E+00	-1.9804E-02
66	67	.0000E+00	.0000E+00	-1.4175E-02	.0000E+00	.0000E+00	-1.4175E-02
67	68	.0000E+00	.0000E+00	-1.4965E-02	.0000E+00	.0000E+00	-1.4965E-02
68	70	.0000E+00	.0000E+00	-5.5026E-03	.0000E+00	.0000E+00	-5.5026E-03
69	71	.0000E+00	.0000E+00	-6.7769E-04	.0000E+00	.0000E+00	-6.7769E-04
70	72	.0000E+00	.0000E+00	-2.1546E-02	.0000E+00	.0000E+00	-2.1546E-02
71	73	.0000E+00	.0000E+00	-5.5501E-03	.0000E+00	.0000E+00	-5.5501E-03
72	74	.0000E+00	.0000E+00	-7.6852E-04	.0000E+00	.0000E+00	-7.6852E-04
73	75	.0000E+00	.0000E+00	-2.2869E-02	.0000E+00	.0000E+00	-2.2869E-02
74	76	.0000E+00	.0000E+00	-1.0909E-04	.0000E+00	.0000E+00	-1.0909E-04
75	77	.0000E+00	.0000E+00	-4.4464E-05	.0000E+00	.0000E+00	-4.4464E-05
76	80	.0000E+00	.0000E+00	-3.9382E-05	.0000E+00	.0000E+00	-3.9382E-05
77	81	.0000E+00	.0000E+00	-7.8521E-03	.0000E+00	.0000E+00	-7.8521E-03
78	82	.0000E+00	.0000E+00	-3.5883E-04	.0000E+00	.0000E+00	-3.5883E-04
79	83	.0000E+00	.0000E+00	-1.4842E-06	.0000E+00	.0000E+00	-1.4842E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-1.9528E-03	.0000E+00	.0000E+00	-1.9528E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	2.5737E-05	.0000E+00	-1.7317E-03	-1.2868E-05	.0000E+00	-1.7188E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.6334E-03	.0000E+00	.0000E+00	-1.6334E-03

TOTAL 2.3499E-03 .0000E+00 -6.6222E-01 -1.1750E-03 -3.4358E-01 -1.0046E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	279013 15894	2.9119E+00 1.9054E-01	1.3426E-02 6.9485E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7095E-01 2.3924E-04 2.8704E-05 1.8626E-06 5.5649E-06 3.0868E-05 2.8100E-06 1.2464E-08 8.1841E-05 4.4435E-03 1.0041E-03 3.2088E-01 1.7263E-04 1.3971E-06 1.5029E-03 4.2242E-04 1.7350E-10 5.2259E-05 1.6996E-04 5.0277E-08 5.7041E-06 1.9502E-08	99656 573 58 953 330 95 876 0 137 23701 869 150610 474 8 16183 3153 0 119 1157 1 19 1	1.4492E+00 7.2889E-03 8.0069E-04 1.0625E-02 3.6855E-03 1.2450E-03 9.2034E-03 .0000E+00 1.8177E-03 4.5720E-01 1.2588E-02 2.1991E+00 6.1718E-03 8.4439E-05 3.2181E-01 4.1541E-02 .0000E+00 1.6528E-03 1.4214E-02 3.6276E-05 2.3829E-04 1.0244E-05	1.2601E-03 6.4300E-03 6.7211E-04 1.0524E-02 3.6661E-03 1.0245E-03 9.1844E-03 .0000E+00 1.1794E-03 4.0496E-02 4.2974E-03 1.8890E-01 4.9437E-03 7.7319E-05 5.9351E-02 3.6901E-02 .0000E+00 1.1572E-03 1.3022E-02 1.1537E-06 2.2653E-04 1.7531E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.6872E-05 2.0063E-01 1.8772E-04 2.0887E-02 4.3759E-05 2.3450E-06 1.2150E-01 1.4608E-04 .0000E+00 1.7974E-05 1.3127E-04 5.6788E-06 .0000E+00 8.2382E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.4567E-05 .0000E+00 1.1175E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 2 2 502 9	1.1400E-05 2.1756E-05 2.2083E-05 5.3787E-03 9.9467E-05	3.0745E-10 6.3700E-06 5.7572E-07 1.0766E-04 5.2472E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	304 12	2.5125E-03 1.0202E-04	1.5153E-05 3.9340E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	16	2.5608E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	13 0	1.1607E-04 .0000E+00	6.1745E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	187 98 228 49963 458	2.7027E-03 1.4087E-03 3.1287E-03 7.4240E-01 6.7726E-03	4.1129E-06 1.4023E-04 1.5504E-04 6.2318E-03 1.5805E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 3.0014E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	90 3	7.4498E-04 3.2410E-05	4.5749E-06 1.4411E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1342819 117615	1.7457E+01 1.6996E+00	5.0908E-02 1.2271E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	84875 7060	1.1111E+00 1.0212E-01	3.6675E-03 6.5672E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	39 2	4.2983E-04 2.5092E-05	2.4923E-06 6.9611E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	16 9 19 3660 41	2.2430E-04 1.3098E-04 2.6181E-04 5.4365E-02 6.0959E-04	1.3533E-09 1.4587E-05 1.5305E-05 5.5481E-04 1.8080E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	28019 2404	3.6724E-01 3.4552E-02	1.1758E-03 2.5662E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 8 17 3127 33	1.4453E-04 9.2441E-05 2.2813E-04 4.6407E-02 4.7897E-04	1.3646E-10 2.5424E-05 1.0927E-05 4.6560E-04 1.4363E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	67248 5530	8.7990E-01 8.0270E-02	2.7996E-03 6.7503E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7324 603	9.5649E-02 8.6756E-03	3.2686E-04 2.2367E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 0 0 312 2	8.1105E-06 .0000E+00 .0000E+00 4.6316E-03 3.1571E-05	3.1642E-10 .0000E+00 .0000E+00 3.9522E-05 1.8734E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6067 449	8.0029E-02 6.5285E-03	2.6273E-04 6.5581E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59787 4516	7.0524E-01 6.1384E-02	2.3668E-03 4.5754E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	10 49 58 0 1 1411 480 7508 2250 162	1.1962E-04 5.6359E-04 7.6064E-04 .0000E+00 5.9392E-06 1.8451E-02 6.8451E-03 9.0937E-02 2.7878E-02 2.1148E-03	2.6078E-08 3.5805E-05 1.2335E-05 .0000E+00 3.1100E-06 1.8242E-03 1.0115E-03 5.4826E-03 1.7318E-03 3.0319E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2322 4	3.3279E-02 4.8278E-05	6.1200E-04 3.5900E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	6 38 40 5 0 1392	8.7383E-05 4.6428E-04 5.2110E-04 6.7701E-05 .0000E+00 1.8061E-02	6.2878E-09 2.5384E-05 6.2301E-06 2.4028E-07 .0000E+00 1.8519E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	444	6.0741E-03	9.4872E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7547	9.0660E-02	5.4573E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2279	2.7666E-02	1.7560E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	148	2.0284E-03	2.6969E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	811	8.0243E-03	4.3716E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	32	3.8013E-04	1.0000E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	61825	7.2885E-01	2.4134E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4820	6.5986E-02	3.9406E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	5	5.9034E-05	1.5953E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	5.9307E-04	2.6313E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	6.4849E-04	7.3853E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	9.2696E-05	1.2207E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.7067E-05	2.1306E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1510	1.9792E-02	1.9740E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	560	7.8457E-03	1.0915E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8049	9.8208E-02	5.5903E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2483	3.0817E-02	1.8177E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	151	1.9913E-03	2.5493E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2458	3.5121E-02	6.3180E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	6	6.0642E-05	1.3435E-05	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	5	7.5787E-05	9.0231E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	5.0129E-04	2.6678E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	6.4588E-04	1.0774E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.1812E-05	1.6392E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5920E-05	1.2371E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1568	2.0451E-02	2.0467E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	465	6.3763E-03	9.4545E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7982	9.6199E-02	5.6350E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2450	2.9766E-02	1.8467E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	151	1.9465E-03	2.5446E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	479	4.5135E-03	2.3959E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	28	3.7008E-04	6.2273E-09	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	87219	1.0813E+00	2.9280E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7615	1.0698E-01	6.5019E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	11	1.4285E-04	1.7915E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	7.0058E-04	1.7985E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	79	1.1787E-03	7.9178E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1406E-04	1.0175E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.0976E-05	2.1958E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2286	3.1216E-02	2.0797E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	877	1.2829E-02	9.6322E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11498	1.4792E-01	5.7768E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3423	4.4397E-02	1.8586E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	266	3.7320E-03	4.5857E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	646	5.8791E-03	2.8754E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	28	2.4225E-04	7.4097E-09	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	86909	1.0651E+00	3.0142E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7404	1.0278E-01	5.9935E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	14	1.7181E-04	4.9923E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	64	8.2699E-04	3.7633E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	86	1.2849E-03	7.2913E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.4386E-04	1.8295E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.6032E-05	4.4863E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2163	2.9205E-02	2.0336E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	874	1.2507E-02	1.1055E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11338	1.4390E-01	5.9248E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3373	4.3299E-02	1.8994E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	279	3.9749E-03	5.3115E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1003	8.1567E-03	4.4954E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	46	4.4435E-04	1.0362E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	406317	3.6965E+00	1.9735E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19792	1.9991E-01	6.9597E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	2	2.2076E-05	1.9647E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	5.5856E-04	3.1706E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	56	6.7037E-04	1.2030E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.3241E-05	1.1553E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5604E-05	1.0253E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1519	1.6821E-02	2.5794E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	398	4.9282E-03	1.1930E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8754	8.9954E-02	7.6238E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2581	2.7182E-02	2.4767E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	141	1.5698E-03	2.5605E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	10	1.0252E-04	2.3875E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	5.3347E-04	4.2135E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	5.8805E-04	1.1676E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	2.6960E-05	9.1940E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2958E-05	1.3294E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1559	1.6897E-02	2.8256E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	446	5.8226E-03	1.1974E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9287	9.4892E-02	8.0180E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2728	2.7845E-02	2.5769E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	147	1.6896E-03	2.9071E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	5	6.7030E-05	4.4878E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	5.5447E-04	2.2284E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	8.8962E-04	5.1036E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.2147E-05	3.7184E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1363	1.8564E-02	1.0136E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	542	7.6848E-03	5.8919E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6801	8.6021E-02	2.7178E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2098	2.6782E-02	9.3227E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	177	2.5073E-03	2.2193E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6040	8.9587E-02	6.6947E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	8.3351E-05	8.2177E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	34	4.7799E-04	2.1813E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	202	2.5958E-03	5.5979E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	298	4.3104E-03	1.7737E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	18	2.5811E-04	2.0899E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.1653E-05	3.4227E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7150	9.8028E-02	3.7488E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2420	3.4415E-02	1.9018E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34458	4.3047E-01	1.1065E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10607	1.3428E-01	3.6453E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	883	1.2380E-02	1.1062E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	8	1.1295E-04	1.4092E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	6.2948E-04	1.8299E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	7.6855E-04	6.1695E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1969E-04	5.6701E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.8320E-05	2.7869E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1484	2.0546E-02	9.0385E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	538	7.8266E-03	4.9712E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7518	9.5440E-02	2.9198E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2284	2.9615E-02	9.5799E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	176	2.4436E-03	2.4628E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6703	9.9908E-02	7.5729E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.6206E-04	1.1235E-05	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	40	5.8445E-04	2.2984E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	232	2.9698E-03	6.9675E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	336	4.8883E-03	1.5627E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	22	2.8743E-04	2.1716E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.1782E-05	8.9223E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7861	1.0866E-01	4.3045E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2428	3.4850E-02	1.9911E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36704	4.6531E-01	1.1517E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11613	1.4965E-01	3.8492E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	899	1.2658E-02	1.1187E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2327	1.8926E-02	1.0769E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	113	9.8752E-04	1.4036E-06	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	983	9.0792E-03	4.4443E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	63	6.4918E-04	2.1058E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	3.0459E-05	4.9833E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1	1.5248E-05	4.4646E-07	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33	2.6814E-04	2.3854E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	14	9.6267E-05	1.0098E-05	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	3	3.3464E-05	2.5177E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	27	2.9167E-04	1.7299E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	35	4.8344E-04	4.3307E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.4506E-05	3.7052E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	6.1104E-05	8.4124E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1118	1.2752E-02	1.4655E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	320	4.0622E-03	7.9151E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6123	6.4070E-02	4.0474E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1884	2.0124E-02	1.3055E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	117	1.4454E-03	2.1177E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	9437	1.0087E-01	3.5191E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	683	8.6393E-03	6.9246E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	29	2.2178E-04	1.4838E-06	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	2	8.4347E-06	3.7504E-10	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	4	5.6806E-05	2.9775E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	2	3.1835E-05	3.6300E-09	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	8	1.1166E-04	6.2033E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	1.7369E-05	4.1415E-08	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	21	2.8614E-04	1.4676E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	589	7.7073E-03	3.9255E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	80	1.1533E-03	6.6518E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1008	1.1913E-02	3.7393E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2250	2.6527E-02	9.5393E-04	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	71	8.5268E-04	4.8821E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	61	8.5086E-04	1.0176E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	53	6.6478E-04	2.0287E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	18	2.4371E-04	4.4523E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	10	1.3861E-04	5.5546E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	3.4635E-05	3.9410E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	175	2.2887E-03	1.0752E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7457	8.5301E-02	1.6192E-03	.0000E+00	1.2868E-05
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	35338	3.0154E-01	1.6315E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1565	1.4922E-02	1.9326E-06	.0000E+00	.0000E+00
TOTAL				3415280	4.2411E+01	6.6222E-01	3.4358E-01	1.1750E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2568921	3.0641E+01	1.0532E-01	.0000E+00	.0000E+00
		2004.50C		16	2.5608E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		210	2.7786E-03	2.4018E-07	.0000E+00	.0000E+00
		7014.50C		955	1.1783E-02	4.2717E-04	.0000E+00	.0000E+00
		8016.50C		296150	4.1383E+00	3.0185E-03	.0000E+00	.0000E+00

13027.50C	17525	2.5793E-01	2.6706E-03	.0000E+00	.0000E+00
14000.50C	1270	1.7994E-02	1.2567E-04	.0000E+00	.0000E+00
15031.50C	106	1.4508E-03	1.2673E-05	.0000E+00	.0000E+00
16032.50C	35	4.9936E-04	3.0143E-05	.0000E+00	.0000E+00
22000.50C	21	2.8614E-04	1.4676E-05	.0000E+00	.0000E+00
24000.50C	33093	4.3884E-01	2.9236E-02	.0000E+00	.0000E+00
25055.50C	11048	1.5552E-01	1.4401E-02	.0000E+00	.0000E+00
26000.55C	172331	2.0951E+00	8.3974E-02	.0000E+00	1.2868E-05
28000.50C	52317	6.4592E-01	2.7618E-02	.0000E+00	.0000E+00
29000.50C	100	1.2070E-03	8.5299E-05	.0000E+00	.0000E+00
40000.50C	57564	8.5318E-01	7.3994E-03	.0000E+00	3.0014E-05
42000.50C	3758	5.1333E-02	5.6254E-03	.0000E+00	.0000E+00
45103.50C	573	7.2889E-03	6.4300E-03	.0000E+00	.0000E+00
47109.50C	58	8.0069E-04	6.7211E-04	.0000E+00	.0000E+00
50000.35C	543	7.9922E-03	1.9761E-04	.0000E+00	.0000E+00
62149.50C	953	1.0625E-02	1.0524E-02	.0000E+00	.0000E+00
63151.55C	330	3.6855E-03	3.6661E-03	.0000E+00	.0000E+00
63153.55C	95	1.2450E-03	1.0245E-03	.0000E+00	.0000E+00
64155.50C	876	9.2034E-03	9.1844E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	137	1.8177E-03	1.1794E-03	2.6872E-05	.0000E+00
92235.50C	23701	4.5720E-01	4.0496E-02	2.0063E-01	1.4567E-05
92236.50C	869	1.2588E-02	4.2974E-03	1.8772E-04	.0000E+00
92238.50C	150610	2.1991E+00	1.8890E-01	2.0887E-02	1.1175E-03
93237.55C	474	6.1718E-03	4.9437E-03	4.3759E-05	.0000E+00
94238.50C	8	8.4439E-05	7.7319E-05	2.3450E-06	.0000E+00
94239.55C	16183	3.2181E-01	5.9351E-02	1.2150E-01	.0000E+00
94240.50C	3153	4.1541E-02	3.6901E-02	1.4608E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	119	1.6528E-03	1.1572E-03	1.7974E-05	.0000E+00
95241.50C	1157	1.4214E-02	1.3022E-02	1.3127E-04	.0000E+00
95242.50C	1	3.6276E-05	1.1537E-06	5.6788E-06	.0000E+00
95243.50C	19	2.3829E-04	2.2653E-04	.0000E+00	.0000E+00
96245.35C	1	1.0244E-05	1.7531E-06	8.2382E-06	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59689 CTM = 115.43

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 115.55 MINUTES

MCNP VERSION 4A-B 10/04/91

02/16/95 21:40:54

PROBID = 02/16/95 19:45:08

1MCNP VERSION 4A-B LD=10/04/91 02/16/95 21:40:54

INP=mpc12f OUTP=mpc12f.o

PROBID = 02/16/95 21:40:54

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/500 year (mpc12f)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE.
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.00%/20 GWD/500 YEAR -- UO2								
331-	M2	8016.50C	4.7766E-02							
332-		45103.50C	1.7033E-05							
333-		47109.50C	2.0435E-06							
334-		62149.50C	1.3260E-07							
335-		63151.55C	4.3085E-07							
336-		63153.55C	2.1975E-06							
337-		64155.50C	2.0006E-07							
338-		92233.50C	1.7957E-09							
339-		92234.50C	5.9042E-06							
340-		92235.50C	3.1682E-04							
341-		92236.50C	7.2110E-05							
342-		92238.50C	2.2844E-02							
343-		93237.55C	1.5611E-05							
344-		94238.50C	2.1284E-08							
345-		94239.55C	1.0638E-04							
346-		94240.50C	2.9433E-05							
347-		94241.50C	2.3189E-12							
348-		94242.50C	3.7204E-06							
349-		95241.50C	8.7791E-06							
350-		95242.50C	1.4379E-09							
351-		95243.50C	3.9859E-07							
352-		96245.35C	1.3659E-09							
353-	C	He AT 10 ATM DENSITY=1.785E-3 GM/CC								
354-	M3	2004.50C	1.0							
355-	C	ZIRCALOY-4								
356-	M4	8016.50C	-0.0012	24000.50C	-0.0010	26000.55C	-0.0020			

357-		40000.50C	-0.9818	50000.35C	-0.0140	
358-	C	ALLOY 825				
359-	M5	6000.50C	-0.0005	13027.50C	-0.0020	14000.50C -0.0050
360-		16032.50C	-0.0003	22000.50C	-0.0090	24000.50C -0.2150
361-		25055.50C	-0.0100	26000.55C	-0.2857	28000.50C -0.4200
362-		29000.50C	-0.0250	42000.50C	-0.0300	
363-	C	1100 ALUMINUM				
364-	M6	13027.50C	-0.99880	29000.50C	-0.00120	
365-	C	A516 CARBON STEEL				
366-	M7	6000.50C	-0.0022	14000.50C	-0.00275	15031.50C -0.00035
367-		16032.50C	-0.00035	25055.50C	-0.0090	
368-		26000.55C	-0.98535			
369-	C	SS316L				
370-	M8	6000.50C	-0.00030	7014.50C	-0.00100	14000.50C -0.00750
371-		15031.50C	-0.00045	16032.50C	-0.00030	24000.50C -0.17000
372-		25055.50C	-0.02000	26000.55C	-0.64545	28000.50C -0.12000
373-		42000.50C	-0.02500			
374-	C	TALLIES				
375-	PRINT					

SURFACES	16048 AND	19048 OF CELL	8 ARE THE SAME.	19048 WILL BE DELETED.
SURFACES	16049 AND	19049 OF CELL	8 ARE THE SAME.	19049 WILL BE DELETED.
SURFACES	16050 AND	17050 OF CELL	8 ARE THE SAME.	17050 WILL BE DELETED.
SURFACES	16050 AND	20050 OF CELL	8 ARE THE SAME.	20050 WILL BE DELETED.
SURFACES	16050 AND	21050 OF CELL	8 ARE THE SAME.	21050 WILL BE DELETED.
SURFACES	16051 AND	17051 OF CELL	8 ARE THE SAME.	17051 WILL BE DELETED.
SURFACES	16051 AND	20051 OF CELL	8 ARE THE SAME.	20051 WILL BE DELETED.
SURFACES	16051 AND	21051 OF CELL	8 ARE THE SAME.	21051 WILL BE DELETED.
SURFACES	18050 AND	22050 OF CELL	8 ARE THE SAME.	22050 WILL BE DELETED.
SURFACES	18051 AND	22051 OF CELL	8 ARE THE SAME.	22051 WILL BE DELETED.
SURFACES	19050 AND	23050 OF CELL	8 ARE THE SAME.	23050 WILL BE DELETED.
SURFACES	19051 AND	23051 OF CELL	8 ARE THE SAME.	23051 WILL BE DELETED.
SURFACES	20048 AND	23048 OF CELL	8 ARE THE SAME.	23048 WILL BE DELETED.
SURFACES	20049 AND	23049 OF CELL	8 ARE THE SAME.	23049 WILL BE DELETED.
SURFACES	24048 AND	27048 OF CELL	9 ARE THE SAME.	27048 WILL BE DELETED.
SURFACES	24049 AND	27049 OF CELL	9 ARE THE SAME.	27049 WILL BE DELETED.
SURFACES	24050 AND	25050 OF CELL	9 ARE THE SAME.	25050 WILL BE DELETED.
SURFACES	24050 AND	28050 OF CELL	9 ARE THE SAME.	28050 WILL BE DELETED.
SURFACES	24050 AND	29050 OF CELL	9 ARE THE SAME.	29050 WILL BE DELETED.
SURFACES	24051 AND	25051 OF CELL	9 ARE THE SAME.	25051 WILL BE DELETED.

SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2945
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2945
 POINTS AFTER EXPANSION OR CONTRACTION 3001
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119122E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE	ATOM FRACTION
1	1001, .66667	8016, .33333
2	8016, .67095	45103, .00024
	63151, .00001	63153, .00003
	92234, .00008	92235, .00445
	93237, .00022	94238, .00000
	94241, .00000	94242, .00005
	95243, .00001	96245, .00000
3	2004, 1.00000	
4	8016, .00681	24000, .00175
	50000, .01071	26000, .00325
5	6000, .00234	13027, .00417
	22000, .01057	24000, .23247
		47109, .00003
		64155, .00000
		92236, .00101
		94239, .00149
		95241, .00012
		62149, .00000
		92233, .00000
		92238, .32088
		94240, .00041
		95242, .00000
		40000, .97748
		16032, .00053
		25055, .01023
		26000, .28763

	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

PRINT TABLE 40

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00001	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00022	92235,	.01175	92236,	.00269	92238,	.85819
	93237,	.00058	94238,	.00000	94239,	.00401	94240,	.00112
	94241,	.00000	94242,	.00014	95241,	.00033	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05226E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	69	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	70	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	71	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	73	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	74	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	75	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	77	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	78	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	79	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	80	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	81	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	82	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	84	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	85	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE
17	17	.00000E+00	INFINITE
18	18	.00000E+00	INFINITE
19	19	.00000E+00	INFINITE
20	21	.00000E+00	INFINITE
21	22	.00000E+00	INFINITE
22	23	.00000E+00	INFINITE
23	24	.00000E+00	INFINITE
24	25	.00000E+00	INFINITE
25	26	.00000E+00	INFINITE
26	27	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	INFINITE
31	32	.00000E+00	INFINITE
32	33	.00000E+00	INFINITE
33	34	.00000E+00	INFINITE
34	35	.00000E+00	INFINITE
35	36	.00000E+00	INFINITE
36	37	.00000E+00	INFINITE
37	38	.00000E+00	INFINITE
38	39	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	INFINITE
43	44	.00000E+00	INFINITE
44	45	.00000E+00	INFINITE
45	46	.00000E+00	INFINITE
46	48	.00000E+00	INFINITE
47	49	.00000E+00	INFINITE
48	50	.00000E+00	INFINITE
49	51	.00000E+00	INFINITE
50	52	.00000E+00	INFINITE
51	53	.00000E+00	INFINITE
52	54	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05226E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1.31148E+01 8.65579E+01
 1SURFACES

PRINT TABLE 70

SURFACE		TRANS	TYPE	SURFACE COEFFICIENTS	
1	1	REFL.	PX	.0000000E+00	
2	2	REFL.	PY	.0000000E+00	
3	3	REFL.	PZ	.0000000E+00	
4	4		PZ	2.0320000E+02	
5	5		PZ	2.2225000E+02	
6	6		PZ	2.2925000E+02	
7	7		PZ	2.3175000E+02	
8	8		PZ	2.4885000E+02	
9	9		CZ	6.0794900E+01	
10	10		CZ	6.3017400E+01	

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	-7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
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58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

(1314) 79/06/21.
(1340) 79/07/31.
(1394) 79/10/17.
(1396) 79/08/30.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/500 year (mpc12f)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.373E-01	-1.814E-01	8.210E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.997E-01	2.876E-01
2	1.353E-01	4.139E-01	1.240E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.997E-01	5.111E-01
3	-2.862E-01	2.761E-01	3.352E+00	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.997E-01	8.456E-01
4	-1.724E-01	1.856E-02	2.397E+00	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.997E-01	2.023E+00
5	1.906E-01	1.220E-01	2.830E+00	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.997E-01	3.300E-01
6	-2.334E-01	-3.172E-01	1.219E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.997E-01	4.168E-01
7	1.531E-01	3.002E-01	4.900E+00	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.997E-01	3.687E+00
8	6.013E-02	1.764E-02	2.670E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.997E-01	3.919E+00
9	1.315E-02	4.245E-01	1.435E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.997E-01	5.638E-01
10	2.822E-01	-3.255E-01	3.048E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.997E-01	2.579E+00
11	2.618E-01	-3.579E-01	3.082E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.997E-01	2.813E+00
12	9.743E-02	4.444E-01	3.052E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.997E-01	1.537E+00
13	5.817E-02	4.202E-01	3.057E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.997E-01	5.008E+00
14	-1.059E-01	4.505E-01	3.121E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.997E-01	1.242E+00
15	1.189E-02	2.777E-01	5.278E+00	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.997E-01	1.863E-01
16	-1.907E-01	-4.172E-01	4.997E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.997E-01	2.585E+00
17	-2.949E-01	1.792E-01	4.982E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.997E-01	2.592E+00
18	5.176E-02	-3.316E-01	5.011E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.997E-01	3.828E+00
19	-2.805E-01	5.137E-02	2.004E+00	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.997E-01	3.954E-01
20	7.512E-02	8.684E-02	9.214E+00	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.997E-01	9.449E-01
21	1.247E-02	7.164E-03	9.086E+00	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.997E-01	2.365E+00
22	-1.918E-01	-4.182E-01	1.621E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.997E-01	3.179E+00
23	-1.135E-01	1.568E-01	2.568E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.997E-01	6.880E-01
24	2.768E-01	9.932E-02	2.258E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.997E-01	1.040E+00
25	-3.240E-01	2.786E-01	4.372E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.997E-01	2.865E-01
26	2.226E-01	-1.384E-01	4.521E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.997E-01	3.664E+00
27	2.821E-02	-4.232E-01	4.370E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.997E-01	2.154E+00
28	1.811E-02	4.205E-01	4.469E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.997E-01	1.323E+00
29	2.967E-02	1.245E-01	4.465E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.997E-01	1.988E+00
30	-3.356E-01	-9.763E-03	5.762E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.997E-01	6.087E-01
31	-1.704E-01	-3.759E-01	5.703E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.997E-01	1.789E+00
32	8.330E-02	-2.370E-01	3.636E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.997E-01	4.387E+00
33	7.305E-02	-1.586E-01	3.630E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.997E-01	7.387E-01
34	4.267E-01	1.820E-01	3.960E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.997E-01	2.978E+00
35	-2.745E-01	-2.100E-01	3.111E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.997E-01	1.909E+00
36	3.646E-01	-2.672E-01	3.175E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.997E-01	1.113E+00
37	1.135E-01	-1.035E-01	5.152E-02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.997E-01	2.043E+00
38	1.310E-01	-1.206E-01	6.235E+00	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.997E-01	6.298E-01
39	-4.652E-02	4.303E-01	1.168E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.997E-01	2.172E+00
40	5.771E-02	4.468E-01	1.152E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.997E-01	1.321E+00
41	-2.755E-01	1.194E-01	2.009E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.997E-01	3.547E-01
42	-4.503E-02	1.066E-01	2.416E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.997E-01	9.537E+00
43	-2.104E-01	-9.542E-02	2.300E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.997E-01	2.445E+00
44	-6.588E-02	9.908E-02	5.778E+00	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.997E-01	6.690E-01
45	4.019E-01	-5.829E-02	7.872E+00	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.997E-01	2.574E+00
46	-3.094E-01	1.523E-01	1.485E-01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.997E-01	2.418E+00
47	7.513E-02	2.801E-01	2.158E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.997E-01	2.465E-02
48	4.906E-02	-2.217E-01	2.254E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.997E-01	1.008E-01
49	5.947E-02	-3.300E-01	2.254E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.997E-01	1.289E+00

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50 1.699E-02 -4.318E-01 2.115E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.997E-01 1.961E+00

CYCLE 1 K(COLLISION) .896863 REMOVAL LIFETIME(ABS) 3.2175E+03 SOURCE POINTS GENERATED 2727
CYCLE 2 K(COLLISION) .882402 REMOVAL LIFETIME(ABS) 3.2593E+03 SOURCE POINTS GENERATED 2966
CYCLE 3 K(COLLISION) .906127 REMOVAL LIFETIME(ABS) 3.2743E+03 SOURCE POINTS GENERATED 3071
CYCLE 4 K(COLLISION) .891050 REMOVAL LIFETIME(ABS) 3.0669E+03 SOURCE POINTS GENERATED 2943
CYCLE 5 K(COLLISION) .891841 REMOVAL LIFETIME(ABS) 3.3273E+03 SOURCE POINTS GENERATED 2988
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .871389 REMOVAL LIFETIME(ABS) 3.3341E+03 SOURCE POINTS GENERATED 2952
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6
ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .881415 .876402 .0057 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .881052 .883558 .0028 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .883562 .870927 .0145 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.3023E+03 3.3082E+03 .0018 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.3193E+03 3.3267E+03 .0022 SOURCE POINTS GENERATED 2983
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7
ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .889409 .880738 .0059 K(COL/ABS) .884445 .0051 .885224 .0088 .6265
K(ABSORPTION) .897340 .888152 .0054 K(ABS/TK LN) .883056 .0074 .887973 .0084 .4457
K(TRK LENGTH) .892022 .877959 .0115 K(TK LN/COL) .879348 .0087 .883286 .0036 .9770
REM LIFE(COL) 3.2762E+03 3.2976E+03 .0034 LIFE(COL/ABS) 3.3026E+03 .0047 3.2847E+03 .0011 .9958
REM LIFE(ABS) 3.2693E+03 3.3076E+03 .0059 SOURCE POINTS GENERATED 2977
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8
ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .904607 .886705 .0079 K(COL/ABS) .888351 .0057 .890478 .0053 .6946
K(ABSORPTION) .895529 .889996 .0044 K(ABS/TK LN) .888655 .0082 .890357 .0050 .6163
K(TRK LENGTH) .915378 .887314 .0133 K(TK LN/COL) .887009 .0106 .885909 .0036 .9876
REM LIFE(COL) 3.3283E+03 3.3052E+03 .0033 K(COL/ABS/TK LN) .888005 .0081 .885925 .0073 .0409
REM LIFE(ABS) 3.2551E+03 3.2945E+03 .0058 LIFE(COL/ABS) 3.2998E+03 .0034 3.3026E+03 .0036 .0409
SOURCE POINTS GENERATED 3080
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9
ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .912465 .891857 .0084 K(COL/ABS) .893236 .0070 .895431 .0070 .8516
K(ABSORPTION) .913087 .894614 .0062 K(ABS/TK LN) .892528 .0076 .894683 .0072 .5895
K(TRK LENGTH) .902957 .890442 .0108 K(TK LN/COL) .891150 .0094 .892531 .0093 .9010
REM LIFE(COL) 3.2107E+03 3.2863E+03 .0063 K(COL/ABS/TK LN) .892305 .0079 .896098 .0079 .7549
REM LIFE(ABS) 3.1895E+03 3.2735E+03 .0078 LIFE(COL/ABS) 3.2799E+03 .0066 3.2850E+03 .0074 .7549
SOURCE POINTS GENERATED 3010
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10
ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .912574 .895310 .0078 K(COL/ABS) .894662 .0059 .893978 .0057 .6700

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K(ABSORPTION) .891016 .894015 .0051
 K(TRK LENGTH) .925636 .896308 .0110
 REM LIFE(COL) 3.2078E+03 3.2732E+03 .0065
 REM LIFE(ABS) 3.1906E+03 3.2596E+03 .0077
 SOURCE POINTS GENERATED 2996

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .916452 .898330 .0074
 K(ABSORPTION) .899239 .894761 .0044
 K(TRK LENGTH) .905169 .897574 .0094
 REM LIFE(COL) 3.2078E+03 3.2639E+03 .0062
 REM LIFE(ABS) 3.2348E+03 3.2561E+03 .0066
 SOURCE POINTS GENERATED 2999

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .863282 .893949 .0081
 K(ABSORPTION) .870745 .891759 .0051
 K(TRK LENGTH) .852999 .892002 .0103
 REM LIFE(COL) 3.0705E+03 3.2397E+03 .0092
 REM LIFE(ABS) 3.0633E+03 3.2320E+03 .0094
 SOURCE POINTS GENERATED 2808

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .871123 .891413 .0077
 K(ABSORPTION) .889136 .891467 .0045
 K(TRK LENGTH) .867847 .889318 .0096
 REM LIFE(COL) 3.1683E+03 3.2318E+03 .0085
 REM LIFE(ABS) 3.1800E+03 3.2262E+03 .0085
 SOURCE POINTS GENERATED 3085

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .882986 .890570 .0070
 K(ABSORPTION) .906222 .892943 .0043
 K(TRK LENGTH) .879476 .888334 .0086
 REM LIFE(COL) 3.0476E+03 3.2134E+03 .0096
 REM LIFE(ABS) 3.0786E+03 3.2115E+03 .0089
 SOURCE POINTS GENERATED 3012

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .903554 .891751 .0064
 K(ABSORPTION) .905021 .894041 .0041
 K(TRK LENGTH) .886637 .888180 .0078
 REM LIFE(COL) 3.3476E+03 3.2256E+03 .0094
 REM LIFE(ABS) 3.2920E+03 3.2188E+03 .0084
 SOURCE POINTS GENERATED 3093

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .894630 .891990 .0059

K(ABS/TK LN) .895161 .0069 .894104 .0057 .3897
 K(TK LN/COL) .895809 .0092 .894534 .0077 .9230
 K(COL/ABS/TK LN) .895211 .0072 .894070 .0060 .8352
 LIFE(COL/ABS) 3.2664E+03 .0068 3.2725E+03 .0074

CYCLE = 11

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .896546 .0054 .894436 .0048 .6728
 K(ABS/TK LN) .896167 .0059 .894852 .0048 .4070
 K(TK LN/COL) .897952 .0081 .898560 .0080 .8815
 K(COL/ABS/TK LN) .896888 .0063 .893635 .0053 .8075
 LIFE(COL/ABS) 3.2600E+03 .0061 3.2611E+03 .0067

CYCLE = 12

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .892854 .0063 .891133 .0053 .8022
 K(ABS/TK LN) .891880 .0070 .891729 .0054 .6453
 K(TK LN/COL) .892976 .0090 .895226 .0083 .9251
 K(COL/ABS/TK LN) .892570 .0073 .890578 .0061 .9302
 LIFE(COL/ABS) 3.2358E+03 .0092 3.2368E+03 .0099

CYCLE = 13

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .891440 .0058 .891481 .0046 .7705
 K(ABS/TK LN) .890393 .0064 .891732 .0047 .6338
 K(TK LN/COL) .890366 .0085 .892858 .0078 .9323
 K(COL/ABS/TK LN) .890733 .0068 .891153 .0051 .9315
 LIFE(COL/ABS) 3.2290E+03 .0084 3.2289E+03 .0090

CYCLE = 14

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .891757 .0052 .893021 .0046 .6539
 K(ABS/TK LN) .890638 .0058 .893034 .0046 .5322
 K(TK LN/COL) .889452 .0077 .892140 .0070 .9335
 K(COL/ABS/TK LN) .890616 .0061 .893003 .0051 .9479
 LIFE(COL/ABS) 3.2124E+03 .0091 3.2112E+03 .0095

CYCLE = 15

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .892896 .0048 .894128 .0043 .6722
 K(ABS/TK LN) .891110 .0052 .893929 .0043 .5010
 K(TK LN/COL) .889965 .0070 .893104 .0067 .9087
 K(COL/ABS/TK LN) .891324 .0056 .893515 .0049 .9446
 LIFE(COL/ABS) 3.2222E+03 .0088 3.2157E+03 .0087

CYCLE = 16

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .892197 .0045 .892347 .0043 .5830

K(ABSORPTION)	.874383	.892403	.0042	K(ABS/TK LN)	.890827	.0048	.891981	.0043	.3705
K(TRK LENGTH)	.901035	.889251	.0072	K(TK LN/COL)	.890621	.0064	.893007	.0061	.9027
REM LIFE(COL)	3.2571E+03	3.2282E+03	.0086	K(COL/ABS/TK LN)	.891215	.0051	.891621	.0047	
REM LIFE(ABS)	3.2551E+03	3.2218E+03	.0077	LIFE(COL/ABS)	3.2250E+03	.0081	3.2190E+03	.0080	.9448
SOURCE POINTS GENERATED 2990									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE 18	AVE OF 13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.883429	.891332	.0055	K(COL/ABS)	.891409	.0042	.891463
K(ABSORPTION)	.880480	.891486	.0040	K(ABS/TK LN)	.890627	.0044	.891203
K(TRK LENGTH)	.895988	.889769	.0067	K(TK LN/COL)	.890551	.0059	.891664
REM LIFE(COL)	3.2801E+03	3.2322E+03	.0080	K(COL/ABS/TK LN)	.890862	.0047	.890897
REM LIFE(ABS)	3.2657E+03	3.2252E+03	.0071	LIFE(COL/ABS)	3.2287E+03	.0075	3.2219E+03
SOURCE POINTS GENERATED 2983							.9461

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE 19	AVE OF 14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.906946	.892447	.0052	K(COL/ABS)	.892740	.0042	.892918
K(ABSORPTION)	.913154	.893033	.0041	K(ABS/TK LN)	.892150	.0044	.892738
K(TRK LENGTH)	.910744	.891267	.0064	K(TK LN/COL)	.891857	.0056	.892764
REM LIFE(COL)	3.0538E+03	3.2194E+03	.0084	K(COL/ABS/TK LN)	.892249	.0046	.892688
REM LIFE(ABS)	3.0660E+03	3.2138E+03	.0075	LIFE(COL/ABS)	3.2166E+03	.0079	3.2099E+03
SOURCE POINTS GENERATED 3084							.9579

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE 20	AVE OF 15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.878778	.891536	.0050	K(COL/ABS)	.892946	.0039	.893473
K(ABSORPTION)	.912885	.894357	.0041	K(ABS/TK LN)	.891863	.0041	.893168
K(TRK LENGTH)	.862805	.889370	.0063	K(TK LN/COL)	.890453	.0055	.892310
REM LIFE(COL)	3.2333E+03	3.2204E+03	.0079	K(COL/ABS/TK LN)	.891754	.0043	.893153
REM LIFE(ABS)	3.2656E+03	3.2173E+03	.0071	LIFE(COL/ABS)	3.2188E+03	.0074	3.2157E+03
SOURCE POINTS GENERATED 2965							.9518

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/500 year (mpc12f)

PROBID = 02/16/95 23:36:25
02/16/95 21:40:54

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59748	1.0042E+00	2.0659E+00	ESCAPE	0	0.	0.
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.5383E-02	4.3830E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59821	6.6630E-02	4.3030E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2615E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	146	1.9760E-03	1.5611E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9571E+00
				CAPTURE	0	6.6080E-01	3.1672E-02
				LOSS TO (N,XN)	73	9.8800E-04	8.4723E-03
				LOSS TO FISSION	0	3.4316E-01	7.0284E-02

TOTAL	59894	1.0716E+00	2.0675E+00	TOTAL	59894	1.0716E+00	2.0675E+00
NUMBER OF NEUTRONS BANKED	73			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0024E+00			ESCAPE	.0000E+00	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.7488E+01			CAPTURE	3.2210E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3434815			CAPTURE OR ESCAPE	3.2210E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0010E+00	.0002		ANY TERMINATION	3.5566E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	115.32 MINUTES			MAXIMUM NUMBER EVER IN BANK	1		
COMPUTER TIME IN MCRUN	115.20 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.1865E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	41692721			MOST RANDOM NUMBERS USED WAS	8767 IN HISTORY	22255	

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6993E-01 TO 1.1001E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25792	9608	3.2439E+00	1.2169E-04	3.8516E-01	7.2930E-01	1.1174E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	728298	59821	297983	4.1730E+00	7.0048E-04	7.4428E-01	8.7683E-01	2.5121E+00
33	34	2276	135	458	4.9102E-03	7.6158E-05	3.4795E-01	6.5455E-01	4.2806E+00
34	35	104	13	288	1.9078E-03	1.8995E-07	1.3629E-05	4.1129E-01	3.4477E-01
35	36	1303090	59821	15	2.2695E-04	6.1200E-04	7.0714E-01	8.7359E-01	3.4969E+03
36	37	186	13	12	7.5370E-05	1.3137E-07	8.1976E-06	4.2902E-01	3.3019E-01
37	38	1412002	59821	50986	7.5680E-01	5.9100E-04	6.9368E-01	8.7356E-01	4.1110E+00
38	39	199	13	72	5.6377E-04	1.2705E-07	8.0338E-06	4.3441E-01	3.3002E-01
39	40	2255797	59821	1449831	1.9000E+01	5.1416E-04	6.6214E-01	8.7110E-01	1.6347E+00
40	41	57038	31138	89996	1.1870E+00	3.9188E-04	6.1167E-01	8.7023E-01	1.5428E+00
41	42	8	4	37	3.3669E-04	4.0804E-08	6.2563E-08	5.0301E-01	3.3394E-01
42	43	120672	32883	3601	5.3174E-02	4.0870E-04	6.2907E-01	8.6986E-01	4.1384E+00
43	44	135240	35235	30056	3.9416E-01	4.1311E-04	6.2763E-01	8.7019E-01	1.5677E+00
44	45	147801	36223	3236	4.8022E-02	4.1993E-04	6.3248E-01	8.7051E-01	4.1382E+00
45	46	179942	41234	71995	9.4815E-01	4.2206E-04	6.3201E-01	8.7020E-01	1.5752E+00
46	47	6980	3229	7798	1.0326E-01	3.5153E-04	6.0017E-01	8.7264E-01	1.5257E+00
47	48	9356	3542	324	4.8136E-03	4.2092E-04	6.2019E-01	8.7583E-01	4.1202E+00
48	49	12311	4902	6233	8.3562E-02	4.3713E-04	6.4421E-01	8.7872E-01	1.6036E+00
49	50	34334	15330	66748	7.9449E-01	3.4260E-04	5.7111E-01	8.2310E-01	1.4734E+00
50	51	34170	14539	12667	1.5637E-01	3.8633E-04	5.7204E-01	8.0297E-01	2.0578E+00
51	52	33772	14199	2456	3.5263E-02	3.8818E-04	5.7548E-01	7.9926E-01	9.1660E+00
52	53	33872	14229	12715	1.5558E-01	3.7584E-04	5.6357E-01	7.9691E-01	2.0706E+00
53	54	146	42	1142	1.0428E-02	5.2521E-05	4.1957E-01	5.8757E-01	8.9754E-01
54	55	33717	15089	66169	7.9210E-01	3.4412E-04	5.6632E-01	8.2495E-01	1.4731E+00
55	56	33616	14380	12233	1.5171E-01	4.0051E-04	5.7008E-01	8.0630E-01	2.0851E+00
56	57	33410	14084	2472	3.5520E-02	3.9391E-04	5.7519E-01	8.0056E-01	9.1148E+00
57	58	33472	14140	12471	1.5293E-01	3.8697E-04	5.7524E-01	8.0132E-01	2.0924E+00
58	59	175	38	1286	1.0923E-02	2.9826E-05	1.6985E-01	5.6335E-01	6.6061E-01
59	60	52882	18978	93547	1.1646E+00	4.7148E-04	5.6444E-01	8.4432E-01	1.5036E+00
60	61	52289	18061	18281	2.3754E-01	6.6290E-04	5.7464E-01	8.3685E-01	2.2521E+00
61	62	278	55	1212	1.1040E-02	3.7698E-05	1.8950E-01	5.9757E-01	7.3376E-01
62	63	52659	18899	92395	1.1512E+00	4.7567E-04	5.5615E-01	8.4412E-01	1.4984E+00
63	64	52164	17988	17967	2.3298E-01	6.4594E-04	5.7139E-01	8.3559E-01	2.2611E+00
64	65	224	42	1073	9.2338E-03	2.1037E-05	8.2448E-02	5.5807E-01	5.6026E-01
65	66	10132	5048	431231	3.9607E+00	5.6524E-05	2.7244E-01	6.1826E-01	8.5944E-01
66	67	10024	3906	14728	1.5402E-01	1.7208E-04	4.2215E-01	6.9580E-01	1.7908E+00
67	68	9933	3992	14540	1.5120E-01	1.8716E-04	4.3794E-01	6.9318E-01	1.8433E+00
68	69	33762	8977	11303	1.4613E-01	9.3320E-04	5.7212E-01	8.3648E-01	2.3724E+00
69	70	33745	8653	6133	9.0686E-02	1.0047E-03	5.6646E-01	8.3386E-01	8.8603E+00
70	71	18137	8430	55124	7.0432E-01	1.2795E-03	5.7616E-01	8.3402E-01	2.5121E+00
71	72	33565	8927	11202	1.4583E-01	9.4006E-04	5.6652E-01	8.3734E-01	2.3607E+00
72	73	33773	8609	6228	9.2833E-02	1.0100E-03	5.6573E-01	8.3584E-01	8.9470E+00
73	74	18199	8410	56014	7.1615E-01	1.3176E-03	5.7839E-01	8.3508E-01	2.4955E+00
74	75	87	26	1342	1.0819E-02	6.1292E-05	2.6909E-01	5.7174E-01	8.8325E-01
75	76	93	25	2343	1.9650E-02	2.6935E-05	1.1283E-01	5.5090E-01	6.1401E-01
76	77	6	4	14	7.7912E-05	5.5073E-08	7.4494E-08	3.3475E-01	8.7688E-01
77	78	3780	1590	11255	1.2338E-01	3.4816E-04	5.2227E-01	7.3203E-01	2.0387E+00
78	79	2411	947	13407	1.4117E-01	2.6037E-04	4.5312E-01	7.4643E-01	1.2963E+00
79	80	1	1	14	9.1682E-05	2.3590E-08	2.8001E-08	3.8772E-01	2.6998E-01
80	81	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	82	1887	736	5560	6.7213E-02	9.4046E-04	5.6641E-01	7.8415E-01	2.0779E+00
82	83	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	1125	490	9254	1.0640E-01	2.2640E-03	5.3819E-01	7.9182E-01	4.4151E+00
85	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	87	387	225	50197	4.2488E-01	2.9423E-05	1.3164E-01	5.5434E-01	6.3968E-01

TOTAL 7089319 696545 3434815 4.2161E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3517E-01	-5.3517E-01
2	2	3.2499E-01	.0000E+00	.0000E+00	-9.0334E-01	-5.7834E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.6683E-02	-1.6683E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.1212E-02	-5.1212E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.6422E-02	-1.6422E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4932E-01	-1.4932E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6596E+00	-1.6596E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9959E+00	-1.9959E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1578E-01	-2.1578E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1338E-01	-2.1338E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8210E-01	-3.8210E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.7891E-01	-3.7891E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.6930E-02	-7.6930E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.8139E-02	-7.8139E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.7449E-02	-8.7449E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.3293E-02	-7.3293E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.1821E-02	-7.1821E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.3983E-02	-7.3983E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.8780E-02	-9.8780E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0145E-01	-1.0145E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-9.3328E-02	-9.3328E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.5794E-02	-8.5794E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.0613E-01	-1.0613E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1177E-01	-1.1177E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1293E-01	-1.1293E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1155E-01	-1.1155E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-9.9446E-02	-9.9446E-02
28	29	.0000E+00	.0000E+00	.0000E+00	-8.4608E-02	-8.4608E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.2996E-02	-9.2996E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0312E-01	-1.0312E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8984E+01	-1.8984E+01
32	33	9.7458E+00	1.0042E+00	.0000E+00	-9.5437E+00	1.2063E+00
33	34	2.5002E-02	.0000E+00	.0000E+00	-2.3934E-02	1.0679E-03
34	35	7.3796E-04	.0000E+00	.0000E+00	-7.0056E-04	3.7402E-05
35	36	1.9071E+01	.0000E+00	.0000E+00	-1.9060E+01	1.0522E-02
36	37	1.3336E-03	.0000E+00	.0000E+00	-1.3331E-03	4.6835E-07
37	38	2.0661E+01	.0000E+00	.0000E+00	-2.0584E+01	7.6758E-02
38	39	1.4509E-03	.0000E+00	.0000E+00	-1.4379E-03	1.3016E-05
39	40	3.2941E+01	.0000E+00	.0000E+00	-1.0816E+01	2.2125E+01
40	41	8.3249E-01	.0000E+00	.0000E+00	-8.2889E-01	3.6024E-03
41	42	5.9276E-05	.0000E+00	.0000E+00	-5.7384E-05	1.8921E-06
42	43	1.7577E+00	.0000E+00	.0000E+00	-1.7571E+00	5.7667E-04
43	44	1.9705E+00	.0000E+00	.0000E+00	-1.9693E+00	1.1874E-03
44	45	2.1541E+00	.0000E+00	.0000E+00	-2.1535E+00	5.3671E-04
45	46	2.6247E+00	.0000E+00	.0000E+00	-1.1135E+00	1.5112E+00
46	47	1.0236E-01	.0000E+00	.0000E+00	-6.2226E-02	4.0137E-02
47	48	1.3723E-01	.0000E+00	.0000E+00	-1.3241E-01	4.8204E-03
48	49	1.8096E-01	.0000E+00	.0000E+00	-7.0217E-02	1.1074E-01
49	50	4.7478E-01	.0000E+00	.0000E+00	-2.6621E-01	2.0857E-01
50	51	4.6465E-01	.0000E+00	.0000E+00	-4.4901E-01	1.5636E-02
51	52	4.5559E-01	.0000E+00	.0000E+00	-4.5004E-01	5.5494E-03
52	53	4.5724E-01	.0000E+00	.0000E+00	-1.9186E-01	2.6538E-01
53	54	1.5200E-03	.0000E+00	.0000E+00	-7.8786E-05	1.4412E-03
54	55	4.6751E-01	.0000E+00	.0000E+00	-2.6152E-01	2.0600E-01
55	56	4.5831E-01	.0000E+00	.0000E+00	-4.4251E-01	1.5794E-02
56	57	4.5146E-01	.0000E+00	.0000E+00	-4.4610E-01	5.3629E-03
57	58	4.5226E-01	.0000E+00	.0000E+00	-1.9061E-01	2.6165E-01

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-1.1002E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1002E-04
33	34	.0000E+00	.0000E+00	1.2785E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2785E-05
34	35	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-1.7922E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7922E-05
38	39	.0000E+00	.0000E+00	4.1849E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1849E-06
39	40	.0000E+00	.0000E+00	3.0903E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0903E-05
40	41	.0000E+00	.0000E+00	6.5812E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5812E-07
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	5.2806E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2806E-07
43	44	.0000E+00	.0000E+00	-1.2330E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2330E-05
44	45	.0000E+00	.0000E+00	8.8606E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8606E-06
45	46	.0000E+00	.0000E+00	4.6944E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6944E-06
46	47	.0000E+00	.0000E+00	-8.2528E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2528E-06
47	48	.0000E+00	.0000E+00	8.5359E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5359E-06
48	49	.0000E+00	.0000E+00	4.1921E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1921E-06
49	50	.0000E+00	.0000E+00	5.1737E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.1737E-05
50	51	.0000E+00	.0000E+00	-6.5446E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5446E-05
51	52	.0000E+00	.0000E+00	-9.8715E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8715E-07
52	53	.0000E+00	.0000E+00	1.8166E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8166E-05
53	54	.0000E+00	.0000E+00	6.6912E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6912E-08
54	55	.0000E+00	.0000E+00	-1.2376E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2376E-04
55	56	.0000E+00	.0000E+00	-2.9332E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9332E-06
56	57	.0000E+00	.0000E+00	5.4789E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4789E-05
57	58	.0000E+00	.0000E+00	-1.6535E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	3.5884E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5884E-06
TOTAL		.0000E+00	.0000E+00	-1.2471E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2471E-03

1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4087E-02	.0000E+00	-1.4087E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.9426E-03	.0000E+00	-3.8003E-01	-9.7129E-04	-3.4316E-01
33	34	.0000E+00	.0000E+00	-1.1792E-04	.0000E+00	-1.1792E-04
34	35	.0000E+00	.0000E+00	-1.0794E-05	.0000E+00	-1.0794E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-4.6835E-07	.0000E+00	-4.6835E-07
37	38	3.3406E-05	.0000E+00	-6.8139E-03	-1.6703E-05	-6.7972E-03
38	39	.0000E+00	.0000E+00	-3.4345E-06	.0000E+00	-3.4345E-06
39	40	.0000E+00	.0000E+00	-5.1537E-02	.0000E+00	-5.1537E-02
40	41	.0000E+00	.0000E+00	-3.6031E-03	.0000E+00	-3.6031E-03
41	42	.0000E+00	.0000E+00	-1.8921E-06	.0000E+00	-1.8921E-06
42	43	.0000E+00	.0000E+00	-5.6975E-04	.0000E+00	-5.6975E-04
43	44	.0000E+00	.0000E+00	-1.1750E-03	.0000E+00	-1.1750E-03
44	45	.0000E+00	.0000E+00	-5.4557E-04	.0000E+00	-5.4557E-04
45	46	.0000E+00	.0000E+00	-2.7841E-03	.0000E+00	-2.7841E-03
46	47	.0000E+00	.0000E+00	-3.3789E-04	.0000E+00	-3.3789E-04
47	48	.0000E+00	.0000E+00	-5.6819E-05	.0000E+00	-5.6819E-05
48	49	.0000E+00	.0000E+00	-2.4244E-04	.0000E+00	-2.4244E-04
49	50	.0000E+00	.0000E+00	-2.4780E-03	.0000E+00	-2.4780E-03
50	51	.0000E+00	.0000E+00	-1.0554E-02	.0000E+00	-1.0554E-02
51	52	.0000E+00	.0000E+00	-6.0098E-04	.0000E+00	-6.0098E-04

52	53	.0000E+00	.0000E+00	-1.0801E-02	.0000E+00	.0000E+00	-1.0801E-02
53	54	.0000E+00	.0000E+00	-5.5840E-05	.0000E+00	.0000E+00	-5.5840E-05
54	55	.0000E+00	.0000E+00	-2.4558E-03	.0000E+00	.0000E+00	-2.4558E-03
55	56	.0000E+00	.0000E+00	-1.0267E-02	.0000E+00	.0000E+00	-1.0267E-02
56	57	.0000E+00	.0000E+00	-6.2774E-04	.0000E+00	.0000E+00	-6.2774E-04
57	58	.0000E+00	.0000E+00	-1.0685E-02	.0000E+00	.0000E+00	-1.0685E-02
58	59	.0000E+00	.0000E+00	-5.7243E-05	.0000E+00	.0000E+00	-5.7243E-05
59	60	.0000E+00	.0000E+00	-3.0046E-03	.0000E+00	.0000E+00	-3.0046E-03
60	61	.0000E+00	.0000E+00	-1.1146E-02	.0000E+00	.0000E+00	-1.1146E-02
61	62	.0000E+00	.0000E+00	-5.9757E-05	.0000E+00	.0000E+00	-5.9757E-05
62	63	.0000E+00	.0000E+00	-2.9472E-03	.0000E+00	.0000E+00	-2.9472E-03
63	64	.0000E+00	.0000E+00	-1.1131E-02	.0000E+00	.0000E+00	-1.1131E-02
64	65	.0000E+00	.0000E+00	-4.8027E-05	.0000E+00	.0000E+00	-4.8027E-05
65	66	.0000E+00	.0000E+00	-2.0078E-02	.0000E+00	.0000E+00	-2.0078E-02
66	67	.0000E+00	.0000E+00	-1.5632E-02	.0000E+00	.0000E+00	-1.5632E-02
67	68	.0000E+00	.0000E+00	-1.4956E-02	.0000E+00	.0000E+00	-1.4956E-02
68	70	.0000E+00	.0000E+00	-5.5260E-03	.0000E+00	.0000E+00	-5.5260E-03
69	71	.0000E+00	.0000E+00	-7.0488E-04	.0000E+00	.0000E+00	-7.0488E-04
70	72	.0000E+00	.0000E+00	-2.1613E-02	.0000E+00	.0000E+00	-2.1613E-02
71	73	.0000E+00	.0000E+00	-5.3944E-03	.0000E+00	.0000E+00	-5.3944E-03
72	74	.0000E+00	.0000E+00	-7.0652E-04	.0000E+00	.0000E+00	-7.0652E-04
73	75	.0000E+00	.0000E+00	-2.1485E-02	.0000E+00	.0000E+00	-2.1485E-02
74	76	.0000E+00	.0000E+00	-5.6575E-05	.0000E+00	.0000E+00	-5.6575E-05
75	77	.0000E+00	.0000E+00	-1.0506E-04	.0000E+00	.0000E+00	-1.0506E-04
76	80	.0000E+00	.0000E+00	-1.0902E-05	.0000E+00	.0000E+00	-1.0902E-05
77	81	.0000E+00	.0000E+00	-8.6189E-03	.0000E+00	.0000E+00	-8.6189E-03
78	82	.0000E+00	.0000E+00	-4.5085E-04	.0000E+00	.0000E+00	-4.5085E-04
79	83	.0000E+00	.0000E+00	-5.0610E-07	.0000E+00	.0000E+00	-5.0610E-07
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.4280E-03	.0000E+00	.0000E+00	-2.4280E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9875E-03	.0000E+00	.0000E+00	-1.9875E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.2085E-03	.0000E+00	.0000E+00	-2.2085E-03

TOTAL 1.9760E-03 .0000E+00 -6.6080E-01 -9.8800E-04 -3.4316E-01 -1.0030E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	290737 16434	3.0453E+00 1.9863E-01	1.4013E-02 7.4199E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7095E-01 2.3926E-04 2.8704E-05 1.8626E-06 6.0520E-06 3.0868E-05 2.8102E-06 2.5224E-08 8.2934E-05 4.4503E-03 1.0129E-03 3.2088E-01 2.1928E-04 2.9897E-07 1.4943E-03 4.1344E-04 3.2573E-11 5.2259E-05 1.2332E-04 2.0198E-08 5.5989E-06 1.9186E-08	99065 591 79 985 351 137 854 0 144 23712 854 150527 608 2 16079 3039 0 117 830 0 9 0	1.4376E+00 7.6309E-03 1.0733E-03 1.0684E-02 3.8976E-03 1.7289E-03 9.0568E-03 2.6111E-06 1.8798E-03 4.5745E-01 1.2452E-02 2.1916E+00 7.6586E-03 2.7616E-05 3.2015E-01 3.9868E-02 .0000E+00 1.6333E-03 1.0247E-02 9.0831E-06 1.1964E-04 2.8254E-06	1.2598E-03 6.7314E-03 8.9260E-04 1.0600E-02 3.8532E-03 1.4705E-03 9.0364E-03 .0000E+00 1.2033E-03 4.0379E-02 4.3555E-03 1.8870E-01 6.1000E-03 2.4657E-05 5.9385E-02 3.5411E-02 .0000E+00 1.1847E-03 9.3528E-03 .0000E+00 8.5187E-05 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 3.0367E-05 2.0030E-01 1.8020E-04 2.0852E-02 7.9547E-05 7.4740E-07 1.2147E-01 1.4121E-04 .0000E+00 7.2569E-06 9.1562E-05 .0000E+00 1.5282E-08 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 9.7129E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 3 4 448 2	1.6281E-05 3.9679E-05 4.1679E-05 4.7990E-03 1.3582E-05	1.9129E-13 1.7533E-05 6.4079E-06 9.2726E-05 1.2536E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	271 17	1.7698E-03 1.3801E-04	1.0790E-05 4.6165E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	15	2.2695E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	12 0	7.5370E-05 .0000E+00	4.6835E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	211 109 233 49957 476	3.0058E-03 1.5371E-03 3.2194E-03 7.4196E-01 7.0765E-03	3.1732E-06 1.4034E-04 1.5403E-04 6.3577E-03 1.5861E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.6703E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	69 3	5.3728E-04 2.6486E-05	3.4334E-06 1.0795E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1332970 116861	1.7314E+01 1.6858E+00	5.0313E-02 1.2242E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	83201 6795	1.0891E+00 9.7889E-02	3.5371E-03 6.6030E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	35 2	3.1964E-04 1.7053E-05	1.8916E-06 4.6803E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	17 6 21 3516 41	2.4711E-04 9.5845E-05 2.9880E-04 5.1935E-02 5.9775E-04	7.1323E-09 7.7696E-06 1.2765E-05 5.3318E-04 1.6022E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	27732 2324	3.6062E-01 3.3534E-02	1.1574E-03 1.7592E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	10 4 18 3165 39	1.4754E-04 5.7318E-05 2.5539E-04 4.6952E-02 6.0898E-04	2.0532E-06 4.9214E-06 1.5159E-05 5.1137E-04 1.2064E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	66384 5611	8.6724E-01 8.0910E-02	2.7243E-03 5.9817E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7223 575	9.4807E-02 8.4541E-03	3.2605E-04 1.1837E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 0 2 317 5	.0000E+00 .0000E+00 2.8005E-05 4.7028E-03 8.2885E-05	.0000E+00 .0000E+00 3.4793E-06 5.2663E-05 6.7747E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5791 442	7.7106E-02 6.4555E-03	2.3828E-04 4.1536E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61972 4776	7.2958E-01 6.4916E-02	2.4313E-03 4.6688E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	8 37 53 2 0 1512 517 8036 2371 131	1.1700E-04 4.7085E-04 7.3026E-04 2.0869E-05 .0000E+00 1.9638E-02 7.3379E-03 9.7031E-02 2.9248E-02 1.7793E-03	9.5418E-09 1.9543E-05 1.0466E-05 4.1358E-07 .0000E+00 1.9293E-03 7.9261E-04 5.7801E-03 1.7866E-03 2.3504E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2453 3	3.5235E-02 2.8003E-05	5.9812E-04 2.8614E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	9 43 58 7 1 1442	1.1830E-04 4.8996E-04 7.8753E-04 9.4383E-05 6.2010E-06 1.8293E-02	1.3000E-08 2.8156E-05 7.3018E-06 8.8488E-07 1.5139E-06 1.9474E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	520	7.3352E-03	9.9428E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8029	9.6628E-02	5.6496E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2457	2.9839E-02	1.8629E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	1.9852E-03	3.0872E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1086	9.8327E-03	5.4831E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	56	5.9553E-04	1.0088E-06	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	61416	7.2750E-01	2.4155E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4753	6.4596E-02	4.0316E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	14	1.6220E-04	1.8618E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.6340E-04	2.9493E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	7.6998E-04	1.1893E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.2455E-05	1.8139E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1560	2.0386E-02	1.9921E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	494	7.2134E-03	8.5501E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7610	9.2383E-02	5.3724E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2284	2.8042E-02	1.6928E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	164	2.1916E-03	3.1186E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2468	3.5474E-02	6.2209E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	4.5374E-05	5.6518E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	15	2.0636E-04	2.8684E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	4.1185E-04	2.3446E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	8.1431E-04	9.2482E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.9788E-05	7.7646E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.7938E-05	1.5777E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1484	1.9216E-02	2.0124E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	512	7.1414E-03	9.7196E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7903	9.5196E-02	5.5686E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2286	2.7480E-02	1.7901E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	175	2.3521E-03	3.0872E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1232	1.0483E-02	5.7228E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	54	4.4052E-04	1.5549E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	86138	1.0612E+00	2.9373E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7409	1.0339E-01	6.7326E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	7	8.0621E-05	1.4979E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	6.8385E-04	3.4250E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	94	1.3348E-03	1.0779E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.0870E-05	4.6753E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6495E-05	1.4086E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2197	2.9967E-02	1.9585E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	866	1.2467E-02	1.0009E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11336	1.4470E-01	5.7966E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3438	4.4083E-02	1.8685E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	286	4.1531E-03	4.7458E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1157	1.0533E-02	5.9743E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	55	5.0711E-04	1.3841E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	84887	1.0462E+00	2.8773E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7508	1.0497E-01	6.9927E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	19	2.8506E-04	1.7843E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	68	9.3294E-04	3.5312E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	102	1.4329E-03	1.5278E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.9516E-05	5.1753E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.8866E-05	1.5958E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2171	2.9781E-02	2.0087E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	868	1.2676E-02	9.7949E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11167	1.4196E-01	5.7973E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3300	4.2158E-02	1.9037E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	262	3.6283E-03	3.8895E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1019	8.7062E-03	4.8014E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	54	5.2762E-04	1.3413E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	411509	3.7601E+00	2.0012E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19722	2.0057E-01	6.5945E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	6	6.8788E-05	1.2230E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	63	5.5836E-04	4.5134E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	6.0955E-04	1.0898E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4102E-05	3.2075E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.8679E-05	1.3413E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1576	1.7295E-02	2.8120E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	448	5.5512E-03	1.4126E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9620	9.8767E-02	8.4077E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2804	2.9334E-02	2.6164E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	155	1.7527E-03	3.2518E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	5	4.9776E-05	1.2422E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	5.5325E-04	4.3887E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	4.5660E-04	1.0830E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.5439E-05	7.1483E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1599	1.7602E-02	2.7307E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	434	5.4132E-03	1.2944E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9468	9.6753E-02	7.9889E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2775	2.8471E-02	2.5696E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	1.8657E-03	3.1748E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	4	4.4831E-05	8.8788E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	4.6686E-04	1.6162E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	7.1470E-04	9.0127E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.4494E-05	4.9313E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3083E-05	5.9228E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1381	1.8858E-02	9.1422E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	499	7.0059E-03	5.3884E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7025	8.9425E-02	2.8100E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2127	2.7065E-02	9.2468E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	176	2.4877E-03	3.1202E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6121	9.0502E-02	6.9169E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.8431E-04	1.3192E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	39	5.3398E-04	2.2011E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	167	2.1365E-03	5.8937E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	318	4.5935E-03	1.6286E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	27	3.7581E-04	2.0469E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.5857E-04	9.8240E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6963	9.4817E-02	3.7805E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2368	3.3531E-02	2.0208E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33857	4.2156E-01	1.1008E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10512	1.3445E-01	3.4968E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	863	1.2175E-02	1.2207E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	7	8.2199E-05	6.8077E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	28	3.6381E-04	6.3503E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	68	9.8707E-04	5.4570E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.7942E-05	6.0654E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.9469E-05	2.4175E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1338	1.8151E-02	9.5583E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	563	8.1709E-03	5.7878E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6886	8.8358E-02	2.7555E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2149	2.7473E-02	8.8325E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	153	2.1030E-03	2.0616E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6214	9.2625E-02	6.9724E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	14	2.0836E-04	9.2832E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	54	7.1283E-04	3.8532E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	174	2.1945E-03	4.4651E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	348	4.9731E-03	2.4584E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	23	3.2910E-04	2.2523E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.4115E-04	9.0967E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7026	9.5615E-02	3.8939E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2396	3.3949E-02	1.9132E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34470	4.3064E-01	1.0811E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10640	1.3531E-01	3.5038E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	874	1.2280E-02	1.2824E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	1281	1.0248E-02	5.6558E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	61	5.7074E-04	1.6497E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2247	1.8830E-02	1.0503E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	96	8.2039E-04	2.4945E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1	5.5489E-06	1.2748E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8	4.1245E-05	5.2334E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	5	3.1118E-05	4.3941E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	5.0785E-05	1.3100E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	4.9103E-04	3.0937E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	6.5500E-04	8.6205E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.5390E-05	3.0201E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	4.6540E-06	1.3840E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1278	1.5098E-02	1.5622E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	356	4.7296E-03	6.8438E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7271	7.7972E-02	4.6884E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2126	2.2932E-02	1.4647E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	115	1.4287E-03	1.7795E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	12499	1.2987E-01	4.4481E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	908	1.1303E-02	6.0323E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	13	8.5310E-05	5.0577E-07	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	1	6.3715E-06	3.3126E-10	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	2	3.4466E-05	6.0790E-11	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	7	1.0661E-04	1.2946E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	12	1.4813E-04	1.5119E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	42	5.6986E-04	2.2406E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	779	9.9565E-03	5.0302E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	119	1.6048E-03	8.6175E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1308	1.5371E-02	4.7900E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	3096	3.6969E-02	1.1557E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	117	1.4129E-03	7.5670E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	78	1.0402E-03	1.0437E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	59	7.7396E-04	1.9705E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	23	3.1687E-04	3.6502E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	4	3.8265E-05	8.6355E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.5439E-05	2.8923E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	212	2.8344E-03	9.9602E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8955	1.0242E-01	1.8866E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	47837	4.0306E-01	2.2064E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2360	2.1828E-02	2.1184E-06	.0000E+00	.0000E+00
TOTAL				3434815	4.2503E+01	6.6080E-01	3.4316E-01	9.8800E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2588718	3.0777E+01	1.0603E-01	.0000E+00	.0000E+00
		2004.50C		15	2.2695E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		252	3.3212E-03	2.3641E-07	.0000E+00	.0000E+00
		7014.50C		850	1.0217E-02	4.1626E-04	.0000E+00	.0000E+00
		8016.50C		296181	4.1280E+00	3.0224E-03	.0000E+00	.0000E+00

13027.50C	17263	2.5394E-01	2.6093E-03	.0000E+00	.0000E+00
14000.50C	1384	1.9324E-02	1.5253E-04	.0000E+00	.0000E+00
15031.50C	102	1.3684E-03	1.2474E-05	.0000E+00	.0000E+00
16032.50C	37	5.5054E-04	2.9361E-05	.0000E+00	.0000E+00
22000.50C	42	5.6986E-04	2.2406E-05	.0000E+00	.0000E+00
24000.50C	32429	4.2641E-01	2.9172E-02	.0000E+00	.0000E+00
25055.50C	11172	1.5696E-01	1.4223E-02	.0000E+00	.0000E+00
26000.55C	173227	2.0930E+00	8.4997E-02	.0000E+00	.0000E+00
28000.50C	52370	6.4289E-01	2.7524E-02	.0000E+00	.0000E+00
29000.50C	150	1.8790E-03	1.0666E-04	.0000E+00	.0000E+00
40000.50C	57403	8.5035E-01	7.5477E-03	.0000E+00	1.6703E-05
42000.50C	3739	5.1223E-02	5.9741E-03	.0000E+00	.0000E+00
45103.50C	591	7.6309E-03	6.7314E-03	.0000E+00	.0000E+00
47109.50C	79	1.0733E-03	8.9260E-04	.0000E+00	.0000E+00
50000.35C	563	8.3797E-03	1.8863E-04	.0000E+00	.0000E+00
62149.50C	985	1.0684E-02	1.0600E-02	.0000E+00	.0000E+00
63151.55C	351	3.8976E-03	3.8532E-03	.0000E+00	.0000E+00
63153.55C	137	1.7289E-03	1.4705E-03	.0000E+00	.0000E+00
64155.50C	854	9.0568E-03	9.0364E-03	.0000E+00	.0000E+00
92233.50C	0	2.6111E-06	.0000E+00	.0000E+00	.0000E+00
92234.50C	144	1.8798E-03	1.2033E-03	3.0367E-05	.0000E+00
92235.50C	23712	4.5745E-01	4.0379E-02	2.0030E-01	.0000E+00
92236.50C	854	1.2452E-02	4.3555E-03	1.8020E-04	.0000E+00
92238.50C	150527	2.1916E+00	1.8870E-01	2.0852E-02	9.7129E-04
93237.55C	608	7.6586E-03	6.1000E-03	7.9547E-05	.0000E+00
94238.50C	2	2.7616E-05	2.4657E-05	7.4740E-07	.0000E+00
94239.55C	16079	3.2015E-01	5.9385E-02	1.2147E-01	.0000E+00
94240.50C	3039	3.9868E-02	3.5411E-02	1.4121E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	117	1.6333E-03	1.1847E-03	7.2569E-06	.0000E+00
95241.50C	830	1.0247E-02	9.3528E-03	9.1562E-05	.0000E+00
95242.50C	0	9.0831E-06	.0000E+00	.0000E+00	.0000E+00
95243.50C	9	1.1964E-04	8.5187E-05	1.5282E-08	.0000E+00
96245.35C	0	2.8254E-06	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59748 CTM = 115.20

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 115.32 MINUTES

MCNP VERSION 4A-B 10/04/91

02/16/95 23:36:26

PROBID = 02/16/95 21:40:54

1MCNP VERSION 4A-B LD=10/04/91 02/16/95 23:36:26

PROBID = 02/16/95 23:36:26

INP=mpc12g OUTP=mpc12g.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1000 year (mpc12g)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL -ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX .95.
216- 67 PY .95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227-
228-
229-
230- MODE N
231- C VOL 88J
232- KCODE 3000 1. 5 20
233- C 4.87 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
234- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
235- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
236- C 13.53 17.86 10. 17.86 22.19 10. 17.86 17.86 10.
237- C 17.86 9.20 10. 22.19 4.87 10. 22.19 9.20 10.
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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.


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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1    1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1   LWTR.01T
330- C      3.00%/20 GWD/1000 YEAR -- U02
331- M2    8016.50C 4.7767E-02
332-      45103.50C 1.7033E-05
333-      47109.50C 2.0435E-06
334-      62149.50C 1.3260E-07
335-      63151.55C 4.3990E-07
336-      63153.55C 2.1975E-06
337-      64155.50C 2.0006E-07
338-      92233.50C 4.7603E-09
339-      92234.50C 5.9189E-06
340-      92235.50C 3.1828E-04
341-      92236.50C 7.3629E-05
342-      92238.50C 2.2844E-02
343-      93237.55C 2.0452E-05
344-      94238.50C 5.4488E-10
345-      94239.55C 1.0490E-04
346-      94240.50C 2.7941E-05
347-      94241.50C 2.2255E-12
348-      94242.50C 3.7157E-06
349-      95241.50C 3.9365E-06
350-      95242.50C 1.4708E-10
351-      95243.50C 3.8010E-07
352-      96245.35C 1.3114E-09
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3    2004.50C 1.0
355- C      ZIRCALOY-4
356- M4    8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	2965
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	2965
POINTS AFTER EXPANSION OR CONTRACTION	2999
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119221E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T					
2	8016,	.67096	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00001	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00008	92235,	.00447	92236,	.00103	92238,	.32088
	93237,	.00029	94238,	.00000	94239,	.00147	94240,	.00039
	94241,	.00000	94242,	.00005	95241,	.00006	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051	15031,	.00062	16032,	.00060
	6000,	.01011	14000,	.00541				
8	25055,	.00905	26000,	.97421	14000,	.01493	15031,	.00081
	6000,	.00140	7014,	.00399	25055,	.02036	26000,	.64626
	16032,	.00052	24000,	.18282				
	28000,	.11433	42000,	.01457				

PRINT TABLE 40

1 MATERIAL NUMBER	COMPONENT NUCLIDE, MASS FRACTION							
1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00001	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00022	92235,	.01181	92236,	.00274	92238,	.85819
	93237,	.00077	94238,	.00000	94239,	.00396	94240,	.00106
	94241,	.00000	94242,	.00014	95241,	.00015	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

	CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
85	89	1.00309E-01	1.00000E+00	.00000E+00
86	90	1.00309E-01	1.00000E+00	.00000E+00
87	91	.00000E+00	.00000E+00	.00000E+00
PRINT TABLE 50				
1SURFACE AREAS		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11920E-02	1.05224E+01	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
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41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
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56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
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71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE	LENGTH
-------	--------

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

(1314)	79/06/21.
(1340)	79/07/31.
(1394)	79/10/17.
(1396)	79/08/30.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1000 year (mpc12g)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.369E-01	2.836E-01	9.409E+00	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.000E+00	3.678E+00
2	-2.393E-01	-1.320E-01	7.861E+00	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.000E+00	3.656E+00
3	-3.554E-02	3.255E-01	1.461E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.000E+00	2.567E+00
4	1.209E-01	2.748E-01	1.401E+00	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.000E+00	8.547E-01
5	4.545E-02	-3.687E-01	4.580E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.000E+00	1.546E+00
6	2.487E-01	1.435E-01	4.560E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.000E+00	9.195E-01
7	-8.838E-02	-3.023E-01	5.250E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.000E+00	1.624E+00
8	-3.060E-01	1.264E-01	6.908E+00	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.000E+00	1.377E+00
9	-2.516E-01	-3.031E-01	6.629E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.000E+00	3.534E+00
10	-3.377E-01	-8.345E-02	6.533E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.000E+00	1.533E+00
11	-1.553E-01	-3.655E-01	9.481E+00	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.000E+00	3.177E+00
12	6.068E-02	-4.048E-01	7.885E+00	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.000E+00	3.668E+00
13	-1.283E-01	-7.276E-02	1.827E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.000E+00	2.428E+00
14	-2.892E-01	5.729E-02	2.250E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.000E+00	4.033E+00
15	2.414E-01	-9.308E-02	2.404E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.000E+00	1.255E+00
16	9.947E-03	4.210E-01	3.936E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.000E+00	2.689E+00
17	3.471E-01	8.696E-02	4.012E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.000E+00	2.328E+00
18	2.939E-01	1.551E-01	3.987E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.000E+00	2.379E+00
19	-2.172E-01	-2.091E-01	4.052E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.000E+00	4.966E-01
20	1.754E-01	3.667E-01	3.912E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.000E+00	5.032E+00
21	-3.676E-01	1.866E-01	3.913E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.000E+00	1.208E+00
22	2.215E-01	-3.787E-01	2.071E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.000E+00	4.941E+00
23	1.718E-01	3.383E-01	4.354E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.000E+00	6.410E+00
24	1.320E-01	3.725E-01	5.450E+00	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.000E+00	8.469E-01
25	1.585E-01	2.615E-01	5.407E+00	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.000E+00	8.991E-01
26	3.190E-03	-1.223E-01	3.484E-02	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.000E+00	1.234E+00
27	1.068E-01	1.056E-01	2.336E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.000E+00	1.281E+00
28	3.816E-01	-2.066E-01	2.386E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.000E+00	2.278E+00
29	-6.249E-02	2.942E-01	1.571E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.000E+00	3.394E-01
30	1.104E-02	-1.977E-01	2.063E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.000E+00	2.765E+00
31	-4.045E-01	-2.173E-01	3.053E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.000E+00	9.286E-01
32	3.770E-01	2.712E-01	1.734E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.000E+00	1.108E+00
33	-6.678E-02	-3.976E-01	6.641E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.000E+00	1.722E+00
34	1.109E-01	-4.383E-01	2.820E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.000E+00	1.071E+00
35	-3.579E-03	-1.023E-01	4.014E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.000E+00	5.176E-01
36	1.443E-01	2.640E-01	3.687E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.000E+00	1.745E+00
37	1.145E-01	1.194E-01	5.724E-01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.000E+00	3.602E+00
38	2.510E-01	1.255E-01	3.539E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.000E+00	9.793E-01
39	3.852E-01	-8.661E-02	3.988E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.000E+00	9.760E-01
40	1.699E-02	2.389E-02	6.500E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.000E+00	4.712E-01
41	1.005E-01	3.138E-01	6.484E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.000E+00	1.551E+00
42	-2.982E-01	-2.657E-01	8.770E+00	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.000E+00	3.109E+00
43	7.280E-02	-9.258E-02	4.824E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.000E+00	1.206E+00
44	-2.161E-01	-2.380E-01	4.286E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.000E+00	2.166E+00
45	1.175E-01	-4.088E-01	6.286E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.000E+00	1.027E+00
46	-5.966E-02	2.795E-01	3.989E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.000E+00	1.299E+00
47	3.607E-01	2.251E-01	1.742E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.000E+00	1.137E+00
48	3.636E-01	2.010E-01	1.075E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.000E+00	6.197E-01
49	1.147E-01	3.566E-01	1.079E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.000E+00	3.947E+00

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50 1.883E-01 8.929E-02 1.046E+02 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 1.000E+00 2.647E+00

CYCLE 1 K(COLLISION) .879220 REMOVAL LIFETIME(ABS) 3.3117E+03 SOURCE POINTS GENERATED 2638
CYCLE 2 K(COLLISION) .911167 REMOVAL LIFETIME(ABS) 3.2725E+03 SOURCE POINTS GENERATED 3103
CYCLE 3 K(COLLISION) .901138 REMOVAL LIFETIME(ABS) 3.3441E+03 SOURCE POINTS GENERATED 3032
CYCLE 4 K(COLLISION) .895709 REMOVAL LIFETIME(ABS) 3.3210E+03 SOURCE POINTS GENERATED 2982
CYCLE 5 K(COLLISION) .879524 REMOVAL LIFETIME(ABS) 3.2803E+03 SOURCE POINTS GENERATED 2935
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .919716 REMOVAL LIFETIME(ABS) 3.3130E+03 SOURCE POINTS GENERATED 3166
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6
ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .900992 .910354 .0103 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .903059 .904526 .0016 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .895570 .895142 .0005 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.0904E+03 3.1822E+03 .0288 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.1197E+03 3.2164E+03 .0301
SOURCE POINTS GENERATED 2976
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7
ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .930057 .916922 .0093 K(COL/ABS) .908674 .0037 .905314 .0043 -.6276
K(ABSORPTION) .892226 .900426 .0046 K(ABS/TK LN) .905410 .0062 .902556 .0010 -.9825
K(TRK LENGTH) .940898 .910394 .0168 K(TK LN/COL) .913658 .0123 .918532 .0129 .7617
REM LIFE(COL) 3.3120E+03 3.2255E+03 .0212 LIFE(COL/ABS) 3.2301E+03 .0194 3.2390E+03 .0254 .9331
REM LIFE(ABS) 3.2713E+03 3.2347E+03 .0182
SOURCE POINTS GENERATED 3143
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8
ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .908648 .914853 .0070 K(COL/ABS) .906114 .0039 .903249 .0051 -.1799
K(ABSORPTION) .888222 .897375 .0047 K(ABS/TK LN) .904545 .0045 .901080 .0029 -.7663
K(TRK LENGTH) .915676 .911715 .0119 K(TK LN/COL) .913284 .0087 .915153 .0085 .6755
REM LIFE(COL) 3.4220E+03 3.2746E+03 .0211 K(COL/ABS/TK LN) .907981 .0051 .898217 .0065
REM LIFE(ABS) 3.3700E+03 3.2685E+03 .0164 LIFE(COL/ABS) 3.2716E+03 .0185 3.2611E+03 .0171 .9576
SOURCE POINTS GENERATED 2941
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9
ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .894878 .910858 .0070 K(COL/ABS) .905535 .0031 .904238 .0033 -.5169
K(ABSORPTION) .911558 .900212 .0048 K(ABS/TK LN) .907008 .0044 .903939 .0041 -.4062
K(TRK LENGTH) .922164 .913805 .0095 K(TK LN/COL) .912331 .0068 .911654 .0075 .3574
REM LIFE(COL) 3.3439E+03 3.2885E+03 .0168 K(COL/ABS/TK LN) .908291 .0039 .904863 .0043
REM LIFE(ABS) 3.3395E+03 3.2827E+03 .0134 LIFE(COL/ABS) 3.2856E+03 .0149 3.2758E+03 .0135 .9583
SOURCE POINTS GENERATED 2949
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10
ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .906883 .910196 .0057 K(COL/ABS) .904709 .0027 .903426 .0029 -.4599

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K(COLLISION) .894281 .899223 .0041
 K(TRK LENGTH) .902978 .912000 .0080
 REM LIFE(COL) 3.4202E+03 3.3104E+03 .0151
 REM LIFE(ABS) 3.3705E+03 3.2973E+03 .0117
 SOURCE POINTS GENERATED 3086

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .879159 .905762 .0069
 K(COLLISION) .895637 .898711 .0035
 K(TRK LENGTH) .903157 .910737 .0069
 REM LIFE(COL) 3.4747E+03 3.3339E+03 .0145
 REM LIFE(ABS) 3.4725E+03 3.3224E+03 .0124
 SOURCE POINTS GENERATED 2903

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .899916 .905031 .0060
 K(COLLISION) .893238 .898027 .0031
 K(TRK LENGTH) .882897 .907257 .0071
 REM LIFE(COL) 3.2470E+03 3.3230E+03 .0130
 REM LIFE(ABS) 3.2284E+03 3.3106E+03 .0113
 SOURCE POINTS GENERATED 3070

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .914303 .906061 .0054
 K(COLLISION) .894987 .897689 .0028
 K(TRK LENGTH) .921290 .908816 .0065
 REM LIFE(COL) 3.2165E+03 3.3112E+03 .0121
 REM LIFE(ABS) 3.2292E+03 3.3016E+03 .0104
 SOURCE POINTS GENERATED 3066

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .885670 .904022 .0054
 K(COLLISION) .903479 .898268 .0026
 K(TRK LENGTH) .902610 .908195 .0059
 REM LIFE(COL) 3.0698E+03 3.2871E+03 .0131
 REM LIFE(ABS) 3.1308E+03 3.2845E+03 .0107
 SOURCE POINTS GENERATED 2825

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .882994 .902111 .0053
 K(COLLISION) .909104 .899253 .0026
 K(TRK LENGTH) .901205 .907560 .0054
 REM LIFE(COL) 3.2418E+03 3.2829E+03 .0120
 REM LIFE(ABS) 3.2590E+03 3.2822E+03 .0097
 SOURCE POINTS GENERATED 2983

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .868123 .899278 .0058

CYCLE = 11

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.902236 .0035	.900438 .0031	-.2050
K(ABS/TK LN)	.904724 .0034	.901761 .0031	-.2700
K(TK LN/COL)	.908249 .0058	.908217 .0064	.4011
K(COL/ABS/TK LN)	.905070 .0037	.901767 .0037	
LIFE(COL/ABS)	3.3281E+03 .0133	3.3092E+03 .0127	.9636

CYCLE = 12

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.901529 .0032	.899737 .0028	-.1646
K(ABS/TK LN)	.902642 .0038	.899691 .0030	-.0903
K(TK LN/COL)	.906144 .0055	.905832 .0059	.4071
K(COL/ABS/TK LN)	.903438 .0037	.900151 .0033	
LIFE(COL/ABS)	3.3168E+03 .0121	3.2974E+03 .0116	.9644

CYCLE = 13

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.901875 .0028	.899734 .0025	-.1877
K(ABS/TK LN)	.903253 .0034	.899693 .0027	-.1218
K(TK LN/COL)	.907439 .0051	.907000 .0053	.4391
K(COL/ABS/TK LN)	.904189 .0034	.900192 .0030	
LIFE(COL/ABS)	3.3064E+03 .0111	3.2900E+03 .0103	.9666

CYCLE = 14

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.901145 .0027	.899648 .0022	-.2699
K(ABS/TK LN)	.903232 .0030	.900172 .0024	-.1463
K(TK LN/COL)	.906109 .0048	.905762 .0051	.4447
K(COL/ABS/TK LN)	.903495 .0031	.900169 .0026	
LIFE(COL/ABS)	3.2858E+03 .0118	3.2804E+03 .0094	.9721

CYCLE = 15

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.900682 .0025	.900003 .0020	-.3937
K(ABS/TK LN)	.903407 .0028	.901119 .0023	-.1868
K(TK LN/COL)	.904835 .0046	.904762 .0048	.4564
K(COL/ABS/TK LN)	.902975 .0029	.900528 .0023	
LIFE(COL/ABS)	3.2826E+03 .0108	3.2810E+03 .0085	.9718

CYCLE = 16

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.898580 .0032	.898140 .0027	.0187

K(ABSORPTION)	.882795	.897882	.0028	K(ABS/TK LN)	.902174	.0029	.899923	.0026	-.0219
K(TRK LENGTH)	.894434	.906466	.0050	K(TK LN/COL)	.902872	.0047	.903803	.0049	.5020
REM LIFE(COL)	3.0618E+03	3.2645E+03	.0123	K(COL/ABS/TK LN)	.901209	.0033	.899566	.0030	
REM LIFE(ABS)	3.1612E+03	3.2721E+03	.0094	LIFE(COL/ABS)	3.2683E+03	.0108	3.2831E+03	.0077	.9664
SOURCE POINTS GENERATED 2914									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.885991	.898256	.0055	K(COL/ABS)	.898687	.0030	.898911	.0026	-.0821
K(ABSORPTION)	.913956	.899118	.0029	K(ABS/TK LN)	.902017	.0026	.900793	.0024	-.1810
K(TRK LENGTH)	.886308	.904915	.0050	K(TK LN/COL)	.901586	.0046	.902218	.0048	.5328
REM LIFE(COL)	3.3064E+03	3.2677E+03	.0114	K(COL/ABS/TK LN)	.900763	.0031	.900337	.0027	
REM LIFE(ABS)	3.3183E+03	3.2757E+03	.0087	LIFE(COL/ABS)	3.2717E+03	.0100	3.2870E+03	.0072	.9660
SOURCE POINTS GENERATED 3064									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.883951	.897234	.0052	K(COL/ABS)	.898098	.0028	.898564	.0024	-.0657
K(ABSORPTION)	.896918	.898961	.0027	K(ABS/TK LN)	.901414	.0025	.900313	.0023	-.1593
K(TRK LENGTH)	.890237	.903867	.0047	K(TK LN/COL)	.900551	.0044	.901170	.0046	.5577
REM LIFE(COL)	3.4211E+03	3.2787E+03	.0110	K(COL/ABS/TK LN)	.900021	.0029	.899865	.0026	
REM LIFE(ABS)	3.4244E+03	3.2863E+03	.0087	LIFE(COL/ABS)	3.2825E+03	.0098	3.2974E+03	.0074	.9672
SOURCE POINTS GENERATED 2981									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.914450	.898382	.0050	K(COL/ABS)	.898410	.0027	.898425	.0023	-.1195
K(ABSORPTION)	.891118	.898438	.0026	K(ABS/TK LN)	.901456	.0024	.900159	.0021	-.1873
K(TRK LENGTH)	.912974	.904474	.0045	K(TK LN/COL)	.901428	.0042	.902171	.0043	.5716
REM LIFE(COL)	3.3673E+03	3.2846E+03	.0104	K(COL/ABS/TK LN)	.900431	.0028	.899730	.0024	
REM LIFE(ABS)	3.3117E+03	3.2880E+03	.0081	LIFE(COL/ABS)	3.2863E+03	.0092	3.2924E+03	.0070	.9617
SOURCE POINTS GENERATED 3066									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1000 year (mpc12g)

PROBID = 02/17/95 01:33:19
02/16/95 23:36:26

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59756	1.0041E+00	2.0644E+00	ESCAPE	1	1.7215E-05	4.4202E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.6629E-02	5.2247E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59831	6.6453E-02	4.8834E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2739E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	151	1.9859E-03	1.4529E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9567E+00
				CAPTURE	0	6.6067E-01	3.2431E-02
				LOSS TO (N,XN)	75	9.8628E-04	8.2639E-03
				LOSS TO FISSION	0	3.4458E-01	6.8430E-02

TOTAL	59907	1.0727E+00	2.0659E+00	TOTAL	59907	1.0727E+00	2.0659E+00
NUMBER OF NEUTRONS BANKED			76	AVERAGE LIFETIME, SHAKES			CUTOFFS
NEUTRON TRACKS PER SOURCE PARTICLE		1.0025E+00		ESCAPE	2.8810E+00		TCO 1.0000E+34
NEUTRON COLLISIONS PER SOURCE PARTICLE		5.8022E+01		CAPTURE	3.2887E+03		ECO .0000E+00
TOTAL NEUTRON COLLISIONS		3467162		CAPTURE OR ESCAPE	3.2886E+03		WC1 -5.0000E-01
NET MULTIPLICATION		1.0010E+00	.0002	ANY TERMINATION	3.6268E+03		WC2 -2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	116.68	MINUTES		MAXIMUM NUMBER EVER IN BANK		2	
COMPUTER TIME IN MCRUN	116.57	MINUTES		BANK OVERFLOWS TO BACKUP FILE		0	
SOURCE PARTICLES PER MINUTE	5.1263	E+02		FIELD LENGTH		0	
RANDOM NUMBERS GENERATED	42021307			MOST RANDOM NUMBERS USED WAS		8033	IN HISTORY 31279

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4757E-01 TO 1.1372E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25167	9332	3.1417E+00	1.2234E-04	3.9193E-01	7.2838E-01	1.1215E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	732997	59832	299286	4.1881E+00	6.8823E-04	7.3915E-01	8.7572E-01	2.5097E+00
33	34	4987	255	1026	1.0591E-02	5.3404E-05	2.5870E-01	6.1388E-01	4.2916E+00
34	35	295	25	772	5.6960E-03	3.6651E-06	1.1685E-02	4.5375E-01	3.6193E-01
35	36	1316115	59832	12	1.5957E-04	5.9744E-04	6.9973E-01	8.7213E-01	3.5057E+03
36	37	534	25	31	2.3209E-04	3.5515E-06	1.2851E-02	4.4512E-01	3.5525E-01
37	38	1426985	59832	50909	7.5368E-01	5.7711E-04	6.8945E-01	8.7166E-01	4.1123E+00
38	39	588	25	258	1.8525E-03	5.9625E-06	2.3871E-02	4.4661E-01	3.7729E-01
39	40	2279405	59832	1476558	1.9270E+01	5.0173E-04	6.5764E-01	8.6905E-01	1.6260E+00
40	41	57572	31178	91647	1.1960E+00	3.7819E-04	6.0939E-01	8.6650E-01	1.5356E+00
41	42	17	8	61	4.1852E-04	3.8264E-08	5.3435E-08	4.2887E-01	3.1954E-01
42	43	121808	32991	3712	5.4780E-02	3.9536E-04	6.1214E-01	8.6698E-01	4.1346E+00
43	44	136426	35236	30681	4.0216E-01	3.9923E-04	6.1997E-01	8.6756E-01	1.5561E+00
44	45	148987	36229	3190	4.7136E-02	4.0527E-04	6.2371E-01	8.6824E-01	4.1400E+00
45	46	181278	41347	73281	9.6113E-01	4.0866E-04	6.2379E-01	8.6955E-01	1.5637E+00
46	47	7267	3282	7774	1.0259E-01	3.5666E-04	5.8826E-01	8.7005E-01	1.5099E+00
47	48	9618	3602	354	5.2902E-03	4.0169E-04	6.3539E-01	8.7194E-01	4.1253E+00
48	49	12516	4903	6576	8.7033E-02	3.8704E-04	6.1921E-01	8.7239E-01	1.5589E+00
49	50	33688	15142	66687	7.9651E-01	3.3550E-04	5.6129E-01	8.2243E-01	1.4599E+00
50	51	33307	14354	12452	1.5361E-01	3.9743E-04	5.8155E-01	8.0648E-01	2.1173E+00
51	52	32835	14014	2449	3.5070E-02	4.0805E-04	5.8090E-01	8.0624E-01	9.1375E+00
52	53	32824	14046	12119	1.4828E-01	3.7996E-04	5.7018E-01	8.0185E-01	2.0843E+00
53	54	362	86	2715	2.2357E-02	4.8990E-05	2.3567E-01	5.5614E-01	8.1829E-01
54	55	33846	14891	67740	7.9672E-01	3.3141E-04	5.7444E-01	8.1685E-01	1.4783E+00
55	56	33501	14128	12630	1.5420E-01	3.8028E-04	5.8552E-01	7.9847E-01	2.0805E+00
56	57	32949	13767	2436	3.4432E-02	3.8319E-04	5.8082E-01	7.9485E-01	9.2705E+00
57	58	32977	13803	12306	1.5004E-01	3.6515E-04	5.6675E-01	7.9289E-01	2.0736E+00
58	59	280	72	1992	1.7286E-02	5.2543E-05	2.6127E-01	5.7992E-01	8.6340E-01
59	60	53618	19337	92656	1.1546E+00	4.9098E-04	5.6351E-01	8.4447E-01	1.5106E+00
60	61	52981	18379	18122	2.3386E-01	6.8618E-04	5.8933E-01	8.3664E-01	2.2729E+00
61	62	556	115	2452	2.1992E-02	4.5516E-05	2.1720E-01	5.9580E-01	7.6948E-01
62	63	53167	19020	93050	1.1579E+00	4.7596E-04	5.5849E-01	8.4426E-01	1.4995E+00
63	64	52745	18112	17958	2.3270E-01	6.7519E-04	5.7965E-01	8.3596E-01	2.2813E+00
64	65	493	102	2127	1.7860E-02	4.2075E-05	2.1369E-01	5.5242E-01	7.9412E-01
65	66	9838	4882	432278	3.9617E+00	5.6476E-05	2.7298E-01	6.1716E-01	8.5889E-01
66	67	9646	3823	14199	1.4900E-01	1.8380E-04	4.5434E-01	6.9741E-01	1.8400E+00
67	68	9662	3815	14072	1.4695E-01	1.8366E-04	4.5824E-01	6.9288E-01	1.8252E+00
68	70	34845	9240	11378	1.4774E-01	9.5754E-04	5.7381E-01	8.3985E-01	2.3921E+00
69	71	35045	8909	6413	9.5262E-02	1.0396E-03	5.6990E-01	8.3825E-01	8.9094E+00
70	72	18989	8705	58448	7.5197E-01	1.3565E-03	5.8006E-01	8.3667E-01	2.4957E+00
71	73	34733	9242	11500	1.4879E-01	9.6045E-04	5.7638E-01	8.3746E-01	2.3601E+00
72	74	34956	8939	6384	9.4672E-02	1.0341E-03	5.7514E-01	8.3496E-01	8.8750E+00
73	75	18906	8728	58385	7.4603E-01	1.3275E-03	5.8173E-01	8.3295E-01	2.4991E+00
74	76	196	56	3155	2.8213E-02	4.5949E-05	1.9280E-01	5.9882E-01	7.7312E-01
75	77	214	58	3531	3.1746E-02	3.9200E-05	1.6536E-01	6.0111E-01	7.0619E-01
76	80	7	4	16	1.1372E-04	2.1567E-08	2.8769E-08	4.4249E-01	7.9361E-01
77	81	3430	1508	9906	1.0767E-01	3.5890E-04	5.1463E-01	7.3008E-01	2.1003E+00
78	82	2146	896	11494	1.2398E-01	2.8504E-04	4.5845E-01	7.5858E-01	1.3192E+00
79	83	2	1	8	6.0792E-05	3.3256E-08	3.4097E-08	4.7868E-01	2.9294E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1719	695	5003	6.0189E-02	9.3295E-04	5.5609E-01	7.9107E-01	2.1327E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1096	475	9582	1.0869E-01	1.9093E-03	5.0867E-01	7.8022E-01	4.4897E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	389	222	47183	4.0208E-01	3.0114E-05	1.2221E-01	5.6358E-01	6.4007E-01

TOTAL 7158510 697332 3467162 4.2461E+01
1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

	CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.5020E-01	-5.5020E-01
2	2	3.1614E-01	.0000E+00	.0000E+00	.0000E+00	-8.8246E-01	-5.6632E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6580E-02	-1.6580E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.0668E-02	-5.0668E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4149E-02	-1.4149E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4505E-01	-1.4505E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6532E+00	-1.6532E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0354E+00	-2.0354E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1269E-01	-2.1269E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1105E-01	-2.1105E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8838E-01	-3.8838E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8579E-01	-3.8579E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8497E-02	-7.8497E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8185E-02	-7.8185E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9955E-02	-8.9955E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3509E-02	-7.3509E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1034E-02	-7.1034E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4110E-02	-7.4110E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8804E-02	-9.8804E-02
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9344E-02	-9.9344E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0107E-02	-9.0107E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2897E-02	-8.2897E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0969E-01	-1.0969E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1421E-01	-1.1421E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1773E-01	-1.1773E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1511E-01	-1.1511E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0009E-01	-1.0009E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3614E-02	-8.3614E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2144E-02	-9.2144E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0526E-01	-1.0526E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9131E+01	-1.9131E+01
32	33	9.8007E+00	1.0041E+00	.0000E+00	.0000E+00	-9.5875E+00	1.2173E+00
33	34	5.1808E-02	.0000E+00	.0000E+00	.0000E+00	-4.9327E-02	2.4801E-03
34	35	2.2259E-03	.0000E+00	.0000E+00	.0000E+00	-2.1325E-03	9.3364E-05
35	36	1.9211E+01	.0000E+00	.0000E+00	.0000E+00	-1.9200E+01	1.0964E-02
36	37	4.0441E-03	.0000E+00	.0000E+00	.0000E+00	-4.0429E-03	1.2383E-06
37	38	2.0826E+01	.0000E+00	.0000E+00	.0000E+00	-2.0750E+01	7.6275E-02
38	39	4.4439E-03	.0000E+00	.0000E+00	.0000E+00	-4.3973E-03	4.6634E-05
39	40	3.3206E+01	.0000E+00	.0000E+00	.0000E+00	-1.0912E+01	2.2295E+01
40	41	8.3768E-01	.0000E+00	.0000E+00	.0000E+00	-8.3394E-01	3.7376E-03
41	42	1.2639E-04	.0000E+00	.0000E+00	.0000E+00	-1.1958E-04	6.8075E-06
42	43	1.7690E+00	.0000E+00	.0000E+00	.0000E+00	-1.7683E+00	6.1627E-04
43	44	1.9818E+00	.0000E+00	.0000E+00	.0000E+00	-1.9806E+00	1.2038E-03
44	45	2.1645E+00	.0000E+00	.0000E+00	.0000E+00	-2.1640E+00	4.8644E-04
45	46	2.6392E+00	.0000E+00	.0000E+00	.0000E+00	-1.1188E+00	1.5204E+00
46	47	1.0617E-01	.0000E+00	.0000E+00	.0000E+00	-6.4185E-02	4.1987E-02
47	48	1.4045E-01	.0000E+00	.0000E+00	.0000E+00	-1.3612E-01	4.3278E-03
48	49	1.8300E-01	.0000E+00	.0000E+00	.0000E+00	-7.1987E-02	1.1102E-01
49	50	4.6504E-01	.0000E+00	.0000E+00	.0000E+00	-2.5990E-01	2.0513E-01
50	51	4.5403E-01	.0000E+00	.0000E+00	.0000E+00	-4.3826E-01	1.5774E-02
51	52	4.4470E-01	.0000E+00	.0000E+00	.0000E+00	-4.3935E-01	5.3570E-03
52	53	4.4467E-01	.0000E+00	.0000E+00	.0000E+00	-1.8735E-01	2.5732E-01
53	54	3.5306E-03	.0000E+00	.0000E+00	.0000E+00	-8.7854E-05	3.4428E-03
54	55	4.6531E-01	.0000E+00	.0000E+00	.0000E+00	-2.6230E-01	2.0302E-01
55	56	4.5297E-01	.0000E+00	.0000E+00	.0000E+00	-4.3641E-01	1.6560E-02
56	57	4.4221E-01	.0000E+00	.0000E+00	.0000E+00	-4.3667E-01	5.5397E-03
57	58	4.4264E-01	.0000E+00	.0000E+00	.0000E+00	-1.8524E-01	2.5740E-01

TOTAL	1.0284E+02	1.0041E+00	.0000E+00	.0000E+00	-1.0284E+02	1.0041E+00
1 NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	5.2858E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2858E-06
33	34	.0000E+00	.0000E+00	7.7073E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.7073E-06
34	35	.0000E+00	.0000E+00	1.2650E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2650E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-1.6363E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6363E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	-1.9822E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9822E-04
40	41	.0000E+00	.0000E+00	-7.5555E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.5555E-06
41	42	.0000E+00	.0000E+00	-4.1791E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1791E-06
42	43	.0000E+00	.0000E+00	4.8509E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8509E-06
43	44	.0000E+00	.0000E+00	1.2787E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2787E-05
44	45	.0000E+00	.0000E+00	-3.6348E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6348E-06
45	46	.0000E+00	.0000E+00	1.0528E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0528E-04
46	47	.0000E+00	.0000E+00	4.2129E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2129E-06
47	48	.0000E+00	.0000E+00	-4.1276E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1276E-06
48	49	.0000E+00	.0000E+00	4.1940E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1940E-06
49	50	.0000E+00	.0000E+00	2.6712E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6712E-05
50	51	.0000E+00	.0000E+00	6.0233E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.0233E-06
51	52	.0000E+00	.0000E+00	-6.3097E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.3097E-06
52	53	.0000E+00	.0000E+00	-4.0472E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0472E-05
53	54	.0000E+00	.0000E+00	1.2730E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2730E-05
54	55	.0000E+00	.0000E+00	3.9181E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9181E-05
55	56	.0000E+00	.0000E+00	-2.1843E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1843E-05
56	57	.0000E+00	.0000E+00	-2.9419E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9419E-06
57	58	.0000E+00	.0000E+00	1.7990E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7990E-04
58	59	.0000E+00	.0000E+00	1.0226E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0226E-07
59	60	.0000E+00	.0000E+00	5.2070E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2070E-05
60	61	.0000E+00	.0000E+00	1.1949E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1949E-04
61	62	.0000E+00	.0000E+00	-8.2517E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2517E-06
62	63	.0000E+00	.0000E+00	-2.3480E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3480E-05
63	64	.0000E+00	.0000E+00	2.5384E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5384E-06
64	65	.0000E+00	.0000E+00	-2.4944E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4944E-05
65	66	.0000E+00	.0000E+00	1.1144E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1144E-04
66	67	.0000E+00	.0000E+00	7.0143E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.0143E-05
67	68	.0000E+00	.0000E+00	7.3850E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.3850E-06
68	70	.0000E+00	.0000E+00	-1.2164E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2164E-04
69	71	.0000E+00	.0000E+00	3.5288E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5288E-05
70	72	.0000E+00	.0000E+00	-1.8306E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8306E-04
71	73	.0000E+00	.0000E+00	-1.8236E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8236E-05
72	74	.0000E+00	.0000E+00	-1.4869E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4869E-06
73	75	.0000E+00	.0000E+00	9.8094E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.8094E-05
74	76	.0000E+00	.0000E+00	-3.9421E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9421E-06
75	77	.0000E+00	.0000E+00	8.5396E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5396E-06
76	80	.0000E+00	.0000E+00	-4.5975E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.5975E-06
77	81	.0000E+00	.0000E+00	-1.8474E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8474E-04
78	82	.0000E+00	.0000E+00	3.3896E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3896E-05
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	3.6099E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.6099E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.6033E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6033E-06

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-6.6402E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.6402E-07
TOTAL		.0000E+00	.0000E+00	1.7586E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7586E-04

1 NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3696E-02	.0000E+00	-1.3696E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.8432E-03	.0000E+00	-3.7851E-01	-9.1496E-04	-3.4458E-01
33	34	.0000E+00	.0000E+00	-2.2752E-04	.0000E+00	-2.2752E-04
34	35	.0000E+00	.0000E+00	-3.3265E-05	.0000E+00	-3.3265E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.2383E-06	.0000E+00	-1.2383E-06
37	38	7.8549E-05	.0000E+00	-6.8682E-03	-3.9275E-05	-6.8290E-03
38	39	.0000E+00	.0000E+00	-1.0641E-05	.0000E+00	-1.0641E-05
39	40	.0000E+00	.0000E+00	-5.2784E-02	.0000E+00	-5.2784E-02
40	41	.0000E+00	.0000E+00	-3.7300E-03	.0000E+00	-3.7300E-03
41	42	.0000E+00	.0000E+00	-2.6284E-06	.0000E+00	-2.6284E-06
42	43	.0000E+00	.0000E+00	-6.2112E-04	.0000E+00	-6.2112E-04
43	44	.0000E+00	.0000E+00	-1.2166E-03	.0000E+00	-1.2166E-03
44	45	.0000E+00	.0000E+00	-4.8280E-04	.0000E+00	-4.8280E-04
45	46	.0000E+00	.0000E+00	-2.8783E-03	.0000E+00	-2.8783E-03
46	47	.0000E+00	.0000E+00	-3.2629E-04	.0000E+00	-3.2629E-04
47	48	.0000E+00	.0000E+00	-5.3756E-05	.0000E+00	-5.3756E-05
48	49	.0000E+00	.0000E+00	-2.7331E-04	.0000E+00	-2.7331E-04
49	50	.0000E+00	.0000E+00	-2.4871E-03	.0000E+00	-2.4871E-03
50	51	.0000E+00	.0000E+00	-1.0664E-02	.0000E+00	-1.0664E-02
51	52	.0000E+00	.0000E+00	-5.9337E-04	.0000E+00	-5.9337E-04

52	53	.0000E+00	.0000E+00	-1.0476E-02	.0000E+00	.0000E+00	-1.0476E-02
53	54	.0000E+00	.0000E+00	-1.1568E-04	.0000E+00	.0000E+00	-1.1568E-04
54	55	.0000E+00	.0000E+00	-2.5544E-03	.0000E+00	.0000E+00	-2.5544E-03
55	56	.0000E+00	.0000E+00	-1.1230E-02	.0000E+00	.0000E+00	-1.1230E-02
56	57	.0000E+00	.0000E+00	-6.5754E-04	.0000E+00	.0000E+00	-6.5754E-04
57	58	.0000E+00	.0000E+00	-1.0648E-02	.0000E+00	.0000E+00	-1.0648E-02
58	59	.0000E+00	.0000E+00	-9.1835E-05	.0000E+00	.0000E+00	-9.1835E-05
59	60	.0000E+00	.0000E+00	-2.9099E-03	.0000E+00	.0000E+00	-2.9099E-03
60	61	.0000E+00	.0000E+00	-1.1344E-02	.0000E+00	.0000E+00	-1.1344E-02
61	62	.0000E+00	.0000E+00	-1.1422E-04	.0000E+00	.0000E+00	-1.1422E-04
62	63	.0000E+00	.0000E+00	-2.9537E-03	.0000E+00	.0000E+00	-2.9537E-03
63	64	2.9645E-05	.0000E+00	-1.1039E-02	-1.4823E-05	.0000E+00	-1.1024E-02
64	65	.0000E+00	.0000E+00	-9.2275E-05	.0000E+00	.0000E+00	-9.2275E-05
65	66	.0000E+00	.0000E+00	-2.0145E-02	.0000E+00	.0000E+00	-2.0145E-02
66	67	.0000E+00	.0000E+00	-1.5154E-02	.0000E+00	.0000E+00	-1.5154E-02
67	68	3.4441E-05	.0000E+00	-1.4715E-02	-1.7221E-05	.0000E+00	-1.4697E-02
68	70	.0000E+00	.0000E+00	-5.4823E-03	.0000E+00	.0000E+00	-5.4823E-03
69	71	.0000E+00	.0000E+00	-7.1950E-04	.0000E+00	.0000E+00	-7.1950E-04
70	72	.0000E+00	.0000E+00	-2.1597E-02	.0000E+00	.0000E+00	-2.1597E-02
71	73	.0000E+00	.0000E+00	-5.5169E-03	.0000E+00	.0000E+00	-5.5169E-03
72	74	.0000E+00	.0000E+00	-6.8886E-04	.0000E+00	.0000E+00	-6.8886E-04
73	75	.0000E+00	.0000E+00	-2.2078E-02	.0000E+00	.0000E+00	-2.2078E-02
74	76	.0000E+00	.0000E+00	-1.4370E-04	.0000E+00	.0000E+00	-1.4370E-04
75	77	.0000E+00	.0000E+00	-1.6269E-04	.0000E+00	.0000E+00	-1.6269E-04
76	80	.0000E+00	.0000E+00	-3.1303E-05	.0000E+00	.0000E+00	-3.1303E-05
77	81	.0000E+00	.0000E+00	-7.6627E-03	.0000E+00	.0000E+00	-7.6627E-03
78	82	.0000E+00	.0000E+00	-3.7882E-04	.0000E+00	.0000E+00	-3.7882E-04
79	83	.0000E+00	.0000E+00	-3.1036E-07	.0000E+00	.0000E+00	-3.1036E-07
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.2707E-03	.0000E+00	.0000E+00	-2.2707E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.1380E-03	.0000E+00	.0000E+00	-2.1380E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0966E-03	.0000E+00	.0000E+00	-2.0966E-03

TOTAL 1.9859E-03 .0000E+00 -6.6067E-01 -9.8628E-04 -3.4458E-01 -1.0042E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	282109 16099	2.9485E+00 1.9324E-01	1.3599E-02 9.7293E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7096E-01 2.3925E-04 2.8704E-05 1.8626E-06 6.1790E-06 3.0867E-05 2.8101E-06 6.6865E-08 8.3140E-05 4.4707E-03 1.0342E-03 3.2088E-01 2.8728E-04 7.6536E-09 1.4735E-03 3.9247E-04 3.1260E-11 5.2193E-05 5.5294E-05 2.0660E-09 5.3391E-06 1.8421E-08	100011 555 66 1008 372 124 882 0 144 23912 925 150830 782 0 16152 3005 0 128 374 0 16 0	1.4513E+00 7.0545E-03 8.4285E-04 1.0897E-02 3.9967E-03 1.5153E-03 9.3533E-03 3.4190E-06 1.9174E-03 4.6153E-01 1.3522E-02 2.1933E+00 9.8657E-03 2.2558E-08 3.2095E-01 3.9521E-02 .0000E+00 1.9094E-03 4.5533E-03 1.7054E-07 2.0486E-04 1.0231E-07	1.2084E-03 6.3226E-03 6.9679E-04 1.0768E-02 3.9575E-03 1.2983E-03 9.3347E-03 .0000E+00 1.3463E-03 4.0513E-02 4.7312E-03 1.9060E-01 7.9090E-03 .0000E+00 5.9138E-02 3.5218E-02 .0000E+00 1.2536E-03 4.0332E-03 .0000E+00 1.7866E-04 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.9168E-05 2.0190E-01 1.9980E-04 2.0594E-02 8.8268E-05 .0000E+00 1.2157E-01 1.2105E-04 .0000E+00 1.9769E-05 5.8450E-05 .0000E+00 3.0927E-06 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.1836E-05 .0000E+00 9.1642E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	4 2 8 1001 11	4.2120E-05 2.0445E-05 8.5986E-05 1.0314E-02 1.2765E-04	6.2354E-10 2.3016E-06 1.3213E-05 2.0306E-04 8.9425E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	737 35	5.4428E-03 2.5316E-04	3.3255E-05 9.9073E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	12	1.5957E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	31 0	2.3209E-04 .0000E+00	1.2383E-06 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	185 92 222 49941 469	2.6604E-03 1.3470E-03 2.9884E-03 7.3973E-01 6.9499E-03	6.9720E-08 1.0953E-04 1.6324E-04 6.4401E-03 1.5531E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 2.8554E-05 1.0721E-05
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	246 12	1.7634E-03 8.9164E-05	1.0637E-05 3.3956E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1358201 118357	1.7564E+01 1.7067E+00	5.1560E-02 1.2242E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	84842 6805	1.0984E+00 9.7580E-02	3.6491E-03 8.0954E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	60 1	4.1402E-04 4.5046E-06	2.6282E-06 2.7180E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	18 10 17 3629 38	2.6584E-04 1.3583E-04 2.3115E-04 5.3587E-02 5.6031E-04	1.5714E-09 2.0219E-05 1.8088E-05 5.6832E-04 1.4486E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	28378 2303	3.6912E-01 3.3036E-02	1.2021E-03 1.4431E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 1 14 3131 35	1.3792E-04 1.7228E-05 1.9900E-04 4.6269E-02 5.1258E-04	1.0409E-06 1.6776E-08 1.7404E-05 4.4922E-04 1.5119E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	67609 5672	8.7931E-01 8.1823E-02	2.8360E-03 4.2344E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7249 525	9.5054E-02 7.5400E-03	3.2191E-04 4.3799E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 0 1 345 7	1.6556E-05 .0000E+00 1.7771E-05 5.1508E-03 1.0510E-04	4.5166E-10 .0000E+00 2.1134E-09 4.8964E-05 4.7892E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6108 468	8.0192E-02 6.8408E-03	2.6896E-04 4.3512E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61986 4701	7.3287E-01 6.3638E-02	2.4535E-03 3.3542E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	12 45 50 4 1 1497 524 7861 2311 147	1.4627E-04 5.8378E-04 6.8821E-04 4.3499E-05 1.5315E-05 1.9386E-02 7.3386E-03 9.5297E-02 2.8139E-02 1.9695E-03	4.7468E-08 3.4204E-05 1.0176E-05 5.3361E-07 3.8035E-06 1.9367E-03 9.4517E-04 5.6718E-03 1.7907E-03 2.7087E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2443 6	3.5002E-02 6.7722E-05	5.8743E-04 5.9366E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	5 34 51 1 1 1443	5.7875E-05 3.7830E-04 7.1322E-04 1.6815E-05 8.0375E-06 1.8573E-02	9.8495E-09 2.2694E-05 1.0841E-05 3.3867E-08 2.2513E-06 1.9660E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	460	6.3959E-03	8.9238E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7755	9.3377E-02	5.5405E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2207	2.6597E-02	1.7301E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	162	2.1619E-03	3.1086E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	2575	2.1131E-02	1.1564E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	140	1.2260E-03	3.8924E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	63019	7.3315E-01	2.5136E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4721	6.3565E-02	4.0800E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	13	1.5465E-04	3.2250E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	5.8948E-04	2.7882E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.5371E-04	5.5340E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	2.7390E-05	3.3024E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1473	1.8702E-02	2.0495E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	505	7.0955E-03	9.9453E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8046	9.6452E-02	5.9296E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2322	2.8146E-02	1.8485E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	167	2.2745E-03	3.7367E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2432	3.4391E-02	6.5299E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	4.1217E-05	4.5503E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	3	5.1603E-05	3.3683E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	4.9913E-04	2.0753E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	6.2243E-04	9.8410E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.8921E-05	3.8810E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6203E-05	1.0377E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1451	1.8415E-02	1.9958E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	503	7.0667E-03	9.0424E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7774	9.2987E-02	5.6525E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2317	2.8132E-02	1.7851E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	171	2.2114E-03	2.7829E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1919	1.6643E-02	9.1418E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	73	6.4246E-04	4.1705E-07	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	85244	1.0510E+00	2.8414E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7412	1.0354E-01	6.8536E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	13	1.8802E-04	5.8765E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	78	9.5876E-04	4.0267E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	88	1.2566E-03	8.5440E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.2951E-05	1.0538E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5422E-05	7.8780E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2263	3.0567E-02	2.1392E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	852	1.2131E-02	1.0274E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11163	1.4156E-01	5.8286E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3398	4.3484E-02	1.8869E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	259	3.6066E-03	4.1248E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2346	2.0922E-02	1.1289E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	106	1.0703E-03	1.3351E-06	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	85592	1.0537E+00	2.9023E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7458	1.0421E-01	5.1396E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	17	2.3900E-04	1.9020E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	62	7.7797E-04	3.9910E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	84	1.2032E-03	7.0703E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.1074E-05	9.9668E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.6889E-05	1.5425E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2243	3.0539E-02	2.0012E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	771	1.1209E-02	9.8414E-04	.0000E+00	9.9061E-06
		26000.55C	6.4626E-01	11167	1.4197E-01	5.7553E-03	.0000E+00	4.9165E-06
		28000.50C	1.1433E-01	3375	4.3399E-02	1.8543E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	231	3.2485E-03	3.9412E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2021	1.6901E-02	9.2247E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	106	9.5922E-04	2.7468E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	412239	3.7580E+00	2.0067E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20039	2.0368E-01	7.8049E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	5	5.7834E-05	1.6194E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	4.5623E-04	3.7081E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	5.6923E-04	1.0514E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	9.7333E-05	1.5345E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	7.7709E-06	2.5527E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1485	1.6257E-02	2.6379E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	483	5.9321E-03	1.5426E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9272	9.5890E-02	8.1012E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2707	2.7924E-02	2.5759E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	1.8044E-03	2.4487E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	7	6.1840E-05	1.9469E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	5.4194E-04	3.4834E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	7.6836E-04	1.5711E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.8651E-05	8.5644E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.7550E-05	2.7259E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1578	1.7108E-02	2.7691E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	392	4.9128E-03	1.2653E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9196	9.4570E-02	7.8764E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2627	2.7129E-02	2.4555E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	154	1.7497E-03	2.9426E-04	.0000E+00	1.7221E-05
68	70	6000.50C	1.3966E-03	14	2.0435E-04	1.2361E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	6.6342E-04	1.3804E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	7.9627E-04	3.7044E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.7967E-05	1.3470E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1401	1.9059E-02	9.8778E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	534	7.6213E-03	5.1775E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6984	8.8974E-02	2.7934E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2160	2.7965E-02	9.0190E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	174	2.4274E-03	2.6378E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6402	9.5127E-02	7.0527E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	11	1.3462E-04	1.4222E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	52	7.0903E-04	4.1568E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	190	2.4293E-03	5.7314E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	279	4.0202E-03	1.4036E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	22	3.3337E-04	1.6554E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.2017E-04	3.2815E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7657	1.0514E-01	3.8233E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2434	3.4733E-02	2.1342E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35566	4.4620E-01	1.0977E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	11358	1.4580E-01	3.5828E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	882	1.2490E-02	1.0040E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	11	1.4897E-04	1.1996E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	4.9082E-04	9.8752E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	6.9541E-04	6.4675E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	5.4466E-06	1.5711E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6841E-05	1.5915E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1401	1.9092E-02	9.4585E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	504	7.2671E-03	5.3107E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7216	9.1504E-02	2.8483E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2090	2.6790E-02	8.8877E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	192	2.7764E-03	2.8637E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6370	9.4475E-02	6.8431E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	14	1.9680E-04	4.5502E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	41	5.2493E-04	4.0539E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	202	2.5433E-03	6.3077E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	307	4.4818E-03	1.8882E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	19	2.8091E-04	1.1180E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	8.2819E-05	8.1747E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7517	1.0208E-01	4.0363E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2510	3.5869E-02	2.0456E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35798	4.4663E-01	1.1208E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11141	1.4160E-01	3.6177E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	845	1.1931E-02	1.0859E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3010	2.6784E-02	1.4366E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	145	1.4291E-03	4.0584E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3398	3.0490E-02	1.6265E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	133	1.2560E-03	3.9044E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	2.1575E-05	9.4949E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11	7.8001E-05	1.7784E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2	1.4147E-05	4.0239E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	1	6.4786E-06	3.9791E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	3.5797E-04	1.7117E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.3784E-04	6.9685E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.8266E-05	7.7048E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.7701E-05	3.0211E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1163	1.3538E-02	1.4514E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	359	4.6299E-03	7.0733E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6291	6.6135E-02	4.0267E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1896	2.0927E-02	1.2661E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	109	1.3512E-03	1.8330E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10695	1.1404E-01	3.7575E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	799	9.9403E-03	3.0728E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	7	5.2622E-05	3.1002E-07	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	1	8.1699E-06	3.3939E-10	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	4	5.2804E-05	8.0777E-10	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	6	8.0020E-05	2.4255E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	17	2.4609E-04	2.1628E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	43	5.3859E-04	4.7570E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	644	8.2949E-03	4.1484E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	121	1.7320E-03	1.0692E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1192	1.3982E-02	4.3615E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2804	3.3091E-02	1.1391E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	95	1.1535E-03	3.9891E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	77	1.0178E-03	8.3800E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	57	6.8522E-04	2.5465E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	26	3.3054E-04	2.4046E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	3	4.3593E-05	8.2377E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	201	2.6317E-03	1.4402E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9295	1.0500E-01	1.9914E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	45095	3.8265E-01	2.0928E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2088	1.9424E-02	3.8035E-06	.0000E+00	.0000E+00
TOTAL				3467162	4.2805E+01	6.6067E-01	3.4458E-01	9.9958E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2614716	3.1000E+01	1.0745E-01	.0000E+00	.0000E+00
		2004.50C		12	1.5957E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		255	3.2889E-03	2.9021E-07	.0000E+00	.0000E+00
		7014.50C		905	1.1270E-02	4.1881E-04	.0000E+00	.0000E+00
		8016.50C		298427	4.1561E+00	2.9586E-03	.0000E+00	.0000E+00

13027.50C	17653	2.5907E-01	2.6302E-03	.0000E+00	.0000E+00
14000.50C	1264	1.7783E-02	1.3286E-04	.0000E+00	.0000E+00
15031.50C	86	1.1762E-03	9.6454E-06	.0000E+00	.0000E+00
16032.50C	29	4.2472E-04	2.1057E-05	.0000E+00	.0000E+00
22000.50C	43	5.3859E-04	4.7570E-05	.0000E+00	.0000E+00
24000.50C	33324	4.3829E-01	2.9296E-02	.0000E+00	.0000E+00
25055.50C	11153	1.5657E-01	1.4743E-02	.0000E+00	9.9061E-06
26000.55C	174849	2.1141E+00	8.4867E-02	.0000E+00	4.9165E-06
28000.50C	52715	6.4914E-01	2.7327E-02	.0000E+00	.0000E+00
29000.50C	130	1.5939E-03	6.9150E-05	.0000E+00	.0000E+00
40000.50C	58047	8.5505E-01	7.7097E-03	.0000E+00	2.8554E-05
42000.50C	3719	5.1020E-02	5.4866E-03	.0000E+00	1.7221E-05
45103.50C	555	7.0545E-03	6.3226E-03	.0000E+00	.0000E+00
47109.50C	66	8.4285E-04	6.9679E-04	.0000E+00	.0000E+00
50000.35C	560	8.2555E-03	1.9864E-04	.0000E+00	1.0721E-05
62149.50C	1008	1.0897E-02	1.0768E-02	.0000E+00	.0000E+00
63151.55C	372	3.9967E-03	3.9575E-03	.0000E+00	.0000E+00
63153.55C	124	1.5153E-03	1.2983E-03	.0000E+00	.0000E+00
64155.50C	882	9.3533E-03	9.3347E-03	.0000E+00	.0000E+00
92233.50C	0	3.4190E-06	.0000E+00	.0000E+00	.0000E+00
92234.50C	144	1.9174E-03	1.3463E-03	1.9168E-05	.0000E+00
92235.50C	23912	4.6153E-01	4.0513E-02	2.0190E-01	1.1836E-05
92236.50C	925	1.3522E-02	4.7312E-03	1.9980E-04	.0000E+00
92238.50C	150830	2.1933E+00	1.9060E-01	2.0594E-02	9.1642E-04
93237.55C	782	9.8657E-03	7.9090E-03	8.8268E-05	.0000E+00
94238.50C	0	2.2558E-08	.0000E+00	.0000E+00	.0000E+00
94239.55C	16152	3.2095E-01	5.9138E-02	1.2157E-01	.0000E+00
94240.50C	3005	3.9521E-02	3.5218E-02	1.2105E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	128	1.9094E-03	1.2536E-03	1.9769E-05	.0000E+00
95241.50C	374	4.5533E-03	4.0332E-03	5.8450E-05	.0000E+00
95242.50C	0	1.7054E-07	.0000E+00	.0000E+00	.0000E+00
95243.50C	16	2.0486E-04	1.7866E-04	3.0927E-06	.0000E+00
96245.35C	0	1.0231E-07	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59756 CTM = 116.57

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 116.68 MINUTES

MCNP VERSION 4A-B 10/04/91

02/17/95 01:33:20

PROBID = 02/16/95 23:36:26

1MCNP VERSION 4A-B LD=10/04/91

02/17/95 01:33:20

PROBID = 02/17/95 01:33:20

INP=mpc12h OUTP=mpc12h.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5000 year (mpc12h)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1193-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      3.00%/20 GWD/5000 YEAR -- UO2
331- M2      8016.50C 4.7767E-02
332-      45103.50C 1.7033E-05
333-      47109.50C 2.0436E-06
334-      62149.50C 1.3260E-07
335-      63151.55C 4.4028E-07
336-      63153.55C 2.1975E-06
337-      64155.50C 2.0006E-07
338-      92233.50C 3.5202E-08
339-      92234.50C 5.8654E-06
340-      92235.50C 3.2990E-04
341-      92236.50C 8.3318E-05
342-      92238.50C 2.2844E-02
343-      93237.55C 2.4359E-05
344-      94238.50C 1.9979E-18
345-      94239.55C 9.3598E-05
346-      94240.50C 1.8272E-05
347-      94241.50C 1.6060E-12
348-      94242.50C 3.6899E-06
349-      95241.50C 6.4995E-09
350-      95242.50C 1.7625E-18
351-      95243.50C 2.6121E-07
352-      96245.35C 9.4621E-10
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3      2004.50C 1.0
355- C      ZIRCALOY-4
356- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.  19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.  19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.  17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.  20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.  21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.  17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.  20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.  21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.  22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.  22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.  23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.  23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.  23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.  23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.  27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.  27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.  25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.  28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.  29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.  25051 WILL BE DELETED.

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SURFACES	24051	AND	28051	OF CELL	9 ARE THE SAME.	28051 WILL BE DELETED.
SURFACES	24051	AND	29051	OF CELL	9 ARE THE SAME.	29051 WILL BE DELETED.
SURFACES	26050	AND	30050	OF CELL	9 ARE THE SAME.	30050 WILL BE DELETED.
SURFACES	26051	AND	30051	OF CELL	9 ARE THE SAME.	30051 WILL BE DELETED.
SURFACES	27050	AND	31050	OF CELL	9 ARE THE SAME.	31050 WILL BE DELETED.
SURFACES	27051	AND	31051	OF CELL	9 ARE THE SAME.	31051 WILL BE DELETED.
SURFACES	28048	AND	31048	OF CELL	9 ARE THE SAME.	31048 WILL BE DELETED.
SURFACES	28049	AND	31049	OF CELL	9 ARE THE SAME.	31049 WILL BE DELETED.

1 WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS		3066
POINTS NOT IN ANY CELL	0	
POINTS IN CELLS OF ZERO IMPORTANCE	0	
POINTS IN VOID CELLS	0	
POINTS IN AMBIGUOUS CELLS	0	
TOTAL POINTS REJECTED		0
POINTS REMAINING		3066
POINTS AFTER EXPANSION OR CONTRACTION		3008
NOMINAL SOURCE SIZE		3000

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INITIAL GUESS FOR K(EFF.)          1.000000
CYCLES TO SKIP BEFORE TALLYING      5
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TOTAL FISSION NUBAR DATA ARE BEING USED.
1MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL	1 WAS 1.003170E-01
THE SUM OF THE FRACTIONS OF MATERIAL	2 WAS 7.119235E-02
THE SUM OF THE FRACTIONS OF MATERIAL	5 WAS 1.002500E+00
THE SUM OF THE FRACTIONS OF MATERIAL	8 WAS 9.900000E-01

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	235U 0.7110, 238U 0.2890
2	235U 0.7110, 238U 0.2890
3	235U 0.7110, 238U 0.2890
4	235U 0.7110, 238U 0.2890
5	235U 0.7110, 238U 0.2890
6	235U 0.7110, 238U 0.2890
7	235U 0.7110, 238U 0.2890
8	235U 0.7110, 238U 0.2890
9	235U 0.7110, 238U 0.2890
10	235U 0.7110, 238U 0.2890
11	235U 0.7110, 238U 0.2890
12	235U 0.7110, 238U 0.2890
13	235U 0.7110, 238U 0.2890
14	235U 0.7110, 238U 0.2890
15	235U 0.7110, 238U 0.2890
16	235U 0.7110, 238U 0.2890
17	235U 0.7110, 238U 0.2890
18	235U 0.7110, 238U 0.2890
19	235U 0.7110, 238U 0.2890
20	235U 0.7110, 238U 0.2890
21	235U 0.7110, 238U 0.2890
22	235U 0.7110, 238U 0.2890
23	235U 0.7110, 238U 0.2890
24	235U 0.7110, 238U 0.2890
25	235U 0.7110, 238U 0.2890
26	235U 0.7110, 238U 0.2890
27	235U 0.7110, 238U 0.2890
28	235U 0.7110, 238U 0.2890
29	235U 0.7110, 238U 0.2890
30	235U 0.7110, 238U 0.2890
31	235U 0.7110, 238U 0.2890
32	235U 0.7110, 238U 0.2890
33	235U 0.7110, 238U 0.2890
34	235U 0.7110, 238U 0.2890
35	235U 0.7110, 238U 0.2890
36	235U 0.7110, 238U 0.2890
37	235U 0.7110, 238U 0.2890
38	235U 0.7110, 238U 0.2890
39	235U 0.7110, 238U 0.2890
40	235U 0.7110, 238U 0.2890
41	235U 0.7110, 238U 0.2890
42	235U 0.7110, 238U 0.2890
43	235U 0.7110, 238U 0.2890
44	235U 0.7110, 238U 0.2890
45	235U 0.7110, 238U 0.2890
46	235U 0.7110, 238U 0.2890
47	235U 0.7110, 238U 0.2890
48	235U 0.7110, 238U 0.2890
49	235U 0.7110, 238U 0.2890
50	235U 0.7110, 238U 0.2890
51	235U 0.7110, 238U 0.2890
52	235U 0.7110, 238U 0.2890
53	235U 0.7110, 238U 0.2890
54	235U 0.7110, 238U 0.2890
55	235U 0.7110, 238U 0.2890
56	235U 0.7110, 238U 0.2890
57	235U 0.7110, 238U 0.2890
58	235U 0.7110, 238U 0.2890
59	235U 0.7110, 238U 0.2890
60	235U 0.7110, 238U 0.2890
61	235U 0.7110, 238U 0.2890
62	235U 0.7110, 238U 0.2890
63	235U 0.7110, 238U 0.2890
64	235U 0.7110, 238U 0.2890
65	235U 0.7110, 238U 0.2890
66	235U 0.7110, 238U 0.2890
67	235U 0.7110, 238U 0.2890
68	235U 0.7110, 238U 0.2890
69	235U 0.7110, 238U 0.2890
70	235U 0.7110, 238U 0.2890
71	235U 0.7110, 238U 0.2890
72	235U 0.7110, 238U 0.2890
73	235U 0.7110, 238U 0.2890
74	235U 0.7110, 238U 0.2890
75	235U 0.7110, 238U 0.2890
76	235U 0.7110, 238U 0.2890
77	235U 0.7110, 238U 0.2890
78	235U 0.7110, 238U 0.2890
79	235U 0.7110, 238U 0.2890
80	235U 0.7110, 238U 0.2890
81	235U 0.7110, 238U 0.2890
82	235U 0.7110, 238U 0.2890
83	235U 0.7110, 238U 0.2890
84	235U 0.7110, 238U 0.2890
85	235U 0.7110, 238U 0.2890
86	235U 0.7110, 238U 0.2890
87	235U 0.7110, 238U 0.2890
88	235U 0.7110, 238U 0.2890
89	235U 0.7110, 238U 0.2890
90	235U 0.7110, 238U 0.2890

1	1001	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B)	DATA SETS:	WTR.01T						
2	8016,	.67096	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00001	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00008	92235,	.00463	92236,	.00117	92238,	.32088
	93237,	.00034	94238,	.00000	94239,	.00131	94240,	.00026
	94241,	.00000	94242,	.00005	95241,	.00000	95242,	.00000
	95243,	.00000	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00001	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00022	92235,	.01224	92236,	.00310	92238,	.85820
	93237,	.00091	94238,	.00000	94239,	.00353	94240,	.00069
	94241,	.00000	94242,	.00014	95241,	.00000	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11930E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS PRINT TABLE 50

SURFACE		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11930E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL 1 TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314) 79/06/21.
(1340) 79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394) 79/10/17.

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396) 79/08/30.

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491
 TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5000 year (mpc12h)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	2.054E-01	-3.282E-01	4.854E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.973E-01	1.231E+00
2	-9.613E-02	5.742E-02	6.544E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.973E-01	7.149E+00
3	-1.643E-03	-2.189E-01	1.963E+00	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.973E-01	3.622E+00
4	4.337E-01	-7.963E-02	4.936E+00	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.973E-01	2.755E+00
5	-3.244E-01	-3.048E-01	3.893E+00	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.973E-01	2.959E-01
6	-3.537E-01	-9.044E-02	1.356E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.973E-01	3.103E+00
7	-3.820E-02	-1.808E-01	1.340E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.973E-01	1.196E+00
8	-9.450E-02	-1.438E-01	1.342E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.973E-01	4.648E+00
9	9.857E-02	-3.428E-01	8.427E+00	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.973E-01	1.943E-03
10	1.482E-01	-3.186E-01	7.267E+00	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.973E-01	2.332E+00
11	4.525E-01	-6.521E-02	7.427E+00	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.973E-01	3.254E+00
12	1.272E-01	-3.898E-01	1.617E+00	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.973E-01	4.459E-01
13	1.049E-02	-4.577E-01	1.253E+00	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.973E-01	1.428E+00
14	-2.115E-01	-2.227E-01	2.289E+00	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.973E-01	1.745E+00
15	1.355E-01	-2.183E-01	4.047E+00	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.973E-01	3.613E+00
16	9.117E-02	-4.155E-02	8.177E-01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.973E-01	3.990E+00
17	-6.565E-02	-3.843E-01	1.701E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.973E-01	2.878E+00
18	1.548E-01	-4.364E-01	5.853E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.973E-01	3.326E+00
19	1.528E-01	4.056E-01	6.681E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.973E-01	1.634E+00
20	-2.672E-01	-8.546E-02	6.365E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.973E-01	1.528E-01
21	5.743E-02	9.051E-02	2.084E+00	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.973E-01	2.907E-02
22	-1.360E-01	-1.481E-01	5.672E+00	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.973E-01	5.409E-01
23	-1.768E-01	-2.891E-02	6.990E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.973E-01	3.542E+00
24	1.092E-01	-4.785E-02	7.332E+00	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.973E-01	1.673E+00
25	2.512E-01	3.948E-01	1.652E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.973E-01	2.011E+00
26	-3.916E-01	7.011E-03	3.344E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.973E-01	9.869E-01
27	-3.916E-01	7.011E-03	3.344E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.973E-01	1.547E+00
28	-9.810E-02	-3.527E-01	3.327E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.973E-01	1.629E+00
29	-5.891E-02	-4.562E-01	3.332E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.973E-01	3.037E+00
30	2.383E-01	-3.326E-01	4.340E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.973E-01	3.376E+00
31	-1.725E-01	-2.303E-01	7.617E+00	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.973E-01	1.335E+00
32	2.065E-02	4.892E-02	9.374E+00	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.973E-01	8.544E-01
33	3.693E-01	-6.257E-02	3.523E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.973E-01	1.384E+00
34	7.290E-02	8.098E-02	7.720E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.973E-01	3.520E+00
35	4.914E-02	2.175E-01	9.993E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.973E-01	1.616E+00
36	1.414E-01	2.475E-01	1.007E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.973E-01	6.205E+00
37	6.794E-02	2.852E-01	2.086E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.973E-01	1.656E+00
38	-2.491E-01	-3.211E-01	3.602E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.973E-01	8.973E-01
39	-2.300E-01	1.349E-01	5.865E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.973E-01	1.270E+00
40	2.635E-01	-2.777E-01	6.339E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.973E-01	3.445E+00
41	3.205E-02	2.956E-01	5.406E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.973E-01	2.908E+00
42	-1.369E-01	-2.338E-01	5.433E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.973E-01	1.013E+00
43	3.024E-02	1.150E-01	5.393E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.973E-01	2.934E+00
44	1.121E-01	4.024E-01	4.579E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.973E-01	2.312E+00
45	1.077E-01	-4.173E-01	4.851E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.973E-01	1.185E+00
46	-2.360E-01	3.327E-01	4.860E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.973E-01	9.606E-01
47	4.491E-02	-2.013E-01	5.378E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.973E-01	7.208E+00
48	-3.292E-01	9.867E-02	6.003E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.973E-01	1.313E+00
49	2.140E-01	1.188E-01	9.816E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.973E-01	1.035E+00

50 -1.903E-01 -1.756E-01 9.633E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.973E-01 3.843E+00

CYCLE 1 K(COLLISION) .905518 REMOVAL LIFETIME(ABS) 3.4247E+03 SOURCE POINTS GENERATED 2681

CYCLE 2 K(COLLISION) .909921 REMOVAL LIFETIME(ABS) 3.4284E+03 SOURCE POINTS GENERATED 3028

CYCLE 3 K(COLLISION) .920060 REMOVAL LIFETIME(ABS) 3.5939E+03 SOURCE POINTS GENERATED 3066

CYCLE 4 K(COLLISION) .909275 REMOVAL LIFETIME(ABS) 3.3975E+03 SOURCE POINTS GENERATED 2943

CYCLE 5 K(COLLISION) .920598 REMOVAL LIFETIME(ABS) 3.3485E+03 SOURCE POINTS GENERATED 3018

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .900954 REMOVAL LIFETIME(ABS) 3.2230E+03 SOURCE POINTS GENERATED 2880

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.916799		.908877	.0087	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)		.918172		.916039	.0023	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)		.881686		.887579	.0066	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.2337E+03		3.2421E+03		.0026				
REM LIFE(ABS)	3.2259E+03		3.2245E+03		.0005				
SOURCE POINTS GENERATED	3126					LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.877507		.898420	.0127	K(COL/ABS)	.903610 .0103	.922018 .0091	.9704
K(ABSORPTION)		.894324		.908801	.0081	K(ABS/TK LN)	.894575 .0082	.901162 .0306	.8206
K(TRK LENGTH)		.865889		.880349	.0091	K(TK LN/COL)	.889385 .0100	.881280 .0169	.6583
REM LIFE(COL)	3.3762E+03		3.2868E+03		.0137				
REM LIFE(ABS)	3.4146E+03		3.2879E+03		.0193				
SOURCE POINTS GENERATED	2880					LIFE(COL/ABS)	3.2873E+03 .0165	3.2846E+03 .0076	.9926

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.880083		.893836	.0104	K(COL/ABS)	.898841 .0090	.914752 .0110	.9514
K(ABSORPTION)		.888985		.903847	.0079	K(ABS/TK LN)	.894576 .0058	.895001 .0079	.0089
K(TRK LENGTH)		.900173		.885305	.0085	K(TK LN/COL)	.889570 .0070	.888582 .0086	.1047
REM LIFE(COL)	3.3889E+03		3.3123E+03		.0123	K(COL/ABS/TK LN)	.894329 .0068	.904886 .0190	
REM LIFE(ABS)	3.4315E+03		3.3238E+03		.0173				
SOURCE POINTS GENERATED	3018					LIFE(COL/ABS)	3.3180E+03 .0148	3.2867E+03 .0049	.9955

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.903685		.895806	.0083	K(COL/ABS)	.900309 .0072	.914469 .0075	.9493
K(ABSORPTION)		.908674		.904812	.0062	K(ABS/TK LN)	.896431 .0049	.897604 .0062	.0650
K(TRK LENGTH)		.899025		.888049	.0072	K(TK LN/COL)	.891927 .0061	.891219 .0070	.2040
REM LIFE(COL)	3.4614E+03		3.3421E+03		.0130	K(COL/ABS/TK LN)	.896222 .0057	.907094 .0114	
REM LIFE(ABS)	3.4698E+03		3.3530E+03		.0159				
SOURCE POINTS GENERATED	3081					LIFE(COL/ABS)	3.3476E+03 .0144	3.3190E+03 .0116	.9819

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.928710		.901290	.0091	K(COL/ABS)	.905164 .0079	.921589 .0065	.9722

K(COLLISION) .930174 .909039 .0069
 K(TRK LENGTH) .908794 .891506 .0071
 REM LIFE(COL) 3.5632E+03 3.3790E+03 .0151
 REM LIFE(ABS) 3.5145E+03 3.3799E+03 .0151
 SOURCE POINTS GENERATED 3220

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .903505 .901606 .0077
 K(COLLISION) .894620 .906979 .0063
 K(TRK LENGTH) .891989 .891575 .0060
 REM LIFE(COL) 3.3898E+03 3.3805E+03 .0128
 REM LIFE(ABS) 3.4002E+03 3.3828E+03 .0128
 SOURCE POINTS GENERATED 2869

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .893560 .900600 .0068
 K(COLLISION) .908107 .907120 .0054
 K(TRK LENGTH) .891369 .891550 .0052
 REM LIFE(COL) 3.3688E+03 3.3791E+03 .0111
 REM LIFE(ABS) 3.4067E+03 3.3858E+03 .0111
 SOURCE POINTS GENERATED 2987

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .915032 .902204 .0062
 K(COLLISION) .903590 .906728 .0048
 K(TRK LENGTH) .925054 .895272 .0062
 REM LIFE(COL) 3.4381E+03 3.3856E+03 .0100
 REM LIFE(ABS) 3.4118E+03 3.3887E+03 .0098
 SOURCE POINTS GENERATED 3160

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .886244 .900608 .0058
 K(COLLISION) .914648 .907520 .0044
 K(TRK LENGTH) .887430 .894488 .0056
 REM LIFE(COL) 3.4262E+03 3.3897E+03 .0090
 REM LIFE(ABS) 3.4671E+03 3.3965E+03 .0091
 SOURCE POINTS GENERATED 2935

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .899189 .900479 .0053
 K(COLLISION) .904506 .907246 .0040
 K(TRK LENGTH) .901876 .895160 .0051
 REM LIFE(COL) 3.3283E+03 3.3841E+03 .0083
 REM LIFE(ABS) 3.3410E+03 3.3915E+03 .0083
 SOURCE POINTS GENERATED 3060

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .905693 .900913 .0048

K(COL/ABS) .900273 .0059 .900364 .0072 .4116
 K(TK LN/COL) .896398 .0070 .893979 .0077 .4945
 K(COL/ABS/TK LN) .900612 .0067 .912987 .0105
 LIFE(COL/ABS) 3.3794E+03 .0150 3.3795E+03 .0167 .9583

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .904293 .0068 .908406 .0070 .8883
 K(COL/ABS) .899277 .0051 .898479 .0060 .3788
 K(TK LN/COL) .896591 .0059 .894103 .0064 .4946
 K(COL/ABS/TK LN) .900054 .0057 .900344 .0088
 LIFE(COL/ABS) 3.3817E+03 .0127 3.3816E+03 .0139 .9580

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .903860 .0059 .908485 .0060 .8710
 K(COL/ABS) .899335 .0044 .898524 .0051 .3785
 K(TK LN/COL) .896075 .0052 .893752 .0054 .4887
 K(COL/ABS/TK LN) .899757 .0050 .900526 .0079
 LIFE(COL/ABS) 3.3824E+03 .0110 3.3822E+03 .0119 .9511

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .904466 .0052 .907014 .0052 .8053
 K(COL/ABS) .901000 .0043 .902682 .0045 .2169
 K(TK LN/COL) .898738 .0054 .898612 .0059 .5386
 K(COL/ABS/TK LN) .901401 .0047 .903438 .0052
 LIFE(COL/ABS) 3.3872E+03 .0098 3.3875E+03 .0104 .9462

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .904064 .0047 .906887 .0047 .6914
 K(COL/ABS) .901004 .0038 .902774 .0041 .1786
 K(TK LN/COL) .897548 .0050 .897188 .0054 .5545
 K(COL/ABS/TK LN) .900872 .0043 .903444 .0051
 LIFE(COL/ABS) 3.3931E+03 .0089 3.3924E+03 .0094 .9408

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .903862 .0043 .906604 .0042 .6912
 K(COL/ABS) .901203 .0035 .902872 .0036 .1649
 K(TK LN/COL) .897819 .0046 .897575 .0048 .5443
 K(COL/ABS/TK LN) .900962 .0039 .903625 .0045
 LIFE(COL/ABS) 3.3878E+03 .0082 3.3872E+03 .0087 .9427

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .904383 .0039 .907124 .0039 .6944

K(ABSORPTION)	.914525	.907853	.0037	K(ABS/TK LN)	.900888	.0032	.902869	.0033	.1039
K(TRK LENGTH)	.880327	.893924	.0049	K(TK LN/COL)	.897419	.0042	.897386	.0044	.4909
REM LIFE(COL)	3.3431E+03	3.3807E+03	.0076	K(COL/ABS/TK LN)	.900897	.0035	.903583	.0043	
REM LIFE(ABS)	3.3283E+03	3.3862E+03	.0078	LIFE(COL/ABS)	3.3834E+03	.0076	3.3825E+03	.0080	.9420
SOURCE POINTS GENERATED	3108								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.924553		.902732	.0049	K(COL/ABS)	.904839	.0036	.4901
K(ABSORPTION)		.896065		.906946	.0035	K(ABS/TK LN)	.901940	.0032	-.0905
K(TRK LENGTH)		.933053		.896934	.0056	K(TK LN/COL)	.899833	.0047	.6054
REM LIFE(COL)	3.4510E+03			3.3861E+03	.0072	K(COL/ABS/TK LN)	.902204	.0036	
REM LIFE(ABS)	3.4179E+03			3.3886E+03	.0072	LIFE(COL/ABS)	3.3874E+03	.0071	.9362
SOURCE POINTS GENERATED	3095								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.908317		.903131	.0045	K(COL/ABS)	.904656	.0034	.4481
K(ABSORPTION)		.896240		.906181	.0034	K(ABS/TK LN)	.902179	.0029	-.1493
K(TRK LENGTH)		.914348		.898177	.0053	K(TK LN/COL)	.900654	.0044	.6071
REM LIFE(COL)	3.3355E+03			3.3825E+03	.0068	K(COL/ABS/TK LN)	.902496	.0033	
REM LIFE(ABS)	3.3366E+03			3.3849E+03	.0068	LIFE(COL/ABS)	3.3837E+03	.0069	.9378
SOURCE POINTS GENERATED	2991								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.911279		.903674	.0043	K(COL/ABS)	.904472	.0032	.3798
K(ABSORPTION)		.892506		.905269	.0033	K(ABS/TK LN)	.902212	.0027	-.2040
K(TRK LENGTH)		.912827		.899154	.0051	K(TK LN/COL)	.901414	.0042	.6173
REM LIFE(COL)	3.4019E+03			3.3838E+03	.0063	K(COL/ABS/TK LN)	.902699	.0031	
REM LIFE(ABS)	3.3632E+03			3.3835E+03	.0063	LIFE(COL/ABS)	3.3836E+03	.0062	.9298
SOURCE POINTS GENERATED	3031								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5000 year (mpc12h)

PROBID = 02/17/95 03:31:43
02/17/95 01:33:20

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	60154	9.9744E-01	2.0552E+00	ESCAPE	2	2.6761E-05	4.3042E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.8507E-02	5.0895E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	60257	6.7930E-02	4.6573E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.3212E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	209	2.7679E-03	2.0880E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9457E+00
				CAPTURE	0	6.5161E-01	3.1693E-02
				LOSS TO (N,XN)	104	1.3774E-03	1.1715E-02
				LOSS TO FISSION	0	3.4777E-01	6.8171E-02

TOTAL	60363	1.0687E+00	2.0573E+00	TOTAL	60363	1.0687E+00	2.0573E+00
NUMBER OF NEUTRONS BANKED			105	AVERAGE LIFETIME, SHAKES			CUTOFFS
NEUTRON TRACKS PER SOURCE PARTICLE		1.0035E+00		ESCAPE	3.6169E+00		TCO 1.0000E+34
NEUTRON COLLISIONS PER SOURCE PARTICLE		5.9161E+01		CAPTURE	3.3907E+03		ECO .0000E+00
TOTAL NEUTRON COLLISIONS		3558794		CAPTURE OR ESCAPE	3.3906E+03		WC1 -5.0000E-01
NET MULTIPLICATION		1.0014E+00	.0002	ANY TERMINATION	3.7444E+03		WC2 -2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	118.17	MINUTES		MAXIMUM NUMBER EVER IN BANK		2	
COMPUTER TIME IN MCRUN	118.03	MINUTES		BANK OVERFLOWS TO BACKUP FILE		0	
SOURCE PARTICLES PER MINUTE		5.0964E+02		FIELD LENGTH		0	
RANDOM NUMBERS GENERATED		42882299		MOST RANDOM NUMBERS USED WAS		7093	IN HISTORY 52529

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3168E-01 TO 1.1190E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26178	9676	3.2451E+00	1.1532E-04	3.6914E-01	7.1925E-01	1.0916E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	742657	60259	304303	4.1908E+00	6.6818E-04	7.2806E-01	8.6832E-01	2.5045E+00
33	34	5824	319	1268	1.2829E-02	4.5359E-05	1.9514E-01	5.9728E-01	4.2561E+00
34	35	319	27	837	6.2960E-03	1.5444E-05	1.3247E-01	4.7904E-01	5.4547E-01
35	36	1335609	60259	17	2.6700E-04	5.7698E-04	6.9129E-01	8.6421E-01	3.5067E+03
36	37	569	27	49	3.6306E-04	1.0534E-05	8.0296E-02	4.7343E-01	4.8082E-01
37	38	1447749	60259	52367	7.6343E-01	5.5484E-04	6.7645E-01	8.6338E-01	4.1086E+00
38	39	609	28	230	1.7614E-03	1.0480E-05	7.8557E-02	4.7753E-01	4.8378E-01
39	40	2312631	60259	1513778	1.9387E+01	4.8379E-04	6.4482E-01	8.6060E-01	1.6084E+00
40	41	58459	31587	93741	1.2057E+00	3.6890E-04	6.0443E-01	8.5936E-01	1.5280E+00
41	42	31	11	71	5.7941E-04	3.8752E-08	5.4570E-08	4.5644E-01	3.2281E-01
42	43	123643	33330	3686	5.3442E-02	3.8473E-04	6.0557E-01	8.5979E-01	4.1321E+00
43	44	138500	35646	31236	4.0204E-01	3.8678E-04	6.0871E-01	8.5932E-01	1.5402E+00
44	45	151379	36636	3215	4.6451E-02	3.9301E-04	6.0935E-01	8.5985E-01	4.1280E+00
45	46	184376	41736	75931	9.7756E-01	3.9723E-04	6.1485E-01	8.6062E-01	1.5505E+00
46	47	7126	3313	7791	1.0052E-01	3.6264E-04	5.9124E-01	8.6280E-01	1.5148E+00
47	48	9547	3623	307	4.4899E-03	4.0522E-04	6.0195E-01	8.6858E-01	4.1147E+00
48	49	12565	4984	6563	8.5773E-02	4.1898E-04	6.2704E-01	8.6509E-01	1.5722E+00
49	50	34615	15324	70147	8.2404E-01	3.2551E-04	5.5518E-01	8.1469E-01	1.4568E+00
50	51	34419	14517	12733	1.5543E-01	3.8375E-04	5.6139E-01	7.9921E-01	2.0736E+00
51	52	34251	14205	2493	3.4484E-02	3.7014E-04	5.4018E-01	7.9393E-01	9.2367E+00
52	53	34335	14287	12972	1.5675E-01	3.6785E-04	5.4979E-01	7.9383E-01	2.0686E+00
53	54	312	86	2125	1.8417E-02	2.5502E-05	1.1129E-01	5.7798E-01	6.2127E-01
54	55	35043	15454	68828	8.0164E-01	3.3252E-04	5.6023E-01	8.1289E-01	1.4577E+00
55	56	34971	14711	12933	1.5734E-01	3.8659E-04	5.7301E-01	7.9702E-01	2.0637E+00
56	57	34648	14360	2499	3.4940E-02	3.7884E-04	5.6749E-01	7.9021E-01	9.1355E+00
57	58	34776	14436	13170	1.5753E-01	3.6933E-04	5.6479E-01	7.8796E-01	2.0557E+00
58	59	399	92	2448	2.2826E-02	5.1335E-05	2.6438E-01	6.1557E-01	8.2542E-01
59	60	53045	19093	94428	1.1502E+00	4.5490E-04	5.4988E-01	8.3434E-01	1.4889E+00
60	61	52605	18222	18073	2.3120E-01	6.5066E-04	5.7840E-01	8.2885E-01	2.2829E+00
61	62	466	107	1952	1.7521E-02	3.0871E-05	1.2028E-01	5.9033E-01	6.4618E-01
62	63	53801	19291	93615	1.1475E+00	4.6962E-04	5.5697E-01	8.3724E-01	1.4961E+00
63	64	53184	18415	18261	2.3334E-01	6.7064E-04	5.8352E-01	8.3088E-01	2.2711E+00
64	65	542	123	2568	2.2686E-02	3.9856E-05	1.9883E-01	5.9306E-01	7.3981E-01
65	66	9973	4974	456005	4.1071E+00	5.3308E-05	2.5209E-01	6.0930E-01	8.3350E-01
66	67	10055	3987	15031	1.5575E-01	1.7259E-04	4.1629E-01	6.8697E-01	1.7833E+00
67	68	9717	3908	14365	1.4938E-01	1.8615E-04	4.4415E-01	6.9297E-01	1.8213E+00
68	69	34123	9087	11193	1.4366E-01	9.1878E-04	5.7571E-01	8.3217E-01	2.3759E+00
69	70	34205	8769	6421	9.3997E-02	1.0338E-03	5.7527E-01	8.3372E-01	8.8600E+00
70	71	18410	8564	56573	7.1376E-01	1.2997E-03	5.8716E-01	8.2882E-01	2.4886E+00
71	72	33582	9042	11008	1.4099E-01	8.8548E-04	5.8327E-01	8.2812E-01	2.3806E+00
72	73	33465	8708	6170	9.0330E-02	1.0109E-03	5.8678E-01	8.2982E-01	8.8238E+00
73	74	18046	8508	55958	7.0221E-01	1.2664E-03	5.8957E-01	8.2639E-01	2.5056E+00
74	75	229	76	4243	3.7351E-02	4.2137E-05	1.5927E-01	5.9623E-01	7.2119E-01
75	76	198	56	3362	3.1917E-02	4.3001E-05	1.9952E-01	6.3657E-01	7.5337E-01
76	77	13	8	32	2.4149E-04	4.0672E-04	1.3253E+00	5.9376E-01	1.8248E+00
77	78	3484	1528	10194	1.0973E-01	3.1715E-04	4.8145E-01	7.1798E-01	2.0974E+00
78	79	2126	855	11483	1.1989E-01	2.6273E-04	4.2541E-01	7.4724E-01	1.2910E+00
79	80	4	3	364	2.9281E-03	2.0090E-05	7.9685E-02	5.1288E-01	5.4111E-01
80	81	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	82	1612	665	4597	5.5020E-02	8.3437E-04	5.0572E-01	7.8214E-01	2.0987E+00
82	83	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	1040	452	8925	1.0186E-01	1.9017E-03	5.1500E-01	7.9014E-01	4.1404E+00
85	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	87	394	215	45147	3.7848E-01	2.9482E-05	1.2447E-01	5.5330E-01	6.3766E-01

TOTAL 7259859 704107 3558794 4.2785E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

	CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3081E-01	-5.3081E-01
2	2	3.2393E-01	.0000E+00	.0000E+00	.0000E+00	-9.1471E-01	-5.9078E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4665E-02	-1.4665E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.1702E-02	-5.1702E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5742E-02	-1.5742E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4678E-01	-1.4678E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6814E+00	-1.6814E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9996E+00	-1.9996E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1521E-01	-2.1521E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1788E-01	-2.1788E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7764E-01	-3.7764E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8451E-01	-3.8451E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7325E-02	-7.7325E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7187E-02	-7.7187E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7820E-02	-8.7820E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3908E-02	-7.3908E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2597E-02	-7.2597E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7868E-02	-7.7868E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0279E-01	-1.0279E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0288E-01	-1.0288E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4166E-02	-9.4166E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5397E-02	-8.5397E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0886E-01	-1.0886E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1144E-01	-1.1144E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1040E-01	-1.1040E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0826E-01	-1.0826E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8907E-02	-9.8907E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5008E-02	-8.5008E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2734E-02	-9.2734E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0487E-01	-1.0487E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9094E+01	-1.9094E+01
32	33	9.7859E+00	9.9744E-01	.0000E+00	.0000E+00	-9.5767E+00	1.2067E+00
33	34	5.8014E-02	.0000E+00	.0000E+00	.0000E+00	-5.5351E-02	2.6633E-03
34	35	2.5063E-03	.0000E+00	.0000E+00	.0000E+00	-2.3752E-03	1.3106E-04
35	36	1.9195E+01	.0000E+00	.0000E+00	.0000E+00	-1.9185E+01	1.0551E-02
36	37	4.5332E-03	.0000E+00	.0000E+00	.0000E+00	-4.5313E-03	1.9579E-06
37	38	2.0800E+01	.0000E+00	.0000E+00	.0000E+00	-2.0727E+01	7.3919E-02
38	39	4.8255E-03	.0000E+00	.0000E+00	.0000E+00	-4.7945E-03	3.0955E-05
39	40	3.3149E+01	.0000E+00	.0000E+00	.0000E+00	-1.0895E+01	2.2254E+01
40	41	8.3771E-01	.0000E+00	.0000E+00	.0000E+00	-8.3392E-01	3.7960E-03
41	42	2.2273E-04	.0000E+00	.0000E+00	.0000E+00	-2.1925E-04	3.4822E-06
42	43	1.7679E+00	.0000E+00	.0000E+00	.0000E+00	-1.7673E+00	5.5485E-04
43	44	1.9806E+00	.0000E+00	.0000E+00	.0000E+00	-1.9793E+00	1.2258E-03
44	45	2.1647E+00	.0000E+00	.0000E+00	.0000E+00	-2.1642E+00	5.0793E-04
45	46	2.6401E+00	.0000E+00	.0000E+00	.0000E+00	-1.1192E+00	1.5209E+00
46	47	1.0245E-01	.0000E+00	.0000E+00	.0000E+00	-6.2331E-02	4.0115E-02
47	48	1.3728E-01	.0000E+00	.0000E+00	.0000E+00	-1.3272E-01	4.5648E-03
48	49	1.8089E-01	.0000E+00	.0000E+00	.0000E+00	-7.0433E-02	1.1046E-01
49	50	4.7146E-01	.0000E+00	.0000E+00	.0000E+00	-2.6462E-01	2.0684E-01
50	51	4.6184E-01	.0000E+00	.0000E+00	.0000E+00	-4.4597E-01	1.5865E-02
51	52	4.5570E-01	.0000E+00	.0000E+00	.0000E+00	-4.4970E-01	5.9972E-03
52	53	4.5753E-01	.0000E+00	.0000E+00	.0000E+00	-1.9181E-01	2.6572E-01
53	54	3.1279E-03	.0000E+00	.0000E+00	.0000E+00	-1.6984E-04	2.9581E-03
54	55	4.7593E-01	.0000E+00	.0000E+00	.0000E+00	-2.6702E-01	2.0892E-01
55	56	4.6738E-01	.0000E+00	.0000E+00	.0000E+00	-4.5104E-01	1.6345E-02
56	57	4.5895E-01	.0000E+00	.0000E+00	.0000E+00	-4.5304E-01	5.9078E-03
57	58	4.6116E-01	.0000E+00	.0000E+00	.0000E+00	-1.9417E-01	2.6699E-01

TOTAL	1.0267E+02	9.9744E-01	.0000E+00	.0000E+00	-1.0267E+02	9.9741E-01
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-3.6944E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	.0000E+00	.0000E+00	5.4289E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6944E-04
34	35	.0000E+00	.0000E+00	-2.0685E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4289E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0685E-05
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	2.8216E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
38	39	.0000E+00	.0000E+00	9.2468E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8216E-05
39	40	.0000E+00	.0000E+00	-5.8530E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.2468E-08
40	41	.0000E+00	.0000E+00	-7.4876E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.8530E-05
41	42	.0000E+00	.0000E+00	2.2351E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4876E-06
42	43	.0000E+00	.0000E+00	4.5906E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2351E-08
43	44	.0000E+00	.0000E+00	-3.9040E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.5906E-06
44	45	.0000E+00	.0000E+00	-2.0247E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9040E-06
45	46	.0000E+00	.0000E+00	-4.0978E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0247E-05
46	47	.0000E+00	.0000E+00	8.3538E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0978E-05
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3538E-06
48	49	.0000E+00	.0000E+00	-4.1024E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
49	50	.0000E+00	.0000E+00	-6.6550E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1024E-06
50	51	.0000E+00	.0000E+00	2.9389E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.6550E-06
51	52	.0000E+00	.0000E+00	4.2273E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9389E-04
52	53	.0000E+00	.0000E+00	-7.9736E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2273E-05
53	54	.0000E+00	.0000E+00	-3.9588E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9736E-05
54	55	.0000E+00	.0000E+00	-6.0797E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9588E-06
55	56	.0000E+00	.0000E+00	-8.9626E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.0797E-05
56	57	.0000E+00	.0000E+00	5.2866E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9626E-05
57	58	.0000E+00	.0000E+00	8.1790E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2866E-05
58	59	.0000E+00	.0000E+00	4.1967E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.1790E-05
59	60	.0000E+00	.0000E+00	-5.6466E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1967E-06
60	61	.0000E+00	.0000E+00	-1.0460E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6466E-05
61	62	.0000E+00	.0000E+00	9.3820E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0460E-05
62	63	.0000E+00	.0000E+00	-2.2595E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.3820E-08
63	64	.0000E+00	.0000E+00	-1.1207E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2595E-06
64	65	.0000E+00	.0000E+00	-1.2207E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1207E-04
65	66	.0000E+00	.0000E+00	3.2009E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2207E-05
66	67	.0000E+00	.0000E+00	-1.1796E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2009E-04
67	68	.0000E+00	.0000E+00	9.7410E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1796E-04
68	70	.0000E+00	.0000E+00	-2.3287E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.7410E-06
69	71	.0000E+00	.0000E+00	-8.7414E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3287E-05
70	72	.0000E+00	.0000E+00	2.0417E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7414E-06
71	73	.0000E+00	.0000E+00	1.9515E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0417E-04
72	74	.0000E+00	.0000E+00	-2.7973E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9515E-04
73	75	.0000E+00	.0000E+00	1.7679E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7973E-05
74	76	.0000E+00	.0000E+00	-2.0504E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7679E-04
75	77	.0000E+00	.0000E+00	-1.2314E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0504E-05
76	80	.0000E+00	.0000E+00	6.8942E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2314E-05
77	81	.0000E+00	.0000E+00	-2.0368E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8942E-06
78	82	.0000E+00	.0000E+00	-1.1913E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0368E-04
79	83	.0000E+00	.0000E+00	-4.1025E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1913E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1025E-06
81	85	.0000E+00	.0000E+00	3.3510E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3510E-05
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-3.0376E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	6.9677E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.9677E-05
TOTAL		.0000E+00	.0000E+00	5.7750E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.7750E-04
1 NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4139E-02	.0000E+00	-1.4139E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.6211E-03	.0000E+00	-3.6509E-01	-1.3040E-03	-3.4777E-01
33	34	.0000E+00	.0000E+00	-2.9690E-04	.0000E+00	-2.9690E-04
34	35	.0000E+00	.0000E+00	-3.3964E-05	.0000E+00	-3.3964E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.9579E-06	.0000E+00	-1.9579E-06
37	38	8.9222E-05	.0000E+00	-7.0187E-03	-4.4611E-05	-6.9741E-03
38	39	.0000E+00	.0000E+00	-9.2466E-06	.0000E+00	-9.2466E-06
39	40	.0000E+00	.0000E+00	-5.3929E-02	.0000E+00	-5.3929E-02
40	41	.0000E+00	.0000E+00	-3.7885E-03	.0000E+00	-3.7885E-03
41	42	.0000E+00	.0000E+00	-3.5045E-06	.0000E+00	-3.5045E-06
42	43	3.2965E-05	.0000E+00	-5.7592E-04	-1.6482E-05	-5.5944E-04
43	44	.0000E+00	.0000E+00	-1.2219E-03	.0000E+00	-1.2219E-03
44	45	.0000E+00	.0000E+00	-4.8768E-04	.0000E+00	-4.8768E-04
45	46	.0000E+00	.0000E+00	-2.9467E-03	.0000E+00	-2.9467E-03
46	47	.0000E+00	.0000E+00	-3.2020E-04	.0000E+00	-3.2020E-04
47	48	.0000E+00	.0000E+00	-4.9641E-05	.0000E+00	-4.9641E-05
48	49	.0000E+00	.0000E+00	-2.5897E-04	.0000E+00	-2.5897E-04
49	50	.0000E+00	.0000E+00	-2.6177E-03	.0000E+00	-2.6177E-03
50	51	.0000E+00	.0000E+00	-1.0805E-02	.0000E+00	-1.0805E-02
51	52	.0000E+00	.0000E+00	-6.9656E-04	.0000E+00	-6.9656E-04

52	53	.0000E+00	.0000E+00	-1.0874E-02	.0000E+00	.0000E+00	-1.0874E-02
53	54	.0000E+00	.0000E+00	-9.7648E-05	.0000E+00	.0000E+00	-9.7648E-05
54	55	.0000E+00	.0000E+00	-2.4951E-03	.0000E+00	.0000E+00	-2.4951E-03
55	56	.0000E+00	.0000E+00	-1.0865E-02	.0000E+00	.0000E+00	-1.0865E-02
56	57	.0000E+00	.0000E+00	-6.5497E-04	.0000E+00	.0000E+00	-6.5497E-04
57	58	.0000E+00	.0000E+00	-1.1328E-02	.0000E+00	.0000E+00	-1.1328E-02
58	59	.0000E+00	.0000E+00	-1.1975E-04	.0000E+00	.0000E+00	-1.1975E-04
59	60	.0000E+00	.0000E+00	-3.0015E-03	.0000E+00	.0000E+00	-3.0015E-03
60	61	.0000E+00	.0000E+00	-1.1019E-02	.0000E+00	.0000E+00	-1.1019E-02
61	62	.0000E+00	.0000E+00	-9.2195E-05	.0000E+00	.0000E+00	-9.2195E-05
62	63	.0000E+00	.0000E+00	-2.9737E-03	.0000E+00	.0000E+00	-2.9737E-03
63	64	.0000E+00	.0000E+00	-1.1392E-02	.0000E+00	.0000E+00	-1.1392E-02
64	65	.0000E+00	.0000E+00	-1.2053E-04	.0000E+00	.0000E+00	-1.2053E-04
65	66	.0000E+00	.0000E+00	-2.0944E-02	.0000E+00	.0000E+00	-2.0944E-02
66	67	.0000E+00	.0000E+00	-1.5475E-02	.0000E+00	.0000E+00	-1.5475E-02
67	68	.0000E+00	.0000E+00	-1.4768E-02	.0000E+00	.0000E+00	-1.4768E-02
68	70	.0000E+00	.0000E+00	-5.3766E-03	.0000E+00	.0000E+00	-5.3766E-03
69	71	.0000E+00	.0000E+00	-7.1136E-04	.0000E+00	.0000E+00	-7.1136E-04
70	72	.0000E+00	.0000E+00	-2.2153E-02	.0000E+00	.0000E+00	-2.2153E-02
71	73	.0000E+00	.0000E+00	-5.3854E-03	.0000E+00	.0000E+00	-5.3854E-03
72	74	.0000E+00	.0000E+00	-6.8183E-04	.0000E+00	.0000E+00	-6.8183E-04
73	75	2.4659E-05	.0000E+00	-2.1942E-02	-1.2329E-05	.0000E+00	-2.1929E-02
74	76	.0000E+00	.0000E+00	-1.8933E-04	.0000E+00	.0000E+00	-1.8933E-04
75	77	.0000E+00	.0000E+00	-1.5767E-04	.0000E+00	.0000E+00	-1.5767E-04
76	80	.0000E+00	.0000E+00	-2.9603E-05	.0000E+00	.0000E+00	-2.9603E-05
77	81	.0000E+00	.0000E+00	-7.8794E-03	.0000E+00	.0000E+00	-7.8794E-03
78	82	.0000E+00	.0000E+00	-3.8286E-04	.0000E+00	.0000E+00	-3.8286E-04
79	83	.0000E+00	.0000E+00	-1.5432E-05	.0000E+00	.0000E+00	-1.5432E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1779E-03	.0000E+00	.0000E+00	-2.1779E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.0524E-03	.0000E+00	.0000E+00	-2.0524E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.9663E-03	.0000E+00	.0000E+00	-1.9663E-03

TOTAL 2.7679E-03 .0000E+00 -6.5161E-01 -1.3774E-03 -3.4777E-01 -9.9799E-01
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	296100 16988	3.0449E+00 2.0021E-01	1.4047E-02 9.1446E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7096E-01 2.3925E-04 2.8705E-05 1.8626E-06 6.1844E-06 3.0867E-05 2.8101E-06 4.9446E-07 8.2388E-05 4.6339E-03 1.1703E-03 3.2088E-01 3.4216E-04 2.8063E-17 1.3147E-03 2.5666E-04 2.2559E-11 5.1830E-05 9.1295E-08 2.4757E-17 3.6691E-06 1.3291E-08	101926 619 62 978 432 110 892 6 168 26036 1006 153993 912 0 14872 2171 0 108 0 0 12 0	1.4537E+00 7.7610E-03 8.3916E-04 1.0564E-02 4.6390E-03 1.3068E-03 8.9863E-03 9.2304E-05 2.2067E-03 4.9591E-01 1.4350E-02 2.2055E+00 1.1262E-02 .0000E+00 2.9125E-01 2.8082E-02 .0000E+00 1.4734E-03 .0000E+00 .0000E+00 1.6021E-04 5.6389E-07	1.1850E-03 6.8036E-03 6.9002E-04 1.0480E-02 4.6131E-03 1.1837E-03 8.9722E-03 7.4770E-06 1.4333E-03 4.3619E-02 5.5355E-03 1.9170E-01 9.0229E-03 .0000E+00 5.3659E-02 2.5078E-02 .0000E+00 9.9017E-04 .0000E+00 .0000E+00 1.2300E-04 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	4 5 12 1239 8	3.6428E-05 3.7650E-05 1.0785E-04 1.2546E-02 1.0135E-04	1.6723E-09 1.3342E-05 1.1899E-05 2.6456E-04 7.1021E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	793 44	5.9552E-03 3.4077E-04	3.3952E-05 1.2329E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	17	2.6700E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	49 0	3.6306E-04 .0000E+00	1.9579E-06 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	210 80 228 51348 501	2.9794E-03 1.1189E-03 3.0968E-03 7.4897E-01 7.2651E-03	1.6744E-06 9.5778E-05 1.4939E-04 6.5953E-03 1.7656E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 4.4611E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	217 13	1.6786E-03 8.2806E-05	9.2438E-06 2.8636E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1392946 120832	1.7677E+01 1.7105E+00	5.2666E-02 1.2635E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	86686 7055	1.1061E+00 9.9612E-02	3.7319E-03 5.6632E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68 3	5.6191E-04 1.7496E-05	3.5037E-06 8.4752E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	11 4 16 3624 31	1.6208E-04 6.7736E-05 2.2609E-04 5.2565E-02 4.2135E-04	1.5172E-09 5.0674E-06 1.2702E-05 5.4108E-04 1.7067E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.6482E-05 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	28793 2443	3.6733E-01 3.4714E-02	1.2083E-03 1.3554E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 6 18 3162 20	1.2389E-04 9.1090E-05 2.5395E-04 4.5706E-02 2.7606E-04	9.0729E-10 4.1947E-06 1.2143E-05 4.6246E-04 8.8831E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	70099 5832	8.9498E-01 8.2585E-02	2.8893E-03 5.7377E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7205 586	9.2295E-02 8.2285E-03	3.1936E-04 8.3758E-07	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 1 0 304 2	.0000E+00 1.2061E-05 .0000E+00 4.4509E-03 2.6910E-05	.0000E+00 3.2703E-06 .0000E+00 4.5941E-05 4.2928E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6023 540	7.7956E-02 7.8171E-03	2.5396E-04 5.0099E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	65296 4851	7.5893E-01 6.5111E-02	2.5807E-03 3.7007E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	6 36 51 1 1 1530 505 7981 2461 161	7.6789E-05 4.5085E-04 6.7995E-04 8.9591E-06 1.7170E-05 1.9458E-02 7.0853E-03 9.5511E-02 2.9954E-02 2.1878E-03	8.8405E-09 1.9072E-05 9.1935E-06 3.5540E-07 2.2200E-08 1.9552E-03 9.8896E-04 5.6237E-03 1.8768E-03 3.3190E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2490 3	3.4453E-02 3.0328E-05	6.9382E-04 2.7386E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	8 41 56 6 1 1562	1.0163E-04 4.6037E-04 7.5242E-04 8.3186E-05 1.6968E-05 1.9883E-02	1.1538E-08 2.9349E-05 1.5208E-05 1.1408E-06 8.4243E-07 2.0614E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	467	6.4235E-03	9.1340E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8244	9.7961E-02	5.7435E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2421	2.8842E-02	1.8240E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	166	2.2282E-03	2.8469E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	2031	1.7483E-02	9.7620E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	94	9.3357E-04	2.8247E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	63950	7.3643E-01	2.4599E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4878	6.5211E-02	3.5192E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	8	1.0620E-04	1.1041E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	4.5500E-04	1.8755E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	7.6765E-04	5.4321E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.7447E-05	8.0112E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.7271E-05	4.2268E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1489	1.9005E-02	1.9460E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	576	7.9939E-03	1.0245E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8150	9.7199E-02	5.7271E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2470	2.9805E-02	1.8793E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	142	1.9084E-03	2.5855E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2494	3.4878E-02	6.5002E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	5	6.2064E-05	4.9452E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	2	3.3933E-05	1.8385E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.9359E-04	3.0642E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	6.5250E-04	5.8171E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.1973E-05	6.7780E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2126E-05	7.0747E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1565	1.9358E-02	2.1656E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	511	6.9500E-03	9.9424E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8425	9.9300E-02	5.9229E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2400	2.8393E-02	1.8311E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	174	2.2815E-03	3.7666E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	2336	2.1709E-02	1.1972E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	112	1.1166E-03	2.9884E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	86907	1.0474E+00	2.9502E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7521	1.0286E-01	5.1209E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.5370E-04	1.2392E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	65	8.5356E-04	2.9611E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	93	1.3100E-03	9.6217E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1705E-04	2.5603E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2258	3.0699E-02	2.0125E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	833	1.1661E-02	9.7570E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11092	1.3901E-01	5.7280E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3463	4.3915E-02	1.8381E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	249	3.4794E-03	4.2272E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1863	1.6670E-02	9.2169E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	89	8.5132E-04	2.5982E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	86296	1.0467E+00	2.9013E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7319	1.0077E-01	7.2467E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	8	1.0510E-04	1.1888E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	67	8.6490E-04	3.3695E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	73	1.0166E-03	7.1117E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	9.4367E-05	1.6470E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	6.0796E-05	4.7297E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2192	2.9208E-02	2.0667E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	828	1.1733E-02	1.0575E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11340	1.4245E-01	5.9597E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3495	4.4455E-02	1.8723E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	245	3.3523E-03	3.8874E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2454	2.1615E-02	1.2048E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	114	1.0711E-03	4.2343E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	435195	3.9006E+00	2.0884E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20810	2.0658E-01	6.0082E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	7	6.7063E-05	1.9539E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	4.8170E-04	3.7019E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	5.4033E-04	9.1638E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.1166E-04	1.7074E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.0634E-05	1.9721E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1655	1.8187E-02	2.9052E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	439	5.3878E-03	1.3557E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9775	9.9488E-02	8.2328E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2877	2.9446E-02	2.5712E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	174	2.0143E-03	3.6031E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	15	1.7827E-04	3.2057E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	6.1648E-04	4.8969E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	5.6498E-04	1.1360E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	6.2615E-05	1.4616E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1542	1.6925E-02	2.5788E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	496	6.2116E-03	1.3885E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9329	9.5497E-02	7.8543E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2725	2.7659E-02	2.5874E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	147	1.6634E-03	2.9687E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	6	7.5241E-05	5.1154E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	30	3.8544E-04	1.1029E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	60	8.7480E-04	5.3251E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.6568E-05	4.4337E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.7956E-05	1.4607E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1346	1.8226E-02	9.8553E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	512	7.2289E-03	5.2642E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6956	8.7409E-02	2.7725E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2114	2.7078E-02	8.7862E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.2932E-03	1.9705E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6406	9.3815E-02	6.9860E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	15	1.8244E-04	1.2754E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	34	4.1834E-04	3.9493E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	197	2.4931E-03	6.4273E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	322	4.5835E-03	2.2139E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.8001E-04	1.2642E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	8.6415E-05	2.4849E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7197	9.6402E-02	3.9475E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2462	3.4278E-02	2.1483E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34725	4.2867E-01	1.1055E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10759	1.3488E-01	3.6985E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	851	1.1674E-02	1.2143E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	12	1.6946E-04	6.7589E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.7343E-04	1.0072E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	60	8.9901E-04	3.8862E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.6836E-05	2.8574E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1334	1.8133E-02	9.4189E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	504	7.0831E-03	4.8525E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6806	8.5132E-02	2.8267E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2097	2.6847E-02	8.8849E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	153	2.1654E-03	2.2888E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6157	9.0154E-02	6.7585E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.7598E-04	5.9703E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	47	6.0739E-04	4.0518E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	185	2.1780E-03	6.0392E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	313	4.4171E-03	2.4385E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.6428E-04	2.3640E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0396E-04	4.2010E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6922	9.2853E-02	3.8045E-03	.0000E+00	1.2329E-05
		25055.50C	2.0356E-02	2367	3.2859E-02	2.0182E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34614	4.2551E-01	1.1114E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10600	1.3142E-01	3.7122E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	875	1.1890E-02	1.2010E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	4044	3.5331E-02	1.8927E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	199	2.0195E-03	5.7273E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3191	3.0178E-02	1.5762E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	171	1.7384E-03	4.9255E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2	1.1241E-05	5.2010E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1	4.4894E-06	4.0269E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	20	1.7269E-04	1.3416E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	9	5.3074E-05	6.9595E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	11	9.3344E-05	2.1225E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	3.9272E-04	1.6150E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	39	4.8815E-04	5.7536E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.8935E-05	3.4457E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1117	1.2333E-02	1.4078E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	354	4.6580E-03	7.0659E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6497	6.8452E-02	4.2112E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2001	2.1578E-02	1.3358E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	138	1.6963E-03	1.9570E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10706	1.1043E-01	3.7780E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	777	9.4574E-03	5.0607E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	351	2.8253E-03	1.5428E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	13	1.0276E-04	3.8431E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	8.5946E-05	8.6621E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	4.9186E-05	1.3237E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	14	2.1266E-04	5.0250E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	1.6673E-05	2.8152E-08	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	33	4.2257E-04	4.1779E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	622	7.8909E-03	3.9789E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	87	1.1905E-03	1.1369E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1083	1.2612E-02	3.9713E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2575	3.0452E-02	1.0363E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	88	1.0062E-03	5.6830E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	84	1.0813E-03	1.3241E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	49	6.3554E-04	1.4920E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	25	3.8433E-04	2.3575E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	4	6.1309E-05	2.1578E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	207	2.7602E-03	1.1532E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8640	9.8022E-02	1.9347E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	43143	3.5979E-01	1.9637E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2004	1.8689E-02	2.6471E-06	.0000E+00	.0000E+00
TOTAL				3558794	4.3133E+01	6.5161E-01	3.4777E-01	1.3905E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2696742	3.1375E+01	1.1007E-01	.0000E+00	.0000E+00
		2004.50C		17	2.6700E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		231	2.9079E-03	2.4417E-07	.0000E+00	.0000E+00
		7014.50C		871	1.0599E-02	4.0903E-04	.0000E+00	.0000E+00
		8016.50C		305448	4.1775E+00	2.9389E-03	.0000E+00	.0000E+00

13027.50C	17551	2.5335E-01	2.7196E-03	.0000E+00	.0000E+00
14000.50C	1301	1.8144E-02	1.3514E-04	.0000E+00	.0000E+00
15031.50C	107	1.3939E-03	1.4654E-05	.0000E+00	.0000E+00
16032.50C	35	5.1128E-04	2.1519E-05	.0000E+00	.0000E+00
22000.50C	33	4.2257E-04	4.1779E-05	.0000E+00	.0000E+00
24000.50C	32429	4.1990E-01	2.9303E-02	.0000E+00	1.2329E-05
25055.50C	11149	1.5351E-01	1.4816E-02	.0000E+00	.0000E+00
26000.55C	173951	2.0761E+00	8.5303E-02	.0000E+00	.0000E+00
28000.50C	52467	6.3478E-01	2.7837E-02	.0000E+00	.0000E+00
29000.50C	124	1.4570E-03	8.3238E-05	.0000E+00	.0000E+00
40000.50C	59677	8.6423E-01	7.9093E-03	.0000E+00	6.1094E-05
42000.50C	3722	4.9916E-02	5.8898E-03	.0000E+00	.0000E+00
45103.50C	619	7.7610E-03	6.8036E-03	.0000E+00	.0000E+00
47109.50C	62	8.3916E-04	6.9002E-04	.0000E+00	.0000E+00
50000.35C	562	8.0908E-03	2.1004E-04	.0000E+00	.0000E+00
62149.50C	978	1.0564E-02	1.0480E-02	.0000E+00	.0000E+00
63151.55C	432	4.6390E-03	4.6131E-03	.0000E+00	.0000E+00
63153.55C	110	1.3068E-03	1.1837E-03	.0000E+00	.0000E+00
64155.50C	892	8.9863E-03	8.9722E-03	.0000E+00	.0000E+00
92233.50C	6	9.2304E-05	7.4770E-06	6.2377E-05	.0000E+00
92234.50C	168	2.2067E-03	1.4333E-03	3.7823E-05	.0000E+00
92235.50C	26036	4.9591E-01	4.3619E-02	2.1741E-01	.0000E+00
92236.50C	1006	1.4350E-02	5.5355E-03	2.2524E-04	.0000E+00
92238.50C	153993	2.2055E+00	1.9170E-01	2.0418E-02	1.3171E-03
93237.55C	912	1.1262E-02	9.0229E-03	9.2181E-05	.0000E+00
94238.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94239.55C	14872	2.9125E-01	5.3659E-02	1.0943E-01	.0000E+00
94240.50C	2171	2.8082E-02	2.5078E-02	8.1723E-05	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	108	1.4734E-03	9.9017E-04	9.4220E-06	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95242.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	12	1.6021E-04	1.2300E-04	5.5414E-06	.0000E+00
96245.35C	0	5.6389E-07	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 60154 CTM = 118.03

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 118.17 MINUTES

MCNP VERSION 4A-B 10/04/91

02/17/95 03:31:44

PROBID = 02/17/95 01:33:20

1MCNP VERSION 4A-B LD=10/04/91 02/17/95 03:31:44

PROBID = 02/17/95 03:31:44

INP=mpc12i OUTP=mpc12i.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/10000 year (mpc12i)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1194 -2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 .72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

```

237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.00%/20 GWD/10000 YEAR -- UO2								
331-	M2	8016.50C	4.7767E-02							
332-		45103.50C	1.7033E-05							
333-		47109.50C	2.0436E-06							
334-		62149.50C	1.3260E-07							
335-		63151.55C	4.4029E-07							
336-		63153.55C	2.1975E-06							
337-		64155.50C	2.0006E-07							
338-		92233.50C	7.3432E-08							
339-		92234.50C	5.8023E-06							
340-		92235.50C	3.4273E-04							
341-		92236.50C	9.0862E-05							
342-		92238.50C	2.2844E-02							
343-		93237.55C	2.4311E-05							
344-		94238.50C	2.5046E-28							
345-		94239.55C	8.1128E-05							
346-		94240.50C	1.0755E-05							
347-		94241.50C	1.0682E-12							
348-		94242.50C	3.6570E-06							
349-		95241.50C	3.4268E-11							
350-		95242.50C	2.2095E-28							
351-		95243.50C	1.6330E-07							
352-		96245.35C	6.2934E-10							
353-	C	He AT 10 ATM DENSITY=1.785E-3 GM/CC								
354-	M3	2004.50C	1.0							
355-	C	ZIRCALOY-4								
356-	M4	8016.50C	-0.0012	24000.50C	-0.0010	26000.55C	-0.0020			

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3031
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3031
 POINTS AFTER EXPANSION OR CONTRACTION 2997
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119253E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
ASSOCIATED THERMAL S(A,B) DATA SETS:	1001, .66667 8016, .33333
2	8016, .67096 45103, .00024 47109, .00003 62149, .00000
	63151, .00001 63153, .00003 64155, .00000 92233, .00000
	92234, .00008 92235, .00481 92236, .00128 92238, .32088
	93237, .00034 94238, .00000 94239, .00114 94240, .00015
	94241, .00000 94242, .00005 95241, .00000 95242, .00000
3	95243, .00000 96245, .00000
4	2004, 1.00000 8016, .00681 24000, .00175 26000, .00325 40000, .97748
	50000, .01071
5	6000, .00234 13027, .00417 14000, .01001 16032, .00053
	22000, .01057 24000, .23247 25055, .01023 26000, .28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12058	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00001	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00021	92235,	.01271	92236,	.00338	92238,	.85820
	93237,	.00091	94238,	.00000	94239,	.00306	94240,	.00041
	94241,	.00000	94242,	.00014	95241,	.00000	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11940E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11940E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE		TRANS	TYPE	SURFACE COEFFICIENTS	
1	1	REFL.	PX	.0000000E+00	
2	2	REFL.	PY	.0000000E+00	
3	3	REFL.	PZ	.0000000E+00	
4	4		PZ	2.0320000E+02	
5	5		PZ	2.2225000E+02	
6	6		PZ	2.2925000E+02	
7	7		PZ	2.3175000E+02	
8	8		PZ	2.4885000E+02	
9	9		CZ	6.0794900E+01	
10	10		CZ	6.3017400E+01	

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80		PZ	3.1235000E+02
72	81		CZ	1.0652500E+02
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
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54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
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59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

(1314) 79/06/21.
(1340) 79/07/31.

(1394) 79/10/17.

(1396) 79/08/30.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU
 TOTAL NU

(1338) 79/09/12.
 (1381) 79/08/30.
 (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/10000 year (mpc12i)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.865E-01	-2.335E-02	8.406E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.001E+00	1.505E+00
2	-9.234E-02	-9.532E-02	8.686E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.001E+00	1.352E+00
3	1.919E-01	3.462E-01	9.030E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.001E+00	1.558E+00
4	-8.058E-02	1.990E-01	1.069E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.001E+00	8.366E+00
5	1.072E-01	2.629E-01	1.107E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.001E+00	1.223E+00
6	-1.896E-02	-4.479E-01	9.622E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.001E+00	8.643E-01
7	4.571E-01	2.177E-02	7.786E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.001E+00	3.867E-01
8	-3.745E-01	6.268E-02	7.757E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.001E+00	4.269E+00
9	3.225E-01	-1.226E-01	7.867E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.001E+00	1.896E+00
10	1.777E-01	-1.446E-01	7.903E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.001E+00	3.999E+00
11	4.499E-01	-1.290E-01	6.754E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.001E+00	3.235E+00
12	2.502E-01	-3.625E-01	6.766E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.001E+00	2.337E+00
13	-3.185E-01	-1.560E-01	6.837E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.001E+00	4.269E+00
14	6.083E-02	-3.880E-01	4.917E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.001E+00	2.617E+00
15	5.371E-02	-3.778E-01	4.914E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.001E+00	8.996E-01
16	4.560E-01	-3.742E-02	7.924E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.001E+00	2.198E+00
17	1.384E-01	-2.293E-01	7.966E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.001E+00	1.351E+00
18	-7.922E-02	-3.606E-01	1.095E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.001E+00	2.426E+00
19	1.202E-01	-4.099E-01	1.187E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.001E+00	4.205E-01
20	3.754E-01	-2.353E-01	3.410E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.001E+00	9.120E-01
21	3.392E-01	-1.537E-01	3.409E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.001E+00	7.655E+00
22	-2.771E-01	2.909E-01	3.127E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.001E+00	6.252E+00
23	-4.297E-01	1.347E-01	3.111E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.001E+00	2.064E+00
24	-3.464E-01	1.526E-01	3.172E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.001E+00	1.854E+00
25	2.202E-01	2.106E-01	3.803E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.001E+00	5.934E-01
26	1.117E-01	-3.913E-01	2.724E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.001E+00	1.573E+00
27	3.597E-01	1.365E-01	2.540E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.001E+00	3.278E+00
28	1.224E-01	-1.669E-01	1.690E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.001E+00	2.851E+00
29	-2.834E-01	-2.459E-02	1.219E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.001E+00	2.272E+00
30	-1.772E-01	-2.520E-01	1.088E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.001E+00	1.418E+00
31	-1.528E-02	2.971E-02	9.825E+00	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.001E+00	2.433E+00
32	-5.717E-02	2.130E-01	9.387E+00	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.001E+00	3.029E+00
33	-2.854E-01	4.621E-02	8.998E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.001E+00	7.158E-01
34	-9.403E-02	3.994E-01	3.321E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.001E+00	4.470E+00
35	-3.945E-01	-2.275E-01	8.280E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.001E+00	4.515E+00
36	-2.162E-01	-1.230E-01	8.029E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.001E+00	2.909E+00
37	-1.221E-01	5.516E-02	7.978E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.001E+00	6.324E-01
38	-1.354E-01	1.555E-01	3.978E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.001E+00	1.866E-01
39	-1.566E-01	9.350E-02	3.651E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.001E+00	1.559E+00
40	-4.438E-01	-1.009E-01	3.765E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.001E+00	1.910E+00
41	-3.279E-02	3.485E-01	3.713E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.001E+00	5.676E-01
42	-2.972E-01	1.772E-01	3.929E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.001E+00	4.002E-01
43	-2.932E-01	2.664E-01	8.102E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.001E+00	1.076E+00
44	-9.402E-02	4.127E-01	7.761E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.001E+00	1.788E+00
45	1.579E-01	-2.385E-02	4.497E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.001E+00	3.738E+00
46	-1.055E-01	2.994E-01	8.441E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.001E+00	6.640E-01
47	1.017E-01	-3.347E-01	8.383E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.001E+00	4.776E-01
48	-5.163E-02	-2.146E-01	8.491E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.001E+00	5.050E-01
49	-3.694E-02	-1.031E-01	8.486E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.001E+00	1.815E+00

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50 4.084E-01 2.115E-01 8.584E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 1.001E+00 4.342E-01

CYCLE 1 K(COLLISION) .917117 REMOVAL LIFETIME(ABS) 3.4521E+03 SOURCE POINTS GENERATED 2823
CYCLE 2 K(COLLISION) .905872 REMOVAL LIFETIME(ABS) 3.3381E+03 SOURCE POINTS GENERATED 2999
CYCLE 3 K(COLLISION) .920567 REMOVAL LIFETIME(ABS) 3.2820E+03 SOURCE POINTS GENERATED 3022
CYCLE 4 K(COLLISION) .917803 REMOVAL LIFETIME(ABS) 3.3461E+03 SOURCE POINTS GENERATED 2936
CYCLE 5 K(COLLISION) .922639 REMOVAL LIFETIME(ABS) 3.3383E+03 SOURCE POINTS GENERATED 2966
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .926452 REMOVAL LIFETIME(ABS) 3.4486E+03 SOURCE POINTS GENERATED 2982
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6
ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .925510 .925981 .0005 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .907300 .911565 .0047 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .908017 .923569 .0168 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.3932E+03 3.4120E+03 .0055 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.3778E+03 3.4132E+03 .0104
SOURCE POINTS GENERATED 2973
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7
ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .934662 .928875 .0031 K(COL/ABS) .921658 .0035 .930515 .0126 .8172
K(ABSORPTION) .920193 .914441 .0041 K(ABS/TK LN) .918948 .0064 .913134 .0063 .6407
K(TRK LENGTH) .923230 .923456 .0097 K(TK LN/COL) .926165 .0052 .928470 .0044 .0811
REM LIFE(COL) 3.3871E+03 3.4037E+03 .0040 LIFE(COL/ABS) 3.3893E+03 .0083 3.4140E+03 .0034 .9102
REM LIFE(ABS) 3.2983E+03 3.3749E+03 .0129
SOURCE POINTS GENERATED 3017
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8
ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .937205 .930957 .0031 K(COL/ABS) .926378 .0056 .934368 .0030 .8651
K(ABSORPTION) .943875 .921799 .0085 K(ABS/TK LN) .922407 .0059 .922553 .0070 .1534
K(TRK LENGTH) .921690 .923015 .0069 K(TK LN/COL) .926986 .0038 .929586 .0037 .0075
REM LIFE(COL) 3.4504E+03 3.4154E+03 .0044 K(COL/ABS/TK LN) .925257 .0046 .933049 .0054 .9171
REM LIFE(ABS) 3.4609E+03 3.3964E+03 .0110 LIFE(COL/ABS) 3.4059E+03 .0076 3.4247E+03 .0034 .9171
SOURCE POINTS GENERATED 2998
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9
ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .916574 .928081 .0039 K(COL/ABS) .925501 .0045 .927363 .0045 .3838
K(ABSORPTION) .927404 .922920 .0067 K(ABS/TK LN) .921445 .0047 .921350 .0054 .0328
K(TRK LENGTH) .907793 .919970 .0063 K(TK LN/COL) .924025 .0044 .926816 .0047 .4166
REM LIFE(COL) 3.3118E+03 3.3947E+03 .0070 K(COL/ABS/TK LN) .923657 .0040 .925898 .0071 .8810
REM LIFE(ABS) 3.2889E+03 3.3749E+03 .0107 LIFE(COL/ABS) 3.3848E+03 .0086 3.4052E+03 .0075 .8810
SOURCE POINTS GENERATED 2928
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10
ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .929920 .928387 .0032 K(COL/ABS) .924637 .0038 .927356 .0036 .3158

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K(ABSORPTION) .910716 .920886 .0059
 K(TRK LENGTH) .939333 .923197 .0062
 REM LIFE(COL) 3.5027E+03 3.4127E+03 .0078
 REM LIFE(ABS) 3.4435E+03 3.3863E+03 .0093
 SOURCE POINTS GENERATED 2986

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .896224 .923793 .0057
 K(ABSORPTION) .918102 .920488 .0050
 K(TRK LENGTH) .889886 .918438 .0074
 REM LIFE(COL) 3.4619E+03 3.4197E+03 .0069
 REM LIFE(ABS) 3.4694E+03 3.3982E+03 .0086
 SOURCE POINTS GENERATED 2889

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .922141 .0042 .921864 .0046 .2278
 K(ABS/TK LN) .919463 .0043 .919818 .0044 -.0715
 K(TK LN/COL) .921116 .0061 .923584 .0063 .7515
 K(COL/ABS/TK LN) .920907 .0045 .920325 .0057
 LIFE(COL/ABS) 3.4089E+03 .0075 3.4236E+03 .0076 .8613

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .926270 .924102 .0049
 K(ABSORPTION) .875986 .914926 .0075
 K(TRK LENGTH) .920830 .918737 .0064
 REM LIFE(COL) 3.5648E+03 3.4378E+03 .0079
 REM LIFE(ABS) 3.5117E+03 3.4124E+03 .0085
 SOURCE POINTS GENERATED 3063

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .919514 .0046 .921420 .0047 .0772
 K(ABS/TK LN) .916832 .0047 .917096 .0050 -.0829
 K(TK LN/COL) .921420 .0053 .923892 .0054 .7523
 K(COL/ABS/TK LN) .919255 .0043 .920543 .0062
 LIFE(COL/ABS) 3.4251E+03 .0080 3.4321E+03 .0088 .8861

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .934713 .925281 .0045
 K(ABSORPTION) .926731 .916237 .0067
 K(TRK LENGTH) .928131 .919781 .0058
 REM LIFE(COL) 3.4935E+03 3.4440E+03 .0072
 REM LIFE(ABS) 3.4663E+03 3.4184E+03 .0077
 SOURCE POINTS GENERATED 3008

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .920759 .0043 .922668 .0043 .1322
 K(ABS/TK LN) .918009 .0043 .918271 .0046 -.0376
 K(TK LN/COL) .922531 .0048 .924991 .0049 .7632
 K(COL/ABS/TK LN) .920433 .0040 .921690 .0058
 LIFE(COL/ABS) 3.4312E+03 .0072 3.4380E+03 .0079 .8924

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .895793 .922332 .0052
 K(ABSORPTION) .885069 .913121 .0069
 K(TRK LENGTH) .897829 .917586 .0057
 REM LIFE(COL) 3.5162E+03 3.4512E+03 .0068
 REM LIFE(ABS) 3.5172E+03 3.4283E+03 .0074
 SOURCE POINTS GENERATED 2920

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .917727 .0051 .919789 .0052 .3943
 K(ABS/TK LN) .915353 .0049 .915874 .0051 .1769
 K(TK LN/COL) .919959 .0052 .921036 .0055 .8042
 K(COL/ABS/TK LN) .917680 .0047 .917703 .0067
 LIFE(COL/ABS) 3.4398E+03 .0069 3.4498E+03 .0073 .9022

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .895538 .919897 .0054
 K(ABSORPTION) .912098 .913028 .0063
 K(TRK LENGTH) .895614 .915588 .0056
 REM LIFE(COL) 3.4201E+03 3.4484E+03 .0062
 REM LIFE(ABS) 3.4176E+03 3.4273E+03 .0067
 SOURCE POINTS GENERATED 3058

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .916462 .0048 .917232 .0050 .3513
 K(ABS/TK LN) .914308 .0045 .914481 .0048 .1692
 K(TK LN/COL) .917743 .0053 .918195 .0056 .8365
 K(COL/ABS/TK LN) .916171 .0045 .915017 .0059
 LIFE(COL/ABS) 3.4379E+03 .0063 3.4461E+03 .0066 .8990

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .912171 .919253 .0050

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .915727 .0045 .916547 .0046 .3654

K(ABSORPTION)	.903121	.912202	.0058	K(ABS/TK LN)	.913377	.0043	.913524	.0045	.1969
K(TRK LENGTH)	.903149	.914552	.0052	K(TK LN/COL)	.916902	.0049	.917604	.0052	.8390
REM LIFE(COL)	3.4459E+03	3.4482E+03	.0056	K(COL/ABS/TK LN)	.915336	.0043	.914406	.0057	
REM LIFE(ABS)	3.4794E+03	3.4316E+03	.0063	LIFE(COL/ABS)	3.4399E+03	.0058	3.4466E+03	.0060	.8782
SOURCE POINTS GENERATED 3013									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.922715		.919519		.0046	K(COL/ABS)	.916094	.0041	.916909
K(ABSORPTION)	.918279		.912670		.0054	K(ABS/TK LN)	.914246	.0040	.914378
K(TRK LENGTH)	.931078		.915823		.0050	K(TK LN/COL)	.917671	.0046	.918550
REM LIFE(COL)	3.7114E+03		3.4684E+03		.0078	K(COL/ABS/TK LN)	.916004	.0040	.915667
REM LIFE(ABS)	3.6672E+03		3.4498E+03		.0078	LIFE(COL/ABS)	3.4591E+03	.0077	3.4582E+03
SOURCE POINTS GENERATED 2992								.0081	.9349

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.910622		.918884		.0043	K(COL/ABS)	.915077	.0040	.916213
K(ABSORPTION)	.893076		.911270		.0052	K(ABS/TK LN)	.913543	.0038	.913860
K(TRK LENGTH)	.915733		.915817		.0046	K(TK LN/COL)	.917350	.0043	.917938
REM LIFE(COL)	3.5625E+03		3.4752E+03		.0075	K(COL/ABS/TK LN)	.915323	.0038	.914876
REM LIFE(ABS)	3.5442E+03		3.4565E+03		.0074	LIFE(COL/ABS)	3.4658E+03	.0073	3.4650E+03
SOURCE POINTS GENERATED 2972								.0077	.9393

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.889912		.916952		.0045	K(COL/ABS)	.913785	.0040	.914180
K(ABSORPTION)	.901498		.910619		.0049	K(ABS/TK LN)	.912280	.0038	.912326
K(TRK LENGTH)	.887699		.913942		.0048	K(TK LN/COL)	.915447	.0045	.915965
REM LIFE(COL)	3.4347E+03		3.4725E+03		.0070	K(COL/ABS/TK LN)	.913838	.0039	.912809
REM LIFE(ABS)	3.4630E+03		3.4569E+03		.0069	LIFE(COL/ABS)	3.4647E+03	.0068	3.4634E+03
SOURCE POINTS GENERATED 2908								.0071	.9313

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/10000 year (mpc12i)

PROBID = 02/17/95 05:30:47
02/17/95 03:31:44

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59542	1.0077E+00	2.0578E+00	ESCAPE	4	4.5637E-05	1.5674E-04
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.8279E-02	4.8989E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59616	6.8186E-02	4.4103E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.3282E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	155	2.1027E-03	1.5654E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9502E+00
				CAPTURE	0	6.5348E-01	3.1763E-02
				LOSS TO (N,XN)	77	1.0444E-03	8.7859E-03
				LOSS TO FISSION	0	3.5532E-01	6.8460E-02

TOTAL	59697	1.0781E+00	2.0593E+00	TOTAL	59697	1.0781E+00	2.0593E+00
NUMBER OF NEUTRONS BANKED			78	AVERAGE LIFETIME, SHAKES			CUTOFFS
NEUTRON TRACKS PER SOURCE PARTICLE	1.0026E+00			ESCAPE	6.2042E+03		TCO 1.0000E+34
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.9449E+01			CAPTURE	3.4265E+03		ECO .0000E+00
TOTAL NEUTRON COLLISIONS		3539686		CAPTURE OR ESCAPE	3.4266E+03		WC1 -5.0000E-01
NET MULTIPLICATION	1.0011E+00	.0001		ANY TERMINATION	3.7691E+03		WC2 -2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	118.83 MINUTES			MAXIMUM NUMBER EVER IN BANK		2	
COMPUTER TIME IN MCRUN	118.72 MINUTES			BANK OVERFLOWS TO BACKUP FILE		0	
SOURCE PARTICLES PER MINUTE	5.0155E+02			FIELD LENGTH		0	
RANDOM NUMBERS GENERATED	42687671			MOST RANDOM NUMBERS USED WAS		7027 IN HISTORY	52458

RANGE OF SAMPLED SOURCE WEIGHTS = 9.7943E-01 TO 1.0627E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25695	9475	3.2577E+00	1.1500E-04	3.6999E-01	7.2636E-01	1.0902E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	742516	59620	303406	4.2501E+00	6.4617E-04	7.2818E-01	8.7474E-01	2.5061E+00
33	34	5799	313	1243	1.2770E-02	5.2992E-05	2.7143E-01	6.0214E-01	4.2970E+00
34	35	258	25	634	5.0716E-03	2.3209E-05	1.1426E-01	5.2811E-01	6.0155E-01
35	36	1335862	59620	7	1.1470E-04	5.5727E-04	6.9093E-01	8.6974E-01	3.5139E+03
36	37	454	25	33	3.0260E-04	3.1374E-05	1.6076E-01	5.6091E-01	6.6193E-01
37	38	1447776	59620	51893	7.7017E-01	5.3698E-04	6.7659E-01	8.6920E-01	4.1174E+00
38	39	510	25	186	1.5858E-03	2.7528E-05	1.3353E-01	5.6165E-01	6.2931E-01
39	40	2317206	59620	1531652	1.9911E+01	4.7109E-04	6.4606E-01	8.6715E-01	1.6074E+00
40	41	58896	31430	95688	1.2510E+00	3.5215E-04	5.9880E-01	8.6579E-01	1.5155E+00
41	42	15	7	48	4.8468E-04	1.0739E-05	1.7304E-02	6.5162E-01	5.1464E-01
42	43	124385	33126	3778	5.5603E-02	3.7900E-04	6.1282E-01	8.6725E-01	4.1363E+00
43	44	139046	35428	31978	4.1975E-01	3.7981E-04	6.1565E-01	8.6731E-01	1.5458E+00
44	45	151880	36360	3291	4.8666E-02	3.8741E-04	6.1644E-01	8.6832E-01	4.1380E+00
45	46	185495	41516	76397	1.0014E+00	3.8959E-04	6.1983E-01	8.6815E-01	1.5544E+00
46	47	7329	3390	7670	1.0192E-01	3.9036E-04	6.1132E-01	8.7443E-01	1.5442E+00
47	48	9814	3716	341	5.0118E-03	4.0156E-04	6.0724E-01	8.7309E-01	4.1389E+00
48	49	12883	5105	6728	8.9104E-02	4.0423E-04	6.1224E-01	8.7278E-01	1.5549E+00
49	50	34456	15157	68450	8.1051E-01	3.3258E-04	5.5892E-01	8.1958E-01	1.4601E+00
50	51	33995	14325	12665	1.5599E-01	3.7463E-04	5.6364E-01	8.0154E-01	2.0799E+00
51	52	33488	14005	2385	3.4063E-02	3.7201E-04	5.5525E-01	7.9984E-01	9.2408E+00
52	53	33832	14069	12776	1.5745E-01	3.6009E-04	5.4628E-01	7.9672E-01	2.0709E+00
53	54	349	89	2468	2.0606E-02	3.4650E-05	1.6534E-01	5.4611E-01	7.0469E-01
54	55	33894	14929	68259	8.0884E-01	3.1394E-04	5.4347E-01	8.1803E-01	1.4355E+00
55	56	33603	14149	12857	1.5856E-01	3.6762E-04	5.6034E-01	8.0219E-01	2.0644E+00
56	57	33312	13807	2420	3.4544E-02	3.6938E-04	5.5775E-01	7.9708E-01	9.1925E+00
57	58	33405	13897	12678	1.5438E-01	3.5400E-04	5.5130E-01	7.9486E-01	2.0651E+00
58	59	246	74	1599	1.4904E-02	4.6386E-05	2.1329E-01	6.1568E-01	7.9501E-01
59	60	52848	19154	94197	1.1774E+00	4.5027E-04	5.4597E-01	8.4402E-01	1.4817E+00
60	61	52299	18203	18297	2.3749E-01	6.4740E-04	5.6315E-01	8.3714E-01	2.2702E+00
61	62	584	118	2570	2.0831E-02	3.9980E-05	2.1423E-01	5.4037E-01	7.5010E-01
62	63	53691	18956	95509	1.1925E+00	4.5824E-04	5.5738E-01	8.4496E-01	1.4936E+00
63	64	52963	18021	18048	2.3541E-01	6.3970E-04	5.7537E-01	8.3761E-01	2.2568E+00
64	65	496	106	2163	1.8791E-02	3.6786E-05	1.9374E-01	5.7115E-01	7.2072E-01
65	66	9681	4866	418068	3.8464E+00	5.1839E-05	2.4300E-01	6.1596E-01	8.2119E-01
66	67	9599	3850	14642	1.5515E-01	1.7810E-04	4.3165E-01	6.9997E-01	1.8245E+00
67	68	9643	3796	14271	1.4817E-01	1.5955E-04	3.9704E-01	6.8608E-01	1.7395E+00
68	70	34891	9142	11471	1.4854E-01	9.0918E-04	5.6972E-01	8.3866E-01	2.3602E+00
69	71	35110	8826	6546	9.7650E-02	1.0063E-03	5.7162E-01	8.3979E-01	8.9304E+00
70	72	18980	8619	58421	7.5724E-01	1.3083E-03	5.8327E-01	8.3979E-01	2.4846E+00
71	73	33628	9061	11263	1.4678E-01	9.1403E-04	5.7633E-01	8.3850E-01	2.3989E+00
72	74	33830	8753	6220	9.2875E-02	1.0136E-03	5.6950E-01	8.3904E-01	8.9330E+00
73	75	18369	8544	56802	7.3099E-01	1.3039E-03	5.7778E-01	8.3823E-01	2.4930E+00
74	76	215	66	4206	3.5479E-02	2.6692E-05	1.0243E-01	5.5932E-01	6.0988E-01
75	77	219	63	4612	3.9567E-02	4.1740E-05	2.1640E-01	5.7259E-01	7.6104E-01
76	80	14	8	42	3.0084E-04	5.9226E-05	1.0779E-01	5.1444E-01	2.1841E+00
77	81	3410	1502	10373	1.1537E-01	3.5917E-04	4.9638E-01	7.3815E-01	2.0792E+00
78	82	2204	904	12942	1.4013E-01	2.2356E-04	4.0784E-01	7.5320E-01	1.2407E+00
79	83	4	2	87	9.0628E-04	1.0911E-05	2.5736E-02	6.3289E-01	5.0571E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1686	696	4928	5.8959E-02	7.7916E-04	5.2519E-01	7.8033E-01	2.0708E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1088	464	9630	1.1125E-01	1.9339E-03	4.9597E-01	7.9448E-01	4.3342E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	414	226	45266	3.8896E-01	3.1061E-05	1.5254E-01	5.6585E-01	6.6250E-01

TOTAL 7262265 696868 3539686 4.3428E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.4408E-01	-5.4408E-01
2	2	3.2332E-01	.0000E+00	.0000E+00	-9.0530E-01	-5.8198E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5316E-02	-1.5316E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-4.9959E-02	-4.9959E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5832E-02	-1.5832E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4560E-01	-1.4560E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.7074E+00	-1.7074E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0505E+00	-2.0505E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1683E-01	-2.1683E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1386E-01	-2.1386E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8564E-01	-3.8564E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.8940E-01	-3.8940E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-8.0805E-02	-8.0805E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-8.0537E-02	-8.0537E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-9.1901E-02	-9.1901E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.4641E-02	-7.4641E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.2701E-02	-7.2701E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.5130E-02	-7.5130E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-1.0522E-01	-1.0522E-01
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0505E-01	-1.0505E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-9.6887E-02	-9.6887E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.7116E-02	-8.7116E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1415E-01	-1.1415E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1560E-01	-1.1560E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1934E-01	-1.1934E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1856E-01	-1.1856E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0184E-01	-1.0184E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.5747E-02	-8.5747E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.0706E-02	-9.0706E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0448E-01	-1.0448E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.9499E+01	-1.9499E+01
32	33	9.9613E+00	1.0077E+00	.0000E+00	-9.7448E+00	1.2241E+00
33	34	5.8921E-02	.0000E+00	.0000E+00	-5.6125E-02	2.7962E-03
34	35	2.3140E-03	.0000E+00	.0000E+00	-2.1583E-03	1.5570E-04
35	36	1.9532E+01	.0000E+00	.0000E+00	-1.9519E+01	1.2457E-02
36	37	4.1714E-03	.0000E+00	.0000E+00	-4.1699E-03	1.5466E-06
37	38	2.1162E+01	.0000E+00	.0000E+00	-2.1084E+01	7.7591E-02
38	39	4.6885E-03	.0000E+00	.0000E+00	-4.6723E-03	1.6219E-05
39	40	3.3801E+01	.0000E+00	.0000E+00	-1.1081E+01	2.2720E+01
40	41	8.5938E-01	.0000E+00	.0000E+00	-8.5537E-01	4.0095E-03
41	42	1.7256E-04	.0000E+00	.0000E+00	-1.7028E-04	2.2751E-06
42	43	1.8116E+00	.0000E+00	.0000E+00	-1.8110E+00	5.7483E-04
43	44	2.0264E+00	.0000E+00	.0000E+00	-2.0251E+00	1.2777E-03
44	45	2.2140E+00	.0000E+00	.0000E+00	-2.2135E+00	5.1042E-04
45	46	2.7071E+00	.0000E+00	.0000E+00	-1.1449E+00	1.5621E+00
46	47	1.0747E-01	.0000E+00	.0000E+00	-6.5242E-02	4.2232E-02
47	48	1.4348E-01	.0000E+00	.0000E+00	-1.3881E-01	4.6727E-03
48	49	1.8868E-01	.0000E+00	.0000E+00	-7.3618E-02	1.1507E-01
49	50	4.7686E-01	.0000E+00	.0000E+00	-2.6795E-01	2.0891E-01
50	51	4.6327E-01	.0000E+00	.0000E+00	-4.4756E-01	1.5712E-02
51	52	4.5310E-01	.0000E+00	.0000E+00	-4.4757E-01	5.5334E-03
52	53	4.5795E-01	.0000E+00	.0000E+00	-1.9049E-01	2.6746E-01
53	54	3.1847E-03	.0000E+00	.0000E+00	-1.5832E-04	3.0264E-03
54	55	4.6825E-01	.0000E+00	.0000E+00	-2.6200E-01	2.0626E-01
55	56	4.5713E-01	.0000E+00	.0000E+00	-4.4046E-01	1.6670E-02
56	57	4.4915E-01	.0000E+00	.0000E+00	-4.4371E-01	5.4452E-03
57	58	4.5083E-01	.0000E+00	.0000E+00	-1.9009E-01	2.6074E-01

TOTAL	1.0455E+02	1.0077E+00	.0000E+00	.0000E+00	-1.0455E+02	1.0076E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-3.5065E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.5065E-04
33	34	.0000E+00	.0000E+00	-5.6529E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6529E-06
34	35	.0000E+00	.0000E+00	1.1410E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1410E-07
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	1.9839E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9839E-05
38	39	.0000E+00	.0000E+00	4.2249E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2249E-06
39	40	.0000E+00	.0000E+00	3.4505E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4505E-04
40	41	.0000E+00	.0000E+00	-1.1931E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1931E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	1.7728E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7728E-05
43	44	.0000E+00	.0000E+00	3.3841E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3841E-05
44	45	.0000E+00	.0000E+00	5.0015E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0015E-06
45	46	.0000E+00	.0000E+00	2.5982E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5982E-05
46	47	.0000E+00	.0000E+00	-1.2578E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2578E-05
47	48	.0000E+00	.0000E+00	-4.1051E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1051E-06
48	49	.0000E+00	.0000E+00	1.6848E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6848E-05
49	50	.0000E+00	.0000E+00	8.1519E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.1519E-05
50	51	.0000E+00	.0000E+00	1.7573E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7573E-04
51	52	.0000E+00	.0000E+00	-5.5686E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.5686E-06
52	53	.0000E+00	.0000E+00	6.5180E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5180E-05
53	54	.0000E+00	.0000E+00	-8.2657E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2657E-06
54	55	.0000E+00	.0000E+00	-4.8781E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.8781E-05
55	56	.0000E+00	.0000E+00	-7.3784E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3784E-05
56	57	.0000E+00	.0000E+00	1.9309E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9309E-05
57	58	.0000E+00	.0000E+00	1.8772E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8772E-04
58	59	.0000E+00	.0000E+00	-4.0413E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0413E-06
59	60	.0000E+00	.0000E+00	-2.7968E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7968E-05
60	61	.0000E+00	.0000E+00	-5.7382E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.7382E-05
61	62	.0000E+00	.0000E+00	1.7054E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7054E-05
62	63	.0000E+00	.0000E+00	6.8873E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8873E-05
63	64	.0000E+00	.0000E+00	-1.5857E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5857E-04
64	65	.0000E+00	.0000E+00	8.6056E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6056E-06
65	66	.0000E+00	.0000E+00	-1.9045E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9045E-04
66	67	.0000E+00	.0000E+00	-1.3559E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3559E-04
67	68	.0000E+00	.0000E+00	2.0559E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0559E-05
68	70	.0000E+00	.0000E+00	4.8641E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8641E-05
69	71	.0000E+00	.0000E+00	2.4021E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4021E-05
70	72	.0000E+00	.0000E+00	2.4356E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4356E-04
71	73	.0000E+00	.0000E+00	1.3856E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3856E-04
72	74	.0000E+00	.0000E+00	-4.6549E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6549E-06
73	75	.0000E+00	.0000E+00	-1.6629E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6629E-04
74	76	.0000E+00	.0000E+00	2.1228E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1228E-05
75	77	.0000E+00	.0000E+00	4.2197E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2197E-07
76	80	.0000E+00	.0000E+00	-7.7084E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7084E-07
77	81	.0000E+00	.0000E+00	-2.3895E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3895E-04
78	82	.0000E+00	.0000E+00	-1.6431E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6431E-05
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	8.8594E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8594E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-8.1026E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1026E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-4.3188E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.3188E-05
TOTAL		.0000E+00	.0000E+00	9.3295E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.3295E-05
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4190E-02	.0000E+00	-1.4190E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.0695E-03	.0000E+00	-3.6197E-01	-1.0278E-03	-3.5532E-01
33	34	.0000E+00	.0000E+00	-2.9222E-04	.0000E+00	-2.9222E-04
34	35	.0000E+00	.0000E+00	-2.9055E-05	.0000E+00	-2.9055E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.5466E-06	.0000E+00	-1.5466E-06
37	38	3.3227E-05	.0000E+00	-7.1040E-03	-1.6614E-05	-7.0874E-03
38	39	.0000E+00	.0000E+00	-8.2552E-06	.0000E+00	-8.2552E-06
39	40	.0000E+00	.0000E+00	-5.6450E-02	.0000E+00	-5.6450E-02
40	41	.0000E+00	.0000E+00	-3.9975E-03	.0000E+00	-3.9975E-03
41	42	.0000E+00	.0000E+00	-2.2751E-06	.0000E+00	-2.2751E-06
42	43	.0000E+00	.0000E+00	-5.9255E-04	.0000E+00	-5.9255E-04
43	44	.0000E+00	.0000E+00	-1.3115E-03	.0000E+00	-1.3115E-03
44	45	.0000E+00	.0000E+00	-5.1542E-04	.0000E+00	-5.1542E-04
45	46	.0000E+00	.0000E+00	-3.0912E-03	.0000E+00	-3.0912E-03
46	47	.0000E+00	.0000E+00	-3.0988E-04	.0000E+00	-3.0988E-04
47	48	.0000E+00	.0000E+00	-5.2718E-05	.0000E+00	-5.2718E-05
48	49	.0000E+00	.0000E+00	-2.6611E-04	.0000E+00	-2.6611E-04
49	50	.0000E+00	.0000E+00	-2.5487E-03	.0000E+00	-2.5487E-03
50	51	.0000E+00	.0000E+00	-1.1036E-02	.0000E+00	-1.1036E-02
51	52	.0000E+00	.0000E+00	-6.2442E-04	.0000E+00	-6.2442E-04

52	53	.0000E+00	.0000E+00	-1.1087E-02	.0000E+00	.0000E+00	-1.1087E-02
53	54	.0000E+00	.0000E+00	-1.1070E-04	.0000E+00	.0000E+00	-1.1070E-04
54	55	.0000E+00	.0000E+00	-2.5896E-03	.0000E+00	.0000E+00	-2.5896E-03
55	56	.0000E+00	.0000E+00	-1.1362E-02	.0000E+00	.0000E+00	-1.1362E-02
56	57	.0000E+00	.0000E+00	-6.5865E-04	.0000E+00	.0000E+00	-6.5865E-04
57	58	.0000E+00	.0000E+00	-1.1237E-02	.0000E+00	.0000E+00	-1.1237E-02
58	59	.0000E+00	.0000E+00	-7.7531E-05	.0000E+00	.0000E+00	-7.7531E-05
59	60	.0000E+00	.0000E+00	-3.0558E-03	.0000E+00	.0000E+00	-3.0558E-03
60	61	.0000E+00	.0000E+00	-1.1580E-02	.0000E+00	.0000E+00	-1.1580E-02
61	62	.0000E+00	.0000E+00	-1.1109E-04	.0000E+00	.0000E+00	-1.1109E-04
62	63	.0000E+00	.0000E+00	-3.1299E-03	.0000E+00	.0000E+00	-3.1299E-03
63	64	.0000E+00	.0000E+00	-1.1451E-02	.0000E+00	.0000E+00	-1.1451E-02
64	65	.0000E+00	.0000E+00	-9.4213E-05	.0000E+00	.0000E+00	-9.4213E-05
65	66	.0000E+00	.0000E+00	-1.9631E-02	.0000E+00	.0000E+00	-1.9631E-02
66	67	.0000E+00	.0000E+00	-1.5473E-02	.0000E+00	.0000E+00	-1.5473E-02
67	68	.0000E+00	.0000E+00	-1.5172E-02	.0000E+00	.0000E+00	-1.5172E-02
68	70	.0000E+00	.0000E+00	-5.5282E-03	.0000E+00	.0000E+00	-5.5282E-03
69	71	.0000E+00	.0000E+00	-7.4999E-04	.0000E+00	.0000E+00	-7.4999E-04
70	72	.0000E+00	.0000E+00	-2.2497E-02	.0000E+00	.0000E+00	-2.2497E-02
71	73	.0000E+00	.0000E+00	-5.5695E-03	.0000E+00	.0000E+00	-5.5695E-03
72	74	.0000E+00	.0000E+00	-7.0617E-04	.0000E+00	.0000E+00	-7.0617E-04
73	75	.0000E+00	.0000E+00	-2.2049E-02	.0000E+00	.0000E+00	-2.2049E-02
74	76	.0000E+00	.0000E+00	-1.8208E-04	.0000E+00	.0000E+00	-1.8208E-04
75	77	.0000E+00	.0000E+00	-2.0981E-04	.0000E+00	.0000E+00	-2.0981E-04
76	80	.0000E+00	.0000E+00	-5.5769E-05	.0000E+00	.0000E+00	-5.5769E-05
77	81	.0000E+00	.0000E+00	-7.6411E-03	.0000E+00	.0000E+00	-7.6411E-03
78	82	.0000E+00	.0000E+00	-4.6889E-04	.0000E+00	.0000E+00	-4.6889E-04
79	83	.0000E+00	.0000E+00	-3.8020E-06	.0000E+00	.0000E+00	-3.8020E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.4254E-03	.0000E+00	.0000E+00	-2.4254E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.1717E-03	.0000E+00	.0000E+00	-2.1717E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0130E-03	.0000E+00	.0000E+00	-2.0130E-03

TOTAL 2.1027E-03 .0000E+00 -6.5348E-01 -1.0444E-03 -3.5532E-01 -1.0077E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	290819 16763	3.0557E+00 2.0194E-01	1.4117E-02 7.2487E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7096E-01 2.3925E-04 2.8705E-05 1.8626E-06 6.1845E-06 3.0867E-05 2.8101E-06 1.0315E-06 8.1502E-05 4.8141E-03 1.2763E-03 3.2088E-01 3.4148E-04 3.5181E-27 1.1396E-03 1.5107E-04 1.5004E-11 5.1368E-05 4.8134E-10 3.1036E-27 2.2938E-06 8.8400E-09	101972 591 70 1032 411 121 991 6 161 27718 1078 153495 908 0 13239 1498 0 110 0 0 5 0	1.4817E+00 7.5455E-03 8.9625E-04 1.1138E-02 4.6374E-03 1.5091E-03 1.0275E-02 1.2965E-04 2.1213E-03 5.3642E-01 1.5622E-02 2.2360E+00 1.1481E-02 .0000E+00 2.6620E-01 2.0060E-02 .0000E+00 1.5833E-03 .0000E+00 .0000E+00 6.6828E-05 3.4348E-06	1.1995E-03 6.5648E-03 7.5942E-04 1.1056E-02 4.5886E-03 1.2849E-03 1.0257E-02 7.7455E-06 1.4806E-03 4.6451E-02 5.5580E-03 1.9641E-01 9.1380E-03 .0000E+00 4.8134E-02 1.7920E-02 .0000E+00 1.1110E-03 .0000E+00 .0000E+00 4.6855E-05 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 6.5644E-05 2.4531E-05 2.3504E-01 2.3297E-04 2.0577E-02 1.1711E-04 .0000E+00 9.9167E-02 7.9508E-05 .0000E+00 8.2623E-06 .0000E+00 .0000E+00 2.5153E-08 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.2132E-05 .0000E+00 1.0087E-03 .0000E+00 .0000E+00 .0000E+00 1.0822E-05 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	5 4 14 1205 15	3.6108E-05 3.5092E-05 1.2652E-04 1.2436E-02 1.3701E-04	1.2219E-09 9.4320E-06 1.3795E-05 2.5549E-04 1.3498E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	609 25	4.8499E-03 2.2172E-04	2.9048E-05 7.0467E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	7	1.1470E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	31 2	2.9094E-04 1.1659E-05	1.5463E-06 2.9310E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	193 87 234 50885 494	2.8222E-03 1.2637E-03 3.1369E-03 7.5570E-01 7.2560E-03	1.0089E-06 1.0697E-04 1.5727E-04 6.6474E-03 1.9138E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.6614E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	176 10	1.4815E-03 1.0431E-04	8.2516E-06 3.6199E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1411185 120467	1.8175E+01 1.7357E+00	5.5120E-02 1.3299E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	88617 7071	1.1490E+00 1.0198E-01	3.9235E-03 7.4083E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	45 3	4.5219E-04 3.2494E-05	2.2746E-06 4.9111E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	15 8 14 3707 34	2.1909E-04 1.0625E-04 1.8423E-04 5.4630E-02 4.6377E-04	1.0945E-06 2.7746E-05 1.2398E-05 5.3541E-04 1.5903E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	29522 2456	3.8417E-01 3.5585E-02	1.2857E-03 2.5801E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	7 5 19 3232 28	8.2611E-05 7.7575E-05 2.6920E-04 4.7839E-02 3.9700E-04	7.2433E-10 6.1493E-06 1.2127E-05 4.8267E-04 1.4482E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	70685 5712	9.1921E-01 8.2164E-02	3.0239E-03 6.7376E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7072 598	9.3249E-02 8.6746E-03	3.0749E-04 2.3947E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 0 1 335 3	3.1886E-05 .0000E+00 1.5801E-05 4.9146E-03 4.9490E-05	1.2913E-12 .0000E+00 2.9750E-07 5.1689E-05 7.3162E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6192 536	8.1213E-02 7.8910E-03	2.6417E-04 1.9416E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63542 4908	7.4371E-01 6.6801E-02	2.5071E-03 4.1649E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	4 38 59 3 0 1525 507 8024 2360 145	4.0475E-05 4.7293E-04 7.5517E-04 2.4381E-05 .0000E+00 2.0001E-02 7.2182E-03 9.7079E-02 2.8421E-02 1.9799E-03	1.8324E-08 2.7593E-05 1.2669E-05 5.8059E-07 .0000E+00 1.9870E-03 1.0457E-03 5.8514E-03 1.8556E-03 2.5525E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2377 8	3.3982E-02 8.1447E-05	6.0689E-04 1.7529E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	8 49 54 5 4 1453	8.2350E-05 6.0277E-04 6.9546E-04 6.2998E-05 5.1209E-05 1.8892E-02	2.2423E-08 3.0612E-05 8.7227E-06 5.7349E-07 2.4727E-06 2.0025E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	473	6.7140E-03	1.0202E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8129	9.8454E-02	5.8295E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2447	2.9824E-02	1.8877E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	154	2.0763E-03	3.0460E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	2378	1.9793E-02	1.1067E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	90	8.1327E-04	2.6721E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	63623	7.4551E-01	2.5489E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4636	6.3329E-02	4.0688E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	11	1.3575E-04	1.7568E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	6.0103E-04	3.2260E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	7.7183E-04	8.1415E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4845E-05	6.8699E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.9391E-05	3.7756E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1443	1.9003E-02	1.9808E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	544	7.7425E-03	1.0214E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8183	9.8876E-02	6.1270E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2421	2.9358E-02	1.9272E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	145	1.9659E-03	2.6038E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2419	3.4539E-02	6.5788E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	1	4.2977E-06	7.7285E-07	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	12	1.4711E-04	1.4579E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	54	5.8940E-04	3.9138E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	62	8.5280E-04	1.1108E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.6384E-05	6.2802E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.9701E-05	1.5696E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1490	1.9061E-02	1.9919E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	460	6.3621E-03	1.1438E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8053	9.6512E-02	5.9003E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2388	2.8770E-02	1.9013E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	1.9649E-03	2.4702E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1532	1.4236E-02	7.7515E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	67	6.6737E-04	1.5428E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	86700	1.0712E+00	3.0078E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7497	1.0617E-01	4.8003E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.5843E-04	3.2287E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	67	8.6159E-04	4.0186E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	95	1.3856E-03	8.4393E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0815E-04	1.1200E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3258E-05	5.7259E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2281	3.1325E-02	2.0074E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	884	1.2908E-02	1.1442E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11259	1.4286E-01	5.9344E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3438	4.4216E-02	1.9802E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	252	3.6290E-03	4.6381E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2459	1.9839E-02	1.1106E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	111	9.9169E-04	2.9513E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	87919	1.0867E+00	3.0554E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7590	1.0582E-01	7.4551E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	13	1.8080E-04	1.7456E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	64	7.5840E-04	4.1372E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	81	1.1694E-03	1.0470E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.8298E-05	3.4030E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.0627E-05	3.0710E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2147	2.9486E-02	2.0440E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	853	1.2547E-02	1.1096E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11192	1.4297E-01	5.8259E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3421	4.4289E-02	1.8904E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	271	3.9152E-03	5.2545E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2057	1.7765E-02	9.4130E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	106	1.0261E-03	8.2044E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	399197	3.6533E+00	1.9561E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	18871	1.9308E-01	7.0199E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	10	1.1135E-04	2.6076E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	4.7266E-04	3.3106E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	66	8.4338E-04	2.0201E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	9	9.2963E-05	1.8453E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	8.3974E-06	2.2952E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1567	1.7772E-02	2.7292E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	451	5.5388E-03	1.5621E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9442	9.8331E-02	8.1607E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2906	3.0293E-02	2.6631E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	145	1.6903E-03	3.0077E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	11	9.2032E-05	3.0287E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	4.7758E-04	4.3784E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	5.0648E-04	1.1549E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0066E-04	1.8811E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1506	1.6179E-02	2.7972E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	428	5.3760E-03	1.2801E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9279	9.5095E-02	8.1021E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2789	2.8570E-02	2.6527E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	1.7743E-03	2.8305E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	8	1.0714E-04	3.3558E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	6.2950E-04	1.5546E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.9912E-04	2.1059E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.4056E-05	1.1264E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.8616E-05	3.1287E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1483	2.0196E-02	1.0650E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	487	7.2040E-03	4.5120E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7082	8.9561E-02	2.8705E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2143	2.7570E-02	9.2284E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.3516E-03	1.9772E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6538	9.7560E-02	7.4384E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	9.0106E-05	6.1474E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	37	4.5294E-04	3.1394E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	190	2.3212E-03	6.2257E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	310	4.4321E-03	2.0381E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	22	3.0227E-04	1.0649E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	11	1.5665E-04	1.3040E-05	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7397	1.0211E-01	3.9478E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2449	3.5022E-02	2.0959E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36055	4.5734E-01	1.1456E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	11059	1.4255E-01	3.7045E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	891	1.2551E-02	1.1959E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	11	1.3843E-04	6.1224E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	29	3.6233E-04	1.4707E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.6955E-04	3.8474E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.2887E-05	9.8584E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3455E-05	7.6834E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1408	1.9556E-02	9.7952E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	480	6.8526E-03	4.9152E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6978	8.9129E-02	2.8981E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2129	2.7499E-02	9.4341E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	170	2.3758E-03	2.3828E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6211	9.2755E-02	7.0016E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.1995E-04	6.0065E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	47	6.5489E-04	2.7767E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	196	2.5102E-03	5.8285E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	317	4.4886E-03	2.1347E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.7271E-04	2.1213E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.6662E-05	2.4619E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7218	9.9155E-02	3.8365E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2520	3.6131E-02	2.1742E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34892	4.3855E-01	1.1198E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10762	1.3749E-01	3.5652E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	827	1.1695E-02	1.1913E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	4021	3.3747E-02	1.8107E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	185	1.7317E-03	1.0099E-06	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	4402	3.7512E-02	2.0785E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	210	2.0559E-03	1.9548E-06	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4	2.5522E-05	8.1585E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2	1.3807E-05	1.2501E-05	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	29	2.1038E-04	2.6818E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	7	5.1136E-05	8.2913E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	9	1.2812E-04	1.2332E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	33	3.3525E-04	1.4877E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.0100E-04	1.3564E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1122	1.2884E-02	1.4118E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	365	4.9736E-03	6.0662E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6670	7.2207E-02	4.1369E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2008	2.2788E-02	1.2538E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	118	1.4544E-03	2.0340E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	12045	1.2877E-01	4.6476E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	897	1.1355E-02	4.1334E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	82	8.5100E-04	3.8009E-06	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	5	5.5281E-05	1.1103E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	8.8100E-05	1.0221E-06	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	7	9.2628E-05	1.5148E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	9	1.3277E-04	6.0405E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	1.6453E-05	3.3612E-09	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	43	5.7177E-04	5.2852E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	637	7.9268E-03	5.1444E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	91	1.3140E-03	6.2477E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1173	1.4024E-02	4.2924E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2805	3.2799E-02	1.2075E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	83	1.0143E-03	6.5406E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	73	9.7880E-04	9.0277E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	75	9.3880E-04	3.0159E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	26	3.6405E-04	7.2662E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	2	3.1936E-05	6.6630E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	2.4460E-05	5.8434E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	240	3.2001E-03	1.0198E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9285	1.0669E-01	2.0684E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	43294	3.7048E-01	2.0089E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1972	1.8479E-02	4.0755E-06	.0000E+00	.0000E+00
TOTAL				3539686	4.3786E+01	6.5348E-01	3.5532E-01	1.0582E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2678204	3.1808E+01	1.1202E-01	.0000E+00	.0000E+00
2004.50C	7	1.1470E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	274	3.4567E-03	1.3123E-06	.0000E+00	.0000E+00
7014.50C	907	1.0995E-02	4.5372E-04	.0000E+00	.0000E+00
8016.50C	302982	4.2316E+00	3.0620E-03	.0000E+00	.0000E+00

13027.50C	17552	2.5893E-01	2.7103E-03	.0000E+00	.0000E+00
14000.50C	1329	1.8567E-02	1.5388E-04	.0000E+00	.0000E+00
15031.50C	99	1.3225E-03	1.1120E-05	.0000E+00	.0000E+00
16032.50C	37	5.3888E-04	3.2537E-05	.0000E+00	.0000E+00
22000.50C	43	5.7177E-04	5.2852E-05	.0000E+00	.0000E+00
24000.50C	32785	4.3506E-01	2.9454E-02	.0000E+00	.0000E+00
25055.50C	11234	1.5912E-01	1.5323E-02	.0000E+00	.0000E+00
26000.55C	176007	2.1416E+00	8.7011E-02	.0000E+00	.0000E+00
28000.50C	53083	6.5449E-01	2.8364E-02	.0000E+00	.0000E+00
29000.50C	109	1.3101E-03	9.5862E-05	.0000E+00	.0000E+00
40000.50C	59364	8.7551E-01	7.9727E-03	.0000E+00	1.6614E-05
42000.50C	3662	5.0403E-02	5.7573E-03	.0000E+00	.0000E+00
45103.50C	591	7.5455E-03	6.5648E-03	.0000E+00	.0000E+00
47109.50C	70	8.9625E-04	7.5942E-04	.0000E+00	.0000E+00
50000.35C	574	8.3033E-03	2.3599E-04	.0000E+00	.0000E+00
62149.50C	1032	1.1138E-02	1.1056E-02	.0000E+00	.0000E+00
63151.55C	411	4.6374E-03	4.5886E-03	.0000E+00	.0000E+00
63153.55C	121	1.5091E-03	1.2849E-03	.0000E+00	.0000E+00
64155.50C	991	1.0275E-02	1.0257E-02	.0000E+00	.0000E+00
92233.50C	6	1.2965E-04	7.7455E-06	6.5644E-05	.0000E+00
92234.50C	161	2.1213E-03	1.4806E-03	2.4531E-05	.0000E+00
92235.50C	27718	5.3642E-01	4.6451E-02	2.3504E-01	2.2132E-05
92236.50C	1078	1.5622E-02	5.5580E-03	2.3297E-04	.0000E+00
92238.50C	153495	2.2360E+00	1.9641E-01	2.0577E-02	1.0087E-03
93237.55C	908	1.1481E-02	9.1380E-03	1.1711E-04	.0000E+00
94238.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94239.55C	13239	2.6620E-01	4.8134E-02	9.9167E-02	.0000E+00
94240.50C	1498	2.0060E-02	1.7920E-02	7.9508E-05	1.0822E-05
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	110	1.5833E-03	1.1110E-03	8.2623E-06	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95242.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	5	6.6828E-05	4.6855E-05	2.5153E-08	.0000E+00
96245.35C	0	3.4348E-06	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59542 CTM = 118.72

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 118.83 MINUTES

MCNP VERSION 4A-B 10/04/91

02/17/95 05:30:47

PROBID = 02/17/95 03:31:44

1MCNP VERSION 4A-B LD=10/04/91 02/20/95 09:19:14

PROBID = 02/20/95 09:19:14

INP=mpc12j OUTP=mpc12j.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/50000 year (mpc12j)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1197-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL -ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      3.00%/20 GWD/50000 YEAR -- U02
331- M2      8016.50C 4.7770E-02
332-      45103.50C 1.7034E-05
333-      47109.50C 2.0437E-06
334-      62149.50C 1.3261E-07
335-      63151.55C 4.4031E-07
336-      63153.55C 2.1977E-06
337-      64155.50C 2.0007E-07
338-      92233.50C 3.4887E-07
339-      92234.50C 5.3164E-06
340-      92235.50C 3.9891E-04
341-      92236.50C 1.0138E-04
342-      92238.50C 2.2846E-02
343-      93237.55C 2.4001E-05
344-      94239.55C 2.5704E-05
345-      94240.50C 1.5476E-07
346-      94241.50C 4.0902E-14
347-      94242.50C 3.4034E-06
348-      95241.50C 1.2280E-12
349-      95243.50C 3.8153E-09
350-      96245.35C 2.4098E-11
351- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
352- M3      2004.50C 1.0
353- C      ZIRCALOY-4
354- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
355-      40000.50C -0.9818 50000.35C -0.0140
356- C      ALLOY 825

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357-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
358-          16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
359-          25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
360-          29000.50C -0.0250 42000.50C -0.0300
361-      C          1100 ALUMINUM ALLOY
362-      M6      13027.50C -0.99880 29000.50C -0.00120
363-      C          A516 CARBON STEEL
364-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
365-          16032.50C -0.00035 25055.50C -0.0090
366-          26000.55C -0.98535
367-      C          SS316L
368-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
369-          15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
370-          25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
371-          42000.50C -0.02500
372-      C          TALLIES
373-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.
SURFACES 24051 AND 28051 OF CELL      9 ARE THE SAME.      28051 WILL BE DELETED.

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SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	2908
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	2908
POINTS AFTER EXPANSION OR CONTRACTION	3008
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119727E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	8016, .67095 45103, .00024 47109, .00003 62149, .00000
3	63151, .00001 63153, .00003 64155, .00000 92233, .00000
4	92234, .00007 92235, .00560 92236, .00142 92238, .32088
5	93237, .00034 94239, .00036 94240, .00000 94241, .00000
6	94242, .00005 95241, .00000 95243, .00000 96245, .00000
7	2004, 1.00000 24000, .00175 26000, .00325 40000, .97748
8	8016, .00681 13027, .00417 14000, .01001 16032, .00053
9	50000, .01071 24000, .23247 25055, .01023 26000, .28763
10	6000, .00234 29000, .02212 42000, .01758
11	22000, .01057 29000, .00051 15031, .00062 16032, .00060
12	28000, .40235 14000, .00541
13	13027, .99949
14	6000, .01011

8	25055, .00905 6000, .00140 16032, .00052 28000, .11433	26000, .97421 7014, .00399 24000, .18282 42000, .01457	14000, .01493 25055, .02036	15031, .00081 26000, .64626
1 MATERIAL NUMBER	COMPONENT NUCLIDE, MASS FRACTION			
1	1001, .11191	8016, .88809		
2	8016, .12058 63151, .00001 92234, .00020 93237, .00090 94242, .00013 2004, 1.00000	45103, .00028 63153, .00005 92235, .01480 94239, .00097 95241, .00000	47109, .00004 64155, .00000 92236, .00378 94240, .00001 95243, .00000	62149, .00000 92233, .00001 92238, .85825 94241, .00000 96245, .00000
3	8016, .00120	24000, .00100	26000, .00200	40000, .98180
4	50000, .01400 6000, .00050 22000, .00898 28000, .41895	13027, .00200 24000, .21446 29000, .02494 29000, .00120	14000, .00499 25055, .00998 42000, .02993	16032, .00030 26000, .28499
5	13027, .99880 6000, .00220 25055, .00900	14000, .00275 26000, .98535	15031, .00035	16032, .00035
6	6000, .00030 16032, .00030 28000, .12121	7014, .00101 24000, .17172 42000, .02525	14000, .00758 25055, .02020	15031, .00045 26000, .65197

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11970E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	69	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	70	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	71	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	78	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	79	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	80	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	81	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	82	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	84	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	85	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	87	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC

57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE

117	27050	.00000E+00	.00000E+00	INFINITE
118	27051	.00000E+00	.00000E+00	INFINITE
119	28048	.00000E+00	.00000E+00	INFINITE
120	28049	.00000E+00	.00000E+00	INFINITE
121	29048	.00000E+00	.00000E+00	INFINITE
122	29049	.00000E+00	.00000E+00	INFINITE
123	30048	.00000E+00	.00000E+00	INFINITE
124	30049	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11970E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00

48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01
11	11		CZ 6.4525000E+01
12	12		CZ 6.6525000E+01
13	13		PX 7.2135000E-01
14	14		PX -7.2135000E-01

15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	PX	2.5991819E+01			
74	2042	PX	2.1437590E+00			

75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08

PRINT TABLE 72

8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08

68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU
TOTAL NU

(1314) 79/06/21.
(1340) 79/07/31.

(1394) 79/10/17.

(1396) 79/08/30.
(1381) 79/08/30.
(1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
-----------	------	------

(1315) 79/10/29.

16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1325785

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 101900
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1325785

TOTAL 1446088

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

8 WARNING MESSAGES SO FAR.
 1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/50000 year (mpc12j)

NPS X Y Z CELL SURF U V W TIME WEIGHT ENERGY

1	2.437E-01	3.597E-01	4.275E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.973E-01	1.011E+00
2	-4.009E-01	-6.821E-02	4.243E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.973E-01	2.005E+00
3	1.475E-01	3.380E-01	4.897E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.973E-01	2.731E+00
4	-1.154E-01	1.113E-01	4.806E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.973E-01	2.027E+00
5	1.385E-01	1.266E-01	3.268E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.973E-01	3.778E+00
6	1.350E-01	2.975E-01	3.273E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.973E-01	7.322E-01
7	2.980E-01	-1.429E-01	3.289E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.973E-01	2.201E+00
8	-3.037E-01	-4.557E-02	6.305E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.973E-01	2.412E+00
9	3.163E-02	2.988E-01	6.279E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.973E-01	1.561E+00
10	4.928E-02	-1.955E-01	7.991E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.973E-01	9.355E-01
11	3.615E-01	1.224E-01	7.807E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.973E-01	3.673E+00
12	-1.824E-01	4.226E-01	7.903E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.973E-01	1.486E-01
13	2.873E-01	1.305E-01	7.894E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.973E-01	1.561E+00
14	2.122E-01	-1.873E-01	8.714E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.973E-01	1.788E+00
15	3.228E-01	-1.038E-01	7.374E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.973E-01	1.042E-01
16	-1.307E-01	4.204E-01	7.800E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.973E-01	4.702E+00
17	-2.409E-01	-1.111E-01	5.894E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.973E-01	6.743E+00
18	-1.382E-01	4.058E-01	5.707E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.973E-01	2.972E+00
19	-1.878E-01	-7.769E-02	5.882E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.973E-01	8.814E-01
20	2.368E-02	-4.647E-01	3.246E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.973E-01	2.455E+00
21	1.950E-01	2.934E-01	1.759E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.973E-01	3.196E-01
22	-4.074E-02	1.616E-01	1.022E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.973E-01	9.513E-01
23	-1.963E-01	1.486E-01	8.055E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.973E-01	7.389E-01
24	-2.735E-01	4.815E-02	8.669E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.973E-01	5.643E+00
25	3.178E-01	2.018E-01	1.928E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.973E-01	2.028E+00
26	2.040E-01	-1.274E-01	2.876E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.973E-01	2.059E-01
27	-3.854E-01	-5.594E-02	3.023E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.973E-01	1.596E+00
28	6.664E-03	1.138E-02	3.095E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.973E-01	1.053E+00
29	1.554E-01	1.595E-01	2.300E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.973E-01	4.234E-01
30	9.628E-02	-2.981E-01	2.441E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.973E-01	4.887E-01
31	4.348E-01	8.369E-02	2.477E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.973E-01	1.414E+00
32	7.287E-02	1.122E-01	3.430E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.973E-01	3.399E+00
33	1.194E-01	5.854E-02	3.375E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.973E-01	2.510E+00
34	4.229E-01	-1.839E-01	7.510E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.973E-01	2.367E+00
35	2.297E-01	9.704E-02	1.799E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.973E-01	1.229E+00
36	2.297E-01	9.704E-02	1.799E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.973E-01	3.664E+00
37	-3.088E-01	6.309E-02	1.772E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.973E-01	1.023E+00
38	2.717E-01	-3.614E-01	1.771E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.973E-01	1.008E+00
39	4.194E-01	-3.473E-03	1.318E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.973E-01	8.279E+00
40	3.761E-02	3.357E-01	1.333E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.973E-01	2.130E+00
41	-1.278E-01	1.707E-01	1.574E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.973E-01	2.911E+00
42	3.603E-01	2.915E-01	1.583E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.973E-01	1.362E+00
43	1.546E-01	1.875E-02	1.594E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.973E-01	6.513E-01
44	2.504E-01	-2.106E-02	1.593E+02	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.973E-01	6.834E+00
45	-4.147E-01	2.558E-02	1.276E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.973E-01	6.078E+00
46	-8.029E-02	-8.448E-02	1.280E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.973E-01	4.555E+00
47	1.694E-01	-2.560E-01	1.291E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.973E-01	1.422E+00
48	1.353E-01	-1.259E-01	1.242E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.973E-01	1.240E+00
49	-1.006E-01	3.073E-03	1.233E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.973E-01	1.046E+00
50	-3.361E-01	2.443E-01	1.193E+02	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.973E-01	2.841E+00

CYCLE	1	K(COLLISION)	.869509	REMOVAL LIFETIME(ABS)	3.6611E+03	SOURCE POINTS GENERATED	2687
CYCLE	2	K(COLLISION)	.920369	REMOVAL LIFETIME(ABS)	3.7965E+03	SOURCE POINTS GENERATED	3211
CYCLE	3	K(COLLISION)	.877369	REMOVAL LIFETIME(ABS)	3.7664E+03	SOURCE POINTS GENERATED	2913
CYCLE	4	K(COLLISION)	.873535	REMOVAL LIFETIME(ABS)	3.7640E+03	SOURCE POINTS GENERATED	2975

CYCLE 5 K(COLLISION) .906096 REMOVAL LIFETIME(ABS) 3.9149E+03 SOURCE POINTS GENERATED 3132

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .915975 REMOVAL LIFETIME(ABS) 3.7276E+03 SOURCE POINTS GENERATED 3015

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.889581	.902778	.0146			K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	.883753	.903923	.0223			K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	.892168	.900543	.0093			K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.7217E+03	3.7228E+03	.0003						
REM LIFE(ABS)	3.6968E+03	3.7122E+03	.0042			LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	2876								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.904005	.903187	.0084			K(COL/ABS)	.898302 .0121	.905079 .0120	.7055
K(ABSORPTION)	.872403	.893416	.0176			K(ABS/TK LN)	.899036 .0098	.903480 .0100	.1316
K(TRK LENGTH)	.912879	.904655	.0070			K(TK LN/COL)	.903921 .0073	.904534 .0100	.7954
REM LIFE(COL)	3.7839E+03	3.7432E+03	.0054						
REM LIFE(ABS)	3.7769E+03	3.7338E+03	.0062			LIFE(COL/ABS)	3.7385E+03 .0058	3.7471E+03 .0083	.9357
SOURCE POINTS GENERATED	3041								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.884973	.898634	.0079			K(COL/ABS)	.892565 .0107	.902589 .0095	.7988
K(ABSORPTION)	.865735	.886496	.0147			K(ABS/TK LN)	.892432 .0102	.897494 .0109	.4957
K(TRK LENGTH)	.879509	.898368	.0086			K(TK LN/COL)	.898501 .0080	.898596 .0096	.8781
REM LIFE(COL)	3.7681E+03	3.7494E+03	.0042			K(COL/ABS/TK LN)	.894499 .0093	.905296 .0182	
REM LIFE(ABS)	3.7414E+03	3.7357E+03	.0044			LIFE(COL/ABS)	3.7426E+03 .0042	3.7462E+03 .0058	.8985
SOURCE POINTS GENERATED	2901								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.882570	.895421	.0071			K(COL/ABS)	.890183 .0088	.897436 .0084	.7575
K(ABSORPTION)	.878740	.884945	.0116			K(ABS/TK LN)	.889109 .0088	.891090 .0098	.4713
K(TRK LENGTH)	.872895	.893274	.0088			K(TK LN/COL)	.894347 .0078	.896309 .0080	.9049
REM LIFE(COL)	3.5898E+03	3.7175E+03	.0092			K(COL/ABS/TK LN)	.891213 .0081	.904864 .0142	
REM LIFE(ABS)	3.6072E+03	3.7100E+03	.0077			LIFE(COL/ABS)	3.7137E+03 .0084	3.6957E+03 .0076	.9789
SOURCE POINTS GENERATED	3000								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.892977	.895013	.0058			K(COL/ABS)	.891394 .0073	.895826 .0066	.6902
K(ABSORPTION)	.901925	.887775	.0099			K(ABS/TK LN)	.889167 .0072	.889616 .0078	.2863
K(TRK LENGTH)	.876989	.890560	.0078			K(TK LN/COL)	.892787 .0066	.896429 .0065	.8613
REM LIFE(COL)	3.5813E+03	3.6948E+03	.0097			K(COL/ABS/TK LN)	.891116 .0066	.904992 .0116	
REM LIFE(ABS)	3.5837E+03	3.6889E+03	.0085			LIFE(COL/ABS)	3.6919E+03 .0091	3.6743E+03 .0080	.9866
SOURCE POINTS GENERATED	3009								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.905679	.896537	.0052			K(COL/ABS)	.892884 .0064	.897332 .0057	.7028

K(ABSORPTION)	.897964	.889231	.0086	K(ABS/TK LN)	.890630	.0063	.891081	.0067	.3190
K(TRK LENGTH)	.900851	.892030	.0068	K(TK LN/COL)	.894283	.0058	.897930	.0057	.8689
REM LIFE(COL)	3.6645E+03	3.6905E+03	.0083	K(COL/ABS/TK LN)	.892599	.0058	.906314	.0108	
REM LIFE(ABS)	3.7095E+03	3.6919E+03	.0073	LIFE(COL/ABS)	3.6912E+03	.0077	3.6930E+03	.0077	.9554
SOURCE POINTS GENERATED 3018									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.912088	.898481	.0050	K(COL/ABS)	.896048	.0065	.899716	.0052
K(ABSORPTION)	.924311	.893616	.0089	K(ABS/TK LN)	.894102	.0066	.894366	.0068
K(TRK LENGTH)	.912494	.894588	.0065	K(TK LN/COL)	.896534	.0056	.900248	.0052
REM LIFE(COL)	3.6541E+03	3.6859E+03	.0073	K(COL/ABS/TK LN)	.895561	.0060	.905513	.0063
REM LIFE(ABS)	3.6248E+03	3.6835E+03	.0067	LIFE(COL/ABS)	3.6847E+03	.0069	3.6829E+03	.0072
SOURCE POINTS GENERATED 3113								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.889553	.897489	.0045	K(COL/ABS)	.896078	.0058	.897872	.0048
K(ABSORPTION)	.903071	.894666	.0079	K(ABS/TK LN)	.894209	.0059	.893976	.0059
K(TRK LENGTH)	.887065	.893752	.0058	K(TK LN/COL)	.895620	.0050	.899079	.0048
REM LIFE(COL)	3.5433E+03	3.6701E+03	.0078	K(COL/ABS/TK LN)	.895302	.0053	.901185	.0059
REM LIFE(ABS)	3.5537E+03	3.6691E+03	.0071	LIFE(COL/ABS)	3.6696E+03	.0074	3.6685E+03	.0075
SOURCE POINTS GENERATED 2904								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.913115	.899052	.0044	K(COL/ABS)	.897089	.0053	.899250	.0047
K(ABSORPTION)	.899277	.895127	.0071	K(ABS/TK LN)	.894009	.0052	.893482	.0053
K(TRK LENGTH)	.885139	.892891	.0053	K(TK LN/COL)	.895971	.0045	.897991	.0047
REM LIFE(COL)	3.8002E+03	3.6831E+03	.0078	K(COL/ABS/TK LN)	.895690	.0048	.898170	.0061
REM LIFE(ABS)	3.7501E+03	3.6772E+03	.0067	LIFE(COL/ABS)	3.6801E+03	.0072	3.6719E+03	.0068
SOURCE POINTS GENERATED 3122								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.873326	.896713	.0048	K(COL/ABS)	.895414	.0051	.896427	.0050
K(ABSORPTION)	.884000	.894116	.0065	K(ABS/TK LN)	.893157	.0048	.892689	.0049
K(TRK LENGTH)	.885269	.892198	.0049	K(TK LN/COL)	.894455	.0044	.894586	.0047
REM LIFE(COL)	3.6421E+03	3.6794E+03	.0071	K(COL/ABS/TK LN)	.894342	.0046	.894338	.0054
REM LIFE(ABS)	3.6494E+03	3.6747E+03	.0061	LIFE(COL/ABS)	3.6770E+03	.0066	3.6703E+03	.0061
SOURCE POINTS GENERATED 2858								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.886395	.895853	.0045	K(COL/ABS)	.894423	.0048	.895579	.0047
K(ABSORPTION)	.880645	.892993	.0061	K(ABS/TK LN)	.892001	.0046	.891523	.0046
K(TRK LENGTH)	.877929	.891009	.0047	K(TK LN/COL)	.893431	.0042	.893741	.0045
REM LIFE(COL)	3.7949E+03	3.6890E+03	.0070	K(COL/ABS/TK LN)	.893285	.0044	.893513	.0052
REM LIFE(ABS)	3.7835E+03	3.6837E+03	.0061	LIFE(COL/ABS)	3.6864E+03	.0065	3.6784E+03	.0061
SOURCE POINTS GENERATED 3010								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	AVE OF	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)	.889274	.895347	.0041	K(COL/ABS)	.895125	.0045	.895290	.0043

K(ABSORPTION)	.917811	.894902	.0060	K(ABS/TK LN)	.892389	.0043	.891351	.0043	.3207
K(TRK LENGTH)	.876290	.889876	.0045	K(TK LN/COL)	.892612	.0040	.893277	.0042	.7158
REM LIFE(COL)	3.5127E+03	3.6754E+03	.0074	K(COL/ABS/TK LN)	.893375	.0040	.893093	.0049	
REM LIFE(ABS)	3.5532E+03	3.6737E+03	.0063	LIFE(COL/ABS)	3.6746E+03	.0068	3.6712E+03	.0058	.9693
SOURCE POINTS GENERATED 3056									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.898100		.895544	.0038	K(COL/ABS)	.894965	.0042	.895389
K(ABSORPTION)		.887675		.894386	.0056	K(ABS/TK LN)	.892072	.0040	.891100
K(TRK LENGTH)		.888221		.889758	.0041	K(TK LN/COL)	.892651	.0037	.893336
REM LIFE(COL)		3.6611E+03		3.6744E+03	.0069	K(COL/ABS/TK LN)	.893229	.0037	.893067
REM LIFE(ABS)		3.6673E+03		3.6732E+03	.0058	LIFE(COL/ABS)	3.6738E+03	.0063	3.6716E+03
SOURCE POINTS GENERATED 3061								.0053	.9691

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.884308		.894795	.0037	K(COL/ABS)	.895009	.0039	.894873
K(ABSORPTION)		.906953		.895224	.0053	K(ABS/TK LN)	.891761	.0037	.890753
K(TRK LENGTH)		.867872		.888299	.0042	K(TK LN/COL)	.891547	.0037	.893000
REM LIFE(COL)		3.6059E+03		3.6698E+03	.0065	K(COL/ABS/TK LN)	.892773	.0035	.892724
REM LIFE(ABS)		3.6008E+03		3.6684E+03	.0056	LIFE(COL/ABS)	3.6691E+03	.0060	3.6664E+03
SOURCE POINTS GENERATED 3022								.0052	.9694

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/50000 year (mpc12j)

02/20/95 11:33:07
PROBID = 02/20/95 09:19:14

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59910	1.0015E+00	2.0297E+00	ESCAPE	4	4.8579E-05	7.4638E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	7.3931E-02	5.0484E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59979	7.3331E-02	4.5942E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.4280E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	146	1.9173E-03	1.4900E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9243E+00
TOTAL	60056	1.0774E+00	2.0312E+00	CAPTURE	0	6.4359E-01	3.1299E-02
				LOSS TO (N,XN)	73	9.5865E-04	8.1609E-03
				LOSS TO FISSION	0	3.5942E-01	6.7377E-02
				TOTAL	60056	1.0774E+00	2.0312E+00

NUMBER OF NEUTRONS BANKED 73
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0024E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.2208E+01
 TOTAL NEUTRON COLLISIONS 3726887
 NET MULTIPLICATION 1.0010E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 3.2704E+03
 CAPTURE 3.6907E+03
 CAPTURE OR ESCAPE 3.6907E+03
 ANY TERMINATION 4.0561E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 122.03 MINUTES
 COMPUTER TIME IN MCRUN 121.90 MINUTES

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0

SOURCE PARTICLES PER MINUTE
RANDOM NUMBERS GENERATED4.9147E+02
44505647

FIELD LENGTH

MOST RANDOM NUMBERS USED WAS

0

8994 IN HISTORY 49665

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3429E-01 TO 1.1165E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						
1NEUTRON	ACTIVITY IN EACH CELL						

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26198	9631	3.3096E+00	1.0927E-04	3.5583E-01	7.1511E-01	1.0664E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	765088	59983	311780	4.2776E+00	5.7685E-04	7.0241E-01	8.6132E-01
33	34	7036	376	1522	1.5697E-02	5.6712E-05	2.6975E-01	6.0471E-01
34	35	423	34	998	7.4281E-03	1.4076E-05	8.4539E-02	4.6530E-01
35	36	1381355	59983	10	1.4269E-04	4.9728E-04	6.6393E-01	8.5683E-01
36	37	760	34	53	4.0114E-04	1.1423E-05	5.7441E-02	4.6945E-01
37	38	1497770	59983	53464	7.7796E-01	4.8230E-04	6.5253E-01	8.5609E-01
38	39	816	34	335	2.5260E-03	9.0820E-06	5.2607E-02	4.7176E-01
39	40	2393813	59983	1642179	2.0790E+01	4.2297E-04	6.2254E-01	8.5332E-01
40	41	60265	31850	100827	1.2832E+00	3.2616E-04	5.8549E-01	8.5123E-01
41	42	26	8	58	3.9420E-04	1.5083E-04	4.9014E-01	5.2241E-01
42	43	127242	33534	3754	5.4754E-02	3.3958E-04	5.9106E-01	8.5235E-01

43	44	142212	35836	33721	4.2808E-01	3.4071E-04	5.8817E-01	8.5296E-01	1.5004E+00
44	45	155493	36852	3372	4.8595E-02	3.4113E-04	5.8674E-01	8.5258E-01	4.1388E+00
45	46	189620	41967	80534	1.0259E+00	3.4945E-04	5.9490E-01	8.5339E-01	1.5100E+00
46	47	7708	3444	9268	1.1976E-01	3.0163E-04	5.7043E-01	8.5712E-01	1.4555E+00
47	48	10247	3722	336	4.8889E-03	3.2982E-04	5.7318E-01	8.5709E-01	4.1568E+00
48	49	13293	5090	7269	9.3514E-02	3.2660E-04	5.7164E-01	8.5861E-01	1.4724E+00
49	50	35049	15196	72119	8.3889E-01	2.9333E-04	5.3731E-01	8.0804E-01	1.4200E+00
50	51	34662	14385	13177	1.5973E-01	3.5190E-04	5.5396E-01	7.9182E-01	2.0442E+00
51	52	34294	14060	2481	3.5002E-02	3.5365E-04	5.5020E-01	7.8755E-01	9.2638E+00
52	53	34480	14150	13273	1.5900E-01	3.4254E-04	5.4475E-01	7.8436E-01	2.0449E+00
53	54	469	124	2965	2.6776E-02	4.0597E-05	1.9361E-01	5.9976E-01	7.5691E-01
54	55	35432	15295	74047	8.6263E-01	2.8770E-04	5.2697E-01	8.0895E-01	1.4026E+00
55	56	34908	14453	13194	1.6082E-01	3.3917E-04	5.3802E-01	7.9265E-01	2.0196E+00
56	57	34424	14084	2567	3.6249E-02	3.3663E-04	5.3640E-01	7.8736E-01	9.2655E+00
57	58	34457	14143	13222	1.5791E-01	3.2712E-04	5.2944E-01	7.8443E-01	2.0270E+00
58	59	355	95	2612	2.2816E-02	3.6654E-05	1.9027E-01	5.7772E-01	7.3160E-01
59	60	54545	19201	99172	1.2068E+00	4.2109E-04	5.3404E-01	8.3182E-01	1.4597E+00
60	61	53453	18224	18838	2.3959E-01	6.0821E-04	5.5673E-01	8.2451E-01	2.2457E+00
61	62	574	132	2491	2.2077E-02	4.3868E-05	2.7115E-01	5.8624E-01	7.9781E-01
62	63	55753	19501	101905	1.2395E+00	4.2170E-04	5.3572E-01	8.3235E-01	1.4667E+00
63	64	54912	18496	18912	2.4070E-01	6.0224E-04	5.6308E-01	8.2618E-01	2.2506E+00
64	65	564	131	2580	2.1986E-02	3.7961E-05	2.2254E-01	5.5977E-01	7.1528E-01
65	66	9977	4930	429112	3.9082E+00	5.5195E-05	2.6066E-01	6.1404E-01	8.4772E-01
66	67	9569	3805	14212	1.4985E-01	1.6639E-04	4.1520E-01	6.9291E-01	1.7594E+00
67	68	9904	3946	14657	1.5248E-01	1.7752E-04	4.4707E-01	6.9020E-01	1.8024E+00
68	70	35997	9410	12248	1.5627E-01	8.6152E-04	5.5413E-01	8.3060E-01	2.3530E+00
69	71	36026	9067	6699	9.8414E-02	9.6227E-04	5.6265E-01	8.3038E-01	8.8850E+00
70	72	19390	8873	60136	7.5812E-01	1.1868E-03	5.6295E-01	8.2718E-01	2.4951E+00
71	73	34403	9062	11526	1.4622E-01	8.4126E-04	5.5187E-01	8.2538E-01	2.3551E+00
72	74	34441	8741	6372	9.3201E-02	9.2644E-04	5.5847E-01	8.2435E-01	8.8950E+00
73	75	18569	8547	58527	7.3473E-01	1.1763E-03	5.6415E-01	8.2416E-01	2.4869E+00
74	76	292	80	5064	4.3530E-02	3.0249E-05	1.4138E-01	5.6723E-01	6.5364E-01
75	77	216	61	4387	3.8512E-02	4.4602E-05	2.9084E-01	5.8769E-01	8.0906E-01
76	80	20	13	93	8.6647E-04	2.3383E-04	7.8721E-01	6.5545E-01	2.1185E+00
77	81	3688	1549	10899	1.1743E-01	3.3054E-04	4.7575E-01	7.2145E-01	2.0782E+00
78	82	2280	901	12673	1.3114E-01	2.6487E-04	4.6342E-01	7.4174E-01	1.3168E+00
79	83	9	6	811	6.3868E-03	6.8649E-05	3.4936E-01	5.5012E-01	9.5483E-01
80	84	1	1	3	4.2813E-05	1.5509E+00	1.5511E+00	8.5261E-01	3.1764E+00
81	85	1671	682	4730	5.6448E-02	9.2957E-04	5.6219E-01	7.8607E-01	2.1350E+00
82	86	1	1	8	9.1334E-05	1.0055E-06	7.8831E-06	6.8250E-01	5.4184E-01
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	982	429	8798	9.9204E-02	2.1307E-03	4.9970E-01	7.7772E-01	4.2533E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	357	206	43714	3.7261E-01	3.1671E-05	1.5388E-01	5.6111E-01	6.6643E-01

TOTAL		7495489	704324	3726887	4.4735E+01
1NEUTRON	WEIGHT BALANCE IN EACH CELL --	EXTERNAL EVENTS			

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.5331E-01	-5.5331E-01
2	2	3.2325E-01	.0000E+00	.0000E+00	-9.0794E-01	-5.8469E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.6232E-02	-1.6232E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0775E-02	-5.0775E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.4528E-02	-1.4528E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4491E-01	-1.4491E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.7093E+00	-1.7093E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0905E+00	-2.0905E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1950E-01	-2.1950E-01

10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1843E-01	-2.1843E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8878E-01	-3.8878E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9811E-01	-3.9811E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0740E-02	-8.0740E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2768E-02	-8.2768E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9673E-02	-8.9673E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6174E-02	-7.6174E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1872E-02	-7.1872E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4596E-02	-7.4596E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0217E-01	-1.0217E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0522E-01	-1.0522E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1460E-02	-9.1460E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5593E-02	-8.5593E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1559E-01	-1.1559E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1671E-01	-1.1671E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1985E-01	-1.1985E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2038E-01	-1.2038E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0294E-01	-1.0294E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4883E-02	-8.4883E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3284E-02	-9.3284E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0546E-01	-1.0546E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9684E+01	-1.9684E+01
32	33	1.0064E+01	1.0015E+00	.0000E+00	.0000E+00	-9.8536E+00	1.2122E+00
33	34	7.0688E-02	.0000E+00	.0000E+00	.0000E+00	-6.7462E-02	3.2267E-03
34	35	3.3381E-03	.0000E+00	.0000E+00	.0000E+00	-3.0765E-03	2.6165E-04
35	36	1.9758E+01	.0000E+00	.0000E+00	.0000E+00	-1.9747E+01	1.1289E-02
36	37	5.9619E-03	.0000E+00	.0000E+00	.0000E+00	-5.9447E-03	1.7185E-05
37	38	2.1417E+01	.0000E+00	.0000E+00	.0000E+00	-2.1337E+01	8.0336E-02
38	39	6.4339E-03	.0000E+00	.0000E+00	.0000E+00	-6.3803E-03	5.3529E-05
39	40	3.4155E+01	.0000E+00	.0000E+00	.0000E+00	-1.1213E+01	2.2942E+01
40	41	8.5985E-01	.0000E+00	.0000E+00	.0000E+00	-8.5561E-01	4.2405E-03
41	42	2.0654E-04	.0000E+00	.0000E+00	.0000E+00	-2.0473E-04	1.8120E-06
42	43	1.8117E+00	.0000E+00	.0000E+00	.0000E+00	-1.8111E+00	5.6330E-04
43	44	2.0259E+00	.0000E+00	.0000E+00	.0000E+00	-2.0245E+00	1.3671E-03
44	45	2.2152E+00	.0000E+00	.0000E+00	.0000E+00	-2.2147E+00	5.5573E-04
45	46	2.7057E+00	.0000E+00	.0000E+00	.0000E+00	-1.1465E+00	1.5591E+00
46	47	1.1070E-01	.0000E+00	.0000E+00	.0000E+00	-6.7034E-02	4.3664E-02
47	48	1.4665E-01	.0000E+00	.0000E+00	.0000E+00	-1.4180E-01	4.8443E-03
48	49	1.9058E-01	.0000E+00	.0000E+00	.0000E+00	-7.4839E-02	1.1574E-01
49	50	4.7498E-01	.0000E+00	.0000E+00	.0000E+00	-2.6381E-01	2.1117E-01
50	51	4.6287E-01	.0000E+00	.0000E+00	.0000E+00	-4.4665E-01	1.6218E-02
51	52	4.5383E-01	.0000E+00	.0000E+00	.0000E+00	-4.4805E-01	5.7842E-03
52	53	4.5635E-01	.0000E+00	.0000E+00	.0000E+00	-1.9297E-01	2.6338E-01
53	54	4.7354E-03	.0000E+00	.0000E+00	.0000E+00	-2.6927E-04	4.4662E-03
54	55	4.8087E-01	.0000E+00	.0000E+00	.0000E+00	-2.6993E-01	2.1094E-01
55	56	4.6666E-01	.0000E+00	.0000E+00	.0000E+00	-4.5024E-01	1.6420E-02
56	57	4.5592E-01	.0000E+00	.0000E+00	.0000E+00	-4.5078E-01	5.1366E-03
57	58	4.5627E-01	.0000E+00	.0000E+00	.0000E+00	-1.9020E-01	2.6608E-01
58	59	3.4381E-03	.0000E+00	.0000E+00	.0000E+00	-1.3682E-04	3.3013E-03
59	60	7.5952E-01	.0000E+00	.0000E+00	.0000E+00	-3.7974E-01	3.7978E-01
60	61	7.4184E-01	.0000E+00	.0000E+00	.0000E+00	-3.4802E-01	3.9381E-01
61	62	5.5864E-03	.0000E+00	.0000E+00	.0000E+00	-1.9637E-04	5.3901E-03
62	63	7.7748E-01	.0000E+00	.0000E+00	.0000E+00	-3.8831E-01	3.8916E-01
63	64	7.6238E-01	.0000E+00	.0000E+00	.0000E+00	-3.6055E-01	4.0183E-01
64	65	5.4272E-03	.0000E+00	.0000E+00	.0000E+00	-1.8907E-04	5.2381E-03
65	66	1.1898E-01	.0000E+00	.0000E+00	.0000E+00	-7.1954E-02	4.7022E-02
66	67	1.1323E-01	.0000E+00	.0000E+00	.0000E+00	-5.6902E-02	5.6327E-02
67	68	1.1608E-01	.0000E+00	.0000E+00	.0000E+00	-5.9341E-02	5.6743E-02
68	70	5.0056E-01	.0000E+00	.0000E+00	.0000E+00	-4.9451E-01	6.0478E-03
69	71	5.0015E-01	.0000E+00	.0000E+00	.0000E+00	-4.9936E-01	7.8331E-04

70	72	2.7077E-01	.0000E+00	.0000E+00	.0000E+00	-2.4678E-01	2.3989E-02
71	73	4.7743E-01	.0000E+00	.0000E+00	.0000E+00	-4.7162E-01	5.8102E-03
72	74	4.7696E-01	.0000E+00	.0000E+00	.0000E+00	-4.7613E-01	8.3580E-04
73	75	2.5896E-01	.0000E+00	.0000E+00	.0000E+00	-2.3532E-01	2.3635E-02
74	76	2.8612E-03	.0000E+00	.0000E+00	.0000E+00	-2.6071E-03	2.5412E-04
75	77	2.1447E-03	.0000E+00	.0000E+00	.0000E+00	-1.9793E-03	1.6539E-04
76	80	2.1984E-04	.0000E+00	.0000E+00	.0000E+00	-1.5455E-04	6.5286E-05
77	81	4.3815E-02	.0000E+00	.0000E+00	.0000E+00	-3.5557E-02	8.2585E-03
78	82	2.8900E-02	.0000E+00	.0000E+00	.0000E+00	-2.8505E-02	3.9541E-04
79	83	1.3544E-04	.0000E+00	.0000E+00	.0000E+00	-1.1842E-04	1.7024E-05
80	84	1.4318E-05	.0000E+00	.0000E+00	.0000E+00	-1.4172E-05	1.4533E-07
81	85	2.2046E-02	.0000E+00	.0000E+00	.0000E+00	-1.9787E-02	2.2594E-03
82	86	1.1464E-05	.0000E+00	.0000E+00	.0000E+00	-1.1252E-05	2.1233E-07
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.2763E-02	.0000E+00	.0000E+00	.0000E+00	-1.0946E-02	1.8174E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	4.7143E-03	.0000E+00	.0000E+00	.0000E+00	-2.7251E-03	1.9893E-03

TOTAL	1.0559E+02	1.0015E+00	.0000E+00	.0000E+00	-1.0559E+02	1.0015E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	2.2070E-04	.0000E+00	.0000E+00	.0000E+00	2.2070E-04
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	1.5404E-04	.0000E+00	.0000E+00	.0000E+00	1.5404E-04
33	34	.0000E+00	.0000E+00	5.8462E-06	.0000E+00	.0000E+00	.0000E+00	5.8462E-06
34	35	.0000E+00	.0000E+00	2.5114E-08	.0000E+00	.0000E+00	.0000E+00	2.5114E-08
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	4.1947E-06	.0000E+00	.0000E+00	.0000E+00	4.1947E-06

37	38	.0000E+00	.0000E+00	-6.0366E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.0366E-05
38	39	.0000E+00	.0000E+00	4.2803E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2803E-08
39	40	.0000E+00	.0000E+00	-2.9695E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9695E-04
40	41	.0000E+00	.0000E+00	-2.8185E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8185E-06
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-1.3987E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3987E-05
43	44	.0000E+00	.0000E+00	2.1227E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1227E-05
44	45	.0000E+00	.0000E+00	-2.2900E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2900E-05
45	46	.0000E+00	.0000E+00	3.4107E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4107E-05
46	47	.0000E+00	.0000E+00	1.2572E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2572E-05
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	2.1342E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1342E-08
49	50	.0000E+00	.0000E+00	9.9780E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.9780E-06
50	51	.0000E+00	.0000E+00	4.5878E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.5878E-05
51	52	.0000E+00	.0000E+00	-1.9626E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9626E-05
52	53	.0000E+00	.0000E+00	-1.6825E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6825E-05
53	54	.0000E+00	.0000E+00	-1.2373E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2373E-05
54	55	.0000E+00	.0000E+00	-1.4952E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4952E-05
55	56	.0000E+00	.0000E+00	1.4513E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4513E-04
56	57	.0000E+00	.0000E+00	-2.1523E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1523E-05
57	58	.0000E+00	.0000E+00	5.0383E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0383E-05
58	59	.0000E+00	.0000E+00	-4.0361E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0361E-06
59	60	.0000E+00	.0000E+00	-4.4008E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.4008E-05
60	61	.0000E+00	.0000E+00	-6.2416E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.2416E-05
61	62	.0000E+00	.0000E+00	1.0929E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0929E-07
62	63	.0000E+00	.0000E+00	1.3136E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3136E-04
63	64	.0000E+00	.0000E+00	-5.3229E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3229E-05
64	65	.0000E+00	.0000E+00	1.2423E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2423E-07
65	66	.0000E+00	.0000E+00	-1.8809E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8809E-04
66	67	.0000E+00	.0000E+00	2.2844E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2844E-04
67	68	.0000E+00	.0000E+00	5.8691E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.8691E-05
68	70	.0000E+00	.0000E+00	1.1801E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1801E-04
69	71	.0000E+00	.0000E+00	-1.6165E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6165E-05
70	72	.0000E+00	.0000E+00	2.4534E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4534E-04
71	73	.0000E+00	.0000E+00	6.1998E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.1998E-05
72	74	.0000E+00	.0000E+00	-5.2005E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.2005E-05
73	75	.0000E+00	.0000E+00	2.8501E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8501E-05
74	76	.0000E+00	.0000E+00	-3.3018E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.3018E-05
75	77	.0000E+00	.0000E+00	3.7840E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7840E-05
76	80	.0000E+00	.0000E+00	1.9429E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9429E-05
77	81	.0000E+00	.0000E+00	-1.9818E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9818E-05
78	82	.0000E+00	.0000E+00	2.5478E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5478E-05
79	83	.0000E+00	.0000E+00	1.6741E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6741E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-1.6060E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6060E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-6.1927E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1927E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-4.2761E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.2761E-05
TOTAL		.0000E+00	.0000E+00	6.0035E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.0035E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --				PHYSICAL EVENTS					
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSIION	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			
2	2	.0000E+00	.0000E+00	-1.4569E-02	.0000E+00	-1.4569E-02			
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			

PRINT TABLE 130

4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	33	1.8931E-03	.0000E+00	-3.3756E-01	-9.4657E-04	-3.5942E-01	-6.9603E-01
34	34	.0000E+00	.0000E+00	-3.2855E-04	.0000E+00	.0000E+00	-3.2855E-04
35	35	.0000E+00	.0000E+00	-4.2983E-05	.0000E+00	.0000E+00	-4.2983E-05
36	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	37	.0000E+00	.0000E+00	-2.4496E-06	.0000E+00	.0000E+00	-2.4496E-06
38	38	2.4153E-05	.0000E+00	-7.4011E-03	-1.2076E-05	.0000E+00	-7.3890E-03
39	39	.0000E+00	.0000E+00	-1.4740E-05	.0000E+00	.0000E+00	-1.4740E-05
40	40	.0000E+00	.0000E+00	-6.1361E-02	.0000E+00	.0000E+00	-6.1361E-02
41	41	.0000E+00	.0000E+00	-4.2376E-03	.0000E+00	.0000E+00	-4.2376E-03
42	42	.0000E+00	.0000E+00	-1.8120E-06	.0000E+00	.0000E+00	-1.8120E-06
43	43	.0000E+00	.0000E+00	-5.4931E-04	.0000E+00	.0000E+00	-5.4931E-04
44	44	.0000E+00	.0000E+00	-1.3883E-03	.0000E+00	.0000E+00	-1.3883E-03
45	45	.0000E+00	.0000E+00	-5.3283E-04	.0000E+00	.0000E+00	-5.3283E-04
46	46	.0000E+00	.0000E+00	-3.2885E-03	.0000E+00	.0000E+00	-3.2885E-03
47	47	.0000E+00	.0000E+00	-4.0853E-04	.0000E+00	.0000E+00	-4.0853E-04
48	48	.0000E+00	.0000E+00	-5.2216E-05	.0000E+00	.0000E+00	-5.2216E-05
49	49	.0000E+00	.0000E+00	-2.9614E-04	.0000E+00	.0000E+00	-2.9614E-04
50	50	.0000E+00	.0000E+00	-2.7513E-03	.0000E+00	.0000E+00	-2.7513E-03
51	51	.0000E+00	.0000E+00	-1.1470E-02	.0000E+00	.0000E+00	-1.1470E-02
52	52	.0000E+00	.0000E+00	-6.9160E-04	.0000E+00	.0000E+00	-6.9160E-04
53	53	.0000E+00	.0000E+00	-1.1856E-02	.0000E+00	.0000E+00	-1.1856E-02
54	54	.0000E+00	.0000E+00	-1.4001E-04	.0000E+00	.0000E+00	-1.4001E-04
55	55	.0000E+00	.0000E+00	-2.8510E-03	.0000E+00	.0000E+00	-2.8510E-03
56	56	.0000E+00	.0000E+00	-1.1530E-02	.0000E+00	.0000E+00	-1.1530E-02
57	57	.0000E+00	.0000E+00	-7.5231E-04	.0000E+00	.0000E+00	-7.5231E-04
58	58	.0000E+00	.0000E+00	-1.1890E-02	.0000E+00	.0000E+00	-1.1890E-02
59	59	.0000E+00	.0000E+00	-1.2093E-04	.0000E+00	.0000E+00	-1.2093E-04
60	60	.0000E+00	.0000E+00	-3.2370E-03	.0000E+00	.0000E+00	-3.2370E-03
61	61	.0000E+00	.0000E+00	-1.1899E-02	.0000E+00	.0000E+00	-1.1899E-02
62	62	.0000E+00	.0000E+00	-1.1788E-04	.0000E+00	.0000E+00	-1.1788E-04
63	63	.0000E+00	.0000E+00	-3.3538E-03	.0000E+00	.0000E+00	-3.3538E-03
64	64	.0000E+00	.0000E+00	-1.2207E-02	.0000E+00	.0000E+00	-1.2207E-02

64	65	.0000E+00	.0000E+00	-1.1612E-04	.0000E+00	.0000E+00	-1.1612E-04
65	66	.0000E+00	.0000E+00	-1.9865E-02	.0000E+00	.0000E+00	-1.9865E-02
66	67	.0000E+00	.0000E+00	-1.4839E-02	.0000E+00	.0000E+00	-1.4839E-02
67	68	.0000E+00	.0000E+00	-1.5235E-02	.0000E+00	.0000E+00	-1.5235E-02
68	70	.0000E+00	.0000E+00	-6.1658E-03	.0000E+00	.0000E+00	-6.1658E-03
69	71	.0000E+00	.0000E+00	-7.6715E-04	.0000E+00	.0000E+00	-7.6715E-04
70	72	.0000E+00	.0000E+00	-2.4234E-02	.0000E+00	.0000E+00	-2.4234E-02
71	73	.0000E+00	.0000E+00	-5.8722E-03	.0000E+00	.0000E+00	-5.8722E-03
72	74	.0000E+00	.0000E+00	-7.8379E-04	.0000E+00	.0000E+00	-7.8379E-04
73	75	.0000E+00	.0000E+00	-2.3663E-02	.0000E+00	.0000E+00	-2.3663E-02
74	76	.0000E+00	.0000E+00	-2.2110E-04	.0000E+00	.0000E+00	-2.2110E-04
75	77	.0000E+00	.0000E+00	-2.0323E-04	.0000E+00	.0000E+00	-2.0323E-04
76	80	.0000E+00	.0000E+00	-8.4715E-05	.0000E+00	.0000E+00	-8.4715E-05
77	81	.0000E+00	.0000E+00	-8.2387E-03	.0000E+00	.0000E+00	-8.2387E-03
78	82	.0000E+00	.0000E+00	-4.2089E-04	.0000E+00	.0000E+00	-4.2089E-04
79	83	.0000E+00	.0000E+00	-3.3765E-05	.0000E+00	.0000E+00	-3.3765E-05
80	84	.0000E+00	.0000E+00	-1.4533E-07	.0000E+00	.0000E+00	-1.4533E-07
81	85	.0000E+00	.0000E+00	-2.2433E-03	.0000E+00	.0000E+00	-2.2433E-03
82	86	.0000E+00	.0000E+00	-2.1233E-07	.0000E+00	.0000E+00	-2.1233E-07
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.7555E-03	.0000E+00	.0000E+00	-1.7555E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.9465E-03	.0000E+00	.0000E+00	-1.9465E-03

TOTAL 1.9173E-03 .0000E+00 -6.4359E-01 -9.5865E-04 -3.5942E-01 -1.0021E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	302177 17006	3.1101E+00 1.9952E-01	1.4471E-02 9.8074E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

32	33	8016.50C	6.7095E-01	105484	1.4994E+00	1.2259E-03	.0000E+00	.0000E+00
		45103.50C	2.3925E-04	647	8.0154E-03	6.9765E-03	.0000E+00	.0000E+00
		47109.50C	2.8705E-05	72	9.1726E-04	8.0639E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	1229	1.3073E-02	1.2971E-02	.0000E+00	.0000E+00
		63151.55C	6.1844E-06	463	4.9337E-03	4.8800E-03	.0000E+00	.0000E+00
		63153.55C	3.0868E-05	129	1.6057E-03	1.4495E-03	.0000E+00	.0000E+00
		64155.50C	2.8101E-06	1107	1.1339E-02	1.1318E-02	.0000E+00	.0000E+00
		92233.50C	4.9000E-06	36	6.7881E-04	3.2245E-05	3.2107E-04	.0000E+00
		92234.50C	7.4671E-05	153	1.9436E-03	1.2046E-03	2.8466E-05	.0000E+00
		92235.50C	5.6029E-03	36164	6.9380E-01	5.9309E-02	3.0272E-01	.0000E+00
		92236.50C	1.4239E-03	1281	1.8409E-02	6.5702E-03	2.7666E-04	.0000E+00
		92238.50C	3.2088E-01	159040	2.2707E+00	2.0148E-01	2.0409E-02	9.4657E-04
		93237.55C	3.3711E-04	1032	1.2887E-02	1.0596E-02	8.7966E-05	.0000E+00
		94239.55C	3.6103E-04	4818	9.5502E-02	1.7443E-02	3.5568E-02	.0000E+00
		94240.50C	2.1737E-06	33	4.1899E-04	3.8246E-04	2.1972E-07	.0000E+00
		94241.50C	5.7449E-13	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94242.50C	4.7802E-05	92	1.3179E-03	9.1547E-04	1.2985E-05	.0000E+00
		95241.50C	1.7248E-11	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95243.50C	5.3588E-08	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		96245.35C	3.3847E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	5	6.0235E-05	1.1934E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	2.0384E-05	7.2628E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	11	8.6680E-05	1.0116E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	1494	1.5459E-02	3.0492E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	9	7.0730E-05	6.2549E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	955	7.1148E-03	4.2971E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	43	3.1329E-04	1.1920E-08	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	10	1.4269E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	53	4.0114E-04	2.4496E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	248	3.4816E-03	1.8054E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	77	1.0620E-03	9.9716E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	236	3.1701E-03	1.6820E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	52368	7.6250E-01	6.9292E-03	.0000E+00	1.2076E-05
		50000.35C	1.0711E-02	535	7.7440E-03	2.0214E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	315	2.3779E-03	1.4733E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20	1.4810E-04	6.7472E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1516285	1.9016E+01	6.0158E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	125894	1.7735E+00	1.2026E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	93841	1.1852E+00	4.1581E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6986	9.7994E-02	7.9535E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	56	3.7819E-04	1.8114E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	1.6016E-05	5.2485E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	8	1.1180E-04	1.2933E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	9	1.3044E-04	8.3431E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	22	2.9981E-04	2.1366E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3680	5.3686E-02	5.0541E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	35	5.2673E-04	1.4190E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	31298	3.9388E-01	1.3652E-03	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	2423	3.4197E-02	2.3110E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	12	1.6152E-04	1.6483E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	7	9.4431E-05	1.4048E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	15	2.1189E-04	1.5318E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3306	4.7687E-02	4.9178E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	32	4.4049E-04	1.1680E-05	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	74671	9.4306E-01	3.2231E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5863	8.2853E-02	6.5365E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	8575	1.1004E-01	3.9883E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	693	9.7141E-03	9.7061E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	1.6608E-05	1.5623E-08	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	1	1.3351E-05	2.2302E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	333	4.8470E-03	4.9695E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	1	1.1923E-05	2.7451E-07	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	6720	8.5717E-02	2.9419E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	549	7.7973E-03	1.9478E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	67148	7.7261E-01	2.7223E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4971	6.6276E-02	2.9001E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	10	1.3497E-04	2.8549E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	5.6475E-04	4.0387E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.4665E-04	8.5355E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.3656E-05	5.5111E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.1675E-05	1.1303E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1510	1.9372E-02	1.9880E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	522	7.2597E-03	9.8637E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8339	9.9124E-02	6.2090E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2527	3.0301E-02	1.9791E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.1889E-03	2.5668E-04	.0000E+00	.0000E+00
51	52	13027.50C	9.9949E-01	2474	3.4906E-02	6.8330E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	9.6562E-05	8.2967E-06	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	12	1.3802E-04	3.0059E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	6.6825E-04	3.1004E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	6.7515E-04	9.3749E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.7407E-05	1.9123E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.0394E-05	2.5129E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1517	1.9258E-02	2.0470E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	519	7.1013E-03	1.1751E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8400	9.8736E-02	6.2049E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2541	3.0069E-02	2.0479E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	172	2.3203E-03	3.3748E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	2857	2.5700E-02	1.3997E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	108	1.0758E-03	3.4521E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	68900	7.9344E-01	2.8184E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5147	6.9182E-02	3.2566E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	9	1.1255E-04	2.3185E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	5.0486E-04	3.0317E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	7.3905E-04	1.0067E-05	.0000E+00	.0000E+00

		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1533	1.9581E-02	2.1095E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	521	7.2716E-03	9.8807E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8343	1.0005E-01	6.0287E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2514	3.0154E-02	2.0383E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	177	2.4095E-03	3.2481E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2562	3.6174E-02	7.4140E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	5	7.4888E-05	1.0912E-05	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	11	1.6571E-04	6.3501E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	3.3602E-04	2.6166E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.1752E-04	8.7028E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	4.7491E-05	1.5376E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5595E-05	2.1935E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1532	1.9150E-02	2.1948E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	486	6.6365E-03	1.0527E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8406	9.8516E-02	6.1970E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2520	3.0011E-02	2.0350E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	179	2.4146E-03	3.7237E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	2502	2.1726E-02	1.2091E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	110	1.0906E-03	2.8621E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	91420	1.1006E+00	3.1816E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7752	1.0624E-01	5.5388E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.6706E-04	1.6505E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	70	8.8019E-04	3.2590E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	88	1.1708E-03	1.0018E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.2635E-04	8.3460E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	7.5023E-05	4.1685E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2215	2.9491E-02	2.1024E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	852	1.2125E-02	1.1520E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11728	1.4667E-01	6.2710E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3589	4.5141E-02	1.9636E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	269	3.7341E-03	3.6283E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2388	2.1117E-02	1.1785E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	103	9.6013E-04	3.1046E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	94015	1.1313E+00	3.3015E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7890	1.0815E-01	5.2259E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	11	1.1303E-04	1.2988E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	68	8.2824E-04	3.1486E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	96	1.3138E-03	1.0778E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.4089E-05	1.2611E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.2211E-05	4.3874E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2289	3.0739E-02	2.1480E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	857	1.2120E-02	1.2121E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11756	1.4662E-01	6.3941E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3569	4.5206E-02	1.9956E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	256	3.6276E-03	4.1334E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2472	2.0936E-02	1.1607E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	108	1.0502E-03	4.9288E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	409579	3.7113E+00	1.9781E-02	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	19533	1.9691E-01	8.3894E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	8	8.9754E-05	2.1538E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	4.3964E-04	3.5886E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.2399E-04	8.5583E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.1985E-05	1.4733E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1578	1.7241E-02	2.7705E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	445	5.7192E-03	1.2778E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9195	9.5306E-02	7.8853E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2730	2.8507E-02	2.5051E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	1.8834E-03	3.5427E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	8	7.8792E-05	1.3450E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	5.4200E-04	3.0379E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	36	3.8539E-04	1.1742E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	6.2814E-05	7.1949E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1633	1.7807E-02	2.8457E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	467	5.8921E-03	1.3932E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9486	9.6609E-02	8.0441E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2799	2.9055E-02	2.5890E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	174	2.0450E-03	3.2009E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	6	8.6181E-05	7.8751E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	5.8954E-04	1.8130E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.0120E-04	5.7762E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	4.7037E-06	2.0010E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2063E-05	3.5925E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1548	2.1090E-02	1.0327E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	526	7.4902E-03	6.0868E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7528	9.4161E-02	3.1072E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2346	2.9525E-02	1.0918E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	193	2.5922E-03	3.0126E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6691	9.8305E-02	7.6274E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.0951E-04	4.4096E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	47	6.3263E-04	3.4467E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	210	2.6057E-03	7.6349E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	324	4.5677E-03	2.0238E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.9992E-04	9.9867E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	11	1.6582E-04	5.0595E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7612	1.0290E-01	4.2545E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2464	3.4857E-02	2.2868E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	37061	4.5629E-01	1.2326E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11487	1.4329E-01	4.1286E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	900	1.2515E-02	1.1352E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	5	5.6990E-05	7.0517E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	5.0609E-04	1.4735E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	7.1106E-04	5.1015E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.5531E-05	2.8034E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2370E-05	1.9770E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1445	1.9479E-02	1.0722E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	513	7.1412E-03	5.8002E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7090	8.8087E-02	2.9941E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2201	2.7703E-02	9.5265E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	180	2.4560E-03	2.5280E-04	.0000E+00	.0000E+00

72	74	13027.50C	9.9949E-01	6352	9.2952E-02	7.5755E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	20	2.4989E-04	2.6247E-05	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	39	5.3789E-04	2.1120E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	191	2.4115E-03	5.8461E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	323	4.6091E-03	2.4094E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	32	4.7590E-04	2.5870E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.5385E-04	1.9024E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7305	9.8449E-02	4.1206E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2466	3.4678E-02	2.1807E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35951	4.4008E-01	1.2011E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11292	1.4065E-01	3.9912E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	918	1.2693E-02	1.2723E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	4831	4.1298E-02	2.2104E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	233	2.2317E-03	5.5466E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	4205	3.6740E-02	2.0318E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	182	1.7723E-03	4.8847E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	9	9.7167E-05	1.0991E-05	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	5	7.4199E-05	5.0320E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	56	4.7013E-04	5.1646E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	21	2.0511E-04	1.5936E-05	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	2	1.9865E-05	1.1105E-06	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	7	7.2279E-05	8.2902E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.1679E-04	1.8373E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	7.2629E-04	1.0661E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.8642E-05	7.8469E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1242	1.4255E-02	1.5202E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	349	4.5314E-03	6.3340E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6992	7.3625E-02	4.3954E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2090	2.2232E-02	1.4252E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	123	1.5202E-03	2.3540E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11845	1.2130E-01	4.1921E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	828	9.8385E-03	1.6749E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	758	5.8932E-03	3.3752E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	53	4.9363E-04	1.2802E-08	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1	1.4261E-05	2.6721E-08	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2	2.8552E-05	1.1861E-07	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

81	85	6000.50C	2.3404E-03	5	5.9481E-05	4.9412E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	10	1.4759E-04	6.1334E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	15	1.8427E-04	1.7815E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	60	7.8065E-04	5.6508E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	619	7.6465E-03	4.3515E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	97	1.3703E-03	8.9784E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1105	1.2979E-02	4.0071E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2673	3.1483E-02	1.0909E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	71	8.0484E-04	6.7164E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	75	9.9274E-04	1.0126E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	8	9.1334E-05	2.1233E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	50	6.3810E-04	2.2953E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	23	3.3820E-04	4.4786E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	4	5.9889E-05	9.9336E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	182	2.3170E-03	1.2592E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8539	9.5851E-02	1.6290E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	41788	3.5460E-01	1.9420E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1926	1.8014E-02	4.5062E-06	.0000E+00	.0000E+00
TOTAL				3726887	4.5092E+01	6.4359E-01	3.5942E-01	9.5865E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE								
			TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)	
		1001.50C	2839662	3.3013E+01	1.1925E-01	.0000E+00	.0000E+00	
		2004.50C	10	1.4269E-04	.0000E+00	.0000E+00	.0000E+00	
		6000.50C	240	3.0834E-03	2.5224E-07	.0000E+00	.0000E+00	
		7014.50C	939	1.1294E-02	4.4426E-04	.0000E+00	.0000E+00	
		8016.50C	314180	4.2926E+00	2.9677E-03	.0000E+00	.0000E+00	
		13027.50C	18089	2.6248E-01	2.9450E-03	.0000E+00	.0000E+00	
		14000.50C	1315	1.8110E-02	1.4588E-04	.0000E+00	.0000E+00	
		15031.50C	99	1.3484E-03	1.0812E-05	.0000E+00	.0000E+00	
		16032.50C	37	5.4900E-04	1.7245E-05	.0000E+00	.0000E+00	
		22000.50C	60	7.8065E-04	5.6508E-05	.0000E+00	.0000E+00	
		24000.50C	33685	4.3790E-01	3.0782E-02	.0000E+00	.0000E+00	
		25055.50C	11271	1.5658E-01	1.5748E-02	.0000E+00	.0000E+00	
		26000.55C	180260	2.1470E+00	9.0367E-02	.0000E+00	.0000E+00	
		28000.50C	54901	6.6356E-01	2.9850E-02	.0000E+00	.0000E+00	
		29000.50C	111	1.3357E-03	1.1703E-04	.0000E+00	.0000E+00	
		40000.50C	61181	8.8418E-01	8.2810E-03	.0000E+00	1.2076E-05	
		42000.50C	3939	5.3413E-02	6.0412E-03	.0000E+00	.0000E+00	
		45103.50C	647	8.0154E-03	6.9765E-03	.0000E+00	.0000E+00	
		47109.50C	72	9.1726E-04	8.0639E-04	.0000E+00	.0000E+00	

50000.35C	612	8.7939E-03	2.3454E-04	.0000E+00	.0000E+00
62149.50C	1229	1.3073E-02	1.2971E-02	.0000E+00	.0000E+00
63151.55C	463	4.9337E-03	4.8800E-03	.0000E+00	.0000E+00
63153.55C	129	1.6057E-03	1.4495E-03	.0000E+00	.0000E+00
64155.50C	1107	1.1339E-02	1.1318E-02	.0000E+00	.0000E+00
92233.50C	36	6.7881E-04	3.2245E-05	3.2107E-04	.0000E+00
92234.50C	153	1.9436E-03	1.2046E-03	2.8466E-05	.0000E+00
92235.50C	36164	6.9380E-01	5.9309E-02	3.0272E-01	.0000E+00
92236.50C	1281	1.8409E-02	6.5702E-03	2.7666E-04	.0000E+00
92238.50C	159040	2.2707E+00	2.0148E-01	2.0409E-02	9.4657E-04
93237.55C	1032	1.2887E-02	1.0596E-02	8.7966E-05	.0000E+00
94239.55C	4818	9.5502E-02	1.7443E-02	3.5568E-02	.0000E+00
94240.50C	33	4.1899E-04	3.8246E-04	2.1972E-07	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	92	1.3179E-03	9.1547E-04	1.2985E-05	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59910 CTM = 121.90

8 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 122.05 MINUTES

MCNP VERSION 4A-B 10/04/91

02/20/95 11:33:07

PROBID = 02/20/95 09:19:14

1MCNP VERSION 4A-B LD=10/04/91 02/20/95 11:33:08

PROBID = 02/20/95 11:33:08

INP=mpc12k OUTP=mpc12k.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/100000 year (mpc12k)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP -.00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1199-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 -5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.


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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      3.00%/20 GWD/100000 YEAR -- UO2
331- M2      8016.50C 4.7772E-02
332-      45103.50C 1.7035E-05
333-      47109.50C 2.0438E-06
334-      62149.50C 1.3261E-07
335-      63151.55C 4.4033E-07
336-      63153.55C 2.1978E-06
337-      64155.50C 2.0008E-07
338-      92233.50C 6.2672E-07
339-      92234.50C 4.7794E-06
340-      92235.50C 4.1877E-04
341-      92236.50C 1.0140E-04
342-      92238.50C 2.2847E-02
343-      93237.55C 2.3625E-05
344-      94239.55C 6.0906E-06
345-      94240.50C 7.7148E-10
346-      94241.50C 6.9321E-16
347-      94242.50C 3.1121E-06
348-      95241.50C 2.0806E-14
349-      95243.50C 3.4855E-11
350-      96245.35C 4.0861E-13
351- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
352- M3      2004.50C 1.0
353- C      ZIRCALOY-4
354- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
355-      40000.50C -0.9818 50000.35C -0.0140
356- C      ALLOY 825

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357-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
358-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
359-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
360-      29000.50C -0.0250 42000.50C -0.0300
361-      C      1100 ALUMINUM ALLOY
362-      M6      13027.50C -0.99880 29000.50C -0.00120
363-      C      A516 CARBON STEEL
364-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
365-      16032.50C -0.00035 25055.50C -0.0090
366-      26000.55C -0.98535
367-      C      SS316L
368-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
369-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
370-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
371-      42000.50C -0.02500
372-      C      TALLIES
373-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.
SURFACES 24051 AND 28051 OF CELL      9 ARE THE SAME.      28051 WILL BE DELETED.

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SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3022
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3022
POINTS AFTER EXPANSION OR CONTRACTION	3004
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119945E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	ASSOCIATED THERMAL S(A,B) DATA SETS: LWTR.01T
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748
5	50000, .01071 13027, .00417 14000, .01001 16032, .00053
6	6000, .00234 24000, .23247 25055, .01023 26000, .28763
7	22000, .01057 29000, .02212 42000, .01758
	28000, .40235 29000, .00051 15031, .00062 16032, .00060
	13027, .99949 14000, .00541
	6000, .01011

8	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				
1	MATERIAL NUMBER COMPONENT NUCLIDE, MASS FRACTION							
1	1001,	.11191	8016,	.88809				
2	8016,	.12058	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00001	63153,	.00005	64155,	.00000	92233,	.00002
	92234,	.00018	92235,	.01553	92236,	.00378	92238,	.85829
	93237,	.00088	94239,	.00023	94240,	.00000	94241,	.00000
	94242,	.00012	95241,	.00000	95243,	.00000	96245,	.00000
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11990E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC

57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE

117	27050	.00000E+00	.00000E+00	INFINITE
118	27051	.00000E+00	.00000E+00	INFINITE
119	28048	.00000E+00	.00000E+00	INFINITE
120	28049	.00000E+00	.00000E+00	INFINITE
121	29048	.00000E+00	.00000E+00	INFINITE
122	29049	.00000E+00	.00000E+00	INFINITE
123	30048	.00000E+00	.00000E+00	INFINITE
124	30049	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11990E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00

48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01

15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	1001 PX	2.5991819E+01			
74	2042	1001 PX	2.1437590E+00			

75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08

8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08

68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU

TOTAL NU

TOTAL NU

TOTAL NU

TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU

TOTAL NU

(1314)	79/06/21.
(1340)	79/07/31.
(1394)	79/10/17.
(1396)	79/08/30.
(1381)	79/08/30.
(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
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(1315)	79/10/29.
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16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=0K

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=0K

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1325785

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 101900
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1325785

TOTAL 1446088

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

8 WARNING MESSAGES SO FAR.
 1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/100000 year (mpc12k)

NPS X Y Z CELL SURF U V W TIME WEIGHT ENERGY

1	-1.438E-01	-5.849E-02	7.467E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.987E-01	1.754E+00
2	2.309E-01	-2.890E-01	2.556E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.987E-01	6.984E-01
3	-6.085E-02	4.023E-01	2.589E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.987E-01	2.718E+00
4	4.359E-01	-1.579E-01	6.802E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.987E-01	2.703E+00
5	1.906E-01	-6.606E-02	6.771E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.987E-01	2.934E+00
6	3.446E-01	-1.759E-01	6.226E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.987E-01	5.818E-01
7	1.850E-01	-3.634E-01	6.719E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.987E-01	8.660E-01
8	-2.471E-01	7.167E-02	6.777E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.987E-01	1.289E+00
9	2.971E-01	-1.113E-01	5.896E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.987E-01	1.005E+00
10	3.560E-01	7.595E-02	5.903E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.987E-01	2.537E+00
11	8.614E-02	4.244E-01	5.714E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.987E-01	7.122E-01
12	7.365E-02	7.159E-02	5.806E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.987E-01	2.932E+00
13	-3.363E-01	-2.659E-01	5.903E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.987E-01	5.418E-02
14	-2.986E-01	2.301E-01	5.570E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.987E-01	5.268E-01
15	-2.802E-02	-8.103E-02	5.485E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.987E-01	6.971E-01
16	2.615E-01	1.258E-01	3.632E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.987E-01	2.307E-01
17	1.866E-01	2.264E-01	9.617E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.987E-01	4.087E+00
18	3.850E-01	-1.405E-01	8.786E+00	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.987E-01	2.560E+00
19	-1.262E-01	-2.608E-01	3.019E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.987E-01	2.921E+00
20	-1.318E-02	2.106E-01	3.029E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.987E-01	1.805E+00
21	-3.584E-01	-2.697E-02	3.167E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.987E-01	4.085E+00
22	-2.126E-01	-1.810E-01	4.215E+00	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.987E-01	8.773E-01
23	-2.160E-01	-1.384E-01	3.462E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.987E-01	3.790E+00
24	2.316E-01	6.129E-02	2.742E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.987E-01	5.526E+00
25	-1.999E-01	3.621E-01	1.644E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.987E-01	8.775E-02
26	-5.845E-02	4.294E-01	1.243E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.987E-01	1.082E+00
27	3.331E-01	1.629E-02	5.869E+00	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.987E-01	4.125E+00
28	2.399E-01	-3.948E-01	8.759E+00	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.987E-01	1.703E+00
29	2.768E-01	2.846E-01	9.272E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.987E-01	1.546E+00
30	1.052E-01	-4.318E-01	3.242E+00	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.987E-01	6.256E+00
31	5.365E-02	-7.525E-03	2.383E+00	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.987E-01	2.825E+00
32	-2.519E-02	5.047E-02	2.443E+00	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.987E-01	3.728E-01
33	1.916E-01	3.084E-01	9.300E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.987E-01	1.293E+00
34	2.195E-01	-1.724E-01	9.444E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.987E-01	2.954E+00
35	3.584E-01	2.832E-01	5.046E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.987E-01	3.647E+00
36	-6.860E-02	5.143E-02	5.711E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.987E-01	1.748E+00
37	-5.959E-02	-2.219E-01	7.364E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.987E-01	2.110E+00
38	-1.539E-01	-3.475E-01	8.555E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.987E-01	5.577E+00
39	1.778E-01	-1.643E-01	7.840E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.987E-01	4.664E+00
40	-2.818E-01	-2.115E-01	7.825E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.987E-01	2.811E+00
41	3.270E-01	-2.034E-01	6.076E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.987E-01	8.904E-01
42	-2.025E-01	-2.306E-01	6.191E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.987E-01	3.372E+00
43	-3.660E-01	-2.599E-01	7.541E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.987E-01	2.292E+00
44	1.710E-01	3.152E-01	7.651E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.987E-01	4.190E+00
45	6.693E-02	-2.392E-01	6.659E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.987E-01	2.311E+00
46	-4.147E-02	4.205E-01	1.024E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.987E-01	1.563E+00
47	-1.607E-01	-3.763E-01	1.552E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.987E-01	4.463E+00
48	-1.963E-01	2.854E-01	9.413E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.987E-01	1.133E+00
49	-1.163E-03	-3.382E-01	9.336E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.987E-01	6.753E-01
50	-2.759E-01	2.835E-01	1.099E+02	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.987E-01	1.875E+00

CYCLE	1	K(COLLISION)	.889189	REMOVAL LIFETIME(ABS)	3.7151E+03	SOURCE POINTS GENERATED	2694
CYCLE	2	K(COLLISION)	.879711	REMOVAL LIFETIME(ABS)	3.7327E+03	SOURCE POINTS GENERATED	2933
CYCLE	3	K(COLLISION)	.894637	REMOVAL LIFETIME(ABS)	3.7499E+03	SOURCE POINTS GENERATED	2991
CYCLE	4	K(COLLISION)	.884276	REMOVAL LIFETIME(ABS)	3.7222E+03	SOURCE POINTS GENERATED	2920

CYCLE 5 K(COLLISION) .892733 REMOVAL LIFETIME(ABS) 3.7871E+03 SOURCE POINTS GENERATED 3038

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .868102 REMOVAL LIFETIME(ABS) 3.8094E+03 SOURCE POINTS GENERATED 2981

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.887778	.877940	.0112	K(COL/ABS)	.000000	.0000	.000000	.0000	.0000
K(ABSORPTION)	.887219	.888902	.0019	K(ABS/TK LN)	.000000	.0000	.000000	.0000	.0000
K(TRK LENGTH)	.872414	.878854	.0073	K(TK LN/COL)	.000000	.0000	.000000	.0000	.0000
REM LIFE(COL)	3.7454E+03	3.7615E+03	.0043						
REM LIFE(ABS)	3.7463E+03	3.7779E+03	.0083	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000	.0000
SOURCE POINTS GENERATED	3063								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.917721	.891200	.0162	K(COL/ABS)	.889558	.0074	.888188	.0007	-.9312
K(ABSORPTION)	.885942	.887915	.0016	K(ABS/TK LN)	.886813	.0042	.887753	.0020	-.2919
K(TRK LENGTH)	.899425	.885711	.0088	K(TK LN/COL)	.888456	.0114	.885331	.0126	.6204
REM LIFE(COL)	3.8444E+03	3.7892E+03	.0077						
REM LIFE(ABS)	3.8029E+03	3.7862E+03	.0053	LIFE(COL/ABS)	3.7877E+03	.0060	3.7862E+03	.0075	.6847
SOURCE POINTS GENERATED	3093								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.898323	.892981	.0116	K(COL/ABS)	.888168	.0055	.885657	.0050	-.3608
K(ABSORPTION)	.869677	.883356	.0053	K(ABS/TK LN)	.886586	.0030	.885834	.0033	-.6330
K(TRK LENGTH)	.902136	.889817	.0077	K(TK LN/COL)	.891399	.0087	.890046	.0095	.5929
REM LIFE(COL)	3.7713E+03	3.7847E+03	.0056	K(COL/ABS/TK LN)	.888718	.0051	.885843	.0051	
REM LIFE(ABS)	3.7015E+03	3.7650E+03	.0068	LIFE(COL/ABS)	3.7749E+03	.0054	3.7788E+03	.0067	.5483
SOURCE POINTS GENERATED	2884								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.868771	.888139	.0105	K(COL/ABS)	.885764	.0050	.884310	.0038	-.3136
K(ABSORPTION)	.883520	.883389	.0041	K(ABS/TK LN)	.884960	.0030	.884426	.0028	-.5435
K(TRK LENGTH)	.873388	.886531	.0071	K(TK LN/COL)	.887335	.0082	.886457	.0082	.7033
REM LIFE(COL)	3.6140E+03	3.7505E+03	.0101	K(COL/ABS/TK LN)	.886020	.0050	.884361	.0035	
REM LIFE(ABS)	3.6388E+03	3.7398E+03	.0086	LIFE(COL/ABS)	3.7452E+03	.0090	3.7395E+03	.0100	.8565
SOURCE POINTS GENERATED	2942								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.881511	.887034	.0087	K(COL/ABS)	.886205	.0041	.885776	.0034	-.3372
K(ABSORPTION)	.895316	.885376	.0040	K(ABS/TK LN)	.884956	.0024	.885066	.0024	-.6231
K(TRK LENGTH)	.874559	.884536	.0062	K(TK LN/COL)	.885785	.0069	.884569	.0070	.7004
REM LIFE(COL)	3.7215E+03	3.7457E+03	.0084	K(COL/ABS/TK LN)	.885649	.0041	.884930	.0027	
REM LIFE(ABS)	3.7459E+03	3.7408E+03	.0070	LIFE(COL/ABS)	3.7433E+03	.0074	3.7408E+03	.0078	.8394
SOURCE POINTS GENERATED	3052								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.876886	.885585	.0076	K(COL/ABS)	.886205	.0035	.886490	.0030	-.3906

K(ABSORPTION)	.895521	.886826	.0038	K(ABS/TK LN)	.885742	.0022	.885969	.0023	-.5496
K(TRK LENGTH)	.885397	.884659	.0052	K(TK LN/COL)	.885122	.0059	.884677	.0057	.6778
REM LIFE(COL)	3.6957E+03	3.7385E+03	.0073	K(COL/ABS/TK LN)	.885690	.0035	.885981	.0026	
REM LIFE(ABS)	3.7577E+03	3.7432E+03	.0059	LIFE(COL/ABS)	3.7409E+03	.0063	3.7429E+03	.0065	.7772
SOURCE POINTS GENERATED 2984									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE 13	AVE OF 8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.907246	.888292	.0072	K(COL/ABS)	.886836	.0031	.886222 .0026 -.5059
K(ABSORPTION)	.875263	.885380	.0036	K(ABS/TK LN)	.885265	.0020	.885282 .0021 -.5421
K(TRK LENGTH)	.888582	.885149	.0046	K(TK LN/COL)	.886721	.0054	.885050 .0050 .6608
REM LIFE(COL)	3.8186E+03	3.7486E+03	.0069	K(COL/ABS/TK LN)	.886274	.0031	.885507 .0023
REM LIFE(ABS)	3.7640E+03	3.7458E+03	.0052	LIFE(COL/ABS)	3.7472E+03	.0057	3.7458E+03 .0056 .7615
SOURCE POINTS GENERATED 3124							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE 14	AVE OF 9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.856322	.884740	.0075	K(COL/ABS)	.884901	.0035	.884989 .0026 -.3664
K(ABSORPTION)	.882520	.885063	.0032	K(ABS/TK LN)	.884581	.0019	.884665 .0020 -.4856
K(TRK LENGTH)	.875706	.884100	.0042	K(TK LN/COL)	.884420	.0054	.884016 .0044 .6868
REM LIFE(COL)	3.7155E+03	3.7449E+03	.0061	K(COL/ABS/TK LN)	.884634	.0033	.884656 .0021
REM LIFE(ABS)	3.7619E+03	3.7476E+03	.0046	LIFE(COL/ABS)	3.7462E+03	.0050	3.7475E+03 .0049 .7311
SOURCE POINTS GENERATED 2868							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE 15	AVE OF 10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.897367	.886003	.0069	K(COL/ABS)	.885470	.0032	.885176 .0023 -.3681
K(ABSORPTION)	.883818	.884938	.0029	K(ABS/TK LN)	.884441	.0017	.884528 .0018 -.4823
K(TRK LENGTH)	.882546	.883945	.0038	K(TK LN/COL)	.884974	.0049	.883720 .0040 .6615
REM LIFE(COL)	3.8663E+03	3.7570E+03	.0064	K(COL/ABS/TK LN)	.884962	.0030	.884527 .0019
REM LIFE(ABS)	3.8555E+03	3.7584E+03	.0050	LIFE(COL/ABS)	3.7577E+03	.0054	3.7585E+03 .0053 .8073
SOURCE POINTS GENERATED 3071							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE 16	AVE OF 11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.890428	.886405	.0062	K(COL/ABS)	.886066	.0030	.885883 .0023 -.3241
K(ABSORPTION)	.893627	.885728	.0028	K(ABS/TK LN)	.884918	.0017	.885034 .0017 -.4384
K(TRK LENGTH)	.885748	.884109	.0034	K(TK LN/COL)	.885257	.0044	.883854 .0036 .6627
REM LIFE(COL)	3.5175E+03	3.7352E+03	.0082	K(COL/ABS/TK LN)	.885414	.0027	.885007 .0019
REM LIFE(ABS)	3.5294E+03	3.7376E+03	.0072	LIFE(COL/ABS)	3.7364E+03	.0075	3.7380E+03 .0076 .9095
SOURCE POINTS GENERATED 3002							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE 17	AVE OF 12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.909125	.888298	.0061	K(COL/ABS)	.886920	.0029	.886136 .0021 -.3314
K(ABSORPTION)	.883504	.885543	.0025	K(ABS/TK LN)	.885759	.0018	.885701 .0017 -.4079
K(TRK LENGTH)	.906521	.885976	.0038	K(TK LN/COL)	.887137	.0046	.885711 .0039 .7107
REM LIFE(COL)	3.7834E+03	3.7393E+03	.0076	K(COL/ABS/TK LN)	.886606	.0028	.885701 .0018
REM LIFE(ABS)	3.7328E+03	3.7372E+03	.0066	LIFE(COL/ABS)	3.7382E+03	.0069	3.7369E+03 .0069 .8979
SOURCE POINTS GENERATED 3050							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE 18	AVE OF 13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.888559	.888318	.0056	K(COL/ABS)	.887330	.0027	.886795 .0020 -.3076

K(ABSORPTION)	.895943	.886343	.0025	K(ABS/TK LN)	.886728	.0020	.886611	.0019	-.2308
K(TRK LENGTH)	.900767	.887114	.0037	K(TK LN/COL)	.887716	.0042	.887101	.0038	.6676
REM LIFE(COL)	3.8441E+03	3.7473E+03	.0073	K(COL/ABS/TK LN)	.887258	.0027	.886700	.0020	
REM LIFE(ABS)	3.8530E+03	3.7461E+03	.0065	LIFE(COL/ABS)	3.7467E+03	.0067	3.7460E+03	.0068	.9064
SOURCE POINTS GENERATED 2953									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.879835		.887712		.0052	K(COL/ABS)	.887270	.0025	.887038
K(ABSORPTION)	.893143		.886828		.0024	K(ABS/TK LN)	.886543	.0018	.886629
K(TRK LENGTH)	.875112		.886257		.0035	K(TK LN/COL)	.886985	.0040	.886268
REM LIFE(COL)	3.7550E+03		3.7479E+03		.0067	K(COL/ABS/TK LN)	.886933	.0025	.886745
REM LIFE(ABS)	3.8300E+03		3.7521E+03		.0062	LIFE(COL/ABS)	3.7500E+03	.0063	3.7514E+03
SOURCE POINTS GENERATED 2983									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.874541		.886834		.0050	K(COL/ABS)	.886827	.0024	.886822
K(ABSORPTION)	.886684		.886819		.0022	K(ABS/TK LN)	.885860	.0019	.886220
K(TRK LENGTH)	.865937		.884902		.0036	K(TK LN/COL)	.885868	.0040	.885037
REM LIFE(COL)	3.6673E+03		3.7425E+03		.0064	K(COL/ABS/TK LN)	.886185	.0025	.886416
REM LIFE(ABS)	3.6604E+03		3.7460E+03		.0060	LIFE(COL/ABS)	3.7442E+03	.0060	3.7453E+03
SOURCE POINTS GENERATED 2839									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/100000 year (mpc12k)

PROBID = 02/20/95 13:36:05
02/20/95 11:33:08

NEUTRON CREATION				NEUTRON LOSS			
TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY		TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	
SOURCE	59630	1.0062E+00	2.0383E+00	ESCAPE	2	1.3130E-05	9.4045E-13
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	7.3735E-02	4.5186E-07	WEIGHT CUTOFF	59705	7.4077E-02	4.4842E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.4432E-07	DOWNSCATTERING	0	0.	1.9334E+00
				CAPTURE	0	6.4632E-01	3.0471E-02
(N,XN)	154	2.0517E-03	1.6303E-03	LOSS TO (N,XN)	77	1.0259E-03	8.5570E-03
FISSION	0	0.	0.	LOSS TO FISSION	0	3.6055E-01	6.7482E-02
TOTAL	59784	1.0820E+00	2.0399E+00	TOTAL	59784	1.0820E+00	2.0399E+00

NUMBER OF NEUTRONS BANKED 77
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0026E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.2612E+01
 TOTAL NEUTRON COLLISIONS 3733527
 NET MULTIPLICATION 1.0010E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 1.0876E+04
 CAPTURE 3.7422E+03
 CAPTURE OR ESCAPE 3.7423E+03
 ANY TERMINATION 4.1036E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 122.72 MINUTES
 COMPUTER TIME IN MCRUN 122.60 MINUTES

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0

SOURCE PARTICLES PER MINUTE
RANDOM NUMBERS GENERATED

4.8638E+02
44585093

FIELD LENGTH

MOST RANDOM NUMBERS USED WAS

0
7787 IN HISTORY 43267

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6031E-01 TO 1.1136E+00
1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25332	9474	3.1562E+00	1.1245E-04	3.5926E-01	7.2344E-01	1.0748E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	33	770527	59707	4.3452E+00	5.5248E-04	6.9579E-01	8.6263E-01	2.4979E+00
34	34	5808	314	1.2212E-02	4.7880E-05	2.1648E-01	6.0005E-01	4.2826E+00
35	35	148	17	2.5785E-03	7.7273E-05	4.7558E-01	5.0058E-01	1.0690E+00
36	36	1392302	59707	1.5604E-04	4.8522E-04	6.5940E-01	8.5819E-01	3.5568E+03
37	37	252	17	1.4332E-04	6.5792E-05	4.3250E-01	5.0082E-01	9.6457E-01
38	38	1509845	59707	7.9453E-01	4.6607E-04	6.4614E-01	8.5773E-01	4.1164E+00
39	39	291	17	9.2781E-04	8.3634E-05	4.8549E-01	5.0922E-01	1.1220E+00
40	40	2412349	59707	2.1208E+01	4.1173E-04	6.1689E-01	8.5535E-01	1.5591E+00
41	41	61263	32125	1.3228E+00	3.1115E-04	5.6753E-01	8.5237E-01	1.4660E+00

41	42	24	6	87	6.9292E-04	4.2674E-08	8.3872E-08	4.6446E-01	3.2249E-01
42	43	129437	33850	4013	5.8429E-02	3.3095E-04	5.8086E-01	8.5446E-01	4.1432E+00
43	44	145039	36169	34827	4.4662E-01	3.3114E-04	5.7778E-01	8.5483E-01	1.4868E+00
44	45	158649	37123	3405	4.9990E-02	3.3338E-04	5.7639E-01	8.5472E-01	4.1343E+00
45	46	193560	42095	83879	1.0753E+00	3.3589E-04	5.7793E-01	8.5568E-01	1.4897E+00
46	47	7308	3358	8411	1.0843E-01	3.2172E-04	5.7719E-01	8.5625E-01	1.4798E+00
47	48	9884	3660	315	4.6182E-03	3.3801E-04	5.7901E-01	8.5870E-01	4.1393E+00
48	49	13162	5051	7300	9.4233E-02	3.3673E-04	5.6950E-01	8.5798E-01	1.4797E+00
49	50	35382	15413	72620	8.5215E-01	3.0541E-04	5.4713E-01	8.1297E-01	1.4350E+00
50	51	34782	14576	13245	1.6260E-01	3.6308E-04	5.6349E-01	7.9993E-01	2.0527E+00
51	52	34335	14273	2562	3.6600E-02	3.5036E-04	5.4082E-01	7.9466E-01	9.2507E+00
52	53	34482	14313	13089	1.5875E-01	3.3851E-04	5.3895E-01	7.9215E-01	2.0371E+00
53	54	281	83	1903	1.6707E-02	4.4182E-05	1.7500E-01	5.9199E-01	7.4512E-01
54	55	35748	15485	74678	8.7082E-01	2.8772E-04	5.3113E-01	8.0862E-01	1.4081E+00
55	56	35289	14626	13360	1.6320E-01	3.3205E-04	5.3866E-01	7.9254E-01	2.0211E+00
56	57	34816	14328	2499	3.5450E-02	3.3851E-04	5.3956E-01	7.9036E-01	9.3333E+00
57	58	34921	14409	13306	1.6131E-01	3.3328E-04	5.3221E-01	7.9066E-01	2.0387E+00
58	59	372	99	2378	2.2698E-02	3.9340E-05	2.2504E-01	6.3013E-01	7.4172E-01
59	60	54666	19427	98979	1.2123E+00	4.1963E-04	5.3573E-01	8.3546E-01	1.4642E+00
60	61	53856	18566	18859	2.4170E-01	5.9030E-04	5.5952E-01	8.2901E-01	2.2499E+00
61	62	663	125	3120	2.6250E-02	3.6613E-05	1.4295E-01	5.6281E-01	6.9558E-01
62	63	54050	19177	98997	1.2136E+00	4.0355E-04	5.2456E-01	8.3404E-01	1.4439E+00
63	64	53342	18303	18788	2.3973E-01	5.6950E-04	5.5567E-01	8.2605E-01	2.2182E+00
64	65	498	111	2245	2.0495E-02	4.4539E-05	2.5199E-01	6.0792E-01	7.9856E-01
65	66	9706	4856	431623	3.9446E+00	5.2452E-05	2.4716E-01	6.1297E-01	8.2531E-01
66	67	9933	3895	14704	1.5320E-01	1.6609E-04	4.0698E-01	6.8910E-01	1.7755E+00
67	68	9264	3744	14059	1.4752E-01	1.7406E-04	4.1645E-01	6.9451E-01	1.7727E+00
68	70	33455	8814	11349	1.4543E-01	8.0691E-04	5.4088E-01	8.2915E-01	2.3230E+00
69	71	33537	8525	6056	8.9793E-02	8.7931E-04	5.4225E-01	8.2810E-01	9.0164E+00
70	72	18122	8304	56902	7.2135E-01	1.1172E-03	5.5808E-01	8.2661E-01	2.4644E+00
71	73	34399	9230	11597	1.4840E-01	8.2569E-04	5.4817E-01	8.2766E-01	2.3522E+00
72	74	34247	8876	6328	9.3330E-02	8.9966E-04	5.4655E-01	8.2728E-01	8.9504E+00
73	75	18484	8633	57701	7.3291E-01	1.1868E-03	5.5342E-01	8.2914E-01	2.4729E+00
74	76	195	54	3999	3.5868E-02	3.3929E-05	1.4759E-01	5.9373E-01	6.7588E-01
75	77	295	73	6317	5.5954E-02	3.1020E-05	1.3401E-01	5.8511E-01	6.5309E-01
76	80	9	4	25	1.9031E-04	2.2439E-04	3.9398E-01	5.3285E-01	2.4837E+00
77	81	3363	1483	10465	1.1308E-01	2.8026E-04	4.4317E-01	7.1897E-01	2.0128E+00
78	82	2099	844	11963	1.2724E-01	2.2253E-04	3.9468E-01	7.4573E-01	1.2142E+00
79	83	1	1	1	4.2676E-06	3.2766E-08	3.3226E-08	2.5349E-01	2.9123E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1623	662	4836	5.8122E-02	7.7177E-04	5.2226E-01	7.7741E-01	2.0367E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	929	438	7387	8.6798E-02	2.0189E-03	5.1386E-01	8.0229E-01	4.7253E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	317	188	45488	3.7729E-01	2.8058E-05	1.1381E-01	5.4628E-01	6.2410E-01

TOTAL 7542641 704042 3733527 4.5146E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3729E-01	-5.3729E-01
2	2	3.1788E-01	.0000E+00	.0000E+00	-9.2618E-01	-6.0829E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.4807E-02	-1.4807E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0357E-02	-5.0357E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5006E-02	-1.5006E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4424E-01	-1.4424E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.7473E+00	-1.7473E+00

8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0995E+00	-2.0995E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2112E-01	-2.2112E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2386E-01	-2.2386E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9461E-01	-3.9461E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8785E-01	-3.8785E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0543E-02	-8.0543E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1668E-02	-8.1668E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5212E-02	-9.5212E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8765E-02	-7.8765E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6241E-02	-7.6241E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9573E-02	-7.9573E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0540E-01	-1.0540E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0735E-01	-1.0735E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6824E-02	-9.6824E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0632E-02	-9.0632E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1516E-01	-1.1516E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1617E-01	-1.1617E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1866E-01	-1.1866E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1824E-01	-1.1824E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0544E-01	-1.0544E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1558E-02	-9.1558E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9492E-02	-9.9492E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0600E-01	-1.0600E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9977E+01	-1.9977E+01
32	33	1.0210E+01	1.0062E+00	.0000E+00	.0000E+00	-1.0009E+01	1.2070E+00
33	34	5.9184E-02	.0000E+00	.0000E+00	.0000E+00	-5.5860E-02	3.3241E-03
34	35	1.2643E-03	.0000E+00	.0000E+00	.0000E+00	-1.1636E-03	1.0071E-04
35	36	2.0050E+01	.0000E+00	.0000E+00	.0000E+00	-2.0039E+01	1.1542E-02
36	37	2.1497E-03	.0000E+00	.0000E+00	.0000E+00	-2.1489E-03	7.8592E-07
37	38	2.1736E+01	.0000E+00	.0000E+00	.0000E+00	-2.1656E+01	8.0337E-02
38	39	2.4573E-03	.0000E+00	.0000E+00	.0000E+00	-2.4377E-03	1.9629E-05
39	40	3.4669E+01	.0000E+00	.0000E+00	.0000E+00	-1.1379E+01	2.3290E+01
40	41	8.7943E-01	.0000E+00	.0000E+00	.0000E+00	-8.7501E-01	4.4241E-03
41	42	1.7626E-04	.0000E+00	.0000E+00	.0000E+00	-1.6707E-04	9.1894E-06
42	43	1.8544E+00	.0000E+00	.0000E+00	.0000E+00	-1.8537E+00	6.3387E-04
43	44	2.0793E+00	.0000E+00	.0000E+00	.0000E+00	-2.0779E+00	1.4407E-03
44	45	2.2746E+00	.0000E+00	.0000E+00	.0000E+00	-2.2740E+00	5.3245E-04
45	46	2.7801E+00	.0000E+00	.0000E+00	.0000E+00	-1.1759E+00	1.6042E+00
46	47	1.0516E-01	.0000E+00	.0000E+00	.0000E+00	-6.4229E-02	4.0936E-02
47	48	1.4226E-01	.0000E+00	.0000E+00	.0000E+00	-1.3725E-01	5.0075E-03
48	49	1.9006E-01	.0000E+00	.0000E+00	.0000E+00	-7.3079E-02	1.1698E-01
49	50	4.8583E-01	.0000E+00	.0000E+00	.0000E+00	-2.7179E-01	2.1404E-01
50	51	4.7091E-01	.0000E+00	.0000E+00	.0000E+00	-4.5439E-01	1.6512E-02
51	52	4.6041E-01	.0000E+00	.0000E+00	.0000E+00	-4.5448E-01	5.9287E-03
52	53	4.6271E-01	.0000E+00	.0000E+00	.0000E+00	-1.9254E-01	2.7017E-01
53	54	2.8390E-03	.0000E+00	.0000E+00	.0000E+00	-2.4483E-04	2.5942E-03
54	55	4.8794E-01	.0000E+00	.0000E+00	.0000E+00	-2.7244E-01	2.1550E-01
55	56	4.7558E-01	.0000E+00	.0000E+00	.0000E+00	-4.5805E-01	1.7533E-02
56	57	4.6566E-01	.0000E+00	.0000E+00	.0000E+00	-4.5962E-01	6.0334E-03
57	58	4.6806E-01	.0000E+00	.0000E+00	.0000E+00	-1.9701E-01	2.7105E-01
58	59	4.0051E-03	.0000E+00	.0000E+00	.0000E+00	-2.4080E-04	3.7643E-03
59	60	7.6850E-01	.0000E+00	.0000E+00	.0000E+00	-3.8370E-01	3.8481E-01
60	61	7.5384E-01	.0000E+00	.0000E+00	.0000E+00	-3.5597E-01	3.9787E-01
61	62	6.3664E-03	.0000E+00	.0000E+00	.0000E+00	-2.4412E-04	6.1222E-03
62	63	7.5903E-01	.0000E+00	.0000E+00	.0000E+00	-3.7973E-01	3.7930E-01
63	64	7.4605E-01	.0000E+00	.0000E+00	.0000E+00	-3.5196E-01	3.9409E-01
64	65	5.0926E-03	.0000E+00	.0000E+00	.0000E+00	-1.9957E-04	4.8931E-03
65	66	1.1713E-01	.0000E+00	.0000E+00	.0000E+00	-7.1306E-02	4.5826E-02
66	67	1.1748E-01	.0000E+00	.0000E+00	.0000E+00	-5.9457E-02	5.8027E-02
67	68	1.1039E-01	.0000E+00	.0000E+00	.0000E+00	-5.6074E-02	5.4319E-02

68	70	4.6862E-01	.0000E+00	.0000E+00	.0000E+00	-4.6266E-01	5.9598E-03
69	71	4.6787E-01	.0000E+00	.0000E+00	.0000E+00	-4.6713E-01	7.3414E-04
70	72	2.5386E-01	.0000E+00	.0000E+00	.0000E+00	-2.3065E-01	2.3213E-02
71	73	4.8128E-01	.0000E+00	.0000E+00	.0000E+00	-4.7539E-01	5.8933E-03
72	74	4.7799E-01	.0000E+00	.0000E+00	.0000E+00	-4.7714E-01	8.4522E-04
73	75	2.5886E-01	.0000E+00	.0000E+00	.0000E+00	-2.3542E-01	2.3434E-02
74	76	2.1432E-03	.0000E+00	.0000E+00	.0000E+00	-1.9548E-03	1.8834E-04
75	77	2.9957E-03	.0000E+00	.0000E+00	.0000E+00	-2.6732E-03	3.2255E-04
76	80	7.8185E-05	.0000E+00	.0000E+00	.0000E+00	-5.8541E-05	1.9644E-05
77	81	4.1086E-02	.0000E+00	.0000E+00	.0000E+00	-3.2684E-02	8.4022E-03
78	82	2.6834E-02	.0000E+00	.0000E+00	.0000E+00	-2.6402E-02	4.3163E-04
79	83	4.2670E-06	.0000E+00	.0000E+00	.0000E+00	-4.2426E-06	2.4397E-08
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.1288E-02	.0000E+00	.0000E+00	.0000E+00	-1.8909E-02	2.3789E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.2087E-02	.0000E+00	.0000E+00	.0000E+00	-1.0394E-02	1.6928E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	4.2982E-03	.0000E+00	.0000E+00	.0000E+00	-2.3864E-03	1.9118E-03

TOTAL	1.0704E+02	1.0062E+00	.0000E+00	.0000E+00	-1.0704E+02	1.0062E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	3.2954E-05	.0000E+00	.0000E+00	.0000E+00	3.2954E-05
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-4.4860E-05	.0000E+00	.0000E+00	.0000E+00	-4.4860E-05
33	34	.0000E+00	.0000E+00	4.1901E-07	.0000E+00	.0000E+00	.0000E+00	4.1901E-07
34	35	.0000E+00	.0000E+00	4.2166E-06	.0000E+00	.0000E+00	.0000E+00	4.2166E-06

35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-2.0577E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0577E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	8.7876E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7876E-05
40	41	.0000E+00	.0000E+00	-7.4553E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4553E-06
41	42	.0000E+00	.0000E+00	4.4048E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4048E-08
42	43	.0000E+00	.0000E+00	-1.1878E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1878E-05
43	44	.0000E+00	.0000E+00	1.2790E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2790E-05
44	45	.0000E+00	.0000E+00	-3.6089E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6089E-06
45	46	.0000E+00	.0000E+00	1.7607E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7607E-05
46	47	.0000E+00	.0000E+00	9.8965E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.8965E-08
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	4.2774E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2774E-06
49	50	.0000E+00	.0000E+00	2.6983E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6983E-05
50	51	.0000E+00	.0000E+00	8.6472E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6472E-05
51	52	.0000E+00	.0000E+00	1.1264E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1264E-05
52	53	.0000E+00	.0000E+00	-3.8160E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8160E-05
53	54	.0000E+00	.0000E+00	-2.4961E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4961E-05
54	55	.0000E+00	.0000E+00	-6.1032E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1032E-06
55	56	.0000E+00	.0000E+00	-7.6296E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6296E-05
56	57	.0000E+00	.0000E+00	2.3820E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3820E-05
57	58	.0000E+00	.0000E+00	-2.7625E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7625E-04
58	59	.0000E+00	.0000E+00	1.0259E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0259E-07
59	60	.0000E+00	.0000E+00	3.1458E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.1458E-05
60	61	.0000E+00	.0000E+00	5.4219E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4219E-06
61	62	.0000E+00	.0000E+00	8.6826E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6826E-06
62	63	.0000E+00	.0000E+00	-6.5068E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5068E-06
63	64	.0000E+00	.0000E+00	-9.8897E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8897E-05
64	65	.0000E+00	.0000E+00	4.4049E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4049E-06
65	66	.0000E+00	.0000E+00	-1.2222E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2222E-04
66	67	.0000E+00	.0000E+00	2.6985E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6985E-05
67	68	.0000E+00	.0000E+00	4.4499E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4499E-05
68	70	.0000E+00	.0000E+00	-7.1215E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1215E-05
69	71	.0000E+00	.0000E+00	7.6102E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.6102E-06
70	72	.0000E+00	.0000E+00	2.1108E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1108E-04
71	73	.0000E+00	.0000E+00	1.5048E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5048E-05
72	74	.0000E+00	.0000E+00	-4.2507E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.2507E-05
73	75	.0000E+00	.0000E+00	-1.2975E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2975E-04
74	76	.0000E+00	.0000E+00	-8.0315E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0315E-06
75	77	.0000E+00	.0000E+00	-2.9044E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9044E-05
76	80	.0000E+00	.0000E+00	3.0427E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0427E-06
77	81	.0000E+00	.0000E+00	2.6234E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6234E-05
78	82	.0000E+00	.0000E+00	-1.6207E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6207E-05
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-3.6807E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6807E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.6406E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.6406E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	6.1904E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.1904E-05

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

PRINT TABLE 130

2	2	.0000E+00	.0000E+00	-1.3768E-02	.0000E+00	.0000E+00	-1.3768E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.0191E-03	.0000E+00	-3.3791E-01	-1.0095E-03	-3.6055E-01	-6.9746E-01
33	34	.0000E+00	.0000E+00	-2.5377E-04	.0000E+00	.0000E+00	-2.5377E-04
34	35	.0000E+00	.0000E+00	-1.4027E-05	.0000E+00	.0000E+00	-1.4027E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-7.8592E-07	.0000E+00	.0000E+00	-7.8592E-07
37	38	.0000E+00	.0000E+00	-7.5533E-03	.0000E+00	.0000E+00	-7.5533E-03
38	39	.0000E+00	.0000E+00	-5.0855E-06	.0000E+00	.0000E+00	-5.0855E-06
39	40	.0000E+00	.0000E+00	-6.3327E-02	.0000E+00	.0000E+00	-6.3327E-02
40	41	.0000E+00	.0000E+00	-4.4167E-03	.0000E+00	.0000E+00	-4.4167E-03
41	42	.0000E+00	.0000E+00	-4.0866E-06	.0000E+00	.0000E+00	-4.0866E-06
42	43	.0000E+00	.0000E+00	-6.2199E-04	.0000E+00	.0000E+00	-6.2199E-04
43	44	.0000E+00	.0000E+00	-1.4535E-03	.0000E+00	.0000E+00	-1.4535E-03
44	45	3.2659E-05	.0000E+00	-5.4067E-04	-1.6330E-05	.0000E+00	-5.2434E-04
45	46	.0000E+00	.0000E+00	-3.4786E-03	.0000E+00	.0000E+00	-3.4786E-03
46	47	.0000E+00	.0000E+00	-3.6324E-04	.0000E+00	.0000E+00	-3.6324E-04
47	48	.0000E+00	.0000E+00	-5.7035E-05	.0000E+00	.0000E+00	-5.7035E-05
48	49	.0000E+00	.0000E+00	-3.0030E-04	.0000E+00	.0000E+00	-3.0030E-04
49	50	.0000E+00	.0000E+00	-2.7938E-03	.0000E+00	.0000E+00	-2.7938E-03
50	51	.0000E+00	.0000E+00	-1.1676E-02	.0000E+00	.0000E+00	-1.1676E-02
51	52	.0000E+00	.0000E+00	-6.7888E-04	.0000E+00	.0000E+00	-6.7888E-04
52	53	.0000E+00	.0000E+00	-1.1806E-02	.0000E+00	.0000E+00	-1.1806E-02
53	54	.0000E+00	.0000E+00	-8.5472E-05	.0000E+00	.0000E+00	-8.5472E-05
54	55	.0000E+00	.0000E+00	-2.8879E-03	.0000E+00	.0000E+00	-2.8879E-03
55	56	.0000E+00	.0000E+00	-1.2094E-02	.0000E+00	.0000E+00	-1.2094E-02
56	57	.0000E+00	.0000E+00	-7.1456E-04	.0000E+00	.0000E+00	-7.1456E-04
57	58	.0000E+00	.0000E+00	-1.2026E-02	.0000E+00	.0000E+00	-1.2026E-02
58	59	.0000E+00	.0000E+00	-1.1616E-04	.0000E+00	.0000E+00	-1.1616E-04
59	60	.0000E+00	.0000E+00	-3.2832E-03	.0000E+00	.0000E+00	-3.2832E-03
60	61	.0000E+00	.0000E+00	-1.2397E-02	.0000E+00	.0000E+00	-1.2397E-02
61	62	.0000E+00	.0000E+00	-1.3776E-04	.0000E+00	.0000E+00	-1.3776E-04

62	63	.0000E+00	.0000E+00	-3.3030E-03	.0000E+00	.0000E+00	-3.3030E-03
63	64	.0000E+00	.0000E+00	-1.2502E-02	.0000E+00	.0000E+00	-1.2502E-02
64	65	.0000E+00	.0000E+00	-1.1058E-04	.0000E+00	.0000E+00	-1.1058E-04
65	66	.0000E+00	.0000E+00	-2.0023E-02	.0000E+00	.0000E+00	-2.0023E-02
66	67	.0000E+00	.0000E+00	-1.5475E-02	.0000E+00	.0000E+00	-1.5475E-02
67	68	.0000E+00	.0000E+00	-1.4749E-02	.0000E+00	.0000E+00	-1.4749E-02
68	70	.0000E+00	.0000E+00	-5.8886E-03	.0000E+00	.0000E+00	-5.8886E-03
69	71	.0000E+00	.0000E+00	-7.4175E-04	.0000E+00	.0000E+00	-7.4175E-04
70	72	.0000E+00	.0000E+00	-2.3424E-02	.0000E+00	.0000E+00	-2.3424E-02
71	73	.0000E+00	.0000E+00	-5.9083E-03	.0000E+00	.0000E+00	-5.9083E-03
72	74	.0000E+00	.0000E+00	-8.0271E-04	.0000E+00	.0000E+00	-8.0271E-04
73	75	.0000E+00	.0000E+00	-2.3305E-02	.0000E+00	.0000E+00	-2.3305E-02
74	76	.0000E+00	.0000E+00	-1.8031E-04	.0000E+00	.0000E+00	-1.8031E-04
75	77	.0000E+00	.0000E+00	-2.9350E-04	.0000E+00	.0000E+00	-2.9350E-04
76	80	.0000E+00	.0000E+00	-2.2686E-05	.0000E+00	.0000E+00	-2.2686E-05
77	81	.0000E+00	.0000E+00	-8.4284E-03	.0000E+00	.0000E+00	-8.4284E-03
78	82	.0000E+00	.0000E+00	-4.1542E-04	.0000E+00	.0000E+00	-4.1542E-04
79	83	.0000E+00	.0000E+00	-2.4397E-08	.0000E+00	.0000E+00	-2.4397E-08
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.3421E-03	.0000E+00	.0000E+00	-2.3421E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.6664E-03	.0000E+00	.0000E+00	-1.6664E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.9737E-03	.0000E+00	.0000E+00	-1.9737E-03

TOTAL 2.0517E-03 .0000E+00 -6.4632E-01 -1.0259E-03 -3.6055E-01 -1.0058E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	284877 15774	2.9670E+00 1.8914E-01	1.3707E-02 6.1316E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7096E-01	107034	1.5297E+00	1.1577E-03	.0000E+00	.0000E+00
		45103.50C	2.3926E-04	671	8.3144E-03	7.5014E-03	.0000E+00	.0000E+00
		47109.50C	2.8705E-05	74	9.7085E-04	8.1572E-04	.0000E+00	.0000E+00
		62149.50C	1.8625E-06	1267	1.3676E-02	1.3564E-02	.0000E+00	.0000E+00
		63151.55C	6.1845E-06	466	5.0289E-03	4.9852E-03	.0000E+00	.0000E+00
		63153.55C	3.0868E-05	140	1.6815E-03	1.4868E-03	.0000E+00	.0000E+00
		64155.50C	2.8101E-06	1171	1.2191E-02	1.2157E-02	.0000E+00	.0000E+00
		92233.50C	8.8023E-06	58	1.2329E-03	5.1595E-05	5.0665E-04	.0000E+00
		92234.50C	6.7127E-05	151	1.8827E-03	1.3678E-03	1.2049E-05	.0000E+00
		92235.50C	5.8816E-03	39419	7.6471E-01	6.4780E-02	3.3032E-01	.0000E+00
		92236.50C	1.4242E-03	1172	1.6677E-02	6.0553E-03	2.2090E-04	.0000E+00
		92238.50C	3.2089E-01	160901	2.3117E+00	2.0793E-01	2.0327E-02	1.0095E-03
		93237.55C	3.3181E-04	1064	1.3123E-02	1.0645E-02	1.1782E-04	.0000E+00
		94239.55C	8.5543E-05	1216	2.4237E-02	4.4390E-03	9.0449E-03	.0000E+00
		94240.50C	1.0835E-08	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94241.50C	9.7362E-15	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94242.50C	4.3710E-05	108	1.5006E-03	9.7620E-04	8.1053E-06	.0000E+00
		95241.50C	2.9222E-13	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95243.50C	4.8954E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		96245.35C	5.7389E-12	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	3	3.6072E-05	8.3587E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	5.2394E-06	3.3068E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	15	1.1616E-04	1.8188E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	1148	1.1959E-02	2.2768E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	9	9.5455E-05	4.5901E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	337	2.4578E-03	1.4023E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	14	1.2067E-04	4.3008E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	11	1.5604E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	19	1.3609E-04	7.8569E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	7.2359E-06	2.3080E-10	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	232	3.2627E-03	2.7771E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	89	1.2308E-03	1.3762E-04	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	257	3.3502E-03	2.0056E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	53155	7.7883E-01	7.0171E-03	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	531	7.8608E-03	1.9520E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	117	9.1211E-04	5.0848E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	1.5700E-05	6.2555E-10	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1538649	1.9420E+01	6.2145E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	126124	1.7881E+00	1.1818E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	96251	1.2186E+00	4.3401E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7333	1.0425E-01	7.6578E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	87	6.9292E-04	4.0866E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	18	2.4786E-04	2.4542E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	9	1.2590E-04	1.6874E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	21	2.5132E-04	2.0826E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3934	5.7342E-02	5.7439E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	31	4.6139E-04	9.9040E-06	.0000E+00	.0000E+00

43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	32381 2446	4.1195E-01 3.4664E-02	1.4379E-03 1.5573E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	13 5 21 3329 37	1.7473E-04 5.7627E-05 2.9051E-04 4.8941E-02 5.2549E-04	2.6697E-09 1.1305E-05 1.5904E-05 4.9649E-04 1.6967E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.6330E-05 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	77846 6033	9.8969E-01 8.5564E-02	3.4230E-03 5.5514E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7791 620	9.9527E-02 8.9021E-03	3.5378E-04 9.4596E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 1 1 311 2	.0000E+00 7.9727E-06 1.5273E-05 4.5612E-03 3.3825E-05	.0000E+00 2.3262E-06 2.3639E-08 5.4287E-05 3.9817E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6741 559	8.6326E-02 7.9074E-03	2.9368E-04 6.6132E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	67645 4975	7.8500E-01 6.7148E-02	2.7588E-03 3.4977E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	8 46 46 3 0 1577 555 8271 2568 171	9.5799E-05 5.2575E-04 6.2834E-04 4.7343E-05 .0000E+00 2.0359E-02 7.6500E-03 9.9981E-02 3.0955E-02 2.3598E-03	2.0426E-08 3.4836E-05 8.3449E-06 8.0541E-08 .0000E+00 2.1479E-03 1.1794E-03 6.0313E-03 1.9848E-03 2.8942E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2556 6	3.6533E-02 6.7165E-05	6.6354E-04 1.5344E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	8 53 52 2 1 1495 496 8273 2553 156	1.0270E-04 6.4532E-04 6.8207E-04 3.2255E-05 1.2234E-05 1.9002E-02 6.8726E-03 9.8519E-02 3.0831E-02 2.0555E-03	1.2164E-08 3.7742E-05 1.1091E-05 1.3265E-07 3.7730E-06 2.1066E-03 1.1397E-03 6.1568E-03 2.0488E-03 3.0171E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
53	54	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1816 87	1.5888E-02 8.1905E-04	8.5450E-05 2.2069E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	69579 5099	8.0213E-01 6.8685E-02	2.8419E-03 4.6040E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	6000.50C	1.3966E-03	7	9.3999E-05	6.1966E-09	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	46	5.5572E-04	2.9887E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	8.8034E-04	8.5433E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.4877E-05	1.5361E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1488	1.8792E-02	2.2448E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	560	7.8439E-03	1.0423E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8457	1.0118E-01	6.4179E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2559	3.1419E-02	1.9946E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	179	2.3896E-03	3.5542E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2495	3.5414E-02	7.0904E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	3.6599E-05	5.5279E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	10	1.2101E-04	3.4894E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	5.3166E-04	3.1550E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	7.3620E-04	1.0841E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.0037E-05	1.2653E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4564E-05	2.4688E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1594	2.0198E-02	2.2543E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	522	7.1410E-03	1.1926E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8341	9.9168E-02	6.2096E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2587	3.1214E-02	2.0538E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	152	2.1198E-03	2.7041E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	2251	2.1395E-02	1.1574E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	127	1.3024E-03	4.1692E-07	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	91355	1.1067E+00	3.2291E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7624	1.0559E-01	5.4056E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.4841E-04	2.3555E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	63	7.8807E-04	3.3289E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	75	1.0683E-03	7.5426E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.2957E-05	7.1304E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	8.4599E-05	9.8101E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2249	3.0447E-02	2.2551E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	853	1.2321E-02	1.0880E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11747	1.4730E-01	6.4504E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3589	4.5819E-02	2.1528E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	258	3.6313E-03	3.9890E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2992	2.5085E-02	1.3772E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	128	1.1652E-03	3.6370E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	91474	1.1097E+00	3.2402E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7523	1.0397E-01	6.2817E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	13	1.7314E-04	1.8744E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	61	7.5225E-04	2.6214E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	84	1.2274E-03	1.1226E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.3253E-05	2.3965E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1837E-05	4.7306E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2243	3.0467E-02	2.1346E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	838	1.2051E-02	1.2663E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11791	1.4691E-01	6.5836E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3520	4.4838E-02	2.0535E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	232	3.2230E-03	4.2589E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2154	1.9606E-02	1.1055E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	91	8.8880E-04	3.8533E-08	.0000E+00	.0000E+00

65	66	1001.50C	6.6667E-01	411641	3.7414E+00	1.9971E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19982	2.0327E-01	5.1605E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	7	9.5789E-05	1.3654E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	57	6.0342E-04	4.8600E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	58	6.7122E-04	1.3900E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	5.0226E-05	8.9006E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1585	1.7530E-02	2.7768E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	424	5.3754E-03	1.3661E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9605	9.8129E-02	8.3766E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2813	2.8991E-02	2.5977E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	1.7567E-03	2.9472E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	6	5.3620E-05	1.0995E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	58	6.1347E-04	4.1125E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	5.9878E-04	7.9301E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.4502E-05	3.4350E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.2461E-05	3.0963E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1620	1.7699E-02	2.8426E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	425	5.3484E-03	1.3060E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9126	9.3992E-02	7.7892E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2627	2.7368E-02	2.4607E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	147	1.7732E-03	2.9844E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	8	1.0653E-04	9.6631E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	5.4489E-04	1.8974E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	6.9738E-04	7.3674E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.0703E-05	2.7584E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	6.0991E-06	1.5511E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1415	1.9196E-02	1.0184E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	455	6.5574E-03	5.3884E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7045	8.8692E-02	3.0444E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2163	2.7333E-02	1.0033E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	168	2.2825E-03	2.5543E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6044	8.9629E-02	7.3367E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.6426E-04	8.0795E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	52	6.5875E-04	6.1895E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	208	2.7136E-03	6.3718E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	288	4.1981E-03	2.0072E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	26	3.3962E-04	2.0697E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	7.2980E-05	2.2425E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7265	9.8552E-02	4.1488E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2312	3.2930E-02	2.1259E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34921	4.3169E-01	1.1959E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11028	1.3887E-01	3.9727E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	797	1.1327E-02	1.1289E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	10	9.7194E-05	1.5049E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	33	3.9451E-04	1.0822E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	63	9.3113E-04	4.9226E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	7.9505E-05	5.3274E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6184E-05	3.1757E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1449	1.9943E-02	1.0648E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	518	7.3093E-03	6.2468E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7192	9.0083E-02	2.9838E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2154	2.7243E-02	9.6130E-04	.0000E+00	.0000E+00

		42000.50C	1.4572E-02	170	2.3006E-03	2.5742E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6317	9.3188E-02	7.9545E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	11	1.4258E-04	7.2646E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	62	8.6512E-04	4.8416E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	203	2.4444E-03	8.0459E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	278	3.9937E-03	2.0101E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.8700E-04	1.0061E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.6350E-04	1.4129E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7234	9.8032E-02	4.1312E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2425	3.4121E-02	2.2177E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35519	4.4060E-01	1.1747E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11001	1.3926E-01	3.7655E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	949	1.3143E-02	1.3400E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3825	3.4043E-02	1.7963E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	174	1.8257E-03	6.8157E-07	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	6068	5.3463E-02	2.9341E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	249	2.4916E-03	9.4152E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4	4.0163E-05	6.1901E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	16	1.0356E-04	1.1436E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	4	3.9204E-05	3.3769E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1	7.3870E-06	1.6835E-06	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	3	3.5079E-05	3.0301E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	3.9153E-04	1.8971E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	40	5.0185E-04	8.4868E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	8.3850E-06	3.5763E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6788E-05	1.7148E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1150	1.3097E-02	1.4750E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	327	4.2464E-03	7.2255E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6748	7.1301E-02	4.5190E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2040	2.2013E-02	1.4882E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	120	1.4666E-03	1.9586E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11206	1.1784E-01	4.1211E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	757	9.3964E-03	3.3180E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	1	4.2670E-06	2.4397E-08	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	8	9.1453E-05	7.7749E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	5	7.8515E-05	4.4334E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	11	1.5548E-04	7.1065E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	27	3.7422E-04	2.1841E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	633	7.9308E-03	4.9330E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	85	1.1599E-03	9.1994E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1164	1.3739E-02	4.4200E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2759	3.2774E-02	1.1298E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	84	1.0299E-03	5.6578E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	60	7.8775E-04	1.0578E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	45	6.0430E-04	3.2998E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	21	2.9306E-04	4.3578E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	1	4.2304E-06	1.7133E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	4.3455E-05	2.9565E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	177	2.4711E-03	8.6762E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7140	8.3382E-02	1.5760E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	43469	3.5912E-01	1.9721E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2019	1.8164E-02	1.6180E-06	.0000E+00	.0000E+00
TOTAL				3733527	4.5508E+01	6.4632E-01	3.6055E-01	1.0259E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2850572	3.3388E+01	1.2107E-01	.0000E+00	.0000E+00
		2004.50C		11	1.5604E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		259	3.3429E-03	3.1945E-07	.0000E+00	.0000E+00
		7014.50C		949	1.1505E-02	4.7619E-04	.0000E+00	.0000E+00
		8016.50C		315042	4.3368E+00	2.8230E-03	.0000E+00	.0000E+00
		13027.50C		17417	2.5484E-01	2.9017E-03	.0000E+00	.0000E+00
		14000.50C		1223	1.7263E-02	1.4152E-04	.0000E+00	.0000E+00
		15031.50C		89	1.1749E-03	7.0930E-06	.0000E+00	.0000E+00
		16032.50C		32	4.7470E-04	2.7407E-05	.0000E+00	.0000E+00
		22000.50C		27	3.7422E-04	2.1841E-05	.0000E+00	.0000E+00
		24000.50C		33106	4.3271E-01	3.1272E-02	.0000E+00	.0000E+00
		25055.50C		10972	1.5340E-01	1.5989E-02	.0000E+00	.0000E+00
		26000.55C		175671	2.1088E+00	9.0554E-02	.0000E+00	.0000E+00
		28000.50C		53965	6.5897E-01	2.9671E-02	.0000E+00	.0000E+00
		29000.50C		117	1.4405E-03	9.2794E-05	.0000E+00	.0000E+00
		40000.50C		61877	9.0163E-01	8.3699E-03	.0000E+00	1.6330E-05
		42000.50C		3710	5.0623E-02	5.9200E-03	.0000E+00	.0000E+00

45103.50C	671	8.3144E-03	7.5014E-03	.0000E+00	.0000E+00
47109.50C	74	9.7085E-04	8.1572E-04	.0000E+00	.0000E+00
50000.35C	610	8.9769E-03	2.2706E-04	.0000E+00	.0000E+00
62149.50C	1267	1.3676E-02	1.3564E-02	.0000E+00	.0000E+00
63151.55C	466	5.0289E-03	4.9852E-03	.0000E+00	.0000E+00
63153.55C	140	1.6815E-03	1.4868E-03	.0000E+00	.0000E+00
64155.50C	1171	1.2191E-02	1.2157E-02	.0000E+00	.0000E+00
92233.50C	58	1.2329E-03	5.1595E-05	5.0665E-04	.0000E+00
92234.50C	151	1.8827E-03	1.3678E-03	1.2049E-05	.0000E+00
92235.50C	39419	7.6471E-01	6.4780E-02	3.3032E-01	.0000E+00
92236.50C	1172	1.6677E-02	6.0553E-03	2.2090E-04	.0000E+00
92238.50C	160901	2.3117E+00	2.0793E-01	2.0327E-02	1.0095E-03
93237.55C	1064	1.3123E-02	1.0645E-02	1.1782E-04	.0000E+00
94239.55C	1216	2.4237E-02	4.4390E-03	9.0449E-03	.0000E+00
94240.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	108	1.5006E-03	9.7620E-04	8.1053E-06	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59630 CTM = 122.60

8 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 122.73 MINUTES

MCNP VERSION 4A-B 10/04/91

02/20/95 13:36:05

PROBID = 02/20/95 11:33:08

1MCNP VERSION 4A-B LD=10/04/91 02/20/95 13:36:05

PROBID = 02/20/95 13:36:05

INP=mpc12l OUTP=mpc12l.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1000000 year (mpc12l)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1223 -2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1    1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1   LWTR.01T
330- C      3.00%/20 GWD/1000000 YEAR -- UO2
331- M2    8016.50C 4.7798E-02
332-      45103.50C 1.7044E-05
333-      47109.50C 2.0449E-06
334-      62149.50C 1.3269E-07
335-      63151.55C 4.4056E-07
336-      63153.55C 2.1989E-06
337-      64155.50C 2.0019E-07
338-      92233.50C 1.3880E-06
339-      92234.50C 1.5270E-06
340-      92235.50C 4.2457E-04
341-      92236.50C 9.8782E-05
342-      92238.50C 2.2859E-02
343-      93237.55C 1.7660E-05
344-      94239.55C 6.5010E-16
345-      94240.50C 5.6724E-15
346-      94241.50C 9.1745E-48
347-      94242.50C 6.2110E-07
348-      95241.50C 2.9000E-46
349-      95243.50C 1.8807E-16
350-      96245.35C 5.4054E-45
351- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
352- M3    2004.50C 1.0
353- C      ZIRCALOY-4
354- M4    8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
355-      40000.50C -0.9818 50000.35C -0.0140
356- C      ALLOY 825

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357-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
358-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
359-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
360-      29000.50C -0.0250 42000.50C -0.0300
361-      C      1100 ALUMINUM ALLOY
362-      M6      13027.50C -0.99880 29000.50C -0.00120
363-      C      A516 CARBON STEEL
364-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
365-      16032.50C -0.00035 25055.50C -0.0090
366-      26000.55C -0.98535
367-      C      SS316L
368-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
369-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
370-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
371-      42000.50C -0.02500
372-      C      TALLIES
373-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.
SURFACES 24051 AND 28051 OF CELL      9 ARE THE SAME.      28051 WILL BE DELETED.

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SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2839
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2839
 POINTS AFTER EXPANSION OR CONTRACTION 2995
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.122361E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE	ATOM FRACTION
1	1001, .66667	8016, .33333
2	8016, .67110	45103, .00024
	63151, .00001	63153, .00003
	92234, .00002	92235, .00596
	93237, .00025	94239, .00000
	94242, .00001	95241, .00000
3	2004, 1.00000	
4	8016, .00681	24000, .00175
	50000, .01071	26000, .00325
5	6000, .00234	13027, .00417
	22000, .01057	24000, .23247
	28000, .40235	29000, .02212
6	13027, .99949	29000, .00051
7	6000, .01011	14000, .00541
		15031, .00062
		16032, .00060

8	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				
1 MATERIAL								
NUMBER	COMPONENT NUCLIDE, MASS FRACTION							
1	1001,	.11191	8016,	.88809				
2	8016,	.12065	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00001	63153,	.00005	64155,	.00000	92233,	.00005
	92234,	.00006	92235,	.01575	92236,	.00368	92238,	.85875
	93237,	.00066	94239,	.00000	94240,	.00000	94241,	.00000
	94242,	.00002	95241,	.00000	95243,	.00000	96245,	.00000
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM	GRAM	INPUT	CALCULATED	MASS	PIECES	REASON VOLUME
	DENSITY	DENSITY	VOLUME	VOLUME			NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.12230E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC

57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE

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117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0 1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.12230E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00

48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01

15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	PX	2.5991819E+01			
74	2042	PX	2.1437590E+00			

75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08

8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08

68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

(1396)	79/08/30.
(1381)	79/08/30.
(1342)	79/09/06.

TOTAL NU
TOTAL NU

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
-----------	------	------

(1315)	79/10/29.
---------	-----------

16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1325785

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 101900
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1325785

TOTAL 1446088

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00.

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

8 WARNING MESSAGES SO FAR.
 1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1000000 year (mpc12l)

NPS X Y Z CELL SURF U V W TIME WEIGHT ENERGY

1	-2.907E-01	-2.614E-01	5.854E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.002E+00	1.294E+00
2	-3.864E-01	1.658E-01	7.117E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.002E+00	2.705E+00
3	-3.774E-01	1.841E-01	7.098E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.002E+00	3.757E-01
4	3.684E-01	-2.401E-01	6.170E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.002E+00	9.753E-01
5	5.655E-03	2.239E-01	6.194E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.002E+00	2.972E+00
6	3.416E-01	1.541E-01	6.254E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.002E+00	1.232E+00
7	-1.361E-01	1.683E-01	8.955E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.002E+00	1.163E+00
8	-3.325E-01	-3.546E-02	6.982E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.002E+00	5.181E-01
9	-1.355E-01	8.135E-02	6.716E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.002E+00	1.280E+00
10	3.988E-01	-8.206E-02	2.465E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.002E+00	2.054E+00
11	4.062E-01	-1.966E-01	2.339E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.002E+00	3.082E-01
12	3.434E-01	2.885E-01	3.372E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.002E+00	1.157E-01
13	3.397E-01	1.363E-01	3.302E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.002E+00	4.750E-01
14	3.397E-01	1.363E-01	3.302E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.002E+00	2.932E+00
15	-2.213E-01	2.444E-01	4.685E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.002E+00	4.777E-01
16	2.345E-01	3.350E-01	4.517E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.002E+00	1.949E+00
17	7.837E-02	-4.407E-01	5.227E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.002E+00	3.453E-01
18	1.074E-01	3.254E-01	3.918E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.002E+00	5.981E-01
19	3.507E-02	1.856E-01	4.522E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.002E+00	1.857E+00
20	-1.427E-01	3.990E-01	4.104E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.002E+00	1.980E+00
21	1.508E-02	-4.375E-01	3.653E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.002E+00	2.463E+00
22	-4.318E-01	5.272E-02	3.966E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.002E+00	3.601E-01
23	1.619E-01	-2.258E-01	1.726E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.002E+00	3.781E+00
24	1.363E-01	-3.041E-01	1.857E+02	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.002E+00	1.996E+00
25	-3.518E-01	-2.322E-01	1.873E+02	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.002E+00	2.596E+00
26	3.564E-02	3.405E-01	1.890E+02	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.002E+00	7.438E-01
27	-4.366E-01	-5.168E-02	1.914E+02	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.002E+00	5.849E-01
28	1.830E-01	1.522E-01	1.009E+02	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.002E+00	1.903E+00
29	1.495E-01	-1.880E-01	1.680E+02	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.002E+00	3.140E-01
30	3.224E-01	-3.365E-01	1.481E+02	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.002E+00	7.835E-01
31	2.864E-01	-3.423E-01	1.447E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.002E+00	1.408E+00
32	-3.445E-01	1.362E-01	1.765E+02	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.002E+00	2.141E+00
33	-2.692E-02	2.729E-01	1.768E+02	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.002E+00	1.526E+00
34	2.889E-01	8.459E-02	1.724E+02	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.002E+00	1.229E+00
35	2.889E-01	8.459E-02	1.724E+02	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.002E+00	6.599E+00
36	3.562E-01	8.031E-02	1.765E+02	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.002E+00	9.976E-01
37	3.270E-01	1.369E-01	2.026E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.002E+00	1.390E+00
38	3.250E-01	2.863E-01	2.006E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.002E+00	6.518E-01
39	3.438E-01	-7.222E-02	2.002E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.002E+00	4.319E-01
40	-2.006E-02	3.394E-02	2.014E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.002E+00	2.995E+00
41	3.923E-01	2.022E-01	1.982E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.002E+00	2.633E+00
42	2.187E-01	-3.557E-01	2.025E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.002E+00	2.426E+00
43	-1.541E-01	-7.335E-02	2.016E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.002E+00	1.275E+00
44	1.766E-03	-4.594E-01	2.025E+02	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.002E+00	3.294E+00
45	2.389E-01	-7.021E-02	1.930E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.002E+00	1.705E+00
46	4.632E-01	-2.112E-02	2.001E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.002E+00	1.798E+00
47	-3.936E-01	6.896E-02	2.018E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.002E+00	3.207E+00
48	-7.271E-02	-4.549E-01	6.223E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.002E+00	5.231E+00
49	2.333E-01	-3.854E-01	6.452E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.002E+00	2.397E+00
50	-2.157E-01	-3.096E-01	6.491E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.002E+00	2.536E+00

CYCLE	1	K(COLLISION)	.894077	REMOVAL LIFETIME(ABS)	3.8689E+03	SOURCE POINTS GENERATED	2661
CYCLE	2	K(COLLISION)	.901743	REMOVAL LIFETIME(ABS)	3.7205E+03	SOURCE POINTS GENERATED	3043
CYCLE	3	K(COLLISION)	.902279	REMOVAL LIFETIME(ABS)	3.8685E+03	SOURCE POINTS GENERATED	3005
CYCLE	4	K(COLLISION)	.866833	REMOVAL LIFETIME(ABS)	3.9045E+03	SOURCE POINTS GENERATED	2889

CYCLE 5 K(COLLISION) .891608 REMOVAL LIFETIME(ABS) 3.8357E+03 SOURCE POINTS GENERATED 3026

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .868288 REMOVAL LIFETIME(ABS) 3.7564E+03 SOURCE POINTS GENERATED 2923

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.896446		.882367 .0160	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)		.905553		.901098 .0049	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)		.885232		.875184 .0115	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.8284E+03			3.7849E+03 .0115				
REM LIFE(ABS)	3.8525E+03			3.8045E+03 .0126	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	3085							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.904132		.889622 .0122	K(COL/ABS)	.894140 .0066	.897981 .0057	.0830
K(ABSORPTION)		.893778		.898658 .0039	K(ABS/TK LN)	.889508 .0050	.895910 .0071	.0833
K(TRK LENGTH)		.890707		.880359 .0088	K(TK LN/COL)	.884990 .0105	.857291 .0000	1.0000
REM LIFE(COL)	3.7843E+03			3.7847E+03 .0066				
REM LIFE(ABS)	3.7294E+03			3.7794E+03 .0099	LIFE(COL/ABS)	3.7821E+03 .0077	3.7853E+03 .0094	.7477
SOURCE POINTS GENERATED	3075							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.893351		.890554 .0087	K(COL/ABS)	.895560 .0049	.899532 .0044	.1383
K(ABSORPTION)		.906286		.900565 .0035	K(ABS/TK LN)	.891240 .0040	.897411 .0055	.2287
K(TRK LENGTH)		.886582		.881914 .0065	K(TK LN/COL)	.886234 .0076	.863583 .0063	.9879
REM LIFE(COL)	3.8799E+03			3.8085E+03 .0078	K(COL/ABS/TK LN)	.891011 .0054	.880444 .0455	
REM LIFE(ABS)	3.8920E+03			3.8076E+03 .0101	LIFE(COL/ABS)	3.8080E+03 .0087	3.8089E+03 .0092	.8904
SOURCE POINTS GENERATED	3012							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.869555		.886354 .0083	K(COL/ABS)	.893367 .0045	.899556 .0034	.1562
K(ABSORPTION)		.899643		.900381 .0027	K(ABS/TK LN)	.890144 .0033	.897687 .0042	.2388
K(TRK LENGTH)		.871878		.879907 .0055	K(TK LN/COL)	.883131 .0069	.870922 .0042	.9741
REM LIFE(COL)	3.5962E+03			3.7660E+03 .0128	K(COL/ABS/TK LN)	.888881 .0048	.889474 .0186	
REM LIFE(ABS)	3.6154E+03			3.7691E+03 .0129	LIFE(COL/ABS)	3.7676E+03 .0127	3.7673E+03 .0147	.9545
SOURCE POINTS GENERATED	2879							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.893940		.887619 .0069	K(COL/ABS)	.893052 .0037	.896571 .0032	-.0314
K(ABSORPTION)		.889004		.898485 .0031	K(ABS/TK LN)	.890588 .0028	.893907 .0029	-.2538
K(TRK LENGTH)		.896619		.882692 .0055	K(TK LN/COL)	.885155 .0060	.880648 .0063	.8988
REM LIFE(COL)	3.7433E+03			3.7622E+03 .0105	K(COL/ABS/TK LN)	.889598 .0040	.891953 .0045	
REM LIFE(ABS)	3.7747E+03			3.7701E+03 .0105	LIFE(COL/ABS)	3.7662E+03 .0104	3.7659E+03 .0117	.9476
SOURCE POINTS GENERATED	3068							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.881857		.886796 .0059	K(COL/ABS)	.892050 .0033	.895328 .0030	.0434

K(ABSORPTION) .890229 .897305 .0029
 K(TRK LENGTH) .864846 .880143 .0055
 REM LIFE(COL) 3.6288E+03 3.7432E+03 .0103
 REM LIFE(ABS) 3.6283E+03 3.7498E+03 .0105
 SOURCE POINTS GENERATED 2928

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .892125 .887462 .0052
 K(ABSORPTION) .869816 .893869 .0046
 K(TRK LENGTH) .895645 .882081 .0052
 REM LIFE(COL) 3.8003E+03 3.7503E+03 .0091
 REM LIFE(ABS) 3.8213E+03 3.7587E+03 .0093
 SOURCE POINTS GENERATED 3048

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .878056 .886417 .0047
 K(ABSORPTION) .897633 .894287 .0041
 K(TRK LENGTH) .866750 .880377 .0050
 REM LIFE(COL) 3.7186E+03 3.7468E+03 .0081
 REM LIFE(ABS) 3.7740E+03 3.7604E+03 .0083
 SOURCE POINTS GENERATED 2925

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .884807 .886256 .0042
 K(ABSORPTION) .888885 .893747 .0037
 K(TRK LENGTH) .871961 .879536 .0046
 REM LIFE(COL) 3.7774E+03 3.7499E+03 .0073
 REM LIFE(ABS) 3.7619E+03 3.7606E+03 .0074
 SOURCE POINTS GENERATED 2972

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .887541 .886372 .0038
 K(ABSORPTION) .879533 .892455 .0037
 K(TRK LENGTH) .897573 .881175 .0045
 REM LIFE(COL) 3.9565E+03 3.7686E+03 .0082
 REM LIFE(ABS) 3.9218E+03 3.7752E+03 .0077
 SOURCE POINTS GENERATED 2976

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .881202 .885942 .0035
 K(ABSORPTION) .881456 .891538 .0035
 K(TRK LENGTH) .900377 .882775 .0045
 REM LIFE(COL) 3.9102E+03 3.7804E+03 .0081
 REM LIFE(ABS) 3.9239E+03 3.7876E+03 .0077
 SOURCE POINTS GENERATED 3043

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 18 AVE OF 13 CYCLES
 K(COLLISION) .863153 .884189 .0038

K(ABS/TK LN) .888724 .0031 .893612 .0032 .0466
 K(TK LN/COL) .883469 .0055 .881834 .0063 .8366
 K(COL/ABS/TK LN) .888081 .0038 .893909 .0058
 LIFE(COL/ABS) 3.7465E+03 .0103 3.7449E+03 .0113 .9607

CYCLE = 12

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.890665 .0033	.890981 .0036	-.0978
K(ABS/TK LN)	.887975 .0029	.888476 .0031	-.3283
K(TK LN/COL)	.884771 .0049	.884841 .0055	.8121
K(COL/ABS/TK LN)	.887804 .0033	.888209 .0043	
LIFE(COL/ABS)	3.7545E+03 .0091	3.7513E+03 .0099	.9618

CYCLE = 13

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.890352 .0029	.890820 .0031	-.1228
K(ABS/TK LN)	.887332 .0026	.888296 .0028	-.3450
K(TK LN/COL)	.883397 .0046	.884297 .0051	.8219
K(COL/ABS/TK LN)	.887027 .0030	.888128 .0040	
LIFE(COL/ABS)	3.7536E+03 .0081	3.7505E+03 .0087	.9475

CYCLE = 14

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.890001 .0026	.890409 .0028	-.1140
K(ABS/TK LN)	.886641 .0025	.887708 .0026	-.2988
K(TK LN/COL)	.882896 .0042	.884215 .0046	.8120
K(COL/ABS/TK LN)	.886513 .0028	.887906 .0039	
LIFE(COL/ABS)	3.7552E+03 .0072	3.7536E+03 .0077	.9421

CYCLE = 15

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.889414 .0025	.889514 .0026	-.1183
K(ABS/TK LN)	.886815 .0022	.887620 .0023	-.4128
K(TK LN/COL)	.883774 .0039	.885447 .0041	.7542
K(COL/ABS/TK LN)	.886668 .0025	.887694 .0029	
LIFE(COL/ABS)	3.7719E+03 .0079	3.7762E+03 .0081	.9527

CYCLE = 16

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.888740 .0024	.888743 .0025	-.0713
K(ABS/TK LN)	.887157 .0021	.887878 .0021	-.4795
K(TK LN/COL)	.884359 .0036	.885333 .0036	.6286
K(COL/ABS/TK LN)	.886752 .0023	.887881 .0024	
LIFE(COL/ABS)	3.7840E+03 .0078	3.7880E+03 .0081	.9596

CYCLE = 17

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.887180 .0028	.887387 .0030	.1695

K(ABSORPTION)	.873781	.890172	.0036	K(ABS/TK LN)	.885662	.0026	.886512	.0026	-.2214
K(TRK LENGTH)	.861669	.881152	.0045	K(TK LN/COL)	.882670	.0039	.883525	.0039	.7016
REM LIFE(COL)	3.6865E+03	3.7732E+03	.0077	K(COL/ABS/TK LN)	.885171	.0028	.886514	.0030	
REM LIFE(ABS)	3.7257E+03	3.7829E+03	.0072	LIFE(COL/ABS)	3.7780E+03	.0074	3.7850E+03	.0076	.9586
SOURCE POINTS GENERATED 2887									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.854629		.882077		.0043	K(COL/ABS)	.885407	.0033	.886140
K(ABSORPTION)	.870080		.888737		.0037	K(ABS/TK LN)	.884621	.0026	.885137
K(TRK LENGTH)	.872082		.880504		.0043	K(TK LN/COL)	.881291	.0039	.881294
REM LIFE(COL)	3.8201E+03		3.7766E+03		.0072	K(COL/ABS/TK LN)	.883773	.0030	.885554
REM LIFE(ABS)	3.8207E+03		3.7856E+03		.0067	LIFE(COL/ABS)	3.7811E+03	.0069	3.7878E+03
SOURCE POINTS GENERATED 2885									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.884336		.882228		.0040	K(COL/ABS)	.885430	.0031	.886133
K(ABSORPTION)	.887149		.888631		.0034	K(ABS/TK LN)	.884867	.0025	.885383
K(TRK LENGTH)	.889496		.881104		.0040	K(TK LN/COL)	.881666	.0037	.881691
REM LIFE(COL)	3.7608E+03		3.7755E+03		.0067	K(COL/ABS/TK LN)	.883988	.0028	.885839
REM LIFE(ABS)	3.7154E+03		3.7809E+03		.0064	LIFE(COL/ABS)	3.7782E+03	.0065	3.7805E+03
SOURCE POINTS GENERATED 3083									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/1000000 year (mpc12l)

02/20/95 15:39:48
PROBID = 02/20/95 13:36:05

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59325	1.0114E+00	2.0261E+00	ESCAPE	1	1.6379E-05	8.2906E-10
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	7.4346E-02	5.1744E-07	WEIGHT CUTOFF	59396	7.5579E-02	4.3647E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.4691E-07	DOWNSCATTERING	0	0.	1.9234E+00
(N,XN)	144	1.9900E-03	1.4418E-03	CAPTURE	0	6.4630E-01	3.0234E-02
FISSION	0	0.	0.	LOSS TO (N,XN)	72	9.9499E-04	8.2840E-03
TOTAL	59469	1.0877E+00	2.0275E+00	LOSS TO FISSION	0	3.6482E-01	6.5626E-02
				TOTAL	59469	1.0877E+00	2.0275E+00

NUMBER OF NEUTRONS BANKED 72
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0024E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.3152E+01
 TOTAL NEUTRON COLLISIONS 3746517
 NET MULTIPLICATION 1.0010E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 9.3716E+00
 CAPTURE 3.7965E+03
 CAPTURE OR ESCAPE 3.7965E+03
 ANY TERMINATION 4.1611E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 122.08 MINUTES
 COMPUTER TIME IN MCRUN 121.97 MINUTES

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0

SOURCE PARTICLES PER MINUTE
RANDOM NUMBERS GENERATED

4.8640E+02
44610246

FIELD LENGTH
MOST RANDOM NUMBERS USED WAS

0
6406 IN HISTORY 49593

RANGE OF SAMPLED SOURCE WEIGHTS = 9.7245E-01 TO 1.1274E+00
1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26308	9760	3.3919E+00	1.1488E-04	3.7544E-01	7.2615E-01	1.0934E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	766629	59397	4.3366E+00	5.4043E-04	6.9016E-01	8.6742E-01	2.4979E+00
33	34	6411	333	1.3483E-02	5.1972E-05	2.4330E-01	6.0213E-01	4.2982E+00
34	35	195	24	491	3.3143E-03	3.7464E-05	2.0878E-01	4.5755E-01
35	36	1385551	59397	15	2.3436E-04	4.7538E-04	6.5495E-01	8.6333E-01
36	37	340	24	24	1.5130E-04	3.9168E-05	2.2345E-01	4.3808E-01
37	38	1501824	59397	53265	7.8845E-01	4.5639E-04	6.4022E-01	8.6258E-01
38	39	363	25	142	9.2821E-04	3.1234E-05	1.8192E-01	4.4441E-01
39	40	2401452	59397	1668656	2.1477E+01	4.0341E-04	6.1241E-01	8.6001E-01
40	41	61271	31831	104801	1.3570E+00	3.0542E-04	5.6229E-01	8.5753E-01

41	42	12	6	44	3.8722E-04	4.6703E-05	2.7858E-01	5.9756E-01	9.9626E-01
42	43	129556	33463	3847	5.6667E-02	3.1770E-04	5.6987E-01	8.5926E-01	4.1421E+00
43	44	145187	35807	34741	4.5150E-01	3.2330E-04	5.7346E-01	8.6069E-01	1.4795E+00
44	45	158525	36719	3328	4.8785E-02	3.2992E-04	5.7401E-01	8.6092E-01	4.1355E+00
45	46	192696	41647	83297	1.0786E+00	3.3347E-04	5.8203E-01	8.6018E-01	1.4946E+00
46	47	7532	3398	8234	1.0744E-01	3.4095E-04	6.0042E-01	8.6695E-01	1.5277E+00
47	48	10104	3722	345	5.0404E-03	3.6484E-04	6.2540E-01	8.7122E-01	4.1196E+00
48	49	13198	5107	7136	9.3258E-02	3.6057E-04	6.2051E-01	8.6793E-01	1.5498E+00
49	50	35404	15370	73056	8.5821E-01	3.0472E-04	5.4885E-01	8.1447E-01	1.4413E+00
50	51	35071	14590	13195	1.6314E-01	3.5503E-04	5.6002E-01	7.9910E-01	2.0485E+00
51	52	34467	14208	2506	3.6266E-02	3.5510E-04	5.5524E-01	7.9447E-01	9.2021E+00
52	53	34468	14232	12973	1.5882E-01	3.4231E-04	5.4147E-01	7.9303E-01	2.0460E+00
53	54	399	103	3170	2.9523E-02	2.5500E-05	1.4528E-01	5.9675E-01	6.3556E-01
54	55	35316	15216	73488	8.6572E-01	2.8156E-04	5.1549E-01	8.1280E-01	1.3922E+00
55	56	34490	14386	13217	1.6363E-01	3.3314E-04	5.2555E-01	7.9595E-01	2.0451E+00
56	57	34050	14014	2406	3.4444E-02	3.3199E-04	5.3068E-01	7.9090E-01	9.2200E+00
57	58	34194	14087	13110	1.5984E-01	3.3072E-04	5.2333E-01	7.9084E-01	2.0529E+00
58	59	347	97	1998	1.9132E-02	3.4089E-05	1.4918E-01	6.2174E-01	6.7567E-01
59	60	53466	18942	97660	1.2111E+00	4.0605E-04	5.2275E-01	8.3951E-01	1.4451E+00
60	61	52730	18055	18637	2.4140E-01	5.8028E-04	5.4977E-01	8.3233E-01	2.2177E+00
61	62	424	103	1790	1.5070E-02	3.8217E-05	1.6996E-01	5.6132E-01	7.1539E-01
62	63	53986	19127	99334	1.2284E+00	4.1777E-04	5.3581E-01	8.3826E-01	1.4645E+00
63	64	53504	18201	18601	2.4029E-01	5.8116E-04	5.5850E-01	8.3106E-01	2.2463E+00
64	65	385	100	1706	1.5711E-02	5.4261E-05	2.9506E-01	6.0429E-01	8.4517E-01
65	66	10001	4989	431805	4.0021E+00	5.6599E-05	2.6812E-01	6.2056E-01	8.6032E-01
66	67	9795	3870	14419	1.5141E-01	1.7631E-04	4.5240E-01	6.9059E-01	1.7842E+00
67	68	9974	3907	14875	1.5569E-01	1.7648E-04	4.5192E-01	6.9030E-01	1.7876E+00
68	70	34974	9255	11841	1.5334E-01	8.2657E-04	5.6450E-01	8.3373E-01	2.3586E+00
69	71	35051	8949	6443	9.6430E-02	9.2258E-04	5.6300E-01	8.3502E-01	8.9303E+00
70	72	18941	8760	59228	7.5850E-01	1.1733E-03	5.5950E-01	8.3319E-01	2.4785E+00
71	73	33921	9004	11645	1.5051E-01	8.0548E-04	5.5115E-01	8.3535E-01	2.3295E+00
72	74	34070	8672	6369	9.5363E-02	8.9462E-04	5.5416E-01	8.3704E-01	8.8959E+00
73	75	18483	8470	57684	7.3991E-01	1.1499E-03	5.6122E-01	8.3438E-01	2.4665E+00
74	76	154	53	2991	2.6421E-02	8.9603E-05	4.4919E-01	6.1086E-01	1.1051E+00
75	77	150	51	2742	2.3153E-02	3.9908E-05	1.7317E-01	5.6122E-01	7.3656E-01
76	80	15	6	39	4.2640E-04	1.7172E-04	3.5099E-01	6.9375E-01	2.0444E+00
77	81	3575	1540	10069	1.1033E-01	3.5995E-04	5.4216E-01	7.3758E-01	2.1148E+00
78	82	2250	911	11997	1.2934E-01	2.8753E-04	4.6690E-01	7.5727E-01	1.3331E+00
79	83	5	4	489	4.6873E-03	1.5149E-05	4.0454E-02	6.1891E-01	4.8577E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1730	736	4956	6.1098E-02	8.5990E-04	5.2897E-01	7.9503E-01	2.0767E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1042	481	8212	1.0112E-01	2.1184E-03	5.0539E-01	8.2322E-01	4.8145E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	387	214	43244	3.7460E-01	2.7747E-05	1.1224E-01	5.6589E-01	6.1953E-01

TOTAL 7514373 700157 3746517 4.5786E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.5013E-01	-5.5013E-01
2	2	3.3337E-01	.0000E+00	.0000E+00	-9.2273E-01	-5.8936E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.7063E-02	-1.7063E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.1723E-02	-5.1723E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5246E-02	-1.5246E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4980E-01	-1.4980E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.7666E+00	-1.7666E+00

8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0954E+00	-2.0954E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2267E-01	-2.2267E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2339E-01	-2.2339E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8710E-01	-3.8710E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8835E-01	-3.8835E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1415E-02	-8.1415E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3151E-02	-8.3151E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0038E-01	-1.0038E-01
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1786E-02	-8.1786E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8523E-02	-7.8523E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3847E-02	-8.3847E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0539E-01	-1.0539E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0589E-01	-1.0589E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6543E-02	-9.6543E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8595E-02	-8.8595E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1466E-01	-1.1466E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1614E-01	-1.1614E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2012E-01	-1.2012E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1824E-01	-1.1824E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0362E-01	-1.0362E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9971E-02	-8.9971E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6981E-02	-9.6981E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0554E-01	-1.0554E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0116E+01	-2.0116E+01
32	33	1.0266E+01	1.0114E+00	.0000E+00	.0000E+00	-1.0066E+01	1.2114E+00
33	34	6.4756E-02	.0000E+00	.0000E+00	.0000E+00	-6.1476E-02	3.2802E-03
34	35	1.5269E-03	.0000E+00	.0000E+00	.0000E+00	-1.4063E-03	1.2060E-04
35	36	2.0167E+01	.0000E+00	.0000E+00	.0000E+00	-2.0155E+01	1.1929E-02
36	37	2.6440E-03	.0000E+00	.0000E+00	.0000E+00	-2.6432E-03	8.2200E-07
37	38	2.1855E+01	.0000E+00	.0000E+00	.0000E+00	-2.1772E+01	8.2402E-02
38	39	2.8126E-03	.0000E+00	.0000E+00	.0000E+00	-2.8113E-03	1.2846E-06
39	40	3.4875E+01	.0000E+00	.0000E+00	.0000E+00	-1.1436E+01	2.3439E+01
40	41	8.8943E-01	.0000E+00	.0000E+00	.0000E+00	-8.8489E-01	4.5396E-03
41	42	1.1818E-04	.0000E+00	.0000E+00	.0000E+00	-1.1570E-04	2.4757E-06
42	43	1.8773E+00	.0000E+00	.0000E+00	.0000E+00	-1.8767E+00	6.5974E-04
43	44	2.1053E+00	.0000E+00	.0000E+00	.0000E+00	-2.1038E+00	1.5090E-03
44	45	2.2989E+00	.0000E+00	.0000E+00	.0000E+00	-2.2983E+00	5.5001E-04
45	46	2.7971E+00	.0000E+00	.0000E+00	.0000E+00	-1.1873E+00	1.6097E+00
46	47	1.1033E-01	.0000E+00	.0000E+00	.0000E+00	-6.7401E-02	4.2933E-02
47	48	1.4837E-01	.0000E+00	.0000E+00	.0000E+00	-1.4335E-01	5.0260E-03
48	49	1.9334E-01	.0000E+00	.0000E+00	.0000E+00	-7.6006E-02	1.1733E-01
49	50	4.8825E-01	.0000E+00	.0000E+00	.0000E+00	-2.7443E-01	2.1382E-01
50	51	4.7680E-01	.0000E+00	.0000E+00	.0000E+00	-4.5920E-01	1.7600E-02
51	52	4.6508E-01	.0000E+00	.0000E+00	.0000E+00	-4.5983E-01	5.2477E-03
52	53	4.6589E-01	.0000E+00	.0000E+00	.0000E+00	-1.9569E-01	2.7019E-01
53	54	4.2422E-03	.0000E+00	.0000E+00	.0000E+00	-2.3298E-04	4.0092E-03
54	55	4.8701E-01	.0000E+00	.0000E+00	.0000E+00	-2.7047E-01	2.1655E-01
55	56	4.6905E-01	.0000E+00	.0000E+00	.0000E+00	-4.5285E-01	1.6201E-02
56	57	4.5888E-01	.0000E+00	.0000E+00	.0000E+00	-4.5283E-01	6.0540E-03
57	58	4.6118E-01	.0000E+00	.0000E+00	.0000E+00	-1.9331E-01	2.6788E-01
58	59	3.6095E-03	.0000E+00	.0000E+00	.0000E+00	-2.0963E-04	3.3998E-03
59	60	7.5982E-01	.0000E+00	.0000E+00	.0000E+00	-3.8035E-01	3.7947E-01
60	61	7.4525E-01	.0000E+00	.0000E+00	.0000E+00	-3.5109E-01	3.9416E-01
61	62	4.0232E-03	.0000E+00	.0000E+00	.0000E+00	-1.5214E-04	3.8711E-03
62	63	7.6661E-01	.0000E+00	.0000E+00	.0000E+00	-3.8629E-01	3.8032E-01
63	64	7.5522E-01	.0000E+00	.0000E+00	.0000E+00	-3.5493E-01	4.0028E-01
64	65	3.9535E-03	.0000E+00	.0000E+00	.0000E+00	-9.8443E-05	3.8550E-03
65	66	1.2085E-01	.0000E+00	.0000E+00	.0000E+00	-7.3372E-02	4.7474E-02
66	67	1.1732E-01	.0000E+00	.0000E+00	.0000E+00	-5.8455E-02	5.8865E-02
67	68	1.1856E-01	.0000E+00	.0000E+00	.0000E+00	-5.9781E-02	5.8774E-02

68	70	4.9413E-01	.0000E+00	.0000E+00	.0000E+00	-4.8793E-01	6.2019E-03
69	71	4.9420E-01	.0000E+00	.0000E+00	.0000E+00	-4.9341E-01	7.9700E-04
70	72	2.6856E-01	.0000E+00	.0000E+00	.0000E+00	-2.4435E-01	2.4211E-02
71	73	4.8005E-01	.0000E+00	.0000E+00	.0000E+00	-4.7403E-01	6.0205E-03
72	74	4.8140E-01	.0000E+00	.0000E+00	.0000E+00	-4.8056E-01	8.4096E-04
73	75	2.6259E-01	.0000E+00	.0000E+00	.0000E+00	-2.3864E-01	2.3952E-02
74	76	1.7721E-03	.0000E+00	.0000E+00	.0000E+00	-1.6362E-03	1.3590E-04
75	77	1.4775E-03	.0000E+00	.0000E+00	.0000E+00	-1.3383E-03	1.3913E-04
76	80	1.8261E-04	.0000E+00	.0000E+00	.0000E+00	-1.5077E-04	3.1842E-05
77	81	4.4042E-02	.0000E+00	.0000E+00	.0000E+00	-3.6065E-02	7.9774E-03
78	82	2.9426E-02	.0000E+00	.0000E+00	.0000E+00	-2.9032E-02	3.9423E-04
79	83	6.7804E-05	.0000E+00	.0000E+00	.0000E+00	-3.4832E-05	3.2972E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.3499E-02	.0000E+00	.0000E+00	.0000E+00	-2.1030E-02	2.4693E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.3954E-02	.0000E+00	.0000E+00	.0000E+00	-1.1916E-02	2.0378E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	5.2233E-03	.0000E+00	.0000E+00	.0000E+00	-3.2229E-03	2.0004E-03

TOTAL	1.0776E+02	1.0114E+00	.0000E+00	.0000E+00	-1.0776E+02	1.0114E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	2.9461E-06	.0000E+00	.0000E+00	.0000E+00	2.9461E-06
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-5.9863E-04	.0000E+00	.0000E+00	.0000E+00	-5.9863E-04
33	34	.0000E+00	.0000E+00	-3.3993E-05	.0000E+00	.0000E+00	.0000E+00	-3.3993E-05
34	35	.0000E+00	.0000E+00	-1.2614E-05	.0000E+00	.0000E+00	.0000E+00	-1.2614E-05

35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-8.7184E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7184E-06
38	39	.0000E+00	.0000E+00	4.2323E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2323E-06
39	40	.0000E+00	.0000E+00	-2.6153E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.6153E-04
40	41	.0000E+00	.0000E+00	5.3698E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3698E-06
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-7.3325E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3325E-06
43	44	.0000E+00	.0000E+00	-3.7443E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7443E-05
44	45	.0000E+00	.0000E+00	4.9636E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.9636E-07
45	46	.0000E+00	.0000E+00	9.4570E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.4570E-06
46	47	.0000E+00	.0000E+00	8.5031E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5031E-06
47	48	.0000E+00	.0000E+00	4.2516E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2516E-06
48	49	.0000E+00	.0000E+00	1.3902E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3902E-07
49	50	.0000E+00	.0000E+00	-1.4956E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4956E-05
50	51	.0000E+00	.0000E+00	-3.4987E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4987E-04
51	52	.0000E+00	.0000E+00	6.2589E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.2589E-05
52	53	.0000E+00	.0000E+00	1.4282E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4282E-04
53	54	.0000E+00	.0000E+00	-8.2989E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2989E-06
54	55	.0000E+00	.0000E+00	-4.4620E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.4620E-05
55	56	.0000E+00	.0000E+00	-3.9975E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9975E-06
56	57	.0000E+00	.0000E+00	-9.6051E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6051E-05
57	58	.0000E+00	.0000E+00	-9.0660E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0660E-06
58	59	.0000E+00	.0000E+00	-4.0788E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0788E-06
59	60	.0000E+00	.0000E+00	9.4467E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.4467E-05
60	61	.0000E+00	.0000E+00	-1.8309E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8309E-05
61	62	.0000E+00	.0000E+00	1.2309E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2309E-07
62	63	.0000E+00	.0000E+00	-5.7110E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.7110E-05
63	64	.0000E+00	.0000E+00	5.4730E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4730E-05
64	65	.0000E+00	.0000E+00	8.5642E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5642E-06
65	66	.0000E+00	.0000E+00	2.4852E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4852E-05
66	67	.0000E+00	.0000E+00	6.2530E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.2530E-05
67	68	.0000E+00	.0000E+00	-3.7937E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7937E-04
68	70	.0000E+00	.0000E+00	-2.3794E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3794E-05
69	71	.0000E+00	.0000E+00	-2.4392E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4392E-06
70	72	.0000E+00	.0000E+00	3.0223E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0223E-04
71	73	.0000E+00	.0000E+00	4.3867E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3867E-05
72	74	.0000E+00	.0000E+00	-2.9251E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9251E-05
73	75	.0000E+00	.0000E+00	1.6362E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6362E-04
74	76	.0000E+00	.0000E+00	1.2114E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2114E-07
75	77	.0000E+00	.0000E+00	-1.6694E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6694E-05
76	80	.0000E+00	.0000E+00	-1.3264E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3264E-06
77	81	.0000E+00	.0000E+00	5.9562E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.9562E-06
78	82	.0000E+00	.0000E+00	1.3192E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3192E-05
79	83	.0000E+00	.0000E+00	-8.4225E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4225E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-5.4304E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.4304E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-8.9324E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9324E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-7.7327E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7327E-05
TOTAL		.0000E+00	.0000E+00	-1.2338E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2338E-03
1NEUTRON WEIGHT BALANCE IN EACH CELL --				PHYSICAL EVENTS					PRINT TABLE 130
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			

2	2	.0000E+00	.0000E+00	-1.4876E-02	.0000E+00	.0000E+00	-1.4876E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.9606E-03	.0000E+00	-3.3206E-01	-9.8031E-04	-3.6482E-01	-6.9590E-01
33	34	.0000E+00	.0000E+00	-2.8275E-04	.0000E+00	.0000E+00	-2.8275E-04
34	35	.0000E+00	.0000E+00	-1.8848E-05	.0000E+00	.0000E+00	-1.8848E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-8.2200E-07	.0000E+00	.0000E+00	-8.2200E-07
37	38	.0000E+00	.0000E+00	-7.6880E-03	.0000E+00	.0000E+00	-7.6880E-03
38	39	.0000E+00	.0000E+00	-5.5169E-06	.0000E+00	.0000E+00	-5.5169E-06
39	40	.0000E+00	.0000E+00	-6.4563E-02	.0000E+00	.0000E+00	-6.4563E-02
40	41	.0000E+00	.0000E+00	-4.5449E-03	.0000E+00	.0000E+00	-4.5449E-03
41	42	.0000E+00	.0000E+00	-2.4757E-06	.0000E+00	.0000E+00	-2.4757E-06
42	43	2.9356E-05	.0000E+00	-6.6708E-04	-1.4678E-05	.0000E+00	-6.5240E-04
43	44	.0000E+00	.0000E+00	-1.4716E-03	.0000E+00	.0000E+00	-1.4716E-03
44	45	.0000E+00	.0000E+00	-5.5051E-04	.0000E+00	.0000E+00	-5.5051E-04
45	46	.0000E+00	.0000E+00	-3.5171E-03	.0000E+00	.0000E+00	-3.5171E-03
46	47	.0000E+00	.0000E+00	-3.7054E-04	.0000E+00	.0000E+00	-3.7054E-04
47	48	.0000E+00	.0000E+00	-6.4877E-05	.0000E+00	.0000E+00	-6.4877E-05
48	49	.0000E+00	.0000E+00	-3.0453E-04	.0000E+00	.0000E+00	-3.0453E-04
49	50	.0000E+00	.0000E+00	-2.8298E-03	.0000E+00	.0000E+00	-2.8298E-03
50	51	.0000E+00	.0000E+00	-1.1689E-02	.0000E+00	.0000E+00	-1.1689E-02
51	52	.0000E+00	.0000E+00	-6.5426E-04	.0000E+00	.0000E+00	-6.5426E-04
52	53	.0000E+00	.0000E+00	-1.1608E-02	.0000E+00	.0000E+00	-1.1608E-02
53	54	.0000E+00	.0000E+00	-1.5822E-04	.0000E+00	.0000E+00	-1.5822E-04
54	55	.0000E+00	.0000E+00	-2.8975E-03	.0000E+00	.0000E+00	-2.8975E-03
55	56	.0000E+00	.0000E+00	-1.1959E-02	.0000E+00	.0000E+00	-1.1959E-02
56	57	.0000E+00	.0000E+00	-6.8212E-04	.0000E+00	.0000E+00	-6.8212E-04
57	58	.0000E+00	.0000E+00	-1.1807E-02	.0000E+00	.0000E+00	-1.1807E-02
58	59	.0000E+00	.0000E+00	-9.6467E-05	.0000E+00	.0000E+00	-9.6467E-05
59	60	.0000E+00	.0000E+00	-3.2968E-03	.0000E+00	.0000E+00	-3.2968E-03
60	61	.0000E+00	.0000E+00	-1.2621E-02	.0000E+00	.0000E+00	-1.2621E-02
61	62	.0000E+00	.0000E+00	-7.5795E-05	.0000E+00	.0000E+00	-7.5795E-05

62	63	.0000E+00	.0000E+00	-3.3272E-03	.0000E+00	.0000E+00	-3.3272E-03
63	64	.0000E+00	.0000E+00	-1.2419E-02	.0000E+00	.0000E+00	-1.2419E-02
64	65	.0000E+00	.0000E+00	-8.1874E-05	.0000E+00	.0000E+00	-8.1874E-05
65	66	.0000E+00	.0000E+00	-2.0334E-02	.0000E+00	.0000E+00	-2.0334E-02
66	67	.0000E+00	.0000E+00	-1.5556E-02	.0000E+00	.0000E+00	-1.5556E-02
67	68	.0000E+00	.0000E+00	-1.5753E-02	.0000E+00	.0000E+00	-1.5753E-02
68	70	.0000E+00	.0000E+00	-6.1781E-03	.0000E+00	.0000E+00	-6.1781E-03
69	71	.0000E+00	.0000E+00	-7.9456E-04	.0000E+00	.0000E+00	-7.9456E-04
70	72	.0000E+00	.0000E+00	-2.4513E-02	.0000E+00	.0000E+00	-2.4513E-02
71	73	.0000E+00	.0000E+00	-6.0644E-03	.0000E+00	.0000E+00	-6.0644E-03
72	74	.0000E+00	.0000E+00	-8.1170E-04	.0000E+00	.0000E+00	-8.1170E-04
73	75	.0000E+00	.0000E+00	-2.4116E-02	.0000E+00	.0000E+00	-2.4116E-02
74	76	.0000E+00	.0000E+00	-1.3602E-04	.0000E+00	.0000E+00	-1.3602E-04
75	77	.0000E+00	.0000E+00	-1.2244E-04	.0000E+00	.0000E+00	-1.2244E-04
76	80	.0000E+00	.0000E+00	-3.0516E-05	.0000E+00	.0000E+00	-3.0516E-05
77	81	.0000E+00	.0000E+00	-7.9834E-03	.0000E+00	.0000E+00	-7.9834E-03
78	82	.0000E+00	.0000E+00	-4.0742E-04	.0000E+00	.0000E+00	-4.0742E-04
79	83	.0000E+00	.0000E+00	-2.4549E-05	.0000E+00	.0000E+00	-2.4549E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.4150E-03	.0000E+00	.0000E+00	-2.4150E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9485E-03	.0000E+00	.0000E+00	-1.9485E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.9231E-03	.0000E+00	.0000E+00	-1.9231E-03

TOTAL 1.9900E-03 .0000E+00 -6.4630E-01 -9.9499E-04 -3.6482E-01 -1.0101E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	302430 17340	3.1829E+00 2.0909E-01	1.4776E-02 9.9899E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7110E-01	106305	1.5339E+00	1.1225E-03	.0000E+00	.0000E+00
		45103.50C	2.3930E-04	698	8.7516E-03	7.8814E-03	.0000E+00	.0000E+00
		47109.50C	2.8711E-05	71	9.2541E-04	7.6019E-04	.0000E+00	.0000E+00
		62149.50C	1.8630E-06	1342	1.4654E-02	1.4538E-02	.0000E+00	.0000E+00
		63151.55C	6.1856E-06	492	5.3928E-03	5.3115E-03	.0000E+00	.0000E+00
		63153.55C	3.0873E-05	132	1.6630E-03	1.3903E-03	.0000E+00	.0000E+00
		64155.50C	2.8107E-06	1133	1.1517E-02	1.1447E-02	.0000E+00	.0000E+00
		92233.50C	1.9488E-05	135	2.7391E-03	1.3584E-04	1.2779E-03	.0000E+00
		92234.50C	2.1440E-05	50	5.7888E-04	4.4362E-04	6.7180E-06	.0000E+00
		92235.50C	5.9611E-03	40212	7.9074E-01	6.6847E-02	3.4306E-01	1.2921E-05
		92236.50C	1.3869E-03	1145	1.6673E-02	5.7981E-03	2.3557E-04	.0000E+00
		92238.50C	3.2095E-01	158671	2.3027E+00	2.0815E-01	2.0131E-02	9.6739E-04
		93237.55C	2.4795E-04	789	9.9960E-03	8.0187E-03	9.8676E-05	.0000E+00
		94239.55C	9.1276E-15	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94240.50C	7.9642E-14	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94241.50C	1.2881E-46	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94242.50C	8.7204E-06	21	3.0923E-04	2.2046E-04	5.8885E-06	.0000E+00
		95241.50C	4.0717E-45	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95243.50C	2.6406E-15	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		96245.35C	7.5893E-44	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	7	5.9240E-05	1.2727E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	1.3863E-05	3.9022E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	11	9.8812E-05	1.0780E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	1257	1.3165E-02	2.5746E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	14	1.4629E-04	1.0605E-05	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	476	3.1893E-03	1.8844E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	15	1.2501E-04	4.1135E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	15	2.3436E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	23	1.4671E-04	8.2183E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	4.5842E-06	1.6533E-10	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	199	2.8251E-03	3.4217E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	96	1.4037E-03	1.1627E-04	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	230	3.1668E-03	1.7100E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	52253	7.7396E-01	7.1931E-03	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	487	7.0979E-03	2.0424E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	139	9.0527E-04	5.5161E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	2.2942E-05	7.7943E-10	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1542305	1.9666E+01	6.3437E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	126351	1.8112E+00	1.1260E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	97329	1.2504E+00	4.4715E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7472	1.0660E-01	7.3462E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	43	3.7924E-04	2.4750E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	7.9775E-06	7.1773E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	16	2.0343E-04	3.9010E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	7	7.3076E-05	3.3300E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	20	2.7019E-04	1.8861E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3772	5.5634E-02	6.0114E-04	.0000E+00	1.4678E-05
		50000.35C	1.0711E-02	32	4.8676E-04	1.3782E-05	.0000E+00	.0000E+00

43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	32239 2502	4.1579E-01 3.5711E-02	1.4552E-03 1.6383E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	13 5 11 3281 18	1.7437E-04 6.7937E-05 1.5749E-04 4.8130E-02 2.5595E-04	2.7259E-09 7.7845E-06 1.3440E-05 5.2035E-04 8.9254E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	77310 5987	9.9260E-01 8.5999E-02	3.4653E-03 5.1838E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7649 585	9.9016E-02 8.4196E-03	3.5977E-04 1.0770E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 2 0 335 8	.0000E+00 2.3063E-05 .0000E+00 4.8959E-03 1.2144E-04	.0000E+00 1.4712E-06 .0000E+00 6.1571E-05 1.8350E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6623 513	8.5843E-02 7.4155E-03	3.0321E-04 1.3194E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68116 4940	7.9142E-01 6.6792E-02	2.7988E-03 3.0932E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	11 38 64 6 0 1511 513 8365 2509 178	1.2212E-04 4.2603E-04 9.1462E-04 8.3737E-05 .0000E+00 1.9659E-02 7.2436E-03 1.0150E-01 3.0803E-02 2.3927E-03	2.8543E-08 2.3036E-05 1.0282E-05 1.1594E-06 .0000E+00 1.9709E-03 1.0441E-03 6.3159E-03 2.0079E-03 3.1576E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2501 5	3.6220E-02 4.6060E-05	6.4795E-04 6.3127E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 47 68 7 2 1479 465 8282 2458 158	9.7892E-05 5.7342E-04 1.0093E-03 1.0883E-04 3.1678E-05 1.8962E-02 6.4547E-03 9.9408E-02 3.0005E-02 2.1673E-03	8.2434E-07 3.3587E-05 1.3868E-05 1.2509E-06 1.0695E-06 2.1092E-03 9.4453E-04 6.2526E-03 1.9342E-03 3.1668E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
53	54	1001.50C 8016.50C	6.6667E-01 3.3333E-01	3021 149	2.7978E-02 1.5457E-03	1.5724E-04 9.7591E-07	.0000E+00 .0000E+00	.0000E+00 .0000E+00
54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68555 4933	7.9919E-01 6.6531E-02	2.8607E-03 3.6803E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	6000.50C	1.3966E-03	10	9.3334E-05	2.8416E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	42	5.5414E-04	2.2192E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	7.4359E-04	1.3574E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	8.5766E-05	1.1080E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6591E-05	1.4712E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1515	1.9806E-02	2.1383E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	581	8.2456E-03	1.1993E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8374	1.0209E-01	6.3065E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2494	3.0161E-02	1.9791E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	137	1.8370E-03	2.9889E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2399	3.4353E-02	6.7584E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	9.0750E-05	6.2787E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	14	1.8674E-04	2.7323E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	4.5574E-04	3.1039E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	6.3893E-04	6.0187E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	5.1950E-05	1.2690E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1889E-05	3.6686E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1531	1.9462E-02	2.1119E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	542	7.6076E-03	1.1554E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8275	9.9032E-02	6.1934E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2503	3.0328E-02	2.0350E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	153	2.0420E-03	2.7286E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1906	1.8158E-02	9.6440E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	92	9.7462E-04	2.7389E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	90153	1.1065E+00	3.2459E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7507	1.0462E-01	5.0883E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	9	1.0093E-04	2.5635E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	61	8.0531E-04	2.9750E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	85	1.2385E-03	8.2553E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.9543E-05	1.0240E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.7830E-05	4.3709E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2320	3.1560E-02	2.3572E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	864	1.2579E-02	1.3323E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11537	1.4603E-01	6.3125E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3506	4.5509E-02	2.0823E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	247	3.4512E-03	4.9347E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1692	1.4140E-02	7.5768E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	98	9.2975E-04	2.6403E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	91716	1.1214E+00	3.2731E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7618	1.0701E-01	5.4135E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	17	2.1155E-04	1.4531E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	6.6870E-04	2.1348E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	72	1.0154E-03	1.0506E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.2252E-04	1.8097E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.0272E-05	1.8396E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2257	3.0551E-02	2.2690E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	841	1.2258E-02	1.1009E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11541	1.4628E-01	6.4537E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3554	4.5507E-02	2.1070E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	256	3.6187E-03	4.5446E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1629	1.4937E-02	8.0506E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	77	7.7415E-04	1.3683E-06	.0000E+00	.0000E+00

[illegible]

		42000.50C	1.4572E-02	171	2.5245E-03	2.3236E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6355	9.5168E-02	8.0484E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	14	1.9507E-04	6.8686E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	43	6.2969E-04	3.0428E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	188	2.4710E-03	5.3682E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	337	4.8461E-03	2.1501E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	23	3.3964E-04	1.5223E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.2656E-04	7.0130E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7243	9.9204E-02	4.3252E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2433	3.5231E-02	2.2485E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35514	4.4424E-01	1.2254E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10977	1.3969E-01	4.0222E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	917	1.3131E-02	1.1824E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2879	2.5283E-02	1.3529E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	112	1.1375E-03	7.2447E-07	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2629	2.2104E-02	1.2207E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	113	1.0492E-03	3.6359E-07	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.8943E-05	3.0157E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4	3.5473E-05	6.8278E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	23	2.3837E-04	1.8242E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11	1.3361E-04	5.4157E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	5	5.7546E-05	9.5680E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	26	2.6727E-04	1.4111E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	38	4.7282E-04	5.6538E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	3.4574E-05	4.4419E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.7862E-05	1.7427E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1115	1.2981E-02	1.3914E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	322	4.2598E-03	5.9050E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6470	6.9113E-02	4.3224E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1946	2.1406E-02	1.3724E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	141	1.7049E-03	2.8473E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11162	1.1875E-01	3.9932E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	835	1.0587E-02	8.0971E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	470	4.4734E-03	2.4545E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19	2.1396E-04	4.0583E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	9	1.1160E-04	8.3094E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	13	1.9238E-04	2.5680E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	18	2.4402E-04	3.8208E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	37	4.7930E-04	3.1475E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	686	8.8604E-03	4.7021E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	144	1.9932E-03	1.5888E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1141	1.3650E-02	4.4900E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2760	3.3596E-02	1.1499E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	86	1.1191E-03	4.9441E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	62	8.5207E-04	1.0202E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	59	8.0061E-04	1.7045E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	19	2.3574E-04	1.2729E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	2	3.0373E-05	4.9505E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	3.8645E-05	8.5075E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	237	3.3184E-03	1.2508E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7892	9.6697E-02	1.8212E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	41303	3.5601E-01	1.9199E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1941	1.8589E-02	3.1513E-06	.0000E+00	.0000E+00
TOTAL				3746517	4.6150E+01	6.4630E-01	3.6482E-01	9.9499E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2863848	3.3917E+01	1.2375E-01	.0000E+00	.0000E+00
		2004.50C		15	2.3436E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		291	3.8398E-03	1.1413E-06	.0000E+00	.0000E+00
		7014.50C		882	1.0917E-02	4.0776E-04	.0000E+00	.0000E+00
		8016.50C		315498	4.3848E+00	2.7599E-03	.0000E+00	.0000E+00
		13027.50C		17696	2.6214E-01	2.9151E-03	.0000E+00	.0000E+00
		14000.50C		1283	1.8088E-02	1.4574E-04	.0000E+00	.0000E+00
		15031.50C		103	1.3673E-03	1.2330E-05	.0000E+00	.0000E+00
		16032.50C		37	5.3823E-04	1.9336E-05	.0000E+00	.0000E+00
		22000.50C		37	4.7930E-04	3.1475E-05	.0000E+00	.0000E+00
		24000.50C		33357	4.4040E-01	3.1648E-02	.0000E+00	.0000E+00
		25055.50C		11343	1.6100E-01	1.5968E-02	.0000E+00	.0000E+00
		26000.55C		177797	2.1570E+00	9.2418E-02	.0000E+00	.0000E+00
		28000.50C		54074	6.6752E-01	3.0139E-02	.0000E+00	.0000E+00
		29000.50C		127	1.6710E-03	7.7209E-05	.0000E+00	.0000E+00
		40000.50C		60898	8.9578E-01	8.6336E-03	.0000E+00	1.4678E-05
		42000.50C		3781	5.2245E-02	6.1963E-03	.0000E+00	.0000E+00

45103.50C	698	8.7516E-03	7.8814E-03	.0000E+00	.0000E+00
47109.50C	71	9.2541E-04	7.6019E-04	.0000E+00	.0000E+00
50000.35C	559	8.1084E-03	2.3938E-04	.0000E+00	.0000E+00
62149.50C	1342	1.4654E-02	1.4538E-02	.0000E+00	.0000E+00
63151.55C	492	5.3928E-03	5.3115E-03	.0000E+00	.0000E+00
63153.55C	132	1.6630E-03	1.3903E-03	.0000E+00	.0000E+00
64155.50C	1133	1.1517E-02	1.1447E-02	.0000E+00	.0000E+00
92233.50C	135	2.7391E-03	1.3584E-04	1.2779E-03	.0000E+00
92234.50C	50	5.7888E-04	4.4362E-04	6.7180E-06	.0000E+00
92235.50C	40212	7.9074E-01	6.6847E-02	3.4306E-01	1.2921E-05
92236.50C	1145	1.6673E-02	5.7981E-03	2.3557E-04	.0000E+00
92238.50C	158671	2.3027E+00	2.0815E-01	2.0131E-02	9.6739E-04
93237.55C	789	9.9960E-03	8.0187E-03	9.8676E-05	.0000E+00
94239.55C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94240.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	21	3.0923E-04	2.2046E-04	5.8885E-06	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59325 CTM = 121.97

8 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 122.08 MINUTES

MCNP VERSION 4A-B 10/04/91

02/20/95 15:39:48

PROBID = 02/20/95 13:36:05

1MCNP VERSION 4A-B LD=10/04/91 02/23/95 16:37:35

PROBID = 02/23/95 16:37:35

INP=mpc12m OUTP=mpc12m.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1 year (mpc12m)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1909-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C 34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C 38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C 43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C 43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C 47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C 30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C 30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C 34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C 34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C 38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C 43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C 43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C 47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C 30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C 30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C 34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C 34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C 38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C 43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C 43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C 47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C 30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C 30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C 34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C 34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C 38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C 43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C 43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C 47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C MATERIAL SPECIFICATIONS
327- C WATER AT 300 K
328- M1 1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1 LWTR.01T
330- M2 PWR: 3.75% U-235 - 37 Gwd/MTU - 1 YEAR DECAY
331- 8016.50C 4.8529E-02
332- 45103.50C 2.7094E-05
333- 47109.50C 4.1672E-06
334- 62149.50C 1.5447E-07
335- 63151.55C 5.5913E-09
336- 63153.55C 5.0457E-06
337- 64155.50C 7.8831E-08
338- 92233.50C 4.5387E-11
339- 92234.50C 4.8280E-06
340- 92235.50C 2.3024E-04
341- 92236.50C 1.1295E-04
342- 92238.50C 2.2728E-02
343- 93237.55C 1.4590E-05
344- 94238.50C 4.8996E-06
345- 94239.55C 1.4487E-04
346- 94240.50C 5.5762E-05
347- 94241.50C 3.0738E-05
348- 94242.50C 1.1251E-05
349- 95241.50C 2.7070E-06
350- 95242.50C 5.2244E-08
351- 95243.50C 2.4302E-06
352- 96245.35C 3.1509E-08
353- C He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3 2004.50C 1.0
355- C ZIRCALOY-4
356- M4 8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP.

ORIGINAL NUMBER OF POINTS 3034
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3034
 POINTS AFTER EXPANSION OR CONTRACTION. 2999
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190890E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	8016, .67487 45103, .00038 47109, .00006 62149, .00000 63151, .00000 63153, .00007 64155, .00000 92233, .00000 92234, .00007 92235, .00320 92236, .00157 92238, .31607 93237, .00020 94238, .00007 94239, .00201 94240, .00078 94241, .00043 94242, .00016 95241, .00004 95242, .00000 95243, .00003 96245, .00000
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748 50000, .01071
5	6000, .00234 13027, .00417 14000, .01001 16032, .00053 22000, .01057 24000, .23247 25055, .01023 26000, .28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
8	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12250	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00000	63153,	.00012	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.00854	92236,	.00421	92238,	.85383
	93237,	.00055	94238,	.00018	94239,	.00547	94240,	.00211
	94241,	.00117	94242,	.00043	95241,	.00010	95242,	.00000
	95243,	.00009	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19090E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE
17	17	.00000E+00	INFINITE
18	18	.00000E+00	INFINITE
19	19	.00000E+00	INFINITE
20	21	.00000E+00	INFINITE
21	22	.00000E+00	INFINITE
22	23	.00000E+00	INFINITE
23	24	.00000E+00	INFINITE
24	25	.00000E+00	INFINITE
25	26	.00000E+00	INFINITE
26	27	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	INFINITE
31	32	.00000E+00	INFINITE
32	33	.00000E+00	INFINITE
33	34	.00000E+00	INFINITE
34	35	.00000E+00	INFINITE
35	36	.00000E+00	INFINITE
36	37	.00000E+00	INFINITE
37	38	.00000E+00	INFINITE
38	39	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	INFINITE
43	44	.00000E+00	INFINITE
44	45	.00000E+00	INFINITE
45	46	.00000E+00	INFINITE
46	48	.00000E+00	INFINITE
47	49	.00000E+00	INFINITE
48	50	.00000E+00	INFINITE
49	51	.00000E+00	INFINITE
50	52	.00000E+00	INFINITE
51	53	.00000E+00	INFINITE
52	54	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19090E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL 1 TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY
WARNING. NUBAR OF	92234.50C	MAY BE EITHER PROMPT OR TOTAL.
92234.50C	76999	NJOY
WARNING. NUBAR OF	92236.50C	MAY BE EITHER PROMPT OR TOTAL.
92236.50C	119238	NJOY
WARNING. NUBAR OF	94238.50C	MAY BE EITHER PROMPT OR TOTAL.

(1314) 79/06/21.
(1340) 79/07/31.
(1394) 79/10/17.
(1396) 79/08/30.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 TOTAL NU (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 TOTAL NU (1373) 11/01/85
 TOTAL NU (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=0K

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=0K

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1 year (mpc12m)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	4.511E-01	-4.938E-02	9.443E-01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.000E+00	1.898E+00
2	4.084E-02	7.414E-02	1.951E+00	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.000E+00	1.223E+00
3	-3.382E-01	1.953E-01	3.928E+00	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.000E+00	4.458E+00
4	1.264E-01	2.609E-01	1.980E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.000E+00	2.622E+00
5	4.258E-01	1.309E-01	2.700E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.000E+00	6.762E-01
6	-3.632E-02	3.504E-01	2.866E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.000E+00	1.389E+00
7	-1.006E-01	-3.365E-01	1.492E+02	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.000E+00	2.403E-01
8	-2.166E-01	-1.957E-01	1.489E+02	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.000E+00	1.068E+00
9	1.813E-01	-5.252E-02	1.249E+02	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.000E+00	4.310E-01
10	-2.520E-01	1.057E-01	1.389E+02	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.000E+00	1.293E+00
11	6.707E-02	4.109E-01	1.285E+02	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.000E+00	7.891E-01
12	-1.239E-02	1.478E-01	1.281E+02	33	0	-8.398E-01	4.129E-01	3.524E-01	.000E+00	1.000E+00	1.327E+00
13	-2.587E-01	-2.697E-01	1.233E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.000E+00	1.869E+00
14	-4.510E-01	-7.846E-02	1.310E+02	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.000E+00	2.857E+00
15	5.039E-02	2.860E-01	1.600E+02	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.000E+00	2.713E+00
16	-4.219E-01	7.097E-02	1.643E+02	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.000E+00	2.897E+00
17	-9.922E-02	7.715E-03	3.633E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.000E+00	1.208E+00
18	-2.575E-01	-2.420E-01	5.398E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.000E+00	4.708E+00
19	-1.714E-01	-4.113E-01	5.840E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.000E+00	9.281E-01
20	-3.741E-01	-1.692E-01	5.777E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.000E+00	3.424E+00
21	1.393E-01	-1.231E-01	5.849E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.000E+00	1.056E+00
22	3.324E-01	1.539E-01	6.070E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.000E+00	8.589E-01
23	-3.268E-01	-1.610E-01	2.636E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.000E+00	1.090E+00
24	1.152E-01	-3.943E-01	1.996E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.000E+00	1.151E+00
25	1.732E-02	5.523E-02	2.997E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.000E+00	2.403E+00
26	2.487E-01	-3.493E-01	3.098E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.000E+00	8.850E-01
27	7.976E-02	-1.539E-02	5.806E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.000E+00	2.000E+00
28	1.343E-01	-3.257E-01	5.795E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.000E+00	8.879E-01
29	2.012E-02	2.259E-02	7.412E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.000E+00	1.438E+00
30	2.308E-01	-1.539E-01	7.402E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.000E+00	2.965E-01
31	-2.518E-01	-1.278E-01	1.151E+02	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.000E+00	8.770E-01
32	2.884E-01	7.634E-02	1.186E+02	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.000E+00	1.066E+00
33	-1.787E-01	-1.218E-01	1.184E+02	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.000E+00	1.669E+00
34	6.310E-02	3.987E-01	4.506E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.000E+00	1.178E+00
35	-2.249E-01	-1.727E-01	4.498E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.000E+00	3.869E+00
36	3.371E-01	2.493E-01	4.653E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.000E+00	2.880E+00
37	2.790E-01	2.268E-01	4.650E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.000E+00	1.244E+00
38	2.887E-01	1.521E-01	4.664E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.000E+00	4.554E+00
39	2.501E-01	-2.463E-02	4.330E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.000E+00	2.405E+00
40	1.690E-02	-1.867E-01	8.950E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.000E+00	3.262E+00
41	-7.099E-03	1.172E-01	9.207E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.000E+00	3.583E-02
42	-3.594E-01	2.761E-01	7.894E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.000E+00	3.068E-01
43	3.381E-01	1.717E-01	7.728E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.000E+00	1.856E+00
44	1.889E-01	-3.036E-01	7.657E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.000E+00	9.822E-01
45	-8.607E-02	3.829E-02	7.753E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.000E+00	2.397E+00
46	1.100E-01	1.242E-01	5.635E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.000E+00	3.781E+00
47	-1.519E-02	-2.608E-01	1.127E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.000E+00	1.008E+00
48	-9.163E-02	-2.047E-01	1.027E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.000E+00	8.509E-02
49	-1.968E-01	4.112E-01	1.114E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.000E+00	9.466E-01

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50 2.544E-02 -6.053E-03 7.863E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 1.000E+00 2.425E+00

CYCLE 1 K(COLLISION) .909342 REMOVAL LIFETIME(ABS) 2.9024E+03 SOURCE POINTS GENERATED 2701
CYCLE 2 K(COLLISION) .926722 REMOVAL LIFETIME(ABS) 2.9744E+03 SOURCE POINTS GENERATED 3107
CYCLE 3 K(COLLISION) .908346 REMOVAL LIFETIME(ABS) 2.9963E+03 SOURCE POINTS GENERATED 2981
CYCLE 4 K(COLLISION) .904436 REMOVAL LIFETIME(ABS) 3.0751E+03 SOURCE POINTS GENERATED 2993
CYCLE 5 K(COLLISION) .889478 REMOVAL LIFETIME(ABS) 2.9906E+03 SOURCE POINTS GENERATED 2951
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .891508 REMOVAL LIFETIME(ABS) 2.9398E+03 SOURCE POINTS GENERATED 2994
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .913846 .902677 .0124 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .931312 .925497 .0063 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .918125 .909925 .0090 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 2.8547E+03 2.8650E+03 .0036 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 2.9167E+03 2.9282E+03 .0039
SOURCE POINTS GENERATED 3076

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .934508 .913287 .0136 K(COL/ABS) .917089 .0063 .919008 .0066 -.3847
K(ABSORPTION) .911679 .920891 .0062 K(ABS/TK LN) .921140 .0058 .921024 .0057 -.5221
K(TRK LENGTH) .944319 .921389 .0135 K(TK LN/COL) .917338 .0135 .917679 .0380 .9881
REM LIFE(COL) 3.1110E+03 2.9470E+03 .0279 LIFE(COL/ABS) 2.9745E+03 .0263 3.4821E+03 .0151 .9998
REM LIFE(ABS) 3.1493E+03 3.0019E+03 .0247
SOURCE POINTS GENERATED 3091

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .954235 .923524 .0146 K(COL/ABS) .923270 .0080 .923051 .0059 .1326
K(ABSORPTION) .929394 .923017 .0049 K(ABS/TK LN) .925838 .0065 .923873 .0055 -.0578
K(TRK LENGTH) .950471 .928660 .0123 K(TK LN/COL) .926092 .0134 .938670 .0136 .9797
REM LIFE(COL) 3.1031E+03 2.9860E+03 .0234 K(COL/ABS/TK LN) .925067 .0091 .930749 .0031
REM LIFE(ABS) 3.1236E+03 3.0324E+03 .0200 LIFE(COL/ABS) 3.0092E+03 .0217 3.2737E+03 .0164 .9978
SOURCE POINTS GENERATED 3018

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .887341 .916287 .0139 K(COL/ABS) .919968 .0072 .923117 .0044 .0070
K(ABSORPTION) .926174 .923648 .0039 K(ABS/TK LN) .923084 .0059 .923499 .0040 -.1473
K(TRK LENGTH) .897964 .922521 .0117 K(TK LN/COL) .919404 .0127 .938277 .0113 .9863
REM LIFE(COL) 2.9263E+03 2.9741E+03 .0187 K(COL/ABS/TK LN) .920819 .0085 .930980 .0023
REM LIFE(ABS) 2.9702E+03 3.0199E+03 .0161 LIFE(COL/ABS) 2.9970E+03 .0173 3.2537E+03 .0147 .9970
SOURCE POINTS GENERATED 2854

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .901255 .913782 .0117 K(COL/ABS) .918581 .0061 .922765 .0035 .0281

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K(ABSORPTION)	.922045	.923381	.0032	K(ABS/TK LN)	.921615	.0051	.922963	.0033	-.1139
K(TRK LENGTH)	.906493	.919849	.0100	K(TK LN/COL)	.916816	.0108	.934576	.0098	.9855
REM LIFE(COL)	2.8659E+03	2.9560E+03	.0165	K(COL/ABS/TK LN)	.919004	.0072	.929487	.0029	
REM LIFE(ABS)	2.9022E+03	3.0003E+03	.0147	LIFE(COL/ABS)	2.9782E+03	.0156	3.1836E+03	.0186	.9942
SOURCE POINTS GENERATED	3019								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.935484		.916882	.0104	K(COL/ABS)	.920768	.0056	.924375 .0033 .1719
K(ABSORPTION)	.932291		.924654	.0030	K(ABS/TK LN)	.923124	.0046	.924319 .0031 .0012
K(TRK LENGTH)	.932060		.921594	.0086	K(TK LN/COL)	.919238	.0095	.931223 .0078 .9806
REM LIFE(COL)	3.1221E+03		2.9797E+03	.0160	K(COL/ABS/TK LN)	.921043	.0065	.929133 .0019
REM LIFE(ABS)	3.1060E+03		3.0154E+03	.0134	LIFE(COL/ABS)	2.9976E+03	.0146	3.1041E+03 .0124 .9859
SOURCE POINTS GENERATED	3143							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.910511		.916086	.0091	K(COL/ABS)	.919571	.0051	.922677 .0034 .1956
K(ABSORPTION)	.911875		.923057	.0031	K(ABS/TK LN)	.921394	.0044	.922719 .0033 .1450
K(TRK LENGTH)	.906690		.919731	.0078	K(TK LN/COL)	.917908	.0083	.924181 .0078 .9673
REM LIFE(COL)	3.0713E+03		2.9912E+03	.0143	K(COL/ABS/TK LN)	.919624	.0058	.924236 .0039
REM LIFE(ABS)	3.0899E+03		3.0247E+03	.0119	LIFE(COL/ABS)	3.0080E+03	.0131	3.1115E+03 .0105 .9868
SOURCE POINTS GENERATED	2851							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.908290		.915220	.0081	K(COL/ABS)	.917270	.0051	.918407 .0049 .2067
K(ABSORPTION)	.889434		.919321	.0049	K(ABS/TK LN)	.917623	.0057	.918998 .0052 .4974
K(TRK LENGTH)	.885476		.915925	.0080	K(TK LN/COL)	.915572	.0078	.915580 .0083 .8826
REM LIFE(COL)	3.0793E+03		3.0010E+03	.0130	K(COL/ABS/TK LN)	.916822	.0060	.918680 .0046
REM LIFE(ABS)	3.0316E+03		3.0255E+03	.0105	LIFE(COL/ABS)	3.0132E+03	.0116	3.0550E+03 .0102 .9609
SOURCE POINTS GENERATED	3041							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.891888		.912886	.0077	K(COL/ABS)	.916019	.0048	.917921 .0044 .2086
K(ABSORPTION)	.917625		.919151	.0044	K(ABS/TK LN)	.916825	.0051	.918757 .0047 .4945
K(TRK LENGTH)	.901673		.914499	.0074	K(TK LN/COL)	.913693	.0073	.913960 .0077 .8839
REM LIFE(COL)	3.1049E+03		3.0114E+03	.0121	K(COL/ABS/TK LN)	.915512	.0056	.918009 .0043
REM LIFE(ABS)	3.1300E+03		3.0359E+03	.0100	LIFE(COL/ABS)	3.0237E+03	.0109	3.0654E+03 .0098 .9629
SOURCE POINTS GENERATED	2957							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.920136		.913545	.0070	K(COL/ABS)	.915679	.0044	.916806 .0041 .1594
K(ABSORPTION)	.904434		.917813	.0043	K(ABS/TK LN)	.917921	.0048	.917850 .0043 .2298
K(TRK LENGTH)	.953327		.918029	.0077	K(TK LN/COL)	.915787	.0070	.914612 .0073 .8124
REM LIFE(COL)	3.2084E+03		3.0293E+03	.0124	K(COL/ABS/TK LN)	.916463	.0051	.916608 .0046
REM LIFE(ABS)	3.1661E+03		3.0478E+03	.0098	LIFE(COL/ABS)	3.0385E+03	.0110	3.0738E+03 .0087 .9659
SOURCE POINTS GENERATED	3108							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.910302		.913275	.0064	K(COL/ABS)	.914594	.0042	.915137 .0041 .1624

K(ABSORPTION)	.895014	.915913	.0044	K(ABS/TK LN)	.916905	.0045	.916373	.0043	.2124
K(TRK LENGTH)	.916445	.917897	.0070	K(TK LN/COL)	.915586	.0064	.914385	.0066	.8123
REM LIFE(COL)	3.0263E+03	3.0290E+03	.0113	K(COL/ABS/TK LN)	.915695	.0048	.915080	.0046	
REM LIFE(ABS)	3.0294E+03	3.0462E+03	.0090	LIFE(COL/ABS)	3.0376E+03	.0100	3.0698E+03	.0080	.9648
SOURCE POINTS GENERATED	2978								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE 18	AVE OF 13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.906662	.912766	.0059	K(COL/ABS)	.914642	.0038	.915383
K(ABSORPTION)	.923764	.916517	.0041	K(ABS/TK LN)	.915714	.0044	.916170
K(TRK LENGTH)	.879071	.914911	.0072	K(TK LN/COL)	.913839	.0062	.912961
REM LIFE(COL)	3.0857E+03	3.0334E+03	.0105	K(COL/ABS/TK LN)	.914731	.0045	.915442
REM LIFE(ABS)	3.1313E+03	3.0528E+03	.0085	LIFE(COL/ABS)	3.0431E+03	.0094	3.0753E+03
SOURCE POINTS GENERATED	3055						.9594

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE 19	AVE OF 14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.915618	.912970	.0055	K(COL/ABS)	.913749	.0037	.913934
K(ABSORPTION)	.888678	.914529	.0044	K(ABS/TK LN)	.914041	.0044	.914293
K(TRK LENGTH)	.895920	.913554	.0069	K(TK LN/COL)	.913262	.0057	.913026
REM LIFE(COL)	3.1741E+03	3.0434E+03	.0102	K(COL/ABS/TK LN)	.913684	.0043	.913907
REM LIFE(ABS)	3.1545E+03	3.0600E+03	.0082	LIFE(COL/ABS)	3.0517E+03	.0091	3.0813E+03
SOURCE POINTS GENERATED	2977						.9626

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE 20	AVE OF 15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.885188	.911118	.0055	K(COL/ABS)	.913235	.0035	.913793
K(ABSORPTION)	.926865	.915351	.0042	K(ABS/TK LN)	.913116	.0043	.914276
K(TRK LENGTH)	.873461	.910881	.0071	K(TK LN/COL)	.911000	.0059	.911118
REM LIFE(COL)	2.9394E+03	3.0365E+03	.0098	K(COL/ABS/TK LN)	.912450	.0043	.913828
REM LIFE(ABS)	2.9925E+03	3.0555E+03	.0078	LIFE(COL/ABS)	3.0460E+03	.0087	3.0807E+03
SOURCE POINTS GENERATED	2877						.9632

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1 year (mpc12m)

PROBID = 02/23/95 18:30:57
02/23/95 16:37:35

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59894	1.0018E+00	2.0737E+00	ESCAPE	0	0.	0.
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.2486E-02	4.2807E-05	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59985	6.3114E-02	4.9520E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.1938E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	182	2.4405E-03	1.7422E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9619E+00
				CAPTURE	0	6.6478E-01	3.2770E-02
				LOSS TO (N,XN)	91	1.2202E-03	9.9763E-03
				LOSS TO FISSION	0	3.3758E-01	7.0812E-02

TOTAL 60076 1.0667E+00 2.0755E+00
 NUMBER OF NEUTRONS BANKED 91
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0030E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 5.5745E+01
 TOTAL NEUTRON COLLISIONS 3338780
 NET MULTIPLICATION 1.0012E+00 .0002

COMPUTER TIME SO FAR IN THIS RUN 112.75 MINUTES
 COMPUTER TIME IN MCRUN 112.62 MINUTES
 SOURCE PARTICLES PER MINUTE 5.3184E+02
 RANDOM NUMBERS GENERATED 40805856

AVERAGE LIFETIME, SHAKES
 ESCAPE .0000E+00
 CAPTURE 3.0368E+03
 CAPTURE OR ESCAPE 3.0368E+03
 ANY TERMINATION 3.3637E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS

8433 IN HISTORY 58838

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5450E-01 TO 1.1107E+00
 WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25236	9370	3.1782E+00	1.1796E-04	3.7617E-01	7.2358E-01	1.0984E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	715940	59985	294622	4.1460E+00	7.8413E-04	7.5956E-01	8.8184E-01	2.5054E+00
33	34	3591	193	738	8.1915E-03	6.5345E-05	2.7375E-01	6.4428E-01	4.2650E+00
34	35	176	22	447	3.8554E-03	2.1319E-05	1.2725E-01	5.6277E-01	5.9909E-01
35	36	1279619	59985	12	1.8366E-04	6.7513E-04	7.2051E-01	8.7783E-01	3.4774E+03
36	37	323	21	16	1.5610E-04	4.1950E-05	2.5485E-01	5.6444E-01	7.9570E-01
37	38	1387983	59985	50333	7.4822E-01	6.4984E-04	7.0865E-01	8.7728E-01	4.1045E+00
38	39	352	21	129	1.0736E-03	3.1791E-05	1.8922E-01	5.6598E-01	7.0036E-01
39	40	2219308	59985	1386504	1.8285E+01	5.6131E-04	6.7535E-01	8.7502E-01	1.6592E+00
40	41	55604	30828	84648	1.1224E+00	4.2008E-04	6.2008E-01	8.7424E-01	1.5606E+00
41	42	24	9	60	5.3567E-04	4.7193E-07	5.5565E-05	5.7873E-01	3.4532E-01
42	43	117579	32668	3633	5.3672E-02	4.3964E-04	6.3126E-01	8.7436E-01	4.1265E+00
43	44	132064	34982	28503	3.7759E-01	4.4405E-04	6.3322E-01	8.7510E-01	1.5848E+00
44	45	144834	35998	3127	4.6393E-02	4.5053E-04	6.3856E-01	8.7471E-01	4.1224E+00
45	46	176608	41228	69249	9.1940E-01	4.5667E-04	6.4210E-01	8.7537E-01	1.5982E+00
46	47	6902	3230	7222	9.5507E-02	4.3855E-04	6.5366E-01	8.7724E-01	1.6139E+00
47	48	9206	3521	310	4.5696E-03	4.9573E-04	6.5982E-01	8.8058E-01	4.1122E+00
48	49	12029	4878	5958	8.0157E-02	5.0606E-04	6.6907E-01	8.8212E-01	1.6428E+00
49	50	33182	15049	63389	7.6169E-01	3.6762E-04	5.7792E-01	8.2805E-01	1.4962E+00
50	51	32991	14293	11942	1.4803E-01	4.2059E-04	5.9437E-01	8.0677E-01	2.1199E+00
51	52	32646	13972	2410	3.4478E-02	4.2355E-04	5.8305E-01	8.0477E-01	9.1851E+00
52	53	32707	14035	12037	1.4710E-01	4.0276E-04	5.7304E-01	8.0230E-01	2.1146E+00
53	54	193	56	1169	1.0423E-02	8.6894E-05	4.0768E-01	6.1875E-01	1.0350E+00
54	55	33607	15195	65859	7.8165E-01	3.5003E-04	5.6840E-01	8.2209E-01	1.4765E+00
55	56	33340	14417	12171	1.5113E-01	4.1443E-04	5.8917E-01	8.0891E-01	2.1029E+00
56	57	32900	14098	2436	3.5045E-02	4.1267E-04	5.8490E-01	8.0440E-01	9.0773E+00
57	58	33123	14148	12416	1.5218E-01	3.9077E-04	5.6689E-01	8.0178E-01	2.0896E+00
58	59	210	60	1257	1.1974E-02	5.6374E-05	2.6516E-01	6.5790E-01	8.3423E-01
59	60	51721	18818	88322	1.1035E+00	5.1005E-04	5.7194E-01	8.4718E-01	1.5243E+00
60	61	51646	17989	17546	2.2848E-01	7.1168E-04	5.8567E-01	8.3889E-01	2.2836E+00
61	62	329	71	1435	1.2915E-02	5.4226E-05	2.9668E-01	5.9881E-01	8.2951E-01
62	63	51641	18903	88039	1.1025E+00	5.1533E-04	5.7309E-01	8.4743E-01	1.5228E+00
63	64	51252	18074	17646	2.3106E-01	7.2249E-04	5.9266E-01	8.4171E-01	2.2868E+00
64	65	335	71	1557	1.4245E-02	4.7356E-05	3.1023E-01	6.0663E-01	8.2411E-01
65	66	9928	4967	431957	3.9194E+00	5.4603E-05	2.5162E-01	6.1235E-01	8.4047E-01
66	67	9986	3932	15272	1.5810E-01	1.7248E-04	4.2337E-01	6.8740E-01	1.7897E+00
67	68	9710	3799	14503	1.5143E-01	1.7208E-04	4.2790E-01	6.8799E-01	1.7981E+00
68	70	32840	8806	10823	1.4043E-01	1.0498E-03	5.9575E-01	8.4110E-01	2.3920E+00
69	71	33182	8513	6130	9.0955E-02	1.1564E-03	5.9782E-01	8.3877E-01	8.8812E+00
70	72	17948	8319	55788	7.1185E-01	1.3718E-03	5.8986E-01	8.3297E-01	2.4834E+00
71	73	34002	9059	11543	1.4995E-01	9.9325E-04	5.7103E-01	8.3937E-01	2.3720E+00
72	74	34077	8721	6247	9.2851E-02	1.0751E-03	5.7173E-01	8.3928E-01	8.8669E+00
73	75	18294	8481	56961	7.3255E-01	1.3547E-03	5.6244E-01	8.3575E-01	2.4597E+00
74	76	103	31	1740	1.6235E-02	4.1835E-05	2.5002E-01	6.1029E-01	8.1826E-01
75	77	142	44	2391	2.0097E-02	5.9176E-05	3.1944E-01	5.6890E-01	8.9776E-01
76	80	9	3	28	2.3056E-04	6.8438E-05	1.9272E-01	4.8831E-01	1.4536E+00
77	81	3408	1517	10141	1.0876E-01	3.7392E-04	5.4853E-01	7.2291E-01	2.1441E+00
78	82	2057	872	11229	1.1681E-01	2.9257E-04	5.1431E-01	7.4476E-01	1.3944E+00
79	83	3	2	117	1.3475E-03	3.4768E-05	5.8512E-02	7.4951E-01	6.3206E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1596	685	4301	5.0956E-02	9.9291E-04	6.1841E-01	7.8508E-01	2.2112E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1123	473	9392	1.0832E-01	2.1733E-03	5.6756E-01	8.0465E-01	4.8778E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	458	245	51641	4.3550E-01	2.7872E-05	1.1380E-01	5.5644E-01	6.2102E-01

TOTAL 6968067 694627 3338780 4.1003E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.2662E-01	-5.2662E-01
2	2	3.1569E-01	.0000E+00	.0000E+00	-8.8649E-01	-5.7080E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5290E-02	-1.5290E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0308E-02	-5.0308E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5911E-02	-1.5911E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4557E-01	-1.4557E-01
7	7	.0000E+00	.0000E+00	.0000E+00	-1.6336E+00	-1.6336E+00
8	8	.0000E+00	.0000E+00	.0000E+00	-1.9743E+00	-1.9743E+00
9	9	.0000E+00	.0000E+00	.0000E+00	-2.0901E-01	-2.0901E-01
10	10	.0000E+00	.0000E+00	.0000E+00	-2.1136E-01	-2.1136E-01
11	11	.0000E+00	.0000E+00	.0000E+00	-3.7392E-01	-3.7392E-01
12	12	.0000E+00	.0000E+00	.0000E+00	-3.7686E-01	-3.7686E-01
13	13	.0000E+00	.0000E+00	.0000E+00	-7.5686E-02	-7.5686E-02
14	14	.0000E+00	.0000E+00	.0000E+00	-7.6179E-02	-7.6179E-02
15	15	.0000E+00	.0000E+00	.0000E+00	-8.9309E-02	-8.9309E-02
16	16	.0000E+00	.0000E+00	.0000E+00	-7.2008E-02	-7.2008E-02
17	17	.0000E+00	.0000E+00	.0000E+00	-7.2043E-02	-7.2043E-02
18	18	.0000E+00	.0000E+00	.0000E+00	-7.4642E-02	-7.4642E-02
19	19	.0000E+00	.0000E+00	.0000E+00	-9.8814E-02	-9.8814E-02
20	20	.0000E+00	.0000E+00	.0000E+00	-9.6292E-02	-9.6292E-02
21	21	.0000E+00	.0000E+00	.0000E+00	-8.6665E-02	-8.6665E-02
22	22	.0000E+00	.0000E+00	.0000E+00	-8.4458E-02	-8.4458E-02
23	23	.0000E+00	.0000E+00	.0000E+00	-1.1193E-01	-1.1193E-01
24	24	.0000E+00	.0000E+00	.0000E+00	-1.0867E-01	-1.0867E-01
25	25	.0000E+00	.0000E+00	.0000E+00	-1.1145E-01	-1.1145E-01
26	26	.0000E+00	.0000E+00	.0000E+00	-1.1130E-01	-1.1130E-01
27	27	.0000E+00	.0000E+00	.0000E+00	-9.5079E-02	-9.5079E-02
28	28	.0000E+00	.0000E+00	.0000E+00	-8.3516E-02	-8.3516E-02
29	29	.0000E+00	.0000E+00	.0000E+00	-9.1760E-02	-9.1760E-02
30	30	.0000E+00	.0000E+00	.0000E+00	-9.7964E-02	-9.7964E-02
31	31	.0000E+00	.0000E+00	.0000E+00	-1.8719E+01	-1.8719E+01
32	32	9.5945E+00	1.0018E+00	.0000E+00	-9.3780E+00	1.2182E+00
33	33	3.8616E-02	.0000E+00	.0000E+00	-3.6350E-02	2.2664E-03
34	34	1.6700E-03	.0000E+00	.0000E+00	-1.6121E-03	5.7883E-05
35	35	1.8774E+01	.0000E+00	.0000E+00	-1.8762E+01	1.1049E-02
36	36	3.0753E-03	.0000E+00	.0000E+00	-3.0745E-03	7.9524E-07
37	37	2.0356E+01	.0000E+00	.0000E+00	-2.0281E+01	7.5658E-02
38	38	3.2995E-03	.0000E+00	.0000E+00	-3.2774E-03	2.2063E-05
39	39	3.2477E+01	.0000E+00	.0000E+00	-1.0670E+01	2.1807E+01
40	40	8.1359E-01	.0000E+00	.0000E+00	-8.1030E-01	3.2957E-03
41	41	2.4435E-04	.0000E+00	.0000E+00	-2.4123E-04	3.1243E-06
42	42	1.7173E+00	.0000E+00	.0000E+00	-1.7168E+00	5.3831E-04
43	43	1.9294E+00	.0000E+00	.0000E+00	-1.9283E+00	1.0782E-03
44	44	2.1156E+00	.0000E+00	.0000E+00	-2.1151E+00	4.6652E-04
45	45	2.5826E+00	.0000E+00	.0000E+00	-1.0941E+00	1.4885E+00
46	46	1.0139E-01	.0000E+00	.0000E+00	-6.1318E-02	4.0076E-02
47	47	1.3512E-01	.0000E+00	.0000E+00	-1.3042E-01	4.7030E-03
48	48	1.7680E-01	.0000E+00	.0000E+00	-6.9166E-02	1.0764E-01
49	49	4.6017E-01	.0000E+00	.0000E+00	-2.5888E-01	2.0129E-01
50	50	4.4986E-01	.0000E+00	.0000E+00	-4.3496E-01	1.4904E-02
51	51	4.4150E-01	.0000E+00	.0000E+00	-4.3563E-01	5.8681E-03
52	52	4.4304E-01	.0000E+00	.0000E+00	-1.8493E-01	2.5812E-01
53	53	2.0199E-03	.0000E+00	.0000E+00	-6.8042E-05	1.9518E-03
54	54	4.6467E-01	.0000E+00	.0000E+00	-2.6113E-01	2.0353E-01
55	55	4.5414E-01	.0000E+00	.0000E+00	-4.3873E-01	1.5410E-02
56	56	4.4459E-01	.0000E+00	.0000E+00	-4.3914E-01	5.4529E-03
57	57	4.4773E-01	.0000E+00	.0000E+00	-1.8695E-01	2.6078E-01

58	59	2.3450E-03	.0000E+00	.0000E+00	.0000E+00	-1.2786E-04	2.2171E-03
59	60	7.3381E-01	.0000E+00	.0000E+00	.0000E+00	-3.6825E-01	3.6556E-01
60	61	7.2921E-01	.0000E+00	.0000E+00	.0000E+00	-3.4574E-01	3.8347E-01
61	62	3.3631E-03	.0000E+00	.0000E+00	.0000E+00	-1.7045E-04	3.1926E-03
62	63	7.3464E-01	.0000E+00	.0000E+00	.0000E+00	-3.6652E-01	3.6812E-01
63	64	7.2495E-01	.0000E+00	.0000E+00	.0000E+00	-3.4374E-01	3.8121E-01
64	65	3.4684E-03	.0000E+00	.0000E+00	.0000E+00	-1.0010E-04	3.3683E-03
65	66	1.1817E-01	.0000E+00	.0000E+00	.0000E+00	-7.2768E-02	4.5400E-02
66	67	1.1762E-01	.0000E+00	.0000E+00	.0000E+00	-5.9062E-02	5.8553E-02
67	68	1.1329E-01	.0000E+00	.0000E+00	.0000E+00	-5.7452E-02	5.5842E-02
68	70	4.6334E-01	.0000E+00	.0000E+00	.0000E+00	-4.5835E-01	4.9895E-03
69	71	4.6601E-01	.0000E+00	.0000E+00	.0000E+00	-4.6532E-01	6.9057E-04
70	72	2.5337E-01	.0000E+00	.0000E+00	.0000E+00	-2.3280E-01	2.0570E-02
71	73	4.7932E-01	.0000E+00	.0000E+00	.0000E+00	-4.7412E-01	5.2017E-03
72	74	4.7926E-01	.0000E+00	.0000E+00	.0000E+00	-4.7858E-01	6.8307E-04
73	75	2.5863E-01	.0000E+00	.0000E+00	.0000E+00	-2.3806E-01	2.0573E-02
74	76	1.0127E-03	.0000E+00	.0000E+00	.0000E+00	-9.3177E-04	8.0882E-05
75	77	1.4618E-03	.0000E+00	.0000E+00	.0000E+00	-1.3045E-03	1.5734E-04
76	80	8.9163E-05	.0000E+00	.0000E+00	.0000E+00	-5.3553E-05	3.5610E-05
77	81	4.0841E-02	.0000E+00	.0000E+00	.0000E+00	-3.3115E-02	7.7259E-03
78	82	2.6104E-02	.0000E+00	.0000E+00	.0000E+00	-2.5756E-02	3.4773E-04
79	83	3.4818E-05	.0000E+00	.0000E+00	.0000E+00	-3.2325E-05	2.4931E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.1073E-02	.0000E+00	.0000E+00	.0000E+00	-1.9018E-02	2.0547E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.4380E-02	.0000E+00	.0000E+00	.0000E+00	-1.2110E-02	2.2698E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	5.8821E-03	.0000E+00	.0000E+00	.0000E+00	-3.6516E-03	2.2305E-03

TOTAL	1.0054E+02	1.0018E+00	.0000E+00	.0000E+00	-1.0054E+02	1.0018E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	.0000E+00	.0000E+00	-6.9556E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9556E-04
34	35	.0000E+00	.0000E+00	-2.3098E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3098E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
38	39	.0000E+00	.0000E+00	-5.1055E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.1055E-06
39	40	.0000E+00	.0000E+00	4.1961E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1961E-06
40	41	.0000E+00	.0000E+00	9.5738E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.5738E-05
41	42	.0000E+00	.0000E+00	5.4979E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4979E-07
42	43	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
43	44	.0000E+00	.0000E+00	-1.9493E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9493E-05
44	45	.0000E+00	.0000E+00	2.0002E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0002E-07
45	46	.0000E+00	.0000E+00	-1.8838E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8838E-05
46	47	.0000E+00	.0000E+00	-2.4424E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4424E-05
47	48	.0000E+00	.0000E+00	4.2043E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2043E-06
48	49	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
49	50	.0000E+00	.0000E+00	4.2213E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2213E-06
50	51	.0000E+00	.0000E+00	-5.2880E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.2880E-05
51	52	.0000E+00	.0000E+00	9.8147E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.8147E-05
52	53	.0000E+00	.0000E+00	-8.3380E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3380E-06
53	54	.0000E+00	.0000E+00	-1.3233E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3233E-04
54	55	.0000E+00	.0000E+00	-2.0796E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0796E-05
55	56	.0000E+00	.0000E+00	-9.4268E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4268E-05
56	57	.0000E+00	.0000E+00	-5.3734E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3734E-05
57	58	.0000E+00	.0000E+00	3.0119E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0119E-05
58	59	.0000E+00	.0000E+00	-1.7326E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7326E-04
59	60	.0000E+00	.0000E+00	2.2064E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2064E-08
60	61	.0000E+00	.0000E+00	-6.5178E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.5178E-05
61	62	.0000E+00	.0000E+00	2.1577E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1577E-05
62	63	.0000E+00	.0000E+00	1.2567E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2567E-05
63	64	.0000E+00	.0000E+00	-4.8644E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.8644E-05
64	65	.0000E+00	.0000E+00	-6.3516E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.3516E-05
65	66	.0000E+00	.0000E+00	-1.2412E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2412E-05
66	67	.0000E+00	.0000E+00	2.6681E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6681E-04
67	68	.0000E+00	.0000E+00	-2.2555E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2555E-05
68	69	.0000E+00	.0000E+00	-1.6915E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6915E-05
69	70	.0000E+00	.0000E+00	-7.1516E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1516E-06
70	71	.0000E+00	.0000E+00	-6.3602E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.3602E-05
71	72	.0000E+00	.0000E+00	1.5340E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5340E-04
72	73	.0000E+00	.0000E+00	-8.9680E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9680E-05
73	74	.0000E+00	.0000E+00	-3.0276E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.0276E-05
74	75	.0000E+00	.0000E+00	1.8056E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8056E-04
75	76	.0000E+00	.0000E+00	8.4002E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4002E-06
76	77	.0000E+00	.0000E+00	-5.4020E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.4020E-05
77	78	.0000E+00	.0000E+00	-5.4015E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.4015E-06
78	79	.0000E+00	.0000E+00	5.8376E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.8376E-05
79	80	.0000E+00	.0000E+00	2.5602E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5602E-05
80	81	.0000E+00	.0000E+00	4.1833E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1833E-06
81	82	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
82	83	.0000E+00	.0000E+00	3.5549E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5549E-05
83	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88		.0000E+00	.0000E+00	6.6184E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6184E-06

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	2.4531E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4531E-05
TOTAL		.0000E+00	.0000E+00	-6.2845E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.2845E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3809E-02	.0000E+00	-1.3809E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.3107E-03	.0000E+00	-3.9568E-01	-1.1553E-03	-3.3758E-01
33	34	.0000E+00	.0000E+00	-1.7280E-04	.0000E+00	-1.7280E-04
34	35	.0000E+00	.0000E+00	-2.1351E-05	.0000E+00	-2.1351E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-7.9524E-07	.0000E+00	-7.9524E-07
37	38	1.2977E-04	.0000E+00	-6.4451E-03	-6.4883E-05	-6.3802E-03
38	39	.0000E+00	.0000E+00	-5.7623E-06	.0000E+00	-5.7623E-06
39	40	.0000E+00	.0000E+00	-4.7625E-02	.0000E+00	-4.7625E-02
40	41	.0000E+00	.0000E+00	-3.2963E-03	.0000E+00	-3.2963E-03
41	42	.0000E+00	.0000E+00	-3.1243E-06	.0000E+00	-3.1243E-06
42	43	.0000E+00	.0000E+00	-5.1881E-04	.0000E+00	-5.1881E-04
43	44	.0000E+00	.0000E+00	-1.0784E-03	.0000E+00	-1.0784E-03
44	45	.0000E+00	.0000E+00	-4.4768E-04	.0000E+00	-4.4768E-04
45	46	.0000E+00	.0000E+00	-2.6160E-03	.0000E+00	-2.6160E-03
46	47	.0000E+00	.0000E+00	-2.8573E-04	.0000E+00	-2.8573E-04
47	48	.0000E+00	.0000E+00	-5.4671E-05	.0000E+00	-5.4671E-05
48	49	.0000E+00	.0000E+00	-2.1919E-04	.0000E+00	-2.1919E-04
49	50	.0000E+00	.0000E+00	-2.3190E-03	.0000E+00	-2.3190E-03
50	51	.0000E+00	.0000E+00	-9.9369E-03	.0000E+00	-9.9369E-03
51	52	.0000E+00	.0000E+00	-5.9794E-04	.0000E+00	-5.9794E-04

52	53	.0000E+00	.0000E+00	-1.0331E-02	.0000E+00	.0000E+00	-1.0331E-02
53	54	.0000E+00	.0000E+00	-5.2251E-05	.0000E+00	.0000E+00	-5.2251E-05
54	55	.0000E+00	.0000E+00	-2.4006E-03	.0000E+00	.0000E+00	-2.4006E-03
55	56	.0000E+00	.0000E+00	-1.0231E-02	.0000E+00	.0000E+00	-1.0231E-02
56	57	.0000E+00	.0000E+00	-5.9857E-04	.0000E+00	.0000E+00	-5.9857E-04
57	58	.0000E+00	.0000E+00	-1.0501E-02	.0000E+00	.0000E+00	-1.0501E-02
58	59	.0000E+00	.0000E+00	-6.0955E-05	.0000E+00	.0000E+00	-6.0955E-05
59	60	.0000E+00	.0000E+00	-2.7390E-03	.0000E+00	.0000E+00	-2.7390E-03
60	61	.0000E+00	.0000E+00	-1.0675E-02	.0000E+00	.0000E+00	-1.0675E-02
61	62	.0000E+00	.0000E+00	-6.4816E-05	.0000E+00	.0000E+00	-6.4816E-05
62	63	.0000E+00	.0000E+00	-2.6879E-03	.0000E+00	.0000E+00	-2.6879E-03
63	64	.0000E+00	.0000E+00	-1.0488E-02	.0000E+00	.0000E+00	-1.0488E-02
64	65	.0000E+00	.0000E+00	-7.6176E-05	.0000E+00	.0000E+00	-7.6176E-05
65	66	.0000E+00	.0000E+00	-1.9872E-02	.0000E+00	.0000E+00	-1.9872E-02
66	67	.0000E+00	.0000E+00	-1.5993E-02	.0000E+00	.0000E+00	-1.5993E-02
67	68	.0000E+00	.0000E+00	-1.5018E-02	.0000E+00	.0000E+00	-1.5018E-02
68	70	.0000E+00	.0000E+00	-4.9824E-03	.0000E+00	.0000E+00	-4.9824E-03
69	71	.0000E+00	.0000E+00	-6.2697E-04	.0000E+00	.0000E+00	-6.2697E-04
70	72	.0000E+00	.0000E+00	-2.0723E-02	.0000E+00	.0000E+00	-2.0723E-02
71	73	.0000E+00	.0000E+00	-5.1121E-03	.0000E+00	.0000E+00	-5.1121E-03
72	74	.0000E+00	.0000E+00	-6.5279E-04	.0000E+00	.0000E+00	-6.5279E-04
73	75	.0000E+00	.0000E+00	-2.0754E-02	.0000E+00	.0000E+00	-2.0754E-02
74	76	.0000E+00	.0000E+00	-8.9282E-05	.0000E+00	.0000E+00	-8.9282E-05
75	77	.0000E+00	.0000E+00	-1.0332E-04	.0000E+00	.0000E+00	-1.0332E-04
76	80	.0000E+00	.0000E+00	-3.0209E-05	.0000E+00	.0000E+00	-3.0209E-05
77	81	.0000E+00	.0000E+00	-7.7843E-03	.0000E+00	.0000E+00	-7.7843E-03
78	82	.0000E+00	.0000E+00	-3.7333E-04	.0000E+00	.0000E+00	-3.7333E-04
79	83	.0000E+00	.0000E+00	-6.6763E-06	.0000E+00	.0000E+00	-6.6763E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.0903E-03	.0000E+00	.0000E+00	-2.0903E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.2764E-03	.0000E+00	.0000E+00	-2.2764E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.2551E-03	.0000E+00	.0000E+00	-2.2551E-03

TOTAL 2.4405E-03 .0000E+00 -6.6478E-01 -1.2202E-03 -3.3758E-01 -1.0011E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	287027 16407	2.9825E+00 1.9575E-01	1.3710E-02 9.9365E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7487E-01 3.7678E-04 5.7951E-05 2.1481E-06 7.7755E-08 7.0168E-05 1.0963E-06 6.3117E-10 6.7141E-05 3.2018E-03 1.5707E-03 3.1607E-01 2.0290E-04 6.8136E-05 2.0146E-03 7.7545E-04 4.2746E-04 1.5646E-04 3.7645E-05 7.2653E-07 3.3796E-05 4.3818E-07	98553 785 150 1033 4 242 319 0 118 15678 1289 146151 562 284 19400 4671 4679 324 248 40 89 3	1.4386E+00 9.8576E-03 2.0974E-03 1.1462E-02 4.9112E-05 3.0668E-03 3.4160E-03 .0000E+00 1.5865E-03 2.9783E-01 1.8608E-02 2.1365E+00 7.1472E-03 3.4174E-03 3.8315E-01 6.1044E-02 9.3800E-02 4.5793E-03 3.0723E-03 9.5916E-04 1.2190E-03 1.0518E-04	1.2405E-03 8.4719E-03 1.6975E-03 1.1386E-02 4.2271E-05 2.6566E-03 3.4113E-03 .0000E+00 9.9461E-04 2.7060E-02 6.4979E-03 1.7872E-01 5.6853E-03 2.5561E-03 7.1495E-02 5.3173E-02 1.3522E-02 3.1471E-03 2.7950E-03 7.3803E-05 1.0513E-03 6.5545E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.2359E-05 1.3188E-01 3.1120E-04 2.0539E-02 7.6089E-05 1.3451E-04 1.4609E-01 3.0442E-04 3.7749E-02 3.8243E-05 2.7822E-05 3.6339E-04 3.3753E-06 3.2201E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2603E-05 .0000E+00 1.1427E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	3 3 4 722 6	3.4323E-05 3.0669E-05 5.0418E-05 8.0100E-03 6.6122E-05	1.0865E-09 8.8395E-06 4.1801E-06 1.5656E-04 3.2167E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	433 14	3.7287E-03 1.2676E-04	2.1348E-05 3.5784E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	12	1.8366E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	16 0	1.5610E-04 .0000E+00	7.9524E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	197 94 228 49314 500	2.8233E-03 1.3638E-03 3.1788E-03 7.3358E-01 7.2752E-03	2.7237E-06 7.9364E-05 1.3329E-04 6.0606E-03 1.6917E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 6.4883E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	125 4	1.0384E-03 3.5221E-05	5.7613E-06 1.0630E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1271541 114963	1.6621E+01 1.6639E+00	4.6337E-02 1.2881E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	78057 6591	1.0269E+00 9.5538E-02	3.2381E-03 5.8137E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	58 2	5.1683E-04 1.8838E-05	3.1236E-06 6.6379E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	11 6 17 3563 36	1.4312E-04 7.7291E-05 2.0826E-04 5.2745E-02 4.9838E-04	9.1816E-07 9.2510E-06 1.3762E-05 4.7478E-04 2.0107E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26234 2269	3.4464E-01 3.2952E-02	1.0607E-03 1.7667E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	8 7 9 3073 30	1.1501E-04 1.0849E-04 1.4956E-04 4.5561E-02 4.5877E-04	7.6355E-07 9.8051E-06 3.5629E-06 4.2339E-04 1.0165E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63677 5572	8.3872E-01 8.0679E-02	2.5471E-03 6.8910E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6680 542	8.7597E-02 7.9095E-03	2.7827E-04 7.4536E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 1 1 305 2	1.5423E-05 1.4510E-05 1.5283E-05 4.4984E-03 2.6034E-05	1.1116E-13 6.6279E-09 8.3741E-09 5.4489E-05 1.6699E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5486 472	7.3229E-02 6.9279E-03	2.1300E-04 6.1867E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	58777 4612	6.9868E-01 6.3008E-02	2.2715E-03 4.7547E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	10 36 43 1 1 1485 448 7618 2140 160	1.1675E-04 4.4674E-04 5.9493E-04 1.7569E-05 1.4945E-05 1.9241E-02 6.3076E-03 9.2560E-02 2.6556E-02 2.1725E-03	1.2076E-08 3.0047E-05 1.0312E-05 1.1169E-08 4.4392E-09 1.8808E-03 8.1041E-04 5.3264E-03 1.5894E-03 2.8946E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2406 4	3.4419E-02 5.8776E-05	5.9395E-04 3.9906E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	4 33 50 2 2 1358	6.3550E-05 3.7575E-04 7.3620E-04 3.2975E-05 3.1702E-05 1.7472E-02	1.0383E-09 2.6494E-05 9.4989E-06 5.5207E-08 2.3143E-06 1.7739E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	439	6.0390E-03	9.4972E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7702	9.2517E-02	5.4891E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2295	2.7740E-02	1.7960E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	152	2.0914E-03	2.8371E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1105	9.7399E-03	5.2234E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	64	6.8321E-04	1.6954E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	61146	7.1780E-01	2.3632E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4713	6.3854E-02	3.7434E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	7	8.8040E-05	1.5836E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	26	3.1975E-04	1.3168E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	66	9.0721E-04	8.5223E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.5016E-05	1.3400E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3632E-05	1.0743E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1441	1.8780E-02	1.8751E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	492	6.9089E-03	9.9535E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7650	9.3250E-02	5.3230E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2322	2.8628E-02	1.7439E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	162	2.1708E-03	2.7062E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2432	3.5003E-02	5.9517E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	4.2052E-05	3.3932E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	6	7.6560E-05	1.3000E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	44	5.4125E-04	2.5634E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	6.5657E-04	1.4887E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.8319E-05	3.5550E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5008E-05	9.6052E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1491	1.9296E-02	1.8784E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	501	6.8921E-03	9.9031E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7714	9.2846E-02	5.4469E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2469	3.0121E-02	1.8823E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	135	1.7176E-03	2.6187E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1202	1.1445E-02	6.0466E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	55	5.2941E-04	4.8884E-07	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	81121	1.0031E+00	2.6799E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7201	1.0041E-01	5.9083E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	16	2.4020E-04	1.9313E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	53	6.6946E-04	2.9136E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	76	1.0665E-03	6.0841E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1920E-04	1.6533E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.4679E-05	2.7343E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2148	2.9035E-02	1.9229E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	844	1.2053E-02	1.1123E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10890	1.3942E-01	5.4560E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3240	4.2062E-02	1.6988E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	267	3.7564E-03	4.4483E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1368	1.2204E-02	6.4766E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	67	7.1123E-04	5.0140E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	81047	1.0045E+00	2.6281E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6992	9.7990E-02	5.9859E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	7	9.2398E-05	6.4443E-10	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	58	8.0156E-04	2.2375E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	88	1.2712E-03	7.8434E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.2535E-05	9.5238E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.4054E-05	1.3867E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2210	3.0347E-02	1.9323E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	821	1.1930E-02	9.9666E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10863	1.3980E-01	5.3393E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3347	4.3330E-02	1.7920E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	244	3.3787E-03	3.9485E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1497	1.3617E-02	7.6156E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	60	6.2829E-04	1.9938E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	412164	3.7203E+00	1.9820E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19793	1.9908E-01	5.2480E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	10	9.6206E-05	3.0011E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	5.0456E-04	4.2032E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	60	6.9633E-04	1.8468E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0212E-04	2.0240E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2870E-05	1.8456E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1639	1.7773E-02	2.8894E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	405	4.9797E-03	1.3235E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9955	1.0135E-01	8.6074E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2996	3.0771E-02	2.7740E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	1.7958E-03	3.3563E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	7	8.8773E-05	2.6972E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	4.3389E-04	3.9087E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	6.2462E-04	8.8345E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	5.9440E-06	3.6267E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.0259E-05	2.4150E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1554	1.7117E-02	2.6921E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	438	5.4364E-03	1.2921E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9492	9.6994E-02	8.1339E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2754	2.8734E-02	2.5386E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	159	1.9841E-03	3.1012E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	7	1.0703E-04	4.1431E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.2232E-04	1.2765E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	74	1.1024E-03	4.6797E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.1567E-04	1.2889E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1840E-05	2.5887E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1394	1.9190E-02	9.0241E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	504	7.2343E-03	4.7303E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6630	8.4176E-02	2.4998E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2031	2.6093E-02	8.4970E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	140	1.9585E-03	2.3982E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6121	9.0844E-02	6.1818E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.1158E-04	8.7861E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	46	6.3287E-04	2.9521E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	193	2.4818E-03	6.1532E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	313	4.4586E-03	2.0601E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	16	2.3731E-04	1.4632E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	11	1.8144E-04	3.8749E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7018	9.5434E-02	3.7121E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2451	3.4360E-02	2.0463E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34212	4.2634E-01	1.0373E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10681	1.3579E-01	3.3663E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	847	1.1939E-02	1.1374E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	11	1.6952E-04	7.7435E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	5.2248E-04	2.4254E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	65	9.0404E-04	8.0354E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.4510E-05	2.1311E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6637E-05	3.1614E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1493	2.0703E-02	9.5687E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	519	7.4552E-03	3.6392E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7043	8.9252E-02	2.7047E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2205	2.8575E-02	8.4673E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	2.2789E-03	2.0729E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6236	9.2690E-02	6.4657E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	11	1.6133E-04	6.2184E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	33	4.4322E-04	1.8861E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	177	2.1537E-03	4.9664E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	284	4.1541E-03	1.5444E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	16	2.2026E-04	1.8306E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.1223E-04	1.1441E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7423	1.0166E-01	3.6852E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2436	3.4547E-02	1.8214E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34834	4.3819E-01	1.0398E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10847	1.3845E-01	3.4833E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	903	1.2616E-02	1.2972E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	1661	1.5534E-02	8.9255E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	79	7.0087E-04	2.7133E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2282	1.9036E-02	1.0329E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	109	1.0609E-03	2.8553E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	2.9645E-05	1.0009E-05	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	17	1.1937E-04	1.5132E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	8	8.1545E-05	5.0681E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	2.9884E-05	1.4199E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	5.3573E-04	3.0279E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	5.8111E-04	6.9400E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	2.9241E-05	3.4434E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	8.1752E-06	1.9995E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1148	1.3289E-02	1.4279E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	375	4.9138E-03	6.5530E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6457	6.7232E-02	4.1070E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1923	2.0495E-02	1.3245E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	133	1.6496E-03	2.3004E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10470	1.0756E-01	3.7018E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	759	9.2513E-03	3.1480E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	109	1.2423E-03	6.6746E-06	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	8	1.0523E-04	1.7420E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	7	9.3491E-05	2.4713E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	12	1.7030E-04	9.9038E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	19	2.7178E-04	1.2930E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	28	3.9104E-04	1.6711E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	590	7.4212E-03	4.5320E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	71	9.8128E-04	6.1034E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	999	1.1619E-02	3.7422E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2442	2.8357E-02	1.0336E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	72	9.3232E-04	4.0068E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	61	7.1960E-04	1.0914E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	50	5.5336E-04	3.9242E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	14	2.0247E-04	4.0926E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	3	2.8696E-05	2.0039E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.5797E-05	2.1014E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	194	2.7112E-03	1.1158E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9130	1.0481E-01	2.1642E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	49263	4.1374E-01	2.2542E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2378	2.1762E-02	8.5612E-07	.0000E+00	.0000E+00
TOTAL				3338780	4.1339E+01	6.6478E-01	3.3758E-01	1.2202E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2502546	2.9728E+01	1.0025E-01	.0000E+00	.0000E+00
		2004.50C		12	1.8366E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		225	2.8919E-03	2.2810E-07	.0000E+00	.0000E+00
		7014.50C		837	1.0209E-02	4.0647E-04	.0000E+00	.0000E+00
		8016.50C		292499	4.0854E+00	3.0517E-03	.0000E+00	.0000E+00

13027.50C	17207	2.5313E-01	2.4549E-03	.0000E+00	.0000E+00
14000.50C	1305	1.8228E-02	1.4185E-04	.0000E+00	.0000E+00
15031.50C	80	1.1194E-03	1.0935E-05	.0000E+00	.0000E+00
16032.50C	40	6.0327E-04	1.6243E-05	.0000E+00	.0000E+00
22000.50C	28	3.9104E-04	1.6711E-05	.0000E+00	.0000E+00
24000.50C	32506	4.2838E-01	2.8100E-02	.0000E+00	.0000E+00
25055.50C	10938	1.5275E-01	1.4003E-02	.0000E+00	.0000E+00
26000.55C	171465	2.0741E+00	8.1914E-02	.0000E+00	.0000E+00
28000.50C	51700	6.3578E-01	2.6724E-02	.0000E+00	.0000E+00
29000.50C	100	1.3061E-03	6.2457E-05	.0000E+00	.0000E+00
40000.50C	56977	8.4439E-01	7.1698E-03	.0000E+00	6.4883E-05
42000.50C	3672	5.0229E-02	5.8120E-03	.0000E+00	.0000E+00
45103.50C	785	9.8573E-03	8.4719E-03	.0000E+00	.0000E+00
47109.50C	150	2.0974E-03	1.6975E-03	.0000E+00	.0000E+00
50000.35C	574	8.3245E-03	2.0282E-04	.0000E+00	.0000E+00
62149.50C	1033	1.1462E-02	1.1386E-02	.0000E+00	.0000E+00
63151.55C	4	4.9112E-05	4.2271E-05	.0000E+00	.0000E+00
63153.55C	242	3.0668E-03	2.6566E-03	.0000E+00	.0000E+00
64155.50C	319	3.4160E-03	3.4113E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	118	1.5865E-03	9.9461E-04	2.2359E-05	.0000E+00
92235.50C	15678	2.9783E-01	2.7060E-02	1.3188E-01	1.2603E-05
92236.50C	1289	1.8608E-02	6.4979E-03	3.1120E-04	.0000E+00
92238.50C	146151	2.1365E+00	1.7872E-01	2.0539E-02	1.1427E-03
93237.55C	562	7.1472E-03	5.6853E-03	7.6089E-05	.0000E+00
94238.50C	284	3.4174E-03	2.5561E-03	1.3451E-04	.0000E+00
94239.55C	19400	3.8315E-01	7.1495E-02	1.4609E-01	.0000E+00
94240.50C	4671	6.1044E-02	5.3173E-02	3.0442E-04	.0000E+00
94241.50C	4679	9.3800E-02	1.3522E-02	3.7749E-02	.0000E+00
94242.50C	324	4.5793E-03	3.1471E-03	3.8243E-05	.0000E+00
95241.50C	248	3.0723E-03	2.7950E-03	2.7822E-05	.0000E+00
95242.50C	40	9.5916E-04	7.3803E-05	3.6339E-04	.0000E+00
95243.50C	89	1.2190E-03	1.0513E-03	3.3753E-06	.0000E+00
96245.35C	3	1.0518E-04	6.5545E-06	3.2201E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59894 CTM = 112.62

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 112.75 MINUTES

MCNP VERSION 4A-B 10/04/91

02/23/95 18:30:57

PROBID = 02/23/95 16:37:35

1MCNP VERSION 4A-B LD=10/04/91 02/23/95 20:24:37

PROBID = 02/23/95 20:24:37

INP=mpc12o OUT=mpc12o.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/10 year (mpc12o)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1908-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      PWR: 3.75% U-235 - 37 GWD/MTU - 10 YEAR DECAY
331- M2      8016.50C 4.8528E-02
332-      45103.50C 2.7099E-05
333-      47109.50C 4.1671E-06
334-      62149.50C 1.5447E-07
335-      63151.55C 4.9478E-08
336-      63153.55C 5.0456E-06
337-      64155.50C 4.3313E-07
338-      92233.50C 8.9656E-11
339-      92234.50C 5.1909E-06
340-      92235.50C 2.3026E-04
341-      92236.50C 1.1300E-04
342-      92238.50C 2.2728E-02
343-      93237.55C 1.4714E-05
344-      94238.50C 4.6349E-06
345-      94239.55C 1.4482E-04
346-      94240.50C 5.5978E-05
347-      94241.50C 1.9931E-05
348-      94242.50C 1.1251E-05
349-      95241.50C 1.3396E-05
350-      95242.50C 5.0142E-08
351-      95243.50C 2.4302E-06
352-      96245.35C 3.1461E-08
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3      2004.50C 1.0
355- C      ZIRCALOY-4
356- M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-		40000.50C	-0.9818	50000.35C	-0.0140		
358-	C	ALLOY 825					
359-	M5	6000.50C	-0.0005	13027.50C	-0.0020	14000.50C	-0.0050
360-		16032.50C	-0.0003	22000.50C	-0.0090	24000.50C	-0.2150
361-		25055.50C	-0.0100	26000.55C	-0.2857	28000.50C	-0.4200
362-		29000.50C	-0.0250	42000.50C	-0.0300		
363-	C	1100 ALUMINUM ALLOY					
364-	M6	13027.50C	-0.99880	29000.50C	-0.00120		
365-	C	A516 CARBON STEEL					
366-	M7	6000.50C	-0.0022	14000.50C	-0.00275	15031.50C	-0.00035
367-		16032.50C	-0.00035	25055.50C	-0.0090		
368-		26000.55C	-0.98535				
369-	C	SS316L					
370-	M8	6000.50C	-0.00030	7014.50C	-0.00100	14000.50C	-0.00750
371-		15031.50C	-0.00045	16032.50C	-0.00030	24000.50C	-0.17000
372-		25055.50C	-0.02000	26000.55C	-0.64545	28000.50C	-0.12000
373-		42000.50C	-0.02500				
374-	C	TALLIES					
375-	C	PRINT					

SURFACES	16048 AND	19048 OF CELL	8 ARE THE SAME.	19048 WILL BE DELETED.
SURFACES	16049 AND	19049 OF CELL	8 ARE THE SAME.	19049 WILL BE DELETED.
SURFACES	16050 AND	17050 OF CELL	8 ARE THE SAME.	17050 WILL BE DELETED.
SURFACES	16050 AND	20050 OF CELL	8 ARE THE SAME.	20050 WILL BE DELETED.
SURFACES	16050 AND	21050 OF CELL	8 ARE THE SAME.	21050 WILL BE DELETED.
SURFACES	16051 AND	17051 OF CELL	8 ARE THE SAME.	17051 WILL BE DELETED.
SURFACES	16051 AND	20051 OF CELL	8 ARE THE SAME.	20051 WILL BE DELETED.
SURFACES	16051 AND	21051 OF CELL	8 ARE THE SAME.	21051 WILL BE DELETED.
SURFACES	18050 AND	22050 OF CELL	8 ARE THE SAME.	22050 WILL BE DELETED.
SURFACES	18051 AND	22051 OF CELL	8 ARE THE SAME.	22051 WILL BE DELETED.
SURFACES	19050 AND	23050 OF CELL	8 ARE THE SAME.	23050 WILL BE DELETED.
SURFACES	19051 AND	23051 OF CELL	8 ARE THE SAME.	23051 WILL BE DELETED.
SURFACES	20048 AND	23048 OF CELL	8 ARE THE SAME.	23048 WILL BE DELETED.
SURFACES	20049 AND	23049 OF CELL	8 ARE THE SAME.	23049 WILL BE DELETED.
SURFACES	24048 AND	27048 OF CELL	9 ARE THE SAME.	27048 WILL BE DELETED.
SURFACES	24049 AND	27049 OF CELL	9 ARE THE SAME.	27049 WILL BE DELETED.
SURFACES	24050 AND	25050 OF CELL	9 ARE THE SAME.	25050 WILL BE DELETED.
SURFACES	24050 AND	28050 OF CELL	9 ARE THE SAME.	28050 WILL BE DELETED.
SURFACES	24050 AND	29050 OF CELL	9 ARE THE SAME.	29050 WILL BE DELETED.
SURFACES	24051 AND	25051 OF CELL	9 ARE THE SAME.	25051 WILL BE DELETED.

SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3015
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3015
 POINTS AFTER EXPANSION OR CONTRACTION 3005
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190864E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T					
2	8016,	.67486	45103,	.00038	47109,	.00006	62149,	.00000
	63151,	.00000	63153,	.00007	64155,	.00001	92233,	.00000
	92234,	.00007	92235,	.00320	92236,	.00157	92238,	.31607
	93237,	.00020	94238,	.00006	94239,	.00201	94240,	.00078
	94241,	.00028	94242,	.00016	95241,	.00019	95242,	.00000
	95243,	.00003	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
	8016,	.12249	45103,	.00044	47109,	.00007	62149,	.00000
2	63151,	.00000	63153,	.00012	64155,	.00001	92233,	.00000
	92234,	.00019	92235,	.00854	92236,	.00421	92238,	.85382
	93237,	.00055	94238,	.00017	94239,	.00546	94240,	.00212
	94241,	.00076	94242,	.00043	95241,	.00051	95242,	.00000
	95243,	.00009	96245,	.00000				
	2004,	1.00000						
3	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
4	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
5	28000,	.41895	29000,	.02494	42000,	.02993		
	13027,	.99880	29000,	.00120				
6	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
7	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
8	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	7	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19080E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.19080E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700000E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80		PZ	3.1235000E+02
72	81		CZ	1.0652500E+02
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
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WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C	16458	NJOY		(1338)	79/09/12.
94241.50C	22523	NJOY	TOTAL NU	(1381)	79/08/30.
94242.50C	43433	NJOY	TOTAL NU	(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY		(1315)	79/10/29.
16032.50C	2684	NJOY		(1316)	79/10/29.
22000.50C	25231	NJOY		(1322)	79/06/21.
25055.50C	60097	NJOY		(1325)	79/06/21.
42000.50C	18467	NJOY		(1321)	79/08/01.
62149.50C	11116	NJOY		(1319)	02/12/85
64155.50C	31471	NJOY		(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY		(1310)	11/01/85
47109.50C	10147	NJOY		(1373)	11/01/85
93237.55C	29142	NJOY	TOTAL NU	(1337)	04/04/85

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24 T=OK	(48)	86/02/01
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WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C	33336				06/28/88
63153.55C	30265				06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
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TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102258
TALLIES	0
BANK	18403
CROSS SECTIONS	1347491
TOTAL	1468152

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/10 year (mpc12o)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	3.733E-01	-1.311E-01	4.813E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.983E-01	2.711E+00
2	3.048E-01	-2.160E-01	4.788E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.983E-01	7.139E-01
3	4.305E-01	-8.380E-02	3.953E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.983E-01	4.021E+00
4	-4.913E-02	4.345E-01	4.896E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.983E-01	7.780E-01
5	1.923E-01	3.906E-04	4.501E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.983E-01	3.697E+00
6	2.252E-01	-1.968E-01	4.568E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.983E-01	4.414E+00
7	-4.152E-01	-2.798E-02	4.593E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.983E-01	9.591E-01
8	2.458E-02	2.838E-01	6.163E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.983E-01	6.158E-01
9	3.734E-01	-1.092E-01	5.110E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.983E-01	3.784E+00
10	8.361E-02	-2.153E-01	1.358E+02	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.983E-01	2.235E+00
11	1.097E-01	-2.929E-01	1.356E+02	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.983E-01	1.432E+00
12	-2.624E-01	4.623E-02	1.424E+02	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.983E-01	1.697E+00
13	-1.919E-01	2.497E-01	1.439E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.983E-01	2.810E-01
14	-1.241E-03	4.381E-01	1.237E+02	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.983E-01	4.389E+00
15	1.533E-01	-1.286E-01	1.514E+02	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.983E-01	5.190E+00
16	-5.772E-02	-3.689E-01	1.572E+02	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.983E-01	2.029E-01
17	2.247E-01	1.089E-01	1.578E+02	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.983E-01	1.327E+00
18	3.276E-01	-3.026E-01	1.596E+02	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.983E-01	4.157E-01
19	2.336E-01	-4.021E-01	1.132E+02	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.983E-01	1.511E+00
20	-2.122E-01	3.846E-01	1.499E+02	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.983E-01	1.546E+00
21	-1.662E-01	4.137E-01	1.499E+02	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.983E-01	6.282E+00
22	-1.536E-01	2.441E-01	1.508E+02	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.983E-01	2.577E-01
23	-3.165E-02	4.289E-01	1.292E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.983E-01	3.599E-01
24	-1.859E-02	-3.612E-01	1.255E+02	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.983E-01	4.906E+00
25	1.285E-02	4.336E-01	7.763E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.983E-01	2.376E+00
26	-3.731E-01	-2.055E-01	7.602E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.983E-01	3.581E+00
27	-3.844E-01	2.240E-01	5.721E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.983E-01	7.528E+00
28	-8.896E-02	-2.185E-01	5.637E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.983E-01	6.856E-01
29	-8.896E-02	-2.185E-01	5.637E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.983E-01	2.666E+00
30	3.277E-01	5.877E-02	3.679E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.983E-01	1.220E+00
31	-2.954E-01	3.221E-01	3.642E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.983E-01	3.323E+00
32	4.263E-01	1.570E-01	3.179E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.983E-01	1.274E+00
33	-4.370E-01	-1.068E-01	2.932E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.983E-01	3.562E+00
34	-2.567E-01	-3.359E-01	1.605E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.983E-01	4.833E-01
35	2.293E-01	3.441E-01	6.725E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.983E-01	1.714E-01
36	2.035E-01	3.154E-01	5.979E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.983E-01	2.338E+00
37	-3.620E-02	-2.464E-01	2.145E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.983E-01	3.632E+00
38	3.523E-01	-2.557E-01	2.196E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.983E-01	2.420E+00
39	7.245E-02	-2.142E-01	3.790E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.983E-01	6.461E-01
40	-5.718E-03	-8.134E-02	2.702E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.983E-01	3.078E+00
41	-1.342E-01	1.867E-01	2.201E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.983E-01	5.610E-01
42	1.965E-01	2.418E-01	1.178E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.983E-01	1.725E+00
43	-1.328E-01	-2.971E-01	1.766E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.983E-01	1.062E+00
44	-1.328E-01	-2.971E-01	1.766E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.983E-01	2.414E+00
45	-4.017E-01	-5.447E-02	1.952E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.983E-01	3.240E-01
46	9.771E-02	3.925E-01	3.950E+00	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.983E-01	7.718E-01
47	9.764E-02	-3.719E-01	2.789E+00	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.983E-01	2.928E+00
48	2.662E-02	-3.717E-01	2.714E+00	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.983E-01	2.732E+00
49	1.738E-01	2.787E-01	5.810E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.983E-01	4.208E+00

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50 2.175E-01 1.555E-01 5.769E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.983E-01 4.674E+00

CYCLE 1 K(COLLISION) .848595 REMOVAL LIFETIME(ABS) 3.0097E+03 SOURCE POINTS GENERATED 2551
CYCLE 2 K(COLLISION) .876513 REMOVAL LIFETIME(ABS) 3.1200E+03 SOURCE POINTS GENERATED 3125
CYCLE 3 K(COLLISION) .865071 REMOVAL LIFETIME(ABS) 2.9713E+03 SOURCE POINTS GENERATED 2944
CYCLE 4 K(COLLISION) .840495 REMOVAL LIFETIME(ABS) 2.9451E+03 SOURCE POINTS GENERATED 2919
CYCLE 5 K(COLLISION) .873031 REMOVAL LIFETIME(ABS) 2.8730E+03 SOURCE POINTS GENERATED 3188
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .863971 REMOVAL LIFETIME(ABS) 3.0720E+03 SOURCE POINTS GENERATED 2916
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6
ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .866311 .865141 .0014 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .873411 .873280 .0001 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .865272 .865984 .0008 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.0488E+03 3.0746E+03 .0084 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.0318E+03 3.0519E+03 .0066
SOURCE POINTS GENERATED 3040
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7
ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .878194 .869492 .0051 K(COL/ABS) .866800 .0028 .867751 .0008 -.9869
K(ABSORPTION) .845767 .864109 .0106 K(ABS/TK LN) .869755 .0002 .869678 .0003 -.9994
K(TRK LENGTH) .894236 .875401 .0108 K(TK LN/COL) .872447 .0079 .864802 .0028 .9805
REM LIFE(COL) 3.0924E+03 3.0805E+03 .0052 LIFE(COL/ABS) 3.0638E+03 .0043 3.0508E+03 .0091 .7135
REM LIFE(ABS) 3.0373E+03 3.0470E+03 .0041
SOURCE POINTS GENERATED 3033
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8
ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .867125 .868900 .0036 K(COL/ABS) .866409 .0020 .867279 .0008 -.9636
K(ABSORPTION) .863342 .863917 .0075 K(ABS/TK LN) .868972 .0009 .868849 .0011 -.9724
K(TRK LENGTH) .869903 .874027 .0078 K(TK LN/COL) .871463 .0057 .864840 .0017 .9811
REM LIFE(COL) 3.0994E+03 3.0852E+03 .0040 K(COL/ABS/TK LN) .868948 .0015 .867338 .0023
REM LIFE(ABS) 3.0981E+03 3.0598E+03 .0051 LIFE(COL/ABS) 3.0725E+03 .0042 3.0816E+03 .0058 .6923
SOURCE POINTS GENERATED 2907
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9
ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .880814 .871283 .0039 K(COL/ABS) .867217 .0018 .868102 .0018 -.7885
K(ABSORPTION) .860088 .863151 .0059 K(ABS/TK LN) .870551 .0019 .869537 .0021 -.8611
K(TRK LENGTH) .893644 .877950 .0075 K(TK LN/COL) .874616 .0057 .864896 .0020 .9806
REM LIFE(COL) 3.0534E+03 3.0789E+03 .0037 K(COL/ABS/TK LN) .870795 .0024 .866468 .0045
REM LIFE(ABS) 3.0443E+03 3.0567E+03 .0041 LIFE(COL/ABS) 3.0678E+03 .0036 3.0708E+03 .0046 .6960
SOURCE POINTS GENERATED 3061
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10
ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .875892 .872051 .0033 K(COL/ABS) .868337 .0020 .869270 .0020 -.6278

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K(ABSORPTION)	.871986	.864624	.0051	K(ABS/TK LN)	.872009	.0023	.871004	.0026	-.6969
K(TRK LENGTH)	.886609	.879393	.0063	K(TK LN/COL)	.875722	.0048	.864939	.0016	.9819
REM LIFE(COL)	3.0795E+03	3.0790E+03	.0030	K(COL/ABS/TK LN)	.872023	.0024	.865399	.0033	
REM LIFE(ABS)	3.0637E+03	3.0579E+03	.0033	LIFE(COL/ABS)	3.0684E+03	.0029	3.0715E+03	.0036	.6926
SOURCE POINTS GENERATED 3053									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.854658		.869566		.0040	K(COL/ABS)	.865974	.0032	-.0100
K(ABSORPTION)	.848931		.862382		.0050	K(ABS/TK LN)	.870239	.0028	-.4380
K(TRK LENGTH)	.870314		.878096		.0055	K(TK LN/COL)	.873831	.0046	.8540
REM LIFE(COL)	2.9859E+03		3.0657E+03		.0050	K(COL/ABS/TK LN)	.870015	.0031	.0062
REM LIFE(ABS)	2.9980E+03		3.0493E+03		.0040	LIFE(COL/ABS)	3.0575E+03	.0044	3.0460E+03 .0045 .8561
SOURCE POINTS GENERATED 2937									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.871108		.869759		.0035	K(COL/ABS)	.866760	.0029	.0125
K(ABSORPTION)	.873410		.863760		.0046	K(ABS/TK LN)	.870947	.0026	-.4083
K(TRK LENGTH)	.878389		.878133		.0048	K(TK LN/COL)	.873946	.0040	.8528
REM LIFE(COL)	2.8487E+03		3.0386E+03		.0100	K(COL/ABS/TK LN)	.870551	.0027	.0059
REM LIFE(ABS)	2.8802E+03		3.0282E+03		.0078	LIFE(COL/ABS)	3.0334E+03	.0088	3.0114E+03 .0067 .9716
SOURCE POINTS GENERATED 3096									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.862829		.868989		.0032	K(COL/ABS)	.865884	.0028	.0858
K(ABSORPTION)	.854925		.862779		.0043	K(ABS/TK LN)	.869424	.0029	-.2142
K(TRK LENGTH)	.859554		.876068		.0049	K(TK LN/COL)	.872529	.0039	.8509
REM LIFE(COL)	3.0861E+03		3.0438E+03		.0089	K(COL/ABS/TK LN)	.869279	.0028	.0045
REM LIFE(ABS)	3.1140E+03		3.0377E+03		.0075	LIFE(COL/ABS)	3.0408E+03	.0081	3.0329E+03 .0077 .9475
SOURCE POINTS GENERATED 3015									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.872560		.869346		.0029	K(COL/ABS)	.865966	.0025	.0764
K(ABSORPTION)	.860841		.862585		.0038	K(ABS/TK LN)	.868959	.0026	-.1988
K(TRK LENGTH)	.868715		.875333		.0044	K(TK LN/COL)	.872340	.0035	.8000
REM LIFE(COL)	3.0439E+03		3.0438E+03		.0080	K(COL/ABS/TK LN)	.869088	.0025	.0035
REM LIFE(ABS)	3.0306E+03		3.0370E+03		.0067	LIFE(COL/ABS)	3.0404E+03	.0073	3.0317E+03 .0068 .9469
SOURCE POINTS GENERATED 3005									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.871149		.869510		.0026	K(COL/ABS)	.866685	.0024	.0984
K(ABSORPTION)	.876612		.863860		.0037	K(ABS/TK LN)	.869785	.0026	-.1394
K(TRK LENGTH)	.879487		.875711		.0040	K(TK LN/COL)	.872610	.0032	.8010
REM LIFE(COL)	2.9596E+03		3.0362E+03		.0077	K(COL/ABS/TK LN)	.869694	.0024	.0034
REM LIFE(ABS)	2.9513E+03		3.0292E+03		.0066	LIFE(COL/ABS)	3.0327E+03	.0071	3.0240E+03 .0068 .9518
SOURCE POINTS GENERATED 3000									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.858486		.868591		.0026	K(COL/ABS)	.866786	.0022	-.0593

K(ABSORPTION)	.877311	.864981	.0037	K(ABS/TK LN)	.869664	.0023	.869286	.0025	-.2584
K(TRK LENGTH)	.859341	.874347	.0040	K(TK LN/COL)	.871469	.0032	.866588	.0027	-.8323
REM LIFE(COL)	3.0913E+03	3.0408E+03	.0072	K(COL/ABS/TK LN)	.869306	.0022	.867187	.0030	
REM LIFE(ABS)	3.0747E+03	3.0330E+03	.0062	LIFE(COL/ABS)	3.0369E+03	.0066	3.0268E+03	.0062	.9538
SOURCE POINTS GENERATED 2959									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.882580		.869667	.0027	K(COL/ABS)	.866754	.0020	-.2162
K(ABSORPTION)		.850167		.863842	.0036	K(ABS/TK LN)	.869528	.0022	-.3275
K(TRK LENGTH)		.885640		.875215	.0038	K(TK LN/COL)	.872441	.0031	-.8338
REM LIFE(COL)		3.0823E+03		3.0440E+03	.0067	K(COL/ABS/TK LN)	.869575	.0021	
REM LIFE(ABS)		3.0384E+03		3.0334E+03	.0057	LIFE(COL/ABS)	3.0387E+03	.0061	.9454
SOURCE POINTS GENERATED 3070									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.850443		.868294	.0030	K(COL/ABS)	.865325	.0025	.0814
K(ABSORPTION)		.843040		.862356	.0038	K(ABS/TK LN)	.867685	.0029	.0286
K(TRK LENGTH)		.844402		.873014	.0043	K(TK LN/COL)	.870654	.0036	.8839
REM LIFE(COL)		3.2143E+03		3.0561E+03	.0073	K(COL/ABS/TK LN)	.867888	.0027	
REM LIFE(ABS)		3.2301E+03		3.0475E+03	.0070	LIFE(COL/ABS)	3.0518E+03	.0071	.9549
SOURCE POINTS GENERATED 2902									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.857645		.867584	.0029	K(COL/ABS)	.865087	.0023	.0560
K(ABSORPTION)		.865852		.862589	.0035	K(ABS/TK LN)	.867059	.0028	-.0036
K(TRK LENGTH)		.850735		.871529	.0044	K(TK LN/COL)	.869557	.0035	.8914
REM LIFE(COL)		3.0865E+03		3.0582E+03	.0068	K(COL/ABS/TK LN)	.867234	.0027	
REM LIFE(ABS)		3.0858E+03		3.0500E+03	.0065	LIFE(COL/ABS)	3.0541E+03	.0066	.9550
SOURCE POINTS GENERATED 3081									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/10 year (mpc12o)

PROBID = 02/23/95 22:17:12
02/23/95 20:24:37

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59726	1.0046E+00	2.0750E+00	ESCAPE	1	1.2438E-05	6.5368E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.1744E-02	5.0078E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59818	6.2917E-02	3.1796E-05
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.1947E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	186	2.5476E-03	2.1065E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9614E+00
				CAPTURE	0	6.8391E-01	3.4034E-02
				LOSS TO (N,XN)	93	1.2738E-03	1.0873E-02
				LOSS TO FISSION	0	3.2077E-01	7.0685E-02

TOTAL 59912 1.0689E+00 2.0771E+00

NUMBER OF NEUTRONS BANKED 93
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0031E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 5.5818E+01
 TOTAL NEUTRON COLLISIONS 3333760
 NET MULTIPLICATION 1.0013E+00 .0002

COMPUTER TIME SO FAR IN THIS RUN 112.35 MINUTES
 COMPUTER TIME IN MCRUN 112.22 MINUTES
 SOURCE PARTICLES PER MINUTE 5.3224E+02
 RANDOM NUMBERS GENERATED 40715477

AVERAGE LIFETIME, SHAKES
 ESCAPE 2.0366E+00
 CAPTURE 3.0332E+03
 CAPTURE OR ESCAPE 3.0332E+03
 ANY TERMINATION 3.3627E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 8494 IN HISTORY 8704

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4103E-01 TO 1.1760E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	24911	9278	3.2466E+00	1.1609E-04	3.7475E-01	7.2910E-01	1.0947E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	712074	59818	293219	4.1460E+00	7.8545E-04	7.6086E-01	8.8358E-01	2.5037E+00
33	34	2958	141	604	6.2088E-03	5.2475E-05	2.4083E-01	6.0897E-01	4.3094E+00
34	35	248	23	635	4.7871E-03	6.0601E-06	2.3350E-02	4.6228E-01	4.0400E-01
35	36	1272510	59818	8	1.3145E-04	6.7579E-04	7.1925E-01	8.8015E-01	3.4832E+03
36	37	453	22	34	2.5775E-04	3.5683E-06	1.3689E-02	4.9637E-01	3.9744E-01
37	38	1379560	59818	49854	7.4393E-01	6.4674E-04	7.0510E-01	8.7967E-01	4.1074E+00
38	39	478	22	179	1.4547E-03	3.3694E-06	1.4000E-02	4.7871E-01	3.8637E-01
39	40	2204564	59818	1379112	1.8296E+01	5.5936E-04	6.7314E-01	8.7701E-01	1.6552E+00
40	41	55775	30854	85778	1.1449E+00	4.1372E-04	6.1691E-01	8.7600E-01	1.5544E+00
41	42	20	6	58	5.1609E-04	3.5676E-08	4.3194E-08	5.4092E-01	3.0619E-01
42	43	117996	32564	3643	5.4342E-02	4.4925E-04	6.4067E-01	8.7727E-01	4.1262E+00
43	44	132318	34921	28350	3.7844E-01	4.4852E-04	6.3955E-01	8.7856E-01	1.5900E+00
44	45	144764	35880	3157	4.7154E-02	4.4908E-04	6.3888E-01	8.7747E-01	4.1233E+00
45	46	176126	40916	68809	9.1916E-01	4.5310E-04	6.4426E-01	8.7737E-01	1.5979E+00
46	47	6727	3114	6927	9.0940E-02	4.2067E-04	6.1332E-01	8.6948E-01	1.5547E+00
47	48	9048	3418	346	5.1905E-03	4.3304E-04	6.1937E-01	8.7149E-01	4.1114E+00
48	49	11853	4776	5906	7.7773E-02	4.5776E-04	6.4681E-01	8.7338E-01	1.6102E+00
49	50	33657	15088	66042	7.9345E-01	3.5578E-04	5.7903E-01	8.2654E-01	1.4909E+00
50	51	33677	14374	12276	1.5221E-01	4.0745E-04	5.8665E-01	8.0886E-01	2.1060E+00
51	52	33281	14004	2536	3.6379E-02	4.0233E-04	5.8095E-01	8.0309E-01	9.1967E+00
52	53	33422	14050	12519	1.5405E-01	3.8457E-04	5.7032E-01	8.0095E-01	2.0923E+00
53	54	157	48	1177	1.0955E-02	3.9439E-05	1.5864E-01	6.1386E-01	7.0217E-01
54	55	32864	14910	63469	7.6088E-01	3.6827E-04	5.9190E-01	8.2736E-01	1.5066E+00
55	56	32773	14106	11947	1.4894E-01	4.2305E-04	5.9831E-01	8.1144E-01	2.1238E+00
56	57	32480	13842	2387	3.4209E-02	4.1560E-04	5.7807E-01	8.0991E-01	9.2147E+00
57	58	32617	13883	12081	1.4826E-01	3.8884E-04	5.6737E-01	8.0161E-01	2.0796E+00
58	59	138	44	988	8.2317E-03	3.1374E-05	1.3829E-01	5.5319E-01	6.5055E-01
59	60	52712	19076	89580	1.1337E+00	5.1411E-04	5.7518E-01	8.5035E-01	1.5260E+00
60	61	52521	18174	17867	2.3268E-01	7.2354E-04	5.9419E-01	8.4096E-01	2.2832E+00
61	62	230	50	1051	8.8378E-03	3.9307E-05	1.6373E-01	5.6813E-01	7.0307E-01
62	63	52055	18877	89218	1.1199E+00	5.0801E-04	5.6987E-01	8.4838E-01	1.5185E+00
63	64	51755	18043	17576	2.3079E-01	7.3089E-04	5.9614E-01	8.4213E-01	2.2921E+00
64	65	273	59	1179	1.0329E-02	4.2361E-05	2.2859E-01	5.8358E-01	7.8061E-01
65	66	9639	4889	428532	3.8894E+00	5.6523E-05	2.7444E-01	6.1200E-01	8.6182E-01
66	67	9600	3815	14185	1.4889E-01	1.7469E-04	4.3245E-01	6.9359E-01	1.7735E+00
67	68	9590	3813	14168	1.5002E-01	1.7940E-04	4.2803E-01	6.9890E-01	1.7999E+00
68	69	34091	9098	11338	1.4800E-01	1.0017E-03	5.7364E-01	8.4233E-01	2.4011E+00
69	70	34398	8766	6447	9.6450E-02	1.1063E-03	5.7869E-01	8.4269E-01	8.8028E+00
70	71	18437	8553	57055	7.3471E-01	1.3971E-03	5.8388E-01	8.3880E-01	2.5196E+00
71	72	33698	9066	10981	1.4343E-01	1.0127E-03	5.8208E-01	8.4261E-01	2.4058E+00
72	73	33857	8747	6282	9.4135E-02	1.0879E-03	5.7705E-01	8.4330E-01	8.8365E+00
73	74	18212	8551	57021	7.4065E-01	1.4263E-03	5.9323E-01	8.4333E-01	2.5279E+00
74	75	125	31	2339	1.7881E-02	5.4248E-05	2.6225E-01	5.3232E-01	8.7173E-01
75	76	99	26	1941	1.5191E-02	2.9698E-05	1.1829E-01	5.2336E-01	6.0872E-01
76	77	7	3	13	8.1959E-05	6.1723E-08	7.2128E-08	3.6565E-01	8.8938E-01
77	78	3493	1511	10655	1.1682E-01	3.5177E-04	5.0771E-01	7.2965E-01	2.0506E+00
78	79	2224	887	12378	1.3381E-01	2.5167E-04	4.5998E-01	7.5294E-01	1.3037E+00
79	80	2	1	46	2.4659E-04	3.1905E-08	3.5714E-08	3.2087E-01	2.9457E-01
80	81	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	82	1723	692	5030	6.1350E-02	1.0225E-03	6.0091E-01	7.9070E-01	2.0771E+00
82	83	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	1079	488	9653	1.1047E-01	2.3680E-03	5.6371E-01	7.8824E-01	4.3852E+00
85	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	87	389	234	51124	4.3419E-01	3.4148E-05	1.5029E-01	5.6143E-01	6.8089E-01

TOTAL 6937658 693006 3333760 4.1184E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3782E-01	-5.3782E-01
2	2	3.1512E-01	.0000E+00	.0000E+00	-8.8947E-01	-5.7436E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5764E-02	-1.5764E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0813E-02	-5.0813E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5294E-02	-1.5294E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4578E-01	-1.4578E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6201E+00	-1.6201E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9871E+00	-1.9871E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1077E-01	-2.1077E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.0747E-01	-2.0747E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8243E-01	-3.8243E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.7841E-01	-3.7841E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.2442E-02	-7.2442E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.6302E-02	-7.6302E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.6260E-02	-8.6260E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.1471E-02	-7.1471E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.0138E-02	-7.0138E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.3324E-02	-7.3324E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.6233E-02	-9.6233E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-9.7442E-02	-9.7442E-02
21	22	.0000E+00	.0000E+00	.0000E+00	-8.8736E-02	-8.8736E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.4523E-02	-8.4523E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1063E-01	-1.1063E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1273E-01	-1.1273E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1287E-01	-1.1287E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1046E-01	-1.1046E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-9.7537E-02	-9.7537E-02
28	29	.0000E+00	.0000E+00	.0000E+00	-8.3740E-02	-8.3740E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.0380E-02	-9.0380E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0173E-01	-1.0173E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8675E+01	-1.8675E+01
32	33	9.5860E+00	1.0046E+00	.0000E+00	-9.3806E+00	1.2100E+00
33	34	3.0074E-02	.0000E+00	.0000E+00	-2.8351E-02	1.7235E-03
34	35	1.9526E-03	.0000E+00	.0000E+00	-1.8623E-03	9.0275E-05
35	36	1.8763E+01	.0000E+00	.0000E+00	-1.8753E+01	1.0208E-02
36	37	3.6293E-03	.0000E+00	.0000E+00	-3.6281E-03	1.2600E-06
37	38	2.0336E+01	.0000E+00	.0000E+00	-2.0260E+01	7.5651E-02
38	39	3.8339E-03	.0000E+00	.0000E+00	-3.8068E-03	2.7107E-05
39	40	3.2426E+01	.0000E+00	.0000E+00	-1.0653E+01	2.1773E+01
40	41	8.2041E-01	.0000E+00	.0000E+00	-8.1702E-01	3.3908E-03
41	42	1.5908E-04	.0000E+00	.0000E+00	-1.5186E-04	7.2190E-06
42	43	1.7329E+00	.0000E+00	.0000E+00	-1.7324E+00	5.2073E-04
43	44	1.9447E+00	.0000E+00	.0000E+00	-1.9436E+00	1.0747E-03
44	45	2.1277E+00	.0000E+00	.0000E+00	-2.1272E+00	4.9268E-04
45	46	2.5906E+00	.0000E+00	.0000E+00	-1.0998E+00	1.4908E+00
46	47	9.8137E-02	.0000E+00	.0000E+00	-5.9608E-02	3.8530E-02
47	48	1.3179E-01	.0000E+00	.0000E+00	-1.2700E-01	4.7912E-03
48	49	1.7337E-01	.0000E+00	.0000E+00	-6.7433E-02	1.0594E-01
49	50	4.6764E-01	.0000E+00	.0000E+00	-2.6454E-01	2.0311E-01
50	51	4.6033E-01	.0000E+00	.0000E+00	-4.4423E-01	1.6102E-02
51	52	4.5159E-01	.0000E+00	.0000E+00	-4.4594E-01	5.6416E-03
52	53	4.5347E-01	.0000E+00	.0000E+00	-1.9070E-01	2.6277E-01
53	54	1.6704E-03	.0000E+00	.0000E+00	-9.0442E-05	1.5800E-03
54	55	4.5730E-01	.0000E+00	.0000E+00	-2.5724E-01	2.0007E-01
55	56	4.4883E-01	.0000E+00	.0000E+00	-4.3347E-01	1.5365E-02
56	57	4.4151E-01	.0000E+00	.0000E+00	-4.3644E-01	5.0744E-03
57	58	4.4337E-01	.0000E+00	.0000E+00	-1.8505E-01	2.5832E-01

TOTAL	1.0061E+02	1.0046E+00	.0000E+00	.0000E+00	-1.0061E+02	1.0046E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-5.5092E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.5092E-05
33	34	.0000E+00	.0000E+00	-2.3148E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3148E-06
34	35	.0000E+00	.0000E+00	9.3774E-09	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.3774E-09
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	3.1437E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.1437E-06
38	39	.0000E+00	.0000E+00	4.2138E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2138E-06
39	40	.0000E+00	.0000E+00	8.8074E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8074E-05
40	41	.0000E+00	.0000E+00	-1.1837E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1837E-05
41	42	.0000E+00	.0000E+00	-4.1671E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1671E-06
42	43	.0000E+00	.0000E+00	-1.5745E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5745E-05
43	44	.0000E+00	.0000E+00	8.6433E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6433E-06
44	45	.0000E+00	.0000E+00	4.7860E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7860E-06
45	46	.0000E+00	.0000E+00	6.7594E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.7594E-05
46	47	.0000E+00	.0000E+00	1.6790E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6790E-05
47	48	.0000E+00	.0000E+00	1.6955E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6955E-07
48	49	.0000E+00	.0000E+00	4.2082E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2082E-06
49	50	.0000E+00	.0000E+00	-1.5363E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5363E-05
50	51	.0000E+00	.0000E+00	-1.8799E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8799E-04
51	52	.0000E+00	.0000E+00	-2.6395E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.6395E-05
52	53	.0000E+00	.0000E+00	-4.8254E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.8254E-05
53	54	.0000E+00	.0000E+00	-1.2479E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2479E-05
54	55	.0000E+00	.0000E+00	-6.9498E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9498E-05
55	56	.0000E+00	.0000E+00	-1.7480E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7480E-04
56	57	.0000E+00	.0000E+00	-1.5322E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5322E-05
57	58	.0000E+00	.0000E+00	-1.2100E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2100E-05
58	59	.0000E+00	.0000E+00	-1.6701E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6701E-05
59	60	.0000E+00	.0000E+00	-2.7772E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7772E-05
60	61	.0000E+00	.0000E+00	5.5681E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.5681E-05
61	62	.0000E+00	.0000E+00	1.2644E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2644E-05
62	63	.0000E+00	.0000E+00	-6.9398E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9398E-05
63	64	.0000E+00	.0000E+00	6.6130E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6130E-05
64	65	.0000E+00	.0000E+00	-1.6629E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6629E-05
65	66	.0000E+00	.0000E+00	2.5084E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5084E-04
66	67	.0000E+00	.0000E+00	-3.2024E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2024E-04
67	68	.0000E+00	.0000E+00	-1.0528E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0528E-04
68	70	.0000E+00	.0000E+00	-1.2768E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2768E-04
69	71	.0000E+00	.0000E+00	1.1334E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1334E-05
70	72	.0000E+00	.0000E+00	1.0440E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0440E-04
71	73	.0000E+00	.0000E+00	-1.8324E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8324E-05
72	74	.0000E+00	.0000E+00	-4.6173E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6173E-05
73	75	.0000E+00	.0000E+00	-2.5177E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5177E-04
74	76	.0000E+00	.0000E+00	3.3677E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3677E-05
75	77	.0000E+00	.0000E+00	-1.2375E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2375E-05
76	80	.0000E+00	.0000E+00	6.1701E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.1701E-06
77	81	.0000E+00	.0000E+00	-3.2885E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2885E-04
78	82	.0000E+00	.0000E+00	8.7034E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7034E-06
79	83	.0000E+00	.0000E+00	-4.1839E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1839E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	3.7896E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7896E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	3.5884E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5884E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-5.9215E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.9215E-05
TOTAL		.0000E+00	.0000E+00	-1.1733E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1733E-03
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4238E-02	.0000E+00	-1.4238E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.4274E-03	.0000E+00	-4.1454E-01	-1.2137E-03	-3.2077E-01
33	34	.0000E+00	.0000E+00	-1.3259E-04	.0000E+00	-1.3259E-04
34	35	.0000E+00	.0000E+00	-2.7541E-05	.0000E+00	-2.7541E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.2600E-06	.0000E+00	-1.2600E-06
37	38	3.2908E-05	.0000E+00	-6.5528E-03	-1.6454E-05	-6.5364E-03
38	39	.0000E+00	.0000E+00	-8.0440E-06	.0000E+00	-8.0440E-06
39	40	.0000E+00	.0000E+00	-4.7526E-02	.0000E+00	-4.7526E-02
40	41	.0000E+00	.0000E+00	-3.3790E-03	.0000E+00	-3.3790E-03
41	42	.0000E+00	.0000E+00	-3.0520E-06	.0000E+00	-3.0520E-06
42	43	3.4471E-05	.0000E+00	-5.2222E-05	-1.7235E-05	-5.0499E-04
43	44	.0000E+00	.0000E+00	-1.0833E-03	.0000E+00	-1.0833E-03
44	45	.0000E+00	.0000E+00	-4.9747E-04	.0000E+00	-4.9747E-04
45	46	.0000E+00	.0000E+00	-2.6377E-03	.0000E+00	-2.6377E-03
46	47	.0000E+00	.0000E+00	-2.7220E-04	.0000E+00	-2.7220E-04
47	48	.0000E+00	.0000E+00	-4.0265E-05	.0000E+00	-4.0265E-05
48	49	.0000E+00	.0000E+00	-2.2643E-04	.0000E+00	-2.2643E-04
49	50	.0000E+00	.0000E+00	-2.4233E-03	.0000E+00	-2.4233E-03
50	51	.0000E+00	.0000E+00	-1.0421E-02	.0000E+00	-1.0421E-02
51	52	.0000E+00	.0000E+00	-6.6910E-04	.0000E+00	-6.6910E-04

52	53	.0000E+00	.0000E+00	-1.0579E-02	.0000E+00	.0000E+00	-1.0579E-02
53	54	.0000E+00	.0000E+00	-5.6294E-05	.0000E+00	.0000E+00	-5.6294E-05
54	55	.0000E+00	.0000E+00	-2.3136E-03	.0000E+00	.0000E+00	-2.3136E-03
55	56	.0000E+00	.0000E+00	-9.9674E-03	.0000E+00	.0000E+00	-9.9674E-03
56	57	.0000E+00	.0000E+00	-6.0371E-04	.0000E+00	.0000E+00	-6.0371E-04
57	58	2.8287E-05	.0000E+00	-1.0242E-02	-1.4144E-05	.0000E+00	-1.0228E-02
58	59	.0000E+00	.0000E+00	-4.2626E-05	.0000E+00	.0000E+00	-4.2626E-05
59	60	.0000E+00	.0000E+00	-2.7975E-03	.0000E+00	.0000E+00	-2.7975E-03
60	61	.0000E+00	.0000E+00	-1.0633E-02	.0000E+00	.0000E+00	-1.0633E-02
61	62	.0000E+00	.0000E+00	-4.7445E-05	.0000E+00	.0000E+00	-4.7445E-05
62	63	.0000E+00	.0000E+00	-2.7795E-03	.0000E+00	.0000E+00	-2.7795E-03
63	64	.0000E+00	.0000E+00	-1.0407E-02	.0000E+00	.0000E+00	-1.0407E-02
64	65	.0000E+00	.0000E+00	-5.4351E-05	.0000E+00	.0000E+00	-5.4351E-05
65	66	.0000E+00	.0000E+00	-1.9812E-02	.0000E+00	.0000E+00	-1.9812E-02
66	67	.0000E+00	.0000E+00	-1.4895E-02	.0000E+00	.0000E+00	-1.4895E-02
67	68	.0000E+00	.0000E+00	-1.4791E-02	.0000E+00	.0000E+00	-1.4791E-02
68	70	.0000E+00	.0000E+00	-5.2954E-03	.0000E+00	.0000E+00	-5.2954E-03
69	71	.0000E+00	.0000E+00	-6.6980E-04	.0000E+00	.0000E+00	-6.6980E-04
70	72	.0000E+00	.0000E+00	-2.0924E-02	.0000E+00	.0000E+00	-2.0924E-02
71	73	.0000E+00	.0000E+00	-5.0391E-03	.0000E+00	.0000E+00	-5.0391E-03
72	74	.0000E+00	.0000E+00	-6.2470E-04	.0000E+00	.0000E+00	-6.2470E-04
73	75	.0000E+00	.0000E+00	-2.1091E-02	.0000E+00	.0000E+00	-2.1091E-02
74	76	.0000E+00	.0000E+00	-9.5895E-05	.0000E+00	.0000E+00	-9.5895E-05
75	77	.0000E+00	.0000E+00	-8.2400E-05	.0000E+00	.0000E+00	-8.2400E-05
76	80	.0000E+00	.0000E+00	-1.4009E-05	.0000E+00	.0000E+00	-1.4009E-05
77	81	.0000E+00	.0000E+00	-7.9266E-03	.0000E+00	.0000E+00	-7.9266E-03
78	82	.0000E+00	.0000E+00	-4.3797E-04	.0000E+00	.0000E+00	-4.3797E-04
79	83	.0000E+00	.0000E+00	-1.4680E-06	.0000E+00	.0000E+00	-1.4680E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.2219E-03	.0000E+00	.0000E+00	-2.2219E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	2.4486E-05	.0000E+00	-1.9818E-03	-1.2243E-05	.0000E+00	-1.9695E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.2753E-03	.0000E+00	.0000E+00	-2.2753E-03

TOTAL 2.5476E-03 .0000E+00 -6.8391E-01 -1.2738E-03 -3.2077E-01 -1.0034E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	289708 16352	3.0502E+00 1.9634E-01	1.4134E-02 1.0316E-04	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7486E-01 3.7685E-04 5.7950E-05 2.1481E-06 6.8807E-07 7.0167E-05 6.0233E-06 1.2468E-09 7.2187E-05 3.2021E-03 1.5714E-03 3.1607E-01 2.0462E-04 6.4455E-05 2.0139E-03 7.7846E-04 2.7717E-04 1.5646E-04 1.8629E-04 6.9730E-07 3.3796E-05 4.3751E-07	97839 882 144 984 28 275 1664 0 129 15117 1246 145772 472 268 19185 4552 3017 322 1187 49 84 3	1.4336E+00 1.1353E-02 1.9297E-03 1.1013E-02 3.2549E-04 3.4274E-03 1.7586E-02 .0000E+00 1.7375E-03 2.9263E-01 1.8401E-02 2.1418E+00 6.0890E-03 3.0682E-03 3.8194E-01 5.9735E-02 6.0909E-02 4.4533E-03 1.4905E-02 9.6617E-04 1.1737E-03 1.4209E-04	1.2558E-03 9.5792E-03 1.6053E-03 1.0929E-02 3.2376E-04 2.9687E-03 1.7529E-02 .0000E+00 1.1725E-03 2.6275E-02 6.4669E-03 1.8051E-01 4.8609E-03 2.4154E-03 7.0986E-02 5.1622E-02 8.7650E-03 2.9165E-03 1.3324E-02 9.1686E-05 7.4382E-04 6.3344E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 2.8144E-05 1.2836E-01 3.0717E-04 2.0783E-02 5.1705E-05 1.2026E-04 1.4567E-01 3.0138E-04 2.4461E-02 2.8478E-05 1.6420E-04 4.5005E-04 7.3847E-06 2.8718E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2137E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	3 3 3 584 11	2.5204E-05 2.3838E-05 4.1634E-05 6.0478E-03 7.0375E-05	7.2504E-10 7.2065E-06 2.7895E-06 1.1638E-04 6.2157E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	607 28	4.5715E-03 2.1563E-04	2.7534E-05 7.2162E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	8	1.3145E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	31 3	2.3003E-04 2.7720E-05	1.2588E-06 1.1502E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	192 110 232 48830 490	2.7792E-03 1.6040E-03 3.2533E-03 7.2899E-01 7.3077E-03	6.2439E-07 1.1849E-04 1.4974E-04 6.1051E-03 1.7884E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.6454E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	177 2	1.4256E-03 2.9061E-05	8.0437E-06 2.6975E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1264193 114919	1.6625E+01 1.6711E+00	4.6196E-02 1.3297E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	79152 6626	1.0487E+00 9.6159E-02	3.3082E-03 7.0816E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	58 0	5.1609E-04 .0000E+00	3.0520E-06 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 5 14 3574 38	1.7936E-04 7.9937E-05 1.8964E-04 5.3363E-02 5.3086E-04	6.3842E-09 1.3203E-05 1.1098E-05 4.8190E-04 1.6018E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.7235E-05 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26106 2244	3.4580E-01 3.2641E-02	1.0611E-03 2.2252E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	16 4 12 3098 27	2.2089E-04 5.4487E-05 1.6253E-04 4.6328E-02 3.8778E-04	1.9046E-07 1.0706E-05 1.2224E-05 4.6137E-04 1.2980E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63293 5516	8.3875E-01 8.0412E-02	2.5735E-03 6.4282E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6354 573	8.2667E-02 8.2736E-03	2.6354E-04 8.6543E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 1 4 337 2	2.3456E-05 1.5276E-05 4.7721E-05 5.0757E-03 2.8369E-05	8.9306E-10 3.3727E-08 1.9557E-06 3.7220E-05 1.0547E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5410 496	7.0612E-02 7.1614E-03	2.1926E-04 7.1674E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61266 4776	7.2798E-01 6.5471E-02	2.3943E-03 2.8959E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	4 42 47 6 1 1435 487 7835 2274 145	3.4817E-05 5.0492E-04 6.6263E-04 8.5481E-05 1.4383E-05 1.8465E-02 6.8919E-03 9.5609E-02 2.7956E-02 1.9877E-03	6.8556E-09 2.8167E-05 1.0073E-05 4.6383E-07 2.2215E-06 1.8843E-03 8.6766E-04 5.5732E-03 1.7777E-03 2.7721E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2531 5	3.6319E-02 6.0917E-05	6.5457E-04 1.4524E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	11 39 44 4 4 1421	1.3740E-04 4.8761E-04 6.3721E-04 5.9302E-05 6.2149E-05 1.8337E-02	3.0263E-08 3.4257E-05 7.4166E-06 1.2609E-06 3.4487E-06 1.8860E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	431	6.1856E-03	7.5725E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7994	9.6570E-02	5.7281E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2407	2.9420E-02	1.8275E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	164	2.1542E-03	3.3372E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1129	1.0465E-02	5.6281E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	48	4.8992E-04	1.2609E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	58794	6.9732E-01	2.2648E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4675	6.3560E-02	4.8749E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	8	1.1315E-04	6.9076E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	4.4930E-04	2.2523E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	5.9948E-04	5.3391E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.0359E-05	2.0048E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1399	1.8287E-02	1.8166E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	535	7.3770E-03	8.9729E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7453	9.1217E-02	5.2052E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2323	2.8771E-02	1.7581E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	2.0965E-03	2.6025E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2383	3.4167E-02	6.0069E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	4	4.2054E-05	3.0269E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	10	1.3754E-04	1.7343E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.6486E-04	2.2435E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.5541E-04	1.1141E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.6923E-05	2.9859E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	4.3747E-05	2.7602E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1433	1.8432E-02	1.8670E-03	.0000E+00	1.4144E-05
		25055.50C	2.0356E-02	482	6.7241E-03	9.6374E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7606	9.1817E-02	5.3880E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2308	2.8055E-02	1.7279E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	146	1.8821E-03	2.5836E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	936	7.7375E-03	4.2614E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	52	4.9421E-04	1.2967E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	82386	1.0318E+00	2.7352E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7194	1.0181E-01	6.2342E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	9	1.1699E-04	1.5947E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	73	9.8035E-04	3.0524E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	91	1.3163E-03	1.2554E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.0517E-05	4.7327E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.0937E-05	1.0734E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2165	2.9510E-02	1.9457E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	818	1.1918E-02	9.7769E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11076	1.4139E-01	5.5341E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3384	4.3855E-02	1.7604E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	240	3.4372E-03	3.7058E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1006	8.4509E-03	4.7435E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	45	3.8691E-04	1.0556E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	82120	1.0204E+00	2.7160E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7098	9.9468E-02	6.3501E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	16	2.4164E-04	3.6810E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	53	6.8102E-04	2.8135E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	76	1.1088E-03	8.8591E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.7325E-05	4.6106E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	8.2809E-05	4.3888E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2154	2.9344E-02	1.8693E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	816	1.1751E-02	1.0552E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10883	1.4081E-01	5.3084E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3310	4.2985E-02	1.7292E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	258	3.7344E-03	4.0261E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1117	9.7005E-03	5.4332E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	62	6.2830E-04	1.8801E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	408941	3.6922E+00	1.9731E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19591	1.9720E-01	8.1323E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	10	1.0586E-04	2.5665E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	5.2555E-04	3.8163E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	6.0540E-04	1.1381E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	7.8042E-05	1.2896E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1498	1.6603E-02	2.6767E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	448	5.5592E-03	1.4168E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9227	9.5050E-02	8.0003E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2746	2.8599E-02	2.4794E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	152	1.7628E-03	2.7048E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	11	1.0545E-04	3.1107E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	53	5.1206E-04	5.2604E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	5.4354E-04	1.0796E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.4259E-05	5.7051E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2568E-05	2.2646E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1551	1.6975E-02	2.7672E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	473	6.0726E-03	1.3508E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9079	9.4794E-02	7.7451E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2806	2.9274E-02	2.5810E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	147	1.7017E-03	2.8078E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	8	1.1115E-04	1.4239E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	33	4.6323E-04	7.4467E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	60	8.5771E-04	3.7324E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0328E-04	7.0224E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2895E-05	4.8502E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1467	2.0333E-02	9.5798E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	497	7.0299E-03	4.7893E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6990	8.9516E-02	2.6879E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2104	2.7199E-02	9.1602E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	169	2.3587E-03	2.4264E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6434	9.6271E-02	6.4515E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.7945E-04	2.4650E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	36	5.2326E-04	2.0162E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	200	2.5784E-03	7.1210E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	330	4.7325E-03	1.8738E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	19	2.7992E-04	6.8302E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.0192E-05	1.7002E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7350	1.0092E-01	3.8023E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2515	3.5755E-02	1.8127E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34976	4.3903E-01	1.0766E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10798	1.3908E-01	3.4230E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	825	1.1720E-02	1.0277E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	12	1.8051E-04	6.5527E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	31	4.0374E-04	1.2391E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	7.0397E-04	3.1344E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.9944E-05	4.1582E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1394	1.9301E-02	9.2220E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	533	7.7154E-03	4.4385E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6732	8.5979E-02	2.6222E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2064	2.6855E-02	8.3775E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.2381E-03	1.9716E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6270	9.3987E-02	6.1514E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.4766E-04	9.5612E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	49	6.4548E-04	4.2618E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	191	2.5145E-03	5.6740E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	297	4.2674E-03	2.4619E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	27	3.6692E-04	1.8189E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	1.0550E-04	1.3015E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7232	1.0012E-01	3.7763E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2532	3.6628E-02	1.9088E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34958	4.4339E-01	1.0671E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10853	1.4021E-01	3.4917E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	876	1.2400E-02	1.1599E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2228	1.6908E-02	9.5788E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	111	9.7281E-04	1.0688E-07	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	1849	1.4381E-02	8.1828E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	92	8.0981E-04	5.7242E-07	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	1.7873E-05	5.5048E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10	6.4086E-05	8.5045E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	5	5.6677E-05	9.4493E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	3.9044E-04	1.6898E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	6.3004E-04	8.6599E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.0090E-05	5.3522E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.3813E-05	7.8958E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1221	1.4364E-02	1.4959E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	363	4.8324E-03	6.9749E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6761	7.1791E-02	4.1099E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2084	2.3089E-02	1.3860E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	128	1.6166E-03	2.1116E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11570	1.2375E-01	4.3350E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	808	1.0064E-02	4.4707E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	44	2.3748E-04	1.4675E-06	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	2	9.1152E-06	4.8951E-10	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	7	8.4705E-05	4.7402E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	6	8.4713E-05	8.4111E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	16	2.3290E-04	1.0507E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	49	5.7279E-04	5.3772E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	747	9.6331E-03	4.7992E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	98	1.3466E-03	8.1699E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1151	1.3730E-02	3.9778E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2789	3.3497E-02	1.0376E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	96	1.2020E-03	5.8826E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	71	9.6605E-04	1.1042E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	60	7.6735E-04	2.5154E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	18	2.3552E-04	5.1417E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	4	5.1660E-05	2.0165E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	4.2687E-05	3.5165E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	235	3.0256E-03	7.6942E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9333	1.0634E-01	1.9038E-03	.0000E+00	1.2243E-05
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	48817	4.1322E-01	2.2731E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2307	2.0972E-02	2.2094E-06	.0000E+00	.0000E+00
TOTAL				3333760	4.1505E+01	6.8391E-01	3.2077E-01	1.2738E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2497292	2.9843E+01	1.0072E-01	.0000E+00	.0000E+00
		2004.50C		8	1.3145E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		256	3.3620E-03	2.8100E-07	.0000E+00	.0000E+00
		7014.50C		877	1.0956E-02	4.2149E-04	.0000E+00	.0000E+00
		8016.50C		291684	4.0916E+00	3.1549E-03	.0000E+00	.0000E+00

13027.50C	17624	2.6083E-01	2.5164E-03	.0000E+00	.0000E+00
14000.50C	1261	1.7789E-02	1.3801E-04	.0000E+00	.0000E+00
15031.50C	100	1.3540E-03	1.1179E-05	.0000E+00	.0000E+00
16032.50C	39	5.8168E-04	1.8396E-05	.0000E+00	.0000E+00
22000.50C	49	5.7279E-04	5.3772E-05	.0000E+00	.0000E+00
24000.50C	32593	4.3243E-01	2.8303E-02	.0000E+00	1.4144E-05
25055.50C	11263	1.5881E-01	1.3787E-02	.0000E+00	.0000E+00
26000.55C	172329	2.1008E+00	8.1828E-02	.0000E+00	1.2243E-05
28000.50C	52250	6.4884E-01	2.6733E-02	.0000E+00	.0000E+00
29000.50C	130	1.6321E-03	1.1059E-04	.0000E+00	.0000E+00
40000.50C	56423	8.3980E-01	7.2020E-03	.0000E+00	3.3690E-05
42000.50C	3634	5.0056E-02	5.4029E-03	.0000E+00	.0000E+00
45103.50C	882	1.1353E-02	9.5792E-03	.0000E+00	.0000E+00
47109.50C	144	1.9297E-03	1.6053E-03	.0000E+00	.0000E+00
50000.35C	568	8.3251E-03	2.1511E-04	.0000E+00	.0000E+00
62149.50C	984	1.1013E-02	1.0929E-02	.0000E+00	.0000E+00
63151.55C	28	3.2549E-04	3.2376E-04	.0000E+00	.0000E+00
63153.55C	275	3.4274E-03	2.9687E-03	.0000E+00	.0000E+00
64155.50C	1664	1.7586E-02	1.7529E-02	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	129	1.7375E-03	1.1725E-03	2.8144E-05	.0000E+00
92235.50C	15117	2.9263E-01	2.6275E-02	1.2836E-01	.0000E+00
92236.50C	1246	1.8401E-02	6.4669E-03	3.0717E-04	.0000E+00
92238.50C	145772	2.1418E+00	1.8051E-01	2.0783E-02	1.2137E-03
93237.55C	472	6.0890E-03	4.8609E-03	5.1705E-05	.0000E+00
94238.50C	268	3.0682E-03	2.4154E-03	1.2026E-04	.0000E+00
94239.55C	19185	3.8194E-01	7.0986E-02	1.4567E-01	.0000E+00
94240.50C	4552	5.9735E-02	5.1622E-02	3.0138E-04	.0000E+00
94241.50C	3017	6.0909E-02	8.7650E-03	2.4461E-02	.0000E+00
94242.50C	322	4.4533E-03	2.9165E-03	2.8478E-05	.0000E+00
95241.50C	1187	1.4905E-02	1.3324E-02	1.6420E-04	.0000E+00
95242.50C	49	9.6617E-04	9.1686E-05	4.5005E-04	.0000E+00
95243.50C	84	1.1737E-03	9.4382E-04	7.3847E-06	.0000E+00
96245.35C	3	1.4209E-04	6.3344E-06	2.8718E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59726 CTM = 112.22

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 112.37 MINUTES

MCNP VERSION 4A-B 10/04/91

02/23/95 22:17:13

PROBID = 02/23/95 20:24:37

1MCNP VERSION 4A-B LD=10/04/91 02/23/95 22:17:13

PROBID = 02/23/95 22:17:13

INP=mpc12p OUTP=mpc12p.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/50 year (mpc12p)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1907-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923
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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.


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297-      C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298-      C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299-      C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300-      C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301-      C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302-      C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303-      C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304-      C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305-      C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306-      C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307-      C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308-      C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309-      C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310-      C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311-      C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312-      C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313-      C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314-      C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315-      C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316-      C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317-      C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318-      C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319-      C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320-      C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321-      C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322-      C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323-      C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324-      C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325-      C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326-      C      MATERIAL SPECIFICATIONS
327-      C      WATER AT 300 K
328-      M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329-      MT1     LWTR.01T
330-      C      PWR: 3.75% U-235 - 37 GWD/MTU - 50 YEAR DECAY
331-      M2      8016.50C 4.8527E-02
332-      45103.50C 2.7099E-05
333-      47109.50C 4.1670E-06
334-      62149.50C 1.5446E-07
335-      63151.55C 2.1162E-07
336-      63153.55C 5.0455E-06
337-      64155.50C 5.7339E-07
338-      92233.50C 2.8917E-10
339-      92234.50C 6.5070E-06
340-      92235.50C 2.3042E-04
341-      92236.50C 1.1324E-04
342-      92238.50C 2.2727E-02
343-      93237.55C 1.6250E-05
344-      94238.50C 3.3868E-06
345-      94239.55C 1.4467E-04
346-      94240.50C 5.6193E-05
347-      94241.50C 2.9082E-06
348-      94242.50C 1.1251E-05
349-      95241.50C 2.8891E-05
350-      95242.50C 4.1784E-08
351-      95243.50C 2.4206E-06
352-      96245.35C 3.1366E-08
353-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354-      M3      2004.50C 1.0
355-      C      ZIRCALOY-4
356-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3081
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3081
 POINTS AFTER EXPANSION OR CONTRACTION 3007
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000
 CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190746E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
ASSOCIATED THERMAL S(A,B) DATA SETS:	LWTR.01T
2	8016, .67485 45103, .00038 47109, .00006 62149, .00000 63151, .00000 63153, .00007 64155, .00001 92233, .00000 92234, .00009 92235, .00320 92236, .00157 92238, .31606 93237, .00023 94238, .00005 94239, .00201 94240, .00078 94241, .00004 94242, .00016 95241, .00040 95242, .00000 95243, .00003 96245, .00000
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748 50000, .01071
5	6000, .00234 13027, .00417 14000, .01001 16032, .00053 22000, .01057 24000, .23247 25055, .01023 26000, .28763

	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12249	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00001	63153,	.00012	64155,	.00001	92233,	.00000
	92234,	.00024	92235,	.00855	92236,	.00422	92238,	.85379
	93237,	.00061	94238,	.00013	94239,	.00546	94240,	.00213
	94241,	.00011	94242,	.00043	95241,	.00110	95242,	.00000
	95243,	.00009	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19070E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.19070E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1SURFACES 3.11148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80		PZ	3.1235000E+02
72	81		CZ	1.0652500E+02
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL	NU
TOTAL	NU
TOTAL	NU
TOTAL	NU
TOTAL	NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1314)	79/06/21.
(1340)	79/07/31.
(1394)	79/10/17.

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
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WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/50 year (mpc12p)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.114E-01	1.005E-01	1.991E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.977E-01	3.641E-01
2	-3.931E-01	1.844E-01	4.932E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.977E-01	8.566E-02
3	-8.622E-02	-3.894E-01	1.385E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.977E-01	1.762E+00
4	-1.711E-01	-3.057E-01	3.234E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.977E-01	1.517E+00
5	3.028E-01	1.646E-01	7.906E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.977E-01	1.176E+00
6	-4.456E-03	6.539E-02	8.776E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.977E-01	2.710E+00
7	-2.077E-01	-9.559E-02	8.776E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.977E-01	6.263E-01
8	1.011E-01	-1.100E-01	8.651E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.977E-01	9.765E-01
9	2.010E-02	2.052E-01	9.739E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.977E-01	7.115E-01
10	1.577E-01	-3.899E-01	6.208E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.977E-01	2.966E+00
11	-4.092E-01	1.011E-01	6.228E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.977E-01	1.359E+00
12	-3.533E-03	3.591E-01	6.143E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.977E-01	1.101E+00
13	-3.229E-01	1.883E-02	5.572E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.977E-01	1.008E+00
14	-1.491E-01	1.814E-01	5.556E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.977E-01	3.215E+00
15	-1.491E-01	1.814E-01	5.556E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.977E-01	3.806E-01
16	2.309E-02	4.580E-02	5.729E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.977E-01	1.476E+00
17	-3.486E-01	2.687E-01	5.693E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.977E-01	1.040E+00
18	1.056E-01	1.054E-01	3.620E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.977E-01	1.799E+00
19	2.120E-01	1.037E-01	3.614E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.977E-01	1.026E+00
20	1.947E-03	-2.272E-01	5.036E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.977E-01	1.580E+00
21	-1.672E-02	-3.660E-01	1.366E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.977E-01	1.622E+00
22	-1.962E-01	-3.020E-01	1.379E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.977E-01	2.455E-01
23	-1.432E-01	-4.184E-01	1.380E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.977E-01	1.165E+00
24	-5.933E-02	-3.008E-01	1.614E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.977E-01	1.130E+00
25	-2.807E-01	-5.143E-03	1.404E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.977E-01	1.004E+00
26	4.843E-02	-9.057E-02	7.775E+00	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.977E-01	2.470E+00
27	-4.457E-01	-2.283E-02	9.362E+00	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.977E-01	2.418E+00
28	2.108E-01	-1.365E-01	7.616E+00	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.977E-01	4.080E-01
29	9.715E-02	2.744E-01	1.100E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.977E-01	1.734E+00
30	1.677E-01	-2.345E-01	3.883E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.977E-01	1.167E-01
31	1.179E-01	2.921E-01	3.995E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.977E-01	1.208E+00
32	1.170E-01	-7.633E-02	2.391E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.977E-01	1.695E+00
33	-2.811E-01	-3.161E-01	1.344E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.977E-01	1.566E-01
34	-4.061E-01	-1.766E-01	1.693E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.977E-01	1.374E+00
35	1.125E-01	3.072E-02	1.666E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.977E-01	3.501E+00
36	1.065E-01	-1.154E-01	1.656E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.977E-01	3.075E+00
37	3.944E-01	-2.021E-01	8.226E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.977E-01	1.812E+00
38	-3.600E-01	-1.947E-01	1.194E+00	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.977E-01	3.935E+00
39	3.413E-01	-1.938E-01	7.350E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.977E-01	7.575E+00
40	8.829E-02	-6.107E-02	5.497E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.977E-01	4.511E+00
41	-1.622E-01	-1.072E-01	5.632E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.977E-01	1.618E+00
42	-2.484E-01	2.669E-01	4.827E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.977E-01	3.342E-01
43	-3.463E-01	2.657E-01	4.934E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.977E-01	4.789E+00
44	-1.245E-01	2.062E-01	5.148E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.977E-01	1.584E+00
45	-3.056E-01	2.581E-01	5.150E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.977E-01	7.126E+00
46	-2.433E-01	-9.919E-02	5.158E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.977E-01	4.361E+00
47	-2.242E-01	-1.411E-01	5.161E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.977E-01	7.682E-01
48	-5.826E-02	3.808E-01	5.101E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.977E-01	3.856E+00
49	-3.804E-01	2.612E-01	5.157E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.977E-01	5.549E+00

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50 -3.464E-01 -2.603E-01 4.890E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.977E-01 2.494E+00

CYCLE 1 K(COLLISION) .814113 REMOVAL LIFETIME(ABS) 2.9039E+03 SOURCE POINTS GENERATED 2399
CYCLE 2 K(COLLISION) .819837 REMOVAL LIFETIME(ABS) 2.9635E+03 SOURCE POINTS GENERATED 3019
CYCLE 3 K(COLLISION) .781166 REMOVAL LIFETIME(ABS) 3.1934E+03 SOURCE POINTS GENERATED 2861
CYCLE 4 K(COLLISION) .798330 REMOVAL LIFETIME(ABS) 3.2066E+03 SOURCE POINTS GENERATED 3126
CYCLE 5 K(COLLISION) .798704 REMOVAL LIFETIME(ABS) 2.9694E+03 SOURCE POINTS GENERATED 2965

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .803299 REMOVAL LIFETIME(ABS) 2.9619E+03 SOURCE POINTS GENERATED 3016

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .818281 .810790 .0092 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .830140 .820862 .0113 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .795071 .800854 .0072 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.1761E+03 3.0617E+03 .0374 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.1427E+03 3.0523E+03 .0296
SOURCE POINTS GENERATED 3016

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .793976 .805185 .0088 K(COL/ABS) .806677 .0128 .802616 .0062 .9669
K(ABSORPTION) .782783 .808169 .0170 K(ABS/TK LN) .803215 .0096 .798420 .0078 .2580
K(TRK LENGTH) .793074 .798261 .0053 K(TK LN/COL) .801723 .0051 .800077 .0068 .0031
REM LIFE(COL) 2.9694E+03 3.0309E+03 .0240 LIFE(COL/ABS) 3.0209E+03 .0229 2.9925E+03 .0338 .9724
REM LIFE(ABS) 2.9279E+03 3.0108E+03 .0221
SOURCE POINTS GENERATED 2923

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .844999 .815139 .0137 K(COL/ABS) .809948 .0099 .809501 .0124 .1147
K(ABSORPTION) .794520 .804756 .0128 K(ABS/TK LN) .807481 .0086 .807103 .0104 -.2616
K(TRK LENGTH) .846042 .810206 .0152 K(TK LN/COL) .812673 .0139 .814463 .0171 .8670
REM LIFE(COL) 2.9775E+03 3.0176E+03 .0176 K(COL/ABS/TK LN) .810034 .0099 .802937 .0175
REM LIFE(ABS) 2.9261E+03 2.9897E+03 .0173 LIFE(COL/ABS) 3.0036E+03 .0173 2.9930E+03 .0241 .9615
SOURCE POINTS GENERATED 3207

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .813097 .814731 .0106 K(COL/ABS) .811572 .0079 .811633 .0092 .0845
K(ABSORPTION) .823043 .808414 .0109 K(ABS/TK LN) .808741 .0068 .808718 .0078 -.2855
K(TRK LENGTH) .804513 .809068 .0119 K(TK LN/COL) .811899 .0109 .814046 .0126 .8655
REM LIFE(COL) 2.9189E+03 2.9978E+03 .0152 K(COL/ABS/TK LN) .810737 .0077 .805228 .0118
REM LIFE(ABS) 2.8926E+03 2.9702E+03 .0150 LIFE(COL/ABS) 2.9840E+03 .0150 2.9722E+03 .0197 .9687
SOURCE POINTS GENERATED 2920

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .812719 .814395 .0087 K(COL/ABS) .809502 .0070 .810256 .0078 .0968

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K(ABSORPTION)	.785587	.804609	.0101	K(ABS/TK LN)	.807022	.0060	.807087	.0067	-.2739
K(TRK LENGTH)	.811270	.809435	.0097	K(TK LN/COL)	.811915	.0089	.813741	.0099	-.8614
REM LIFE(COL)	2.9576E+03	2.9911E+03	.0127	K(COL/ABS/TK LN)	.809480	.0065	.803847	.0104	
REM LIFE(ABS)	2.9659E+03	2.9695E+03	.0122	LIFE(COL/ABS)	2.9803E+03	.0123	2.9699E+03	.0145	.9567
SOURCE POINTS GENERATED 2952									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.815435		.814544	.0073	K(COL/ABS)	.810375	.0060	.811137
K(ABSORPTION)		.815788		.806206	.0087	K(ABS/TK LN)	.807539	.0051	.807598
K(TRK LENGTH)		.805488		.808871	.0082	K(TK LN/COL)	.811707	.0075	.813777
REM LIFE(COL)		3.0061E+03		2.9933E+03	.0107	K(COL/ABS/TK LN)	.809874	.0055	.804143
REM LIFE(ABS)		2.9842E+03		2.9716E+03	.0104	LIFE(COL/ABS)	2.9824E+03	.0104	2.9719E+03
SOURCE POINTS GENERATED 3021									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.800551		.812795	.0067	K(COL/ABS)	.810744	.0052	.811115
K(ABSORPTION)		.826109		.808694	.0082	K(ABS/TK LN)	.808756	.0046	.808763
K(TRK LENGTH)		.808447		.808818	.0071	K(TK LN/COL)	.810806	.0066	.811390
REM LIFE(COL)		3.0162E+03		2.9961E+03	.0093	K(COL/ABS/TK LN)	.810102	.0048	.808858
REM LIFE(ABS)		3.0265E+03		2.9785E+03	.0092	LIFE(COL/ABS)	2.9873E+03	.0092	2.9846E+03
SOURCE POINTS GENERATED 2962									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.817808		.813352	.0060	K(COL/ABS)	.811993	.0048	.812308
K(ABSORPTION)		.826152		.810634	.0076	K(ABS/TK LN)	.809675	.0042	.809534
K(TRK LENGTH)		.807903		.808716	.0063	K(TK LN/COL)	.811034	.0058	.811612
REM LIFE(COL)		2.9170E+03		2.9873E+03	.0088	K(COL/ABS/TK LN)	.810901	.0043	.809491
REM LIFE(ABS)		2.9449E+03		2.9748E+03	.0083	LIFE(COL/ABS)	2.9810E+03	.0084	2.9752E+03
SOURCE POINTS GENERATED 3066									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.797969		.811813	.0057	K(COL/ABS)	.811155	.0044	.811271
K(ABSORPTION)		.809267		.810497	.0068	K(ABS/TK LN)	.809823	.0038	.809726
K(TRK LENGTH)		.813039		.809149	.0056	K(TK LN/COL)	.810481	.0053	.810451
REM LIFE(COL)		3.0761E+03		2.9962E+03	.0084	K(COL/ABS/TK LN)	.810486	.0039	.809804
REM LIFE(ABS)		3.0567E+03		2.9829E+03	.0079	LIFE(COL/ABS)	2.9896E+03	.0080	2.9824E+03
SOURCE POINTS GENERATED 2936									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.813315		.811950	.0051	K(COL/ABS)	.811893	.0041	.811905
K(ABSORPTION)		.825235		.811837	.0063	K(ABS/TK LN)	.810892	.0037	.810737
K(TRK LENGTH)		.817935		.809947	.0052	K(TK LN/COL)	.810949	.0048	.810990
REM LIFE(COL)		2.9172E+03		2.9890E+03	.0080	K(COL/ABS/TK LN)	.811245	.0037	.810947
REM LIFE(ABS)		2.9326E+03		2.9784E+03	.0073	LIFE(COL/ABS)	2.9837E+03	.0075	2.9760E+03
SOURCE POINTS GENERATED 3042									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.799985		.810953	.0048	K(COL/ABS)	.811390	.0038	.811311

K(ABSORPTION)	.811710	.811826	.0058	K(ABS/TK LN)	.810931	.0034	.810784	.0035	- .1979
K(TRK LENGTH)	.811016	.810036	.0047	K(TK LN/COL)	.810495	.0044	.810463	.0046	.6875
REM LIFE(COL)	2.9379E+03	2.9848E+03	.0074	K(COL/ABS/TK LN)	.810939	.0034	.810851	.0036	
REM LIFE(ABS)	2.9472E+03	2.9758E+03	.0067	LIFE(COL/ABS)	2.9803E+03	.0070	2.9732E+03	.0070	.9404
SOURCE POINTS GENERATED 2984									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.804953		.810491		.0045	K(COL/ABS)	.811360	.0035	.811209 .0036 .0090
K(ABSORPTION)	.817059		.812229		.0053	K(ABS/TK LN)	.810622	.0031	.810408 .0032 -.2151
K(TRK LENGTH)	.796759		.809015		.0046	K(TK LN/COL)	.809753	.0042	.809778 .0043 .6904
REM LIFE(COL)	2.8540E+03		2.9747E+03		.0076	K(COL/ABS/TK LN)	.810578	.0031	.810517 .0034
REM LIFE(ABS)	2.8753E+03		2.9680E+03		.0067	LIFE(COL/ABS)	2.9714E+03	.0071	2.9641E+03 .0069 .9489
SOURCE POINTS GENERATED 3027									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.819317		.811122		.0042	K(COL/ABS)	.811882	.0033	.811757 .0034 .0277
K(ABSORPTION)	.818021		.812643		.0050	K(ABS/TK LN)	.811611	.0031	.811546 .0032 -.1517
K(TRK LENGTH)	.830920		.810580		.0046	K(TK LN/COL)	.810851	.0041	.810928 .0042 .6934
REM LIFE(COL)	2.9517E+03		2.9731E+03		.0071	K(COL/ABS/TK LN)	.811448	.0031	.811565 .0033
REM LIFE(ABS)	2.9523E+03		2.9669E+03		.0062	LIFE(COL/ABS)	2.9700E+03	.0066	2.9632E+03 .0063 .9490
SOURCE POINTS GENERATED 3052									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.808967		.810978		.0039	K(COL/ABS)	.811843	.0031	.811701 .0032 .0269
K(ABSORPTION)	.813628		.812708		.0046	K(ABS/TK LN)	.811185	.0030	.811133 .0031 -.1511
K(TRK LENGTH)	.796818		.809662		.0045	K(TK LN/COL)	.810320	.0039	.810566 .0039 .6814
REM LIFE(COL)	2.8728E+03		2.9664E+03		.0070	K(COL/ABS/TK LN)	.811116	.0029	.811289 .0031
REM LIFE(ABS)	2.9226E+03		2.9640E+03		.0059	LIFE(COL/ABS)	2.9652E+03	.0063	2.9624E+03 .0059 .9399
SOURCE POINTS GENERATED 2992									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/50 year (mpc12p)

PROBID = 02/24/95 00:10:39
02/23/95 22:17:13

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59501	1.0084E+00	2.0627E+00	ESCAPE	1	4.7858E-06	2.1701E-13
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.3510E-02	4.7557E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59578	6.2940E-02	5.0151E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.1740E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	156	2.1334E-03	1.6237E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9540E+00
				CAPTURE	0	7.0752E-01	3.3307E-02
				LOSS TO (N,XN)	78	1.0667E-03	9.0308E-03
				LOSS TO FISSION	0	3.0250E-01	6.7996E-02

TOTAL	59657	1.0740E+00	2.0643E+00	TOTAL	59657	1.0740E+00	2.0643E+00
NUMBER OF NEUTRONS BANKED	78			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0026E+00			ESCAPE	3.7479E+04	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.5142E+01			CAPTURE	2.9798E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3281019			CAPTURE OR ESCAPE	2.9800E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0011E+00	.0003		ANY TERMINATION	3.2937E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	113.22 MINUTES			MAXIMUM NUMBER EVER IN BANK	1		
COMPUTER TIME IN MCRUN	113.10 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.2609E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	40295481			MOST RANDOM NUMBERS USED WAS	9136	IN HISTORY	446

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3545E-01 TO 1.2505E+00

WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
80	NO DATA AVAILABLE YET FOR THIS CELL.						
83	NO DATA AVAILABLE YET FOR THIS CELL.						
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	24891	9104	3.1082E+00	1.2297E-04	3.8191E-01	7.3086E-01	1.1152E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	711349	59579	292684	4.1641E+00	7.8459E-04	7.5516E-01	8.8695E-01	2.5038E+00
33	34	2249	135	486	5.2346E-03	7.7603E-05	3.4420E-01	6.3799E-01	4.2818E+00
34	35	107	13	243	2.0414E-03	5.2027E-05	3.7789E-01	5.4880E-01	9.3083E-01
35	36	1269532	59579	13	1.9383E-04	6.7888E-04	7.1521E-01	8.8410E-01	3.4792E+03
36	37	195	13	14	1.1054E-04	4.4347E-05	3.0698E-01	5.8408E-01	8.3044E-01
37	38	1376446	59579	49695	7.4864E-01	6.5358E-04	7.0354E-01	8.8337E-01	4.1042E+00
38	39	219	13	100	9.1514E-04	3.1328E-05	2.5505E-01	5.8006E-01	7.3032E-01
39	40	2195783	59579	1370260	1.8340E+01	5.6421E-04	6.7082E-01	8.8120E-01	1.6553E+00
40	41	54968	30470	84590	1.1312E+00	4.1065E-04	6.1847E-01	8.7785E-01	1.5571E+00
41	42	14	6	46	5.2607E-04	1.6876E-05	9.2172E-02	6.7420E-01	5.5009E-01
42	43	116193	32218	3600	5.3702E-02	4.2656E-04	6.2574E-01	8.7819E-01	4.1318E+00
43	44	130154	34559	28496	3.8157E-01	4.4395E-04	6.3755E-01	8.7948E-01	1.5890E+00
44	45	142356	35569	3056	4.5741E-02	4.5329E-04	6.4215E-01	8.8088E-01	4.1312E+00
45	46	173400	40635	67838	9.1142E-01	4.5564E-04	6.4284E-01	8.8042E-01	1.5982E+00
46	47	6774	3218	6833	9.1387E-02	4.7730E-04	6.7877E-01	8.8159E-01	1.6407E+00
47	48	9034	3515	294	4.3783E-03	5.2289E-04	6.9246E-01	8.8304E-01	4.1444E+00
48	49	11692	4758	5551	7.5408E-02	5.0057E-04	6.6949E-01	8.8446E-01	1.6433E+00
49	50	33743	15161	64397	7.7691E-01	3.6160E-04	5.6601E-01	8.3174E-01	1.4829E+00
50	51	33611	14390	12398	1.5620E-01	4.1849E-04	5.6984E-01	8.1512E-01	2.1056E+00
51	52	33208	14070	2493	3.6286E-02	4.2192E-04	5.7448E-01	8.1260E-01	9.0853E+00
52	53	33258	14126	12419	1.5397E-01	4.0777E-04	5.6250E-01	8.1120E-01	2.1109E+00
53	54	134	33	1069	9.9125E-03	1.6970E-05	7.1903E-02	6.0339E-01	5.6089E-01
54	55	32847	14823	64424	7.7894E-01	3.5616E-04	5.7482E-01	8.3052E-01	1.4895E+00
55	56	32542	14071	11857	1.5036E-01	4.1019E-04	5.7841E-01	8.1630E-01	2.1019E+00
56	57	32181	13717	2418	3.4972E-02	4.1088E-04	5.7622E-01	8.1293E-01	9.1637E+00
57	58	32207	13745	11823	1.4703E-01	4.0962E-04	5.8376E-01	8.0985E-01	2.1263E+00
58	59	145	37	1112	1.0781E-02	3.9823E-05	1.6756E-01	6.2380E-01	7.1991E-01
59	60	52294	19094	89179	1.1251E+00	5.1577E-04	5.7441E-01	8.5082E-01	1.5290E+00
60	61	52133	18187	17586	2.3089E-01	7.1258E-04	5.8814E-01	8.4261E-01	2.2795E+00
61	62	221	54	978	1.0263E-02	4.2000E-05	1.6168E-01	6.8516E-01	7.4258E-01
62	63	53865	19261	93082	1.1802E+00	4.9719E-04	5.6418E-01	8.5183E-01	1.5102E+00
63	64	53294	18364	18234	2.3964E-01	6.9304E-04	5.8999E-01	8.4200E-01	2.2758E+00
64	65	224	47	999	8.6751E-03	4.2509E-05	1.7419E-01	5.7892E-01	7.4853E-01
65	66	9609	4792	411683	3.8183E+00	5.6723E-05	2.6899E-01	6.2236E-01	8.5851E-01
66	67	9510	3786	14007	1.4774E-01	1.8355E-04	4.3104E-01	7.0266E-01	1.8401E+00
67	68	9712	3782	14427	1.5215E-01	1.7551E-04	4.3812E-01	6.9254E-01	1.7918E+00
68	70	35582	9511	11980	1.5694E-01	9.5934E-04	5.8183E-01	8.4213E-01	2.3771E+00
69	71	35752	9155	6762	1.0110E-01	1.0590E-03	5.8457E-01	8.4270E-01	8.8661E+00
70	72	19146	8966	59624	7.7493E-01	1.3283E-03	5.8367E-01	8.4020E-01	2.4907E+00
71	73	33562	8856	11347	1.4840E-01	9.9119E-04	5.8467E-01	8.3876E-01	2.3917E+00
72	74	33748	8550	6133	9.1329E-02	1.1005E-03	5.8330E-01	8.3862E-01	8.8867E+00
73	75	18159	8346	56630	7.2960E-01	1.3504E-03	5.8115E-01	8.3669E-01	2.5048E+00
74	76	79	26	1225	1.1909E-02	5.2936E-05	2.0469E-01	6.6088E-01	8.3236E-01
75	77	83	33	1298	1.1871E-02	5.9495E-05	2.1989E-01	6.3136E-01	8.5685E-01
76	80	2	2	12	7.5083E-05	8.0578E-08	8.2111E-08	3.6062E-01	9.1154E-01
77	81	3468	1510	10512	1.1426E-01	3.0065E-04	4.7242E-01	7.1784E-01	1.9840E+00
78	82	2132	860	12212	1.3231E-01	2.3099E-04	4.2944E-01	7.5363E-01	1.2561E+00
79	83	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1630	651	4930	5.7960E-02	8.0447E-04	5.7560E-01	7.7466E-01	2.1280E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	963	439	7773	9.1750E-02	2.3216E-03	6.2178E-01	8.0272E-01	4.5833E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	328	194	39496	3.4204E-01	4.2011E-05	1.9693E-01	5.7537E-01	7.4147E-01
TOTAL		6914728	691181	3281019	4.0997E+01				

1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.4727E-01	-5.4727E-01
2	2	3.1564E-01	.0000E+00	.0000E+00	-8.9254E-01	-5.7691E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.6381E-02	-1.6381E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0956E-02	-5.0956E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5197E-02	-1.5197E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4636E-01	-1.4636E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6348E+00	-1.6348E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9904E+00	-1.9904E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1552E-01	-2.1552E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.0881E-01	-2.0881E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8326E-01	-3.8326E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.9423E-01	-3.9423E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.4461E-02	-7.4461E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.4489E-02	-7.4489E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.5005E-02	-8.5005E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-6.8972E-02	-6.8972E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-6.9457E-02	-6.9457E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.1252E-02	-7.1252E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.8555E-02	-9.8555E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0113E-01	-1.0113E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9880E-02	-8.9880E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.2097E-02	-8.2097E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.0781E-01	-1.0781E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1469E-01	-1.1469E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1498E-01	-1.1498E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1073E-01	-1.1073E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-9.6378E-02	-9.6378E-02
28	29	.0000E+00	.0000E+00	.0000E+00	-8.1340E-02	-8.1340E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-8.6836E-02	-8.6836E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-9.7972E-02	-9.7972E-02
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8741E+01	-1.8741E+01
32	33	9.6545E+00	1.0084E+00	.0000E+00	-9.4417E+00	1.2211E+00
33	34	2.4172E-02	.0000E+00	.0000E+00	-2.2842E-02	1.3294E-03
34	35	9.6628E-04	.0000E+00	.0000E+00	-9.0785E-04	5.8427E-05
35	36	1.8874E+01	.0000E+00	.0000E+00	-1.8864E+01	1.0367E-02
36	37	1.7439E-03	.0000E+00	.0000E+00	-1.7433E-03	6.3832E-07
37	38	2.0457E+01	.0000E+00	.0000E+00	-2.0380E+01	7.6680E-02
38	39	1.9916E-03	.0000E+00	.0000E+00	-1.9825E-03	9.0846E-06
39	40	3.2564E+01	.0000E+00	.0000E+00	-1.0717E+01	2.1848E+01
40	41	8.1293E-01	.0000E+00	.0000E+00	-8.0957E-01	3.3631E-03
41	42	1.5975E-04	.0000E+00	.0000E+00	-1.5694E-04	2.8154E-06
42	43	1.7155E+00	.0000E+00	.0000E+00	-1.7150E+00	5.0705E-04
43	44	1.9233E+00	.0000E+00	.0000E+00	-1.9223E+00	1.0783E-03
44	45	2.1047E+00	.0000E+00	.0000E+00	-2.1042E+00	4.6628E-04
45	46	2.5680E+00	.0000E+00	.0000E+00	-1.0883E+00	1.4797E+00
46	47	1.0046E-01	.0000E+00	.0000E+00	-6.1100E-02	3.9359E-02
47	48	1.3424E-01	.0000E+00	.0000E+00	-1.2954E-01	4.7050E-03
48	49	1.7389E-01	.0000E+00	.0000E+00	-6.8465E-02	1.0542E-01
49	50	4.7403E-01	.0000E+00	.0000E+00	-2.6543E-01	2.0859E-01
50	51	4.6458E-01	.0000E+00	.0000E+00	-4.4939E-01	1.5189E-02
51	52	4.5593E-01	.0000E+00	.0000E+00	-4.5044E-01	5.4889E-03
52	53	4.5694E-01	.0000E+00	.0000E+00	-1.9310E-01	2.6384E-01
53	54	1.4238E-03	.0000E+00	.0000E+00	-3.2620E-05	1.3911E-03
54	55	4.6070E-01	.0000E+00	.0000E+00	-2.5919E-01	2.0151E-01
55	56	4.4968E-01	.0000E+00	.0000E+00	-4.3468E-01	1.5003E-02

TOTAL	1.0107E+02	1.0084E+00	.0000E+00	.0000E+00	-1.0107E+02	1.0084E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

[illegible]

23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	1.8510E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8510E-04
33	34	.0000E+00	.0000E+00	-2.0460E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0460E-05
34	35	.0000E+00	.0000E+00	-4.1932E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1932E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-4.2022E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.2022E-06
38	39	.0000E+00	.0000E+00	-4.1881E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1881E-06
39	40	.0000E+00	.0000E+00	3.3141E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3141E-05
40	41	.0000E+00	.0000E+00	1.7370E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7370E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-2.4820E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4820E-06
43	44	.0000E+00	.0000E+00	2.5395E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5395E-05
44	45	.0000E+00	.0000E+00	4.5050E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.5050E-07
45	46	.0000E+00	.0000E+00	8.8669E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8669E-06
46	47	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	-8.3976E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3976E-06
49	50	.0000E+00	.0000E+00	6.4482E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.4482E-05
50	51	.0000E+00	.0000E+00	1.2681E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2681E-05
51	52	.0000E+00	.0000E+00	3.1607E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.1607E-06
52	53	.0000E+00	.0000E+00	1.0129E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0129E-04
53	54	.0000E+00	.0000E+00	6.0191E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.0191E-08
54	55	.0000E+00	.0000E+00	3.9413E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9413E-05
55	56	.0000E+00	.0000E+00	3.9665E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9665E

83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-4.6898E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6898E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-9.3979E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3979E-05
TOTAL		.0000E+00	.0000E+00	5.6999E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6999E-04

1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3444E-02	.0000E+00	-1.3444E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.0439E-03	.0000E+00	-4.3638E-01	-1.0219E-03	-3.0250E-01
33	34	.0000E+00	.0000E+00	-1.0655E-04	.0000E+00	-1.0655E-04
34	35	.0000E+00	.0000E+00	-1.1100E-05	.0000E+00	-1.1100E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-6.3832E-07	.0000E+00	-6.3832E-07
37	38	.0000E+00	.0000E+00	-6.3093E-03	.0000E+00	-6.3093E-03
38	39	.0000E+00	.0000E+00	-4.8965E-06	.0000E+00	-4.8965E-06
39	40	.0000E+00	.0000E+00	-4.7379E-02	.0000E+00	-4.7379E-02
40	41	.0000E+00	.0000E+00	-3.3805E-03	.0000E+00	-3.3805E-03
41	42	.0000E+00	.0000E+00	-2.8154E-06	.0000E+00	-2.8154E-06
42	43	.0000E+00	.0000E+00	-5.0457E-04	.0000E+00	-5.0457E-04
43	44	.0000E+00	.0000E+00	-1.1037E-03	.0000E+00	-1.1037E-03
44	45	.0000E+00	.0000E+00	-4.6673E-04	.0000E+00	-4.6673E-04
45	46	.0000E+00	.0000E+00	-2.5897E-03	.0000E+00	-2.5897E-03
46	47	.0000E+00	.0000E+00	-2.6433E-04	.0000E+00	-2.6433E-04
47	48	.0000E+00	.0000E+00	-5.5774E-05	.0000E+00	-5.5774E-05
48	49	.0000E+00	.0000E+00	-2.0921E-04	.0000E+00	-2.0921E-04
49	50	.0000E+00	.0000E+00	-2.3556E-03	.0000E+00	-2.3556E-03

50	51	.0000E+00	.0000E+00	-1.0248E-02	.0000E+00	.0000E+00	-1.0248E-02
51	52	.0000E+00	.0000E+00	-6.1321E-04	.0000E+00	.0000E+00	-6.1321E-04
52	53	.0000E+00	.0000E+00	-1.0306E-02	.0000E+00	.0000E+00	-1.0306E-02
53	54	.0000E+00	.0000E+00	-5.1530E-05	.0000E+00	.0000E+00	-5.1530E-05
54	55	.0000E+00	.0000E+00	-2.3771E-03	.0000E+00	.0000E+00	-2.3771E-03
55	56	.0000E+00	.0000E+00	-1.0011E-02	.0000E+00	.0000E+00	-1.0011E-02
56	57	.0000E+00	.0000E+00	-6.3111E-04	.0000E+00	.0000E+00	-6.3111E-04
57	58	.0000E+00	.0000E+00	-9.9929E-03	.0000E+00	.0000E+00	-9.9929E-03
58	59	.0000E+00	.0000E+00	-5.5531E-05	.0000E+00	.0000E+00	-5.5531E-05
59	60	.0000E+00	.0000E+00	-2.7904E-03	.0000E+00	.0000E+00	-2.7904E-03
60	61	.0000E+00	.0000E+00	-1.0705E-02	.0000E+00	.0000E+00	-1.0705E-02
61	62	.0000E+00	.0000E+00	-5.1398E-05	.0000E+00	.0000E+00	-5.1398E-05
62	63	.0000E+00	.0000E+00	-2.9333E-03	.0000E+00	.0000E+00	-2.9333E-03
63	64	.0000E+00	.0000E+00	-1.1137E-02	.0000E+00	.0000E+00	-1.1137E-02
64	65	.0000E+00	.0000E+00	-4.6042E-05	.0000E+00	.0000E+00	-4.6042E-05
65	66	.0000E+00	.0000E+00	-1.9381E-02	.0000E+00	.0000E+00	-1.9381E-02
66	67	.0000E+00	.0000E+00	-1.4945E-02	.0000E+00	.0000E+00	-1.4945E-02
67	68	.0000E+00	.0000E+00	-1.5232E-02	.0000E+00	.0000E+00	-1.5232E-02
68	70	.0000E+00	.0000E+00	-5.7983E-03	.0000E+00	.0000E+00	-5.7983E-03
69	71	.0000E+00	.0000E+00	-7.6316E-04	.0000E+00	.0000E+00	-7.6316E-04
70	72	.0000E+00	.0000E+00	-2.2483E-02	.0000E+00	.0000E+00	-2.2483E-02
71	73	.0000E+00	.0000E+00	-5.3605E-03	.0000E+00	.0000E+00	-5.3605E-03
72	74	.0000E+00	.0000E+00	-6.6027E-04	.0000E+00	.0000E+00	-6.6027E-04
73	75	8.9466E-05	.0000E+00	-2.1371E-02	-4.4733E-05	.0000E+00	-2.1326E-02
74	76	.0000E+00	.0000E+00	-6.1709E-05	.0000E+00	.0000E+00	-6.1709E-05
75	77	.0000E+00	.0000E+00	-5.9041E-05	.0000E+00	.0000E+00	-5.9041E-05
76	80	.0000E+00	.0000E+00	-1.5872E-05	.0000E+00	.0000E+00	-1.5872E-05
77	81	.0000E+00	.0000E+00	-8.4214E-03	.0000E+00	.0000E+00	-8.4214E-03
78	82	.0000E+00	.0000E+00	-4.3316E-04	.0000E+00	.0000E+00	-4.3316E-04
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.5001E-03	.0000E+00	.0000E+00	-2.5001E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.7369E-03	.0000E+00	.0000E+00	-1.7369E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7793E-03	.0000E+00	.0000E+00	-1.7793E-03

TOTAL 2.1334E-03 .0000E+00 -7.0752E-01 -1.0667E-03 -3.0250E-01 -1.0090E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	276869 15832	2.9169E+00 1.9128E-01	1.3365E-02 7.8221E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7485E-01	97663	1.4396E+00	1.3020E-03	.0000E+00	.0000E+00
		45103.50C	3.7686E-04	866	1.1296E-02	9.4727E-03	.0000E+00	.0000E+00
		47109.50C	5.7949E-05	142	1.9198E-03	1.5866E-03	.0000E+00	.0000E+00
		62149.50C	2.1480E-06	992	1.1096E-02	1.1020E-02	.0000E+00	.0000E+00
		63151.55C	2.9429E-06	173	2.0017E-03	1.9449E-03	.0000E+00	.0000E+00
		63153.55C	7.0167E-05	277	3.4490E-03	2.9850E-03	.0000E+00	.0000E+00
		64155.50C	7.9740E-06	2269	2.4473E-02	2.4406E-02	.0000E+00	.0000E+00
		92233.50C	4.0214E-09	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	9.0491E-05	171	2.3081E-03	1.5564E-03	4.6014E-05	.0000E+00
		92235.50C	3.2044E-03	15312	2.9850E-01	2.6958E-02	1.3077E-01	.0000E+00
		92236.50C	1.5748E-03	1289	1.9007E-02	6.3391E-03	3.0470E-04	1.2625E-05
		92238.50C	3.1606E-01	145576	2.1523E+00	1.8380E-01	2.0381E-02	1.0093E-03
		93237.55C	2.2598E-04	549	7.1637E-03	5.8527E-03	5.9213E-05	.0000E+00
		94238.50C	4.7099E-05	191	2.2665E-03	1.7853E-03	1.0265E-04	.0000E+00
		94239.55C	2.0119E-03	19232	3.8484E-01	7.1470E-02	1.4632E-01	.0000E+00
		94240.50C	7.8146E-04	4613	6.0818E-02	5.2612E-02	2.9404E-04	.0000E+00
		94241.50C	4.0444E-05	436	8.8589E-03	1.2573E-03	3.4492E-03	.0000E+00
		94242.50C	1.5646E-04	283	3.9862E-03	2.7264E-03	2.2886E-05	.0000E+00
		95241.50C	4.0178E-04	2509	3.1170E-02	2.8088E-02	3.1971E-04	.0000E+00
		95242.50C	5.8108E-07	38	8.4551E-04	7.2971E-05	3.5604E-04	.0000E+00
		95243.50C	3.3663E-05	97	1.3830E-03	1.1368E-03	6.1273E-06	.0000E+00
		96245.35C	4.3620E-07	6	1.3899E-04	1.2278E-05	6.1110E-05	.0000E+00
33	34	8016.50C	6.8138E-03	5	5.8736E-05	8.4231E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	2.9256E-05	7.4074E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	1	5.1587E-06	4.4489E-07	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	476	5.1284E-03	9.7308E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	1	1.3019E-05	1.3930E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	234	1.9530E-03	1.1097E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9	8.8411E-05	3.7461E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	13	1.9383E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	13	1.0174E-04	6.3768E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	8.7927E-06	6.4568E-10	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	194	2.8441E-03	4.9660E-07	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	95	1.3706E-03	8.2846E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	177	2.5471E-03	1.1434E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	48726	7.3425E-01	5.9496E-03	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	503	7.6235E-03	1.6197E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	93	8.5217E-04	4.8929E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7	6.2968E-05	3.5858E-09	.0000E+00	.0000E+00

39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1256007 114253	1.6663E+01 1.6763E+00	4.6080E-02 1.2980E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	78087 6503	1.0358E+00 9.5349E-02	3.3065E-03 7.4016E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	43 3	5.0028E-04 2.5783E-05	2.8144E-06 1.0661E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	27 4 17 3513 39	3.9452E-04 6.2079E-05 2.3200E-04 5.2449E-02 5.6417E-04	5.0587E-09 6.0797E-06 1.4231E-05 4.6622E-04 1.8034E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26277 2219	3.4926E-01 3.2310E-02	1.0776E-03 2.6120E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 3 17 2991 33	1.5763E-04 4.9012E-05 2.5004E-04 4.4772E-02 5.1230E-04	1.2914E-07 2.9341E-06 9.4086E-06 4.4313E-04 1.1128E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	62447 5391	8.3236E-01 7.9067E-02	2.5386E-03 5.1132E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6267 566	8.3116E-02 8.2710E-03	2.5337E-04 1.0962E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 0 4 282 6	2.3499E-05 .0000E+00 5.2137E-05 4.2192E-03 8.3446E-05	5.5456E-10 .0000E+00 5.0109E-06 4.9612E-05 1.1513E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5124 427	6.9089E-02 6.3197E-03	2.0427E-04 4.9467E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59681 4716	7.1141E-01 6.5497E-02	2.3195E-03 3.6147E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	4 56 59 8 2 1400 549 7826 2337 157	5.9339E-05 6.8840E-04 8.0065E-04 1.0930E-04 3.0577E-05 1.8363E-02 7.8869E-03 9.7118E-02 2.9009E-02 2.1395E-03	3.8042E-09 3.0582E-05 1.2197E-05 1.3163E-06 1.1137E-06 1.7875E-03 9.1178E-04 5.4442E-03 1.7529E-03 3.0687E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2484 9	3.6189E-02 9.6645E-05	6.0267E-04 1.0544E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04	8 45 61 2	1.0352E-04 5.5679E-04 8.9268E-04 2.2562E-05	1.0887E-08 2.1068E-05 1.0249E-05 1.7757E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00

		16032.50C	5.2467E-04	2	3.3528E-05	2.7098E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1414	1.8394E-02	1.8555E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	483	6.8869E-03	9.2336E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7903	9.6192E-02	5.4579E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2342	2.8662E-02	1.7548E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	159	2.2241E-03	2.8299E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1017	9.4054E-03	5.1514E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	52	5.0709E-04	1.5970E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	59781	7.1508E-01	2.3436E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4643	6.3861E-02	3.3576E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	12	1.3842E-04	4.1375E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.2655E-04	2.0569E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	6.4615E-04	7.9301E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	2.9578E-05	5.3824E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3932E-05	9.5768E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1423	1.8738E-02	1.8308E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	512	7.2589E-03	9.7614E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7508	9.3586E-02	5.2508E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2185	2.7730E-02	1.6432E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	134	1.7775E-03	2.8055E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2413	3.4901E-02	6.2589E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	5	7.0926E-05	5.2183E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	6	9.4565E-05	8.3688E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.6626E-04	1.8214E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	6.9765E-04	1.3405E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.6366E-05	6.5704E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.7005E-05	3.6514E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1442	1.8906E-02	1.7781E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	503	7.0318E-03	9.2961E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7363	8.9884E-02	5.1484E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2249	2.7573E-02	1.7829E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	169	2.3153E-03	3.1792E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1058	1.0272E-02	5.5516E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	54	5.0945E-04	1.4488E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	81943	1.0223E+00	2.7248E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7236	1.0286E-01	6.5540E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	18	2.4881E-04	1.4815E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	65	8.1120E-04	3.6406E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	90	1.2882E-03	1.0698E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0639E-04	7.4407E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.1532E-05	1.3809E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2209	3.0085E-02	2.0475E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	781	1.1558E-02	8.1182E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10873	1.3998E-01	5.5701E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3264	4.2805E-02	1.7382E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	277	3.9845E-03	4.8761E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	945	9.8892E-03	5.1391E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	33	3.7411E-04	7.3073E-09	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	85556	1.0734E+00	2.8599E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7526	1.0678E-01	7.3339E-05	.0000E+00	.0000E+00

63	64	6000.50C	1.3966E-03	16	2.1506E-04	3.3920E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	5.5392E-04	2.0547E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	101	1.5309E-03	1.4808E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	9	1.2644E-04	9.4990E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.1645E-05	3.1490E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2289	3.1729E-02	2.0140E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	805	1.1699E-02	9.8827E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11283	1.4531E-01	5.8078E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3433	4.4865E-02	1.8627E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	252	3.5471E-03	4.2738E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	967	8.3813E-03	4.6034E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	32	2.9383E-04	8.5704E-09	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	392701	3.6239E+00	1.9308E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	18982	1.9439E-01	7.2520E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	8	1.0985E-04	1.2816E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	4.6463E-04	3.5205E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	6.9628E-04	2.3155E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	7.6194E-05	1.7001E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.6903E-05	2.9068E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1581	1.7411E-02	2.7708E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	397	4.7943E-03	1.3546E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9145	9.5072E-02	7.9830E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2612	2.7262E-02	2.4243E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	1.8317E-03	3.4970E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	11	1.1680E-04	3.9487E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	5.4368E-04	3.9516E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	7.0915E-04	1.1286E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	4.6950E-05	1.0884E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.4397E-05	4.0737E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1534	1.6948E-02	2.7744E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	454	5.7614E-03	1.3110E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9372	9.6737E-02	8.1462E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2796	2.9633E-02	2.6443E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	139	1.6226E-03	2.9964E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	10	1.1571E-04	1.6056E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	5.6588E-04	2.0714E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	63	9.1934E-04	4.0933E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.0563E-05	3.5938E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1290E-05	2.5975E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1473	2.0402E-02	1.0682E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	544	7.9390E-03	4.7137E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7442	9.5671E-02	3.0272E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2219	2.8839E-02	9.2341E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	175	2.4190E-03	2.8290E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6754	1.0098E-01	7.6095E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.1322E-04	2.2031E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	46	6.4659E-04	3.2651E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	200	2.5474E-03	6.5448E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	294	4.2391E-03	2.0027E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.6368E-04	2.1784E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.1587E-04	7.1606E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7625	1.0559E-01	3.9412E-03	.0000E+00	.0000E+00

		25055.50C	2.0356E-02	2604	3.7502E-02	1.9854E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36410	4.6164E-01	1.1405E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11444	1.4844E-01	3.7165E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	966	1.3852E-02	1.3459E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	9	1.3326E-04	9.3843E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.4235E-04	1.1633E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	63	9.2178E-04	2.9946E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0148E-04	4.5549E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.5336E-05	1.5204E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1422	1.9512E-02	9.6273E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	504	7.3503E-03	4.4585E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7026	9.0174E-02	2.7766E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2117	2.7480E-02	8.7662E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.2551E-03	2.8206E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6124	9.1221E-02	6.5197E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.0766E-04	8.2987E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	30	4.3913E-04	9.2277E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	183	2.3121E-03	6.0960E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	298	4.3814E-03	1.8302E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	24	3.3962E-04	2.9717E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	9.9106E-05	3.5595E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7202	9.8963E-02	3.7694E-03	.0000E+00	1.5384E-05
		25055.50C	2.0356E-02	2387	3.4072E-02	2.0579E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34968	4.4088E-01	1.0848E-02	.0000E+00	2.9349E-05
		28000.50C	1.1433E-01	10689	1.3650E-01	3.4684E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	841	1.1619E-02	1.1414E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	1166	1.1272E-02	6.0379E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	59	6.3735E-04	1.3309E-06	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	1233	1.1234E-02	5.9020E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	65	6.3647E-04	2.0477E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2	1.4190E-05	3.8574E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1	6.5888E-06	5.6380E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7	4.1586E-05	4.7403E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2	1.2718E-05	1.6365E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	7	6.9646E-05	1.3878E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	27	2.9701E-04	1.9984E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	6.8787E-04	1.2018E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	5.4460E-05	7.1086E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	1.9638E-05	2.7038E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1201	1.3976E-02	1.5893E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	336	4.2871E-03	7.4488E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6761	7.1668E-02	4.4345E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1998	2.1689E-02	1.3644E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	122	1.5095E-03	2.5287E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11433	1.2252E-01	4.3000E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	779	9.7882E-03	3.1663E-06	.0000E+00	.0000E+00

79	83	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	8	1.2600E-04	4.9390E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	19	2.5619E-04	1.9147E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	1.5692E-05	9.2918E-08	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	37	4.3746E-04	4.9215E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	623	7.9576E-03	4.1109E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	85	1.1732E-03	9.6131E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1168	1.3451E-02	4.7320E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2830	3.2629E-02	1.2681E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	76	9.2063E-04	6.1126E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	83	9.9355E-04	1.3872E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	54	7.0064E-04	3.2300E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	25	3.4485E-04	1.0452E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	1	1.6985E-05	1.0885E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	3.2448E-05	7.2991E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	137	1.9097E-03	8.0391E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7554	8.8745E-02	1.6553E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	37738	3.2506E-01	1.7700E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1758	1.6988E-02	9.2644E-06	.0000E+00	.0000E+00
TOTAL				3281019	4.1300E+01	7.0752E-01	3.0250E-01	1.0667E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2446680	2.9607E+01	9.8926E-02	.0000E+00	.0000E+00
		2004.50C		13	1.9383E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		239	3.1913E-03	2.7897E-07	.0000E+00	.0000E+00

7014.50C	868	1.0676E-02	4.0085E-04	.0000E+00	.0000E+00
8016.50C	289049	4.0952E+00	3.1410E-03	.0000E+00	.0000E+00
13027.50C	17783	2.6342E-01	2.6420E-03	.0000E+00	.0000E+00
14000.50C	1332	1.9012E-02	1.6412E-04	.0000E+00	.0000E+00
15031.50C	112	1.4806E-03	1.3858E-05	.0000E+00	.0000E+00
16032.50C	42	5.9890E-04	2.2130E-05	.0000E+00	.0000E+00
22000.50C	37	4.3746E-04	4.9215E-05	.0000E+00	.0000E+00
24000.50C	32945	4.3850E-01	2.8704E-02	.0000E+00	1.5384E-05
25055.50C	11082	1.5712E-01	1.4094E-02	.0000E+00	.0000E+00
26000.55C	172825	2.1192E+00	8.3577E-02	.0000E+00	2.9349E-05
28000.50C	52517	6.5313E-01	2.7222E-02	.0000E+00	.0000E+00
29000.50C	107	1.3091E-03	8.7390E-05	.0000E+00	.0000E+00
40000.50C	55988	8.4082E-01	7.0059E-03	.0000E+00	.0000E+00
42000.50C	3797	5.2091E-02	6.1965E-03	.0000E+00	.0000E+00
45103.50C	866	1.1296E-02	9.4727E-03	.0000E+00	.0000E+00
47109.50C	142	1.9198E-03	1.5866E-03	.0000E+00	.0000E+00
50000.35C	582	8.7964E-03	1.9368E-04	.0000E+00	.0000E+00
62149.50C	992	1.1096E-02	1.1020E-02	.0000E+00	.0000E+00
63151.55C	173	2.0017E-03	1.9449E-03	.0000E+00	.0000E+00
63153.55C	277	3.4490E-03	2.9850E-03	.0000E+00	.0000E+00
64155.50C	2269	2.4473E-02	2.4406E-02	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	171	2.3081E-03	1.5564E-03	4.6014E-05	.0000E+00
92235.50C	15312	2.9850E-01	2.6958E-02	1.3077E-01	.0000E+00
92236.50C	1289	1.9007E-02	6.3391E-03	3.0470E-04	1.2625E-05
92238.50C	145576	2.1523E+00	1.8380E-01	2.0381E-02	1.0093E-03
93237.55C	549	7.1637E-03	5.8527E-03	5.9213E-05	.0000E+00
94238.50C	191	2.2665E-03	1.7853E-03	1.0265E-04	.0000E+00
94239.55C	19232	3.8484E-01	7.1470E-02	1.4632E-01	.0000E+00
94240.50C	4613	6.0818E-02	5.2612E-02	2.9404E-04	.0000E+00
94241.50C	436	8.8589E-03	1.2573E-03	3.4492E-03	.0000E+00
94242.50C	283	3.9862E-03	2.7264E-03	2.2886E-05	.0000E+00
95241.50C	2509	3.1170E-02	2.8088E-02	3.1971E-04	.0000E+00
95242.50C	38	8.4551E-04	7.2971E-05	3.5604E-04	.0000E+00
95243.50C	97	1.3830E-03	1.1368E-03	6.1273E-06	.0000E+00
96245.35C	6	1.3899E-04	1.2278E-05	6.1110E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59501 CTM = 113.10

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 113.22 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 00:10:40

PROBID = 02/23/95 22:17:13

1MCNP VERSION 4A-B LD=10/04/91

02/24/95 00:10:40

PROBID = 02/24/95 00:10:40

INP=mpc12q OUTP=mpc12q.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/300 year (mpc12q)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1907-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57-      36      3 -1.785-3  17 -18 -5 IMP:N=1 U=2
58-      37      1 -1.0000  17 -18  5 IMP:N=1 U=2
59-      38      4 -6.6000  18 -19 -5 IMP:N=1 U=2
60-      39      1 -1.0000  18 -19  5 IMP:N=1 U=2
61-      40      1 -1.0000  19      IMP:N=1 U=2
62-      C      CONTROL ROD/GUIDE TUBE
63-      41      1 -1.0000 -21 -5 IMP:N=1 U=3
64-      42      1 -1.0000 -21  5 IMP:N=1 U=3
65-      43      4 -6.6000  21 -22 IMP:N=1 U=3
66-      44      1 -1.0000  22 -23 IMP:N=1 U=3
67-      45      4 -6.6000  23 -24 IMP:N=1 U=3
68-      46      1 -1.0000  24      IMP:N=1 U=3
69-      C      INSTRUMENTATION TUBE
70-      47      1 -1.0000 -25      IMP:N=1 U=4
71-      48      4 -6.6000  25 -26 IMP:N=1 U=4
72-      49      1 -1.0000  26      IMP:N=1 U=4
73-      C      WATER GAP - ASSEMBLY TOP
74-      50      1 -1.0000 -35 -4 IMP:N=1 U=5
75-      C      SS TUBE WALL - ASSEMBLY TOP
76-      51      8 -8.2380  35 -44 -4 IMP:N=1 U=5
77-      C      AL-B WALL - ASSEMBLY TOP
78-      52      6 -2.700  44 -46 -4 IMP:N=1 U=5
79-      C      SS WALL - ASSEMBLY TOP
80-      53      8 -8.2380  46 -4 IMP:N=1 U=5
81-      C      WATER ABOVE BASKET
82-      54      1 -1.000  4 IMP:N=1 U=5
83-      C      WATER GAP - ASSEMBLY RIGHT
84-      55      1 -1.0000 -36 -4 IMP:N=1 U=6
85-      C      SS TUBE WALL - ASSEMBLY RIGHT
86-      56      8 -8.2380  36 -43 -4 IMP:N=1 U=6
87-      C      AL-B WALL - ASSEMBLY RIGHT
88-      57      6 -2.7000  43 -45 -4 IMP:N=1 U=6
89-      C      SS WALL - ASSEMBLY RIGHT
90-      58      8 -8.2380  45 -4 IMP:N=1 U=6
91-      C      WATER ABOVE BASKET
92-      59      1 -1.000  4 IMP:N=1 U=6
93-      C      WATER GAP - ASSEMBLY BOTTOM
94-      60      1 -1.0000  37 -4 IMP:N=1 U=7
95-      C      SS TUBE WALL - ASSEMBLY BOTTOM
96-      61      8 -8.2380 -37 -4 IMP:N=1 U=7
97-      C      WATER ABOVE BASKET
98-      62      1 -1.000  4 IMP:N=1 U=7
99-      C      WATER GAP - ASSEMBLY LEFT
100-     63      1 -1.0000  38 -4 IMP:N=1 U=8
101-     C      LOWER ST COMB - ASSEMBLY LEFT
102-     64      8 -8.2380 -38 -4 IMP:N=1 U=8
103-     C      WATER ABOVE BASKET
104-     65      1 -1.000  4 IMP:N=1 U=8
105-     C      SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106-     66      1 -1.0000  74 75 IMP:N=1 U=10
107-     67      8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108-     68      8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109-     C      AXIS MATERIALS
110-     70      8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111-     71      6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112-     72      8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113-     73      8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114-     74      6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115-     75      8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116-     76      1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923
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177-    29 PY 12.80923
178-    30 PY -12.80923
179-    C ASSEMBLY LATTICE BOUNDS
180-    31 PY 10.82024 $ ACTUAL 10.82025
181-    32 PX 10.82024 $ ACTUAL 10.82025
182-    33 PY -10.82024 $ ACTUAL -10.82025
183-    34 PX -10.82024 $ ACTUAL -10.82025
184-    35 PY 11.4300
185-    36 PX 11.4300
186-    37 PY -11.4300
187-    38 PX -11.4300
188-    39 PY 12.17930
189-    40 PX 12.17930
190-    41 PY -11.66876
191-    42 PX -11.66876
192-    43 PX 11.66876
193-    44 PY 11.66876
194-    45 PX 11.94054
195-    46 PY 11.94054
196-    C BLANK PIN CELL
197-    48 PX -0.7213
198-    49 PX 0.7213
199-    50 PY -0.7213
200-    51 PY 0.7213
201-    52 PY 0.0001
202-    53 PY -0.0001
203-    54 PY 0.0
204-    55 P 1. -1. 0. 0.
205-    56 P 1. 1. 0. 0. $ 24.35
206-    C EXTRA CARDS
207-    57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208-    58 PY 2.14376
209-    59 PX 1.9050
210-    60 PY 1.9050
211-    61 PX 1.270
212-    62 PY 1.270050
213-    64 PX -.0000005
214-    65 PY -.0000005
215-    66 PX 95.
216-    67 PY 95.
217-    C OUTER BARRIER
218-    70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219-    71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220-    72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221-    73 PZ 282.3500 $TOP OF OUTER BARRIER
222-    74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223-    75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224-    80 PZ 312.3500 $ WET TUFF OVERPACK, END
225-    81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227-    MODE N
228-    C VOL 88J
229-    KCODE 3000 1. 5 20
230-    C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231-    C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232-    C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233-    C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234-    C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235-    C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236-    C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	PWR: 3.75% U-235 - 37 Gwd/MTU - 300 YEAR DECAY								
331-	M2	8016.50C	4.8527E-02							
332-		45103.50C	2.7098E-05							
333-		47109.50C	4.1670E-06							
334-		62149.50C	1.5446E-07							
335-		63151.55C	5.9548E-07							
336-		63153.55C	5.0454E-06							
337-		64155.50C	5.7413E-07							
338-		92233.50C	2.0532E-09							
339-		92234.50C	9.5171E-06							
340-		92235.50C	2.3148E-04							
341-		92236.50C	1.1473E-04							
342-		92238.50C	2.2727E-02							
343-		93237.55C	2.6721E-05							
344-		94238.50C	4.7828E-07							
345-		94239.55C	1.4368E-04							
346-		94240.50C	5.4844E-05							
347-		94241.50C	7.1710E-11							
348-		94242.50C	1.1250E-05							
349-		95241.50C	2.1364E-05							
350-		95242.50C	1.3363E-08							
351-		95243.50C	2.3637E-06							
352-		96245.35C	3.0753E-08							
353-	C	He AT 10 ATM DENSITY=1.785E-3 GM/CC								
354-	M3	2004.50C	1.0							
355-	C	ZIRCALOY-4								
356-	M4	8016.50C	-0.0012	24000.50C	-0.0010	26000.55C	-0.0020			

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2992
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2992
 POINTS AFTER EXPANSION OR CONTRACTION 2996
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190811E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	8016, .67485 45103, .00038 47109, .00006 62149, .00000 63151, .00001 63153, .00007 64155, .00001 92233, .00000 92234, .00013 92235, .00322 92236, .00160 92238, .31606 93237, .00037 94238, .00001 94239, .00200 94240, .00076 94241, .00000 94242, .00016 95241, .00030 95242, .00000 95243, .00003 96245, .00000
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748 50000, .01071
5	6000, .00234 13027, .00417 14000, .01001 16032, .00053 22000, .01057 24000, .23247 25055, .01023 26000, .28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
7	13027,	.99949	29000,	.00051				
8	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12249	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00001	63153,	.00012	64155,	.00001	92233,	.00000
	92234,	.00035	92235,	.00859	92236,	.00427	92238,	.85378
	93237,	.00100	94238,	.00002	94239,	.00542	94240,	.00208
	94241,	.00000	94242,	.00043	95241,	.00081	95242,	.00000
	95243,	.00009	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	7	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19070E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE	
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00	
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
32	33	2	7.19070E-02	1.05224E+01	.00000E+00	0	1.0000E+00	
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	0	1.0000E+00	
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	0	1.0000E+00	
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	0	1.0000E+00	
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1.31148E+01 8.65579E+01
 1SURFACES

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80		PZ	3.1235000E+02
72	81		CZ	1.0652500E+02
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
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WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C	16458	NJOY		(1338)	79/09/12.
94241.50C	22523	NJOY	TOTAL NU	(1381)	79/08/30.
94242.50C	43433	NJOY	TOTAL NU	(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY		(1315)	79/10/29.
16032.50C	2684	NJOY		(1316)	79/10/29.
22000.50C	25231	NJOY		(1322)	79/06/21.
25055.50C	60097	NJOY		(1325)	79/06/21.
42000.50C	18467	NJOY		(1321)	79/08/01.
62149.50C	11116	NJOY		(1319)	02/12/85
64155.50C	31471	NJOY		(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY		(1310)	11/01/85
47109.50C	10147	NJOY		(1373)	11/01/85
93237.55C	29142	NJOY	TOTAL NU	(1337)	04/04/85

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24 T=OK	(48)	86/02/01
WARNING. NUBAR OF 96245.35C	15310	ZA=96245 ENDL-85	85/04/24 T=OK	(93)	86/04/23

TABLES FROM FILE NEWXS2

63151.55C	33336				06/28/88
63153.55C	30265				06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
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TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
10DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102258
TALLIES	0
BANK	18403
CROSS SECTIONS	1347491

TOTAL 1468152

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/300 year (mpc12q)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-4.527E-02	4.505E-01	7.526E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.001E+00	1.209E+00
2	6.225E-02	8.385E-02	2.410E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.001E+00	4.194E+00
3	2.805E-02	-1.867E-01	2.114E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.001E+00	1.007E+00
4	1.660E-02	-1.861E-01	2.113E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.001E+00	1.846E+00
5	1.707E-01	-6.228E-02	2.128E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.001E+00	2.218E+00
6	2.926E-01	-2.045E-01	2.147E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.001E+00	1.894E+00
7	-1.216E-01	2.876E-01	1.825E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.001E+00	4.916E-01
8	1.896E-01	2.410E-01	1.730E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.001E+00	3.065E+00
9	-9.673E-03	2.472E-01	4.112E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.001E+00	4.753E-01
10	2.148E-01	2.154E-01	3.780E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.001E+00	2.180E+00
11	6.347E-02	2.638E-01	3.789E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.001E+00	6.673E-01
12	-3.804E-02	-1.277E-01	4.555E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.001E+00	2.173E+00
13	4.320E-01	1.294E-01	4.506E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.001E+00	2.222E+00
14	-4.323E-02	-3.161E-01	4.866E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.001E+00	2.586E+00
15	-4.563E-02	-4.267E-01	4.878E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.001E+00	2.897E+00
16	3.777E-01	6.074E-02	3.750E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.001E+00	5.161E-01
17	-1.061E-01	3.225E-01	3.099E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.001E+00	1.673E+00
18	-2.287E-01	2.759E-01	3.105E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.001E+00	2.167E-01
19	-6.375E-02	2.215E-01	4.080E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.001E+00	2.186E+00
20	-1.020E-02	-2.971E-01	4.085E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.001E+00	5.954E+00
21	-2.494E-01	-2.192E-01	3.806E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.001E+00	1.300E+00
22	3.126E-01	-3.152E-01	3.827E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.001E+00	3.885E-01
23	2.862E-01	-9.252E-02	3.620E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.001E+00	2.711E-01
24	1.462E-01	-8.891E-02	3.596E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.001E+00	6.371E-01
25	-3.190E-01	8.371E-02	4.762E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.001E+00	3.022E+00
26	-9.780E-02	2.790E-01	4.757E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.001E+00	3.699E+00
27	2.802E-01	2.031E-01	4.805E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.001E+00	1.283E+00
28	9.388E-02	-3.388E-01	5.035E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.001E+00	1.770E+00
29	2.523E-01	2.223E-02	4.959E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.001E+00	5.136E+00
30	4.079E-02	1.427E-01	6.893E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.001E+00	4.312E-01
31	3.457E-01	1.525E-01	7.096E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.001E+00	1.562E+00
32	1.040E-01	2.334E-02	6.489E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.001E+00	8.848E-01
33	-1.947E-02	1.863E-01	4.549E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.001E+00	1.560E+00
34	-6.401E-03	-2.140E-01	1.720E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.001E+00	1.072E+00
35	2.793E-01	7.858E-03	3.286E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.001E+00	5.062E-01
36	-1.367E-01	2.678E-01	3.932E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.001E+00	1.674E+00
37	3.410E-01	7.230E-03	5.063E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.001E+00	5.629E+00
38	-3.619E-01	-2.741E-01	1.031E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.001E+00	3.218E+00
39	1.583E-01	-4.228E-01	9.265E+00	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.001E+00	3.162E+00
40	-7.140E-02	-7.859E-02	9.715E+00	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.001E+00	1.983E+00
41	1.715E-01	-2.122E-02	3.502E+00	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.001E+00	4.590E-01
42	4.119E-01	1.933E-01	3.616E+00	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.001E+00	2.951E-01
43	-1.869E-01	4.205E-01	2.102E+00	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.001E+00	1.904E+00
44	-4.211E-01	-5.804E-02	2.929E+00	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.001E+00	1.651E+00
45	1.137E-01	-1.024E-01	3.235E+00	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.001E+00	4.975E-01
46	-1.775E-01	-8.730E-02	3.098E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.001E+00	1.697E+00
47	-1.163E-01	5.839E-02	3.189E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.001E+00	4.154E+00
48	-1.198E-01	-2.905E-01	3.041E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.001E+00	4.044E+00
49	-2.114E-01	-3.835E-01	8.070E+00	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.001E+00	1.976E+00

50 -3.672E-01 2.193E-01 6.446E+00 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 1.001E+00 6.438E-01

CYCLE 1 K(COLLISION) .820390 REMOVAL LIFETIME(ABS) 3.0408E+03 SOURCE POINTS GENERATED 2454

CYCLE 2 K(COLLISION) .806144 REMOVAL LIFETIME(ABS) 3.1919E+03 SOURCE POINTS GENERATED 2952

CYCLE 3 K(COLLISION) .831584 REMOVAL LIFETIME(ABS) 3.0513E+03 SOURCE POINTS GENERATED 3065

CYCLE 4 K(COLLISION) .806626 REMOVAL LIFETIME(ABS) 2.9573E+03 SOURCE POINTS GENERATED 2942

CYCLE 5 K(COLLISION) .821848 REMOVAL LIFETIME(ABS) 3.0983E+03 SOURCE POINTS GENERATED 3026

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .800100 REMOVAL LIFETIME(ABS) 3.0407E+03 SOURCE POINTS GENERATED 2954

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.794964		.797532	.0032	K(COL/ABS)	.000000	.000000	.0000
K(ABSORPTION)		.826177		.824376	.0022	K(ABS/TK LN)	.000000	.000000	.0000
K(TRK LENGTH)		.780720		.787761	.0089	K(TK LN/COL)	.000000	.000000	.0000
REM LIFE(COL)	2.8574E+03		2.9279E+03		.0241				
REM LIFE(ABS)	2.9097E+03		2.9752E+03		.0220				
SOURCE POINTS GENERATED	2987					LIFE(COL/ABS)	.0000E+00	.0000	.0000

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.806115		.800393	.0040	K(COL/ABS)	.807181	.803496	-.9292
K(ABSORPTION)		.793154		.813969	.0128	K(ABS/TK LN)	.801596	.794874	-.4305
K(TRK LENGTH)		.792150		.789224	.0055	K(TK LN/COL)	.794809	.800173	.7336
REM LIFE(COL)	3.0036E+03		2.9532E+03		.0162				
REM LIFE(ABS)	3.0449E+03		2.9984E+03		.0148				
SOURCE POINTS GENERATED	3062					LIFE(COL/ABS)	2.9758E+03	3.5716E+03	1.0000

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.797620		.799700	.0030	K(COL/ABS)	.807147	.803187	-.9103
K(ABSORPTION)		.816468		.814593	.0091	K(ABS/TK LN)	.804311	.802003	-.1591
K(TRK LENGTH)		.808444		.794029	.0072	K(TK LN/COL)	.796865	.799060	.1310
REM LIFE(COL)	3.1463E+03		3.0014E+03		.0196				
REM LIFE(ABS)	3.1542E+03		3.0374E+03		.0165				
SOURCE POINTS GENERATED	2968					LIFE(COL/ABS)	3.0194E+03	3.2071E+03	.9978

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.822448		.804249	.0061	K(COL/ABS)	.808198	.807635	-.6776
K(ABSORPTION)		.802363		.812147	.0077	K(ABS/TK LN)	.807839	.809338	-.4168
K(TRK LENGTH)		.841541		.803532	.0130	K(TK LN/COL)	.803890	.804570	.8613
REM LIFE(COL)	3.1672E+03		3.0346E+03		.0186				
REM LIFE(ABS)	3.1588E+03		3.0616E+03		.0149				
SOURCE POINTS GENERATED	3094					LIFE(COL/ABS)	3.0481E+03	3.1580E+03	.9961

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.824056		.807551	.0064	K(COL/ABS)	.807659	.807643	-.8110

K(ABSORPTION)	.785865	.807767	.0083	K(ABS/TK LN)	.807801	.0049	.807793	.0050	-.5752
K(TRK LENGTH)	.829350	.807835	.0119	K(TK LN/COL)	.807693	.0089	.807398	.0059	-.8796
REM LIFE(COL)	2.9976E+03	3.0284E+03	.0154	K(COL/ABS/TK LN)	.807717	.0045	.807570	.0022	
REM LIFE(ABS)	2.9811E+03	3.0482E+03	.0130	LIFE(COL/ABS)	3.0383E+03	.0141	3.0791E+03	.0133	.9740
SOURCE POINTS GENERATED 3029									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.796353		.805951	.0058	K(COL/ABS)	.806296	.0027	-.6808
K(ABSORPTION)		.799885		.806641	.0072	K(ABS/TK LN)	.806207	.0046	-.4988
K(TRK LENGTH)		.793400		.805773	.0104	K(TK LN/COL)	.805862	.0079	-.8854
REM LIFE(COL)		3.0425E+03		3.0304E+03	.0130	K(COL/ABS/TK LN)	.806121	.0043	
REM LIFE(ABS)		3.0436E+03		3.0476E+03	.0110	LIFE(COL/ABS)	3.0390E+03	.0119	3.0723E+03
SOURCE POINTS GENERATED 2919									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.810115		.806471	.0051	K(COL/ABS)	.807872	.0030	-.5386
K(ABSORPTION)		.827702		.809274	.0070	K(ABS/TK LN)	.807798	.0044	-.4052
K(TRK LENGTH)		.810173		.806323	.0090	K(TK LN/COL)	.806397	.0068	-.8853
REM LIFE(COL)		3.1251E+03		3.0423E+03	.0119	K(COL/ABS/TK LN)	.807356	.0040	
REM LIFE(ABS)		3.1448E+03		3.0597E+03	.0103	LIFE(COL/ABS)	3.0510E+03	.0110	3.0840E+03
SOURCE POINTS GENERATED 3044									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.807072		.806538	.0045	K(COL/ABS)	.807607	.0027	-.5370
K(ABSORPTION)		.803899		.808676	.0062	K(ABS/TK LN)	.808241	.0039	-.4187
K(TRK LENGTH)		.819668		.807806	.0081	K(TK LN/COL)	.807172	.0061	-.8665
REM LIFE(COL)		3.1292E+03		3.0519E+03	.0109	K(COL/ABS/TK LN)	.807673	.0036	
REM LIFE(ABS)		3.1439E+03		3.0691E+03	.0095	LIFE(COL/ABS)	3.0605E+03	.0102	3.0937E+03
SOURCE POINTS GENERATED 2958									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.790454		.804930	.0045	K(COL/ABS)	.805166	.0039	-.1253
K(ABSORPTION)		.775926		.805401	.0069	K(ABS/TK LN)	.806514	.0041	-.3205
K(TRK LENGTH)		.806012		.807626	.0073	K(TK LN/COL)	.806278	.0056	-.7884
REM LIFE(COL)		3.0277E+03		3.0495E+03	.0098	K(COL/ABS/TK LN)	.805986	.0038	
REM LIFE(ABS)		3.0362E+03		3.0658E+03	.0086	LIFE(COL/ABS)	3.0576E+03	.0091	3.0880E+03
SOURCE POINTS GENERATED 2999									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.818444		.806158	.0043	K(COL/ABS)	.806397	.0038	-.0298
K(ABSORPTION)		.818981		.806636	.0064	K(ABS/TK LN)	.807573	.0040	-.2679
K(TRK LENGTH)		.817361		.808511	.0067	K(TK LN/COL)	.807335	.0052	-.7855
REM LIFE(COL)		2.9426E+03		3.0398E+03	.0094	K(COL/ABS/TK LN)	.807102	.0037	
REM LIFE(ABS)		2.9906E+03		3.0589E+03	.0081	LIFE(COL/ABS)	3.0494E+03	.0087	3.0882E+03
SOURCE POINTS GENERATED 3137									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.796704		.805371	.0041	K(COL/ABS)	.805413	.0037	.0303

K(ABSORPTION)	.792472	.805455	.0061	K(ABS/TK LN)	.806750	.0038	.806736	.0039	-.2359
K(TRK LENGTH)	.802902	.808044	.0061	K(TK LN/COL)	.806707	.0048	.804845	.0042	-.7818
REM LIFE(COL)	3.1944E+03	3.0527E+03	.0096	K(COL/ABS/TK LN)	.806290	.0036	.805579	.0039	
REM LIFE(ABS)	3.2079E+03	3.0714E+03	.0084	LIFE(COL/ABS)	3.0620E+03	.0089	3.1024E+03	.0082	.9792
SOURCE POINTS GENERATED 2925									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.808073		.805578		.0037	K(COL/ABS)	.805568 .0034	.805572 .0033	.0317
K(ABSORPTION)	.806780		.805557		.0056	K(ABS/TK LN)	.806532 .0035	.806516 .0036	-.2369
K(TRK LENGTH)	.801059		.807506		.0057	K(TK LN/COL)	.806542 .0044	.805257 .0039	.7664
REM LIFE(COL)	3.0254E+03		3.0506E+03		.0088	K(COL/ABS/TK LN)	.806214 .0033	.805728 .0035	
REM LIFE(ABS)	3.0315E+03		3.0683E+03		.0078	LIFE(COL/ABS)	3.0594E+03 .0083	3.0955E+03 .0077	.9782
SOURCE POINTS GENERATED 2996									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.800424		.805210		.0035	K(COL/ABS)	.805208 .0032	.805209 .0031	.0424
K(ABSORPTION)	.800623		.805205		.0052	K(ABS/TK LN)	.805919 .0033	.805897 .0034	-.2141
K(TRK LENGTH)	.795276		.806633		.0054	K(TK LN/COL)	.805922 .0042	.804947 .0036	.7706
REM LIFE(COL)	3.0777E+03		3.0525E+03		.0082	K(COL/ABS/TK LN)	.805683 .0031	.805279 .0032	
REM LIFE(ABS)	3.0478E+03		3.0668E+03		.0073	LIFE(COL/ABS)	3.0597E+03 .0077	3.0812E+03 .0073	.9680
SOURCE POINTS GENERATED 2956									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.781626		.803638		.0038	K(COL/ABS)	.804540 .0031	.804326 .0031	.0050
K(ABSORPTION)	.808756		.805442		.0048	K(ABS/TK LN)	.804654 .0035	.804801 .0035	-.2106
K(TRK LENGTH)	.765140		.803867		.0061	K(TK LN/COL)	.803752 .0047	.803551 .0037	.8359
REM LIFE(COL)	2.9160E+03		3.0434E+03		.0082	K(COL/ABS/TK LN)	.804315 .0034	.804277 .0033	
REM LIFE(ABS)	2.9706E+03		3.0604E+03		.0071	LIFE(COL/ABS)	3.0519E+03 .0076	3.0813E+03 .0069	.9689
SOURCE POINTS GENERATED 2893									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

+ RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

0 MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/300 year (mpc12q)

PROBID = 02/24/95 02:03:04
02/24/95 00:10:40

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER SOURCE PARTICLE)	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER SOURCE PARTICLE)
SOURCE	59463	1.0090E+00	2.0682E+00	ESCAPE	2	2.0041E-05	3.6272E-08
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	6.3150E-02	4.5801E-07	WEIGHT CUTOFF	59541	6.3846E-02	4.6624E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.2160E-07	DOWNSCATTERING	0	0.	1.9593E+00
				CAPTURE	0	7.0703E-01	3.2162E-02
(N,XN)	159	2.1803E-03	1.8203E-03	LOSS TO (N,XN)	79	1.0831E-03	9.2189E-03
FISSION	0	0.	0.	LOSS TO FISSION	0	3.0239E-01	6.9291E-02

TOTAL	59622	1.0744E+00	2.0700E+00	TOTAL	59622	1.0744E+00	2.0700E+00
NUMBER OF NEUTRONS BANKED	80			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0027E+00			ESCAPE	2.2329E+03	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.6309E+01			CAPTURE	3.0611E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3348278			CAPTURE OR ESCAPE	3.0611E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0011E+00	.0002		ANY TERMINATION	3.3976E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	112.18 MINUTES			MAXIMUM NUMBER EVER IN BANK	2		
COMPUTER TIME IN MCRUN	112.07 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.3060E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	40786879			MOST RANDOM NUMBERS USED WAS	6968	IN HISTORY	32495

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5633E-01 TO 1.2225E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25246	9334	3.1860E+00	1.2162E-04	3.8294E-01	7.3161E-01	1.1117E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	711774	59542	293162	4.1779E+00	7.7077E-04	7.5318E-01	8.8660E-01	2.5016E+00
33	34	3555	200	728	7.7084E-03	6.5560E-05	2.8518E-01	6.2323E-01	4.2871E+00
34	35	98	16	249	2.0833E-03	1.8501E-05	6.9726E-02	5.2139E-01	5.3676E-01
35	36	1273430	59542	8	1.2902E-04	6.6589E-04	7.1277E-01	8.8339E-01	3.4820E+03
36	37	177	14	14	9.6327E-05	4.4743E-05	1.5767E-01	5.4955E-01	7.3872E-01
37	38	1380577	59542	49834	7.4980E-01	6.3979E-04	7.0117E-01	8.8245E-01	4.1074E+00
38	39	184	16	67	5.4054E-04	3.8721E-05	1.3872E-01	5.4318E-01	7.0240E-01
39	40	2204403	59542	1382627	1.8452E+01	5.5554E-04	6.7100E-01	8.7982E-01	1.6537E+00
40	41	55339	30675	85496	1.1424E+00	4.1162E-04	6.2204E-01	8.7758E-01	1.5607E+00
41	42	5	1	26	3.2898E-04	4.2509E-08	5.8626E-08	7.3313E-01	3.3264E-01
42	43	117195	32492	3648	5.4775E-02	4.3637E-04	6.3503E-01	8.7867E-01	4.1304E+00
43	44	131695	34748	28922	3.8748E-01	4.3880E-04	6.3431E-01	8.7885E-01	1.5817E+00
44	45	144215	35789	3210	4.7898E-02	4.4278E-04	6.4093E-01	8.7769E-01	4.1288E+00
45	46	175947	40953	69305	9.2862E-01	4.5044E-04	6.4384E-01	8.7971E-01	1.5975E+00
46	47	6739	3127	6751	9.1699E-02	4.2339E-04	6.0449E-01	8.8470E-01	1.5546E+00
47	48	8905	3403	322	4.9042E-03	4.7588E-04	6.3766E-01	8.8550E-01	4.1285E+00
48	49	11736	4784	5868	8.0582E-02	4.6147E-04	6.3994E-01	8.8543E-01	1.5985E+00
49	50	33063	14859	63886	7.7628E-01	3.5313E-04	5.6282E-01	8.3337E-01	1.4729E+00
50	51	33020	14094	12179	1.5331E-01	4.0966E-04	5.7223E-01	8.1380E-01	2.1004E+00
51	52	32645	13772	2355	3.4395E-02	4.1059E-04	5.6860E-01	8.1077E-01	9.1602E+00
52	53	32691	13836	12091	1.5054E-01	3.9685E-04	5.5793E-01	8.0690E-01	2.1037E+00
53	54	204	55	1411	1.2309E-02	5.3149E-05	1.7367E-01	5.9664E-01	7.9256E-01
54	55	33515	15037	64350	7.7221E-01	3.6338E-04	5.6983E-01	8.2894E-01	1.4861E+00
55	56	33398	14261	12270	1.5336E-01	4.1857E-04	5.7879E-01	8.1282E-01	2.1167E+00
56	57	32992	13959	2361	3.4365E-02	4.1546E-04	5.7299E-01	8.0974E-01	9.2075E+00
57	58	33108	14047	12220	1.5266E-01	3.9756E-04	5.7310E-01	8.0772E-01	2.0968E+00
58	59	228	68	1673	1.6265E-02	6.3022E-05	2.6926E-01	6.6424E-01	9.1778E-01
59	60	52109	18881	88895	1.1268E+00	5.1257E-04	5.6132E-01	8.5398E-01	1.5174E+00
60	61	51774	18014	17647	2.3288E-01	6.9955E-04	5.8332E-01	8.4403E-01	2.2889E+00
61	62	365	77	1706	1.5288E-02	5.0289E-05	2.5705E-01	5.9630E-01	8.6123E-01
62	63	52019	18900	90542	1.1513E+00	4.8448E-04	5.5990E-01	8.5289E-01	1.5028E+00
63	64	51646	18049	17758	2.3419E-01	6.8866E-04	5.8024E-01	8.4463E-01	2.2759E+00
64	65	392	85	1676	1.5562E-02	6.1256E-05	3.2107E-01	6.1471E-01	9.4874E-01
65	66	10133	4963	448136	4.0979E+00	5.1959E-05	2.5093E-01	6.1094E-01	8.2665E-01
66	67	10026	3908	14851	1.5795E-01	1.7776E-04	4.3116E-01	6.9861E-01	1.7834E+00
67	68	9881	3871	14694	1.5668E-01	1.7526E-04	4.4087E-01	6.9699E-01	1.7836E+00
68	70	33317	8940	10732	1.4147E-01	9.7914E-04	5.6694E-01	8.4613E-01	2.3914E+00
69	71	33532	8649	6233	9.3994E-02	1.0938E-03	5.6693E-01	8.4649E-01	8.8700E+00
70	72	18120	8438	56194	7.3032E-01	1.3013E-03	5.6600E-01	8.4185E-01	2.4871E+00
71	73	33830	9076	11120	1.4585E-01	9.8262E-04	5.7930E-01	8.4339E-01	2.3841E+00
72	74	33924	8730	6337	9.5380E-02	1.0779E-03	5.8020E-01	8.4377E-01	8.8243E+00
73	75	18302	8511	57116	7.4355E-01	1.3518E-03	5.7252E-01	8.4118E-01	2.5028E+00
74	76	160	42	3612	2.9598E-02	4.4911E-05	2.5358E-01	5.4365E-01	8.0706E-01
75	77	148	42	3151	2.9696E-02	3.6899E-05	1.6454E-01	6.2033E-01	7.2036E-01
76	80	15	7	44	4.2298E-04	1.6680E-04	2.9360E-01	6.3112E-01	1.4266E+00
77	81	3384	1472	10025	1.1079E-01	3.4751E-04	5.3099E-01	7.3393E-01	2.1093E+00
78	82	2070	888	11801	1.2506E-01	2.8296E-04	4.7853E-01	7.5696E-01	1.3509E+00
79	83	9	6	1020	9.3368E-03	1.5915E-05	9.8108E-02	5.8968E-01	5.5781E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1565	669	4406	5.3100E-02	1.0571E-03	6.0607E-01	7.9805E-01	2.2463E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1065	453	8723	1.0147E-01	2.2642E-03	5.7802E-01	7.9870E-01	4.7012E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	427	227	47456	4.0713E-01	3.4819E-05	1.5640E-01	5.6404E-01	6.7675E-01

TOTAL 6934297 690606 3348278 4.1577E+01
1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.3765E-01	-5.3765E-01
2	2	3.2174E-01	.0000E+00	.0000E+00	-8.9927E-01	-5.7754E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5843E-02	-1.5843E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.2450E-02	-5.2450E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5646E-02	-1.5646E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4947E-01	-1.4947E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6367E+00	-1.6367E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9984E+00	-1.9984E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1002E-01	-2.1002E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1179E-01	-2.1179E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8140E-01	-3.8140E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.8246E-01	-3.8246E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.4979E-02	-7.4979E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.6045E-02	-7.6045E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.6446E-02	-8.6446E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.5532E-02	-7.5532E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.0229E-02	-7.0229E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.0292E-02	-7.0292E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.9045E-02	-9.9045E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0201E-01	-1.0201E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9110E-02	-8.9110E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.0251E-02	-8.0251E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1100E-01	-1.1100E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1220E-01	-1.1220E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1532E-01	-1.1532E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1433E-01	-1.1433E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-9.9142E-02	-9.9142E-02
28	29	.0000E+00	.0000E+00	.0000E+00	-8.3498E-02	-8.3498E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-8.9355E-02	-8.9355E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0237E-01	-1.0237E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8818E+01	-1.8818E+01
32	33	9.6626E+00	1.0090E+00	.0000E+00	-9.4536E+00	1.2181E+00
33	34	3.7325E-02	.0000E+00	.0000E+00	-3.5186E-02	2.1389E-03
34	35	8.6516E-04	.0000E+00	.0000E+00	-8.4198E-04	2.3174E-05
35	36	1.8922E+01	.0000E+00	.0000E+00	-1.8910E+01	1.1965E-02
36	37	1.5790E-03	.0000E+00	.0000E+00	-1.5784E-03	5.7366E-07
37	38	2.0507E+01	.0000E+00	.0000E+00	-2.0431E+01	7.5372E-02
38	39	1.6479E-03	.0000E+00	.0000E+00	-1.6291E-03	1.8804E-05
39	40	3.2675E+01	.0000E+00	.0000E+00	-1.0740E+01	2.1935E+01
40	41	8.1934E-01	.0000E+00	.0000E+00	-8.1593E-01	3.4134E-03
41	42	6.1364E-05	.0000E+00	.0000E+00	-5.9386E-05	1.9787E-06
42	43	1.7321E+00	.0000E+00	.0000E+00	-1.7316E+00	5.5627E-04
43	44	1.9467E+00	.0000E+00	.0000E+00	-1.9456E+00	1.1288E-03
44	45	2.1314E+00	.0000E+00	.0000E+00	-2.1309E+00	4.8304E-04
45	46	2.6048E+00	.0000E+00	.0000E+00	-1.1019E+00	1.5029E+00
46	47	1.0033E-01	.0000E+00	.0000E+00	-6.0443E-02	3.9882E-02
47	48	1.3242E-01	.0000E+00	.0000E+00	-1.2796E-01	4.4581E-03
48	49	1.7483E-01	.0000E+00	.0000E+00	-6.7596E-02	1.0723E-01
49	50	4.6459E-01	.0000E+00	.0000E+00	-2.6198E-01	2.0260E-01
50	51	4.5654E-01	.0000E+00	.0000E+00	-4.4131E-01	1.5234E-02
51	52	4.4776E-01	.0000E+00	.0000E+00	-4.4184E-01	5.9153E-03
52	53	4.4889E-01	.0000E+00	.0000E+00	-1.8941E-01	2.5948E-01
53	54	2.1734E-03	.0000E+00	.0000E+00	-1.6366E-04	2.0097E-03
54	55	4.6927E-01	.0000E+00	.0000E+00	-2.6471E-01	2.0456E-01
55	56	4.6072E-01	.0000E+00	.0000E+00	-4.4562E-01	1.5104E-02
56	57	4.5216E-01	.0000E+00	.0000E+00	-4.4671E-01	5.4466E-03
57	58	4.5464E-01	.0000E+00	.0000E+00	-1.8928E-01	2.6536E-01

TOTAL	1.0133E+02	1.0090E+00	.0000E+00	.0000E+00	-1.0133E+02	1.0090E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-2.2660E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2660E-04
33	34	.0000E+00	.0000E+00	-8.9002E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9002E-06
34	35	.0000E+00	.0000E+00	-1.2592E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2592E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	2.8424E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8424E-05
38	39	.0000E+00	.0000E+00	-4.1989E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1989E-06
39	40	.0000E+00	.0000E+00	-1.5553E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5553E-04
40	41	.0000E+00	.0000E+00	4.7834E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7834E-06
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	9.1879E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.1879E-06
43	44	.0000E+00	.0000E+00	-1.6560E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6560E-05
44	45	.0000E+00	.0000E+00	4.9808E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.9808E-06
45	46	.0000E+00	.0000E+00	-3.7307E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7307E-05
46	47	.0000E+00	.0000E+00	-8.3501E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3501E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	4.2210E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2210E-06
49	50	.0000E+00	.0000E+00	-5.3368E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3368E-05
50	51	.0000E+00	.0000E+00	9.5724E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.5724E-05
51	52	.0000E+00	.0000E+00	-1.5954E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5954E-05
52	53	.0000E+00	.0000E+00	-1.7677E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7677E-04
53	54	.0000E+00	.0000E+00	8.4525E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4525E-06
54	55	.0000E+00	.0000E+00	-7.4047E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4047E-05
55	56	.0000E+00	.0000E+00	5.2117E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2117E-05
56	57	.0000E+00	.0000E+00	3.9790E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9790E-05
57	58	.0000E+00	.0000E+00	4.5676E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.5676E-05
58	59	.0000E+00	.0000E+00	1.1145E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1145E-07
59	60	.0000E+00	.0000E+00	-4.0249E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0249E-05
60	61	.0000E+00	.0000E+00	1.9817E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9817E-07
61	62	.0000E+00	.0000E+00	9.5004E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.5004E-08
62	63	.0000E+00	.0000E+00	-6.7755E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.7755E-06
63	64	.0000E+00	.0000E+00	-1.6699E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6699E-04
64	65	.0000E+00	.0000E+00	-1.2545E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2545E-05
65	66	.0000E+00	.0000E+00	1.3126E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3126E-04
66	67	.0000E+00	.0000E+00	1.8115E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8115E-04
67	68	.0000E+00	.0000E+00	-9.5022E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5022E-07
68	70	.0000E+00	.0000E+00	3.8576E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8576E-05
69	71	.0000E+00	.0000E+00	-2.4699E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4699E-05
70	72	.0000E+00	.0000E+00	4.8853E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8853E-05
71	73	.0000E+00	.0000E+00	1.4623E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4623E-04
72	74	.0000E+00	.0000E+00	-3.8316E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8316E-05
73	75	.0000E+00	.0000E+00	-2.5458E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5458E-04
74	76	.0000E+00	.0000E+00	2.8733E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8733E-07
75	77	.0000E+00	.0000E+00	-4.0353E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0353E-06
76	80	.0000E+00	.0000E+00	-1.0793E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0793E-05
77	81	.0000E+00	.0000E+00	-3.1449E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.1449E-06
78	82	.0000E+00	.0000E+00	-2.8831E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8831E-05
79	83	.0000E+00	.0000E+00	5.2331E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2331E-08
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.0533E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0533E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	3.7219E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7219E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-9.7664E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.7664E-05
TOTAL		.0000E+00	.0000E+00	-6.9532E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9532E-04

1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3724E-02	.0000E+00	-1.3724E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.0237E-03	.0000E+00	-4.3235E-01	-1.0048E-03	-3.0239E-01
33	34	.0000E+00	.0000E+00	-1.6201E-04	.0000E+00	-1.6201E-04
34	35	.0000E+00	.0000E+00	-1.0582E-05	.0000E+00	-1.0582E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-5.7366E-07	.0000E+00	-5.7366E-07
37	38	1.2676E-04	.0000E+00	-6.4943E-03	-6.3380E-05	-6.4310E-03
38	39	.0000E+00	.0000E+00	-2.6357E-06	.0000E+00	-2.6357E-06
39	40	.0000E+00	.0000E+00	-4.8157E-02	.0000E+00	-4.8157E-02
40	41	.0000E+00	.0000E+00	-3.4182E-03	.0000E+00	-3.4182E-03
41	42	.0000E+00	.0000E+00	-1.9787E-06	.0000E+00	-1.9787E-06
42	43	.0000E+00	.0000E+00	-5.6545E-04	.0000E+00	-5.6545E-04
43	44	.0000E+00	.0000E+00	-1.1123E-03	.0000E+00	-1.1123E-03
44	45	.0000E+00	.0000E+00	-4.8802E-04	.0000E+00	-4.8802E-04
45	46	.0000E+00	.0000E+00	-2.7061E-03	.0000E+00	-2.7061E-03
46	47	.0000E+00	.0000E+00	-2.6461E-04	.0000E+00	-2.6461E-04
47	48	.0000E+00	.0000E+00	-5.7793E-05	.0000E+00	-5.7793E-05
48	49	.0000E+00	.0000E+00	-2.2451E-04	.0000E+00	-2.2451E-04
49	50	.0000E+00	.0000E+00	-2.3638E-03	.0000E+00	-2.3638E-03
50	51	.0000E+00	.0000E+00	-1.0413E-02	.0000E+00	-1.0413E-02
51	52	.0000E+00	.0000E+00	-5.9302E-04	.0000E+00	-5.9302E-04

52	53	.0000E+00	.0000E+00	-1.0260E-02	.0000E+00	.0000E+00	-1.0260E-02
53	54	.0000E+00	.0000E+00	-6.2234E-05	.0000E+00	.0000E+00	-6.2234E-05
54	55	.0000E+00	.0000E+00	-2.3409E-03	.0000E+00	.0000E+00	-2.3409E-03
55	56	.0000E+00	.0000E+00	-1.0310E-02	.0000E+00	.0000E+00	-1.0310E-02
56	57	.0000E+00	.0000E+00	-5.7648E-04	.0000E+00	.0000E+00	-5.7648E-04
57	58	2.9915E-05	.0000E+00	-1.0602E-02	-1.4957E-05	.0000E+00	-1.0587E-02
58	59	.0000E+00	.0000E+00	-8.1351E-05	.0000E+00	.0000E+00	-8.1351E-05
59	60	.0000E+00	.0000E+00	-2.7605E-03	.0000E+00	.0000E+00	-2.7605E-03
60	61	.0000E+00	.0000E+00	-1.0866E-02	.0000E+00	.0000E+00	-1.0866E-02
61	62	.0000E+00	.0000E+00	-7.9958E-05	.0000E+00	.0000E+00	-7.9958E-05
62	63	.0000E+00	.0000E+00	-2.9032E-03	.0000E+00	.0000E+00	-2.9032E-03
63	64	.0000E+00	.0000E+00	-1.0881E-02	.0000E+00	.0000E+00	-1.0881E-02
64	65	.0000E+00	.0000E+00	-7.9788E-05	.0000E+00	.0000E+00	-7.9788E-05
65	66	.0000E+00	.0000E+00	-2.0896E-02	.0000E+00	.0000E+00	-2.0896E-02
66	67	.0000E+00	.0000E+00	-1.5680E-02	.0000E+00	.0000E+00	-1.5680E-02
67	68	.0000E+00	.0000E+00	-1.5533E-02	.0000E+00	.0000E+00	-1.5533E-02
68	70	.0000E+00	.0000E+00	-5.2046E-03	.0000E+00	.0000E+00	-5.2046E-03
69	71	.0000E+00	.0000E+00	-6.1683E-04	.0000E+00	.0000E+00	-6.1683E-04
70	72	.0000E+00	.0000E+00	-2.1826E-02	.0000E+00	.0000E+00	-2.1826E-02
71	73	.0000E+00	.0000E+00	-5.3869E-03	.0000E+00	.0000E+00	-5.3869E-03
72	74	.0000E+00	.0000E+00	-6.5088E-04	.0000E+00	.0000E+00	-6.5088E-04
73	75	.0000E+00	.0000E+00	-2.1339E-02	.0000E+00	.0000E+00	-2.1339E-02
74	76	.0000E+00	.0000E+00	-1.5404E-04	.0000E+00	.0000E+00	-1.5404E-04
75	77	.0000E+00	.0000E+00	-1.5475E-04	.0000E+00	.0000E+00	-1.5475E-04
76	80	.0000E+00	.0000E+00	-3.0410E-05	.0000E+00	.0000E+00	-3.0410E-05
77	81	.0000E+00	.0000E+00	-8.0258E-03	.0000E+00	.0000E+00	-8.0258E-03
78	82	.0000E+00	.0000E+00	-3.9898E-04	.0000E+00	.0000E+00	-3.9898E-04
79	83	.0000E+00	.0000E+00	-5.0454E-05	.0000E+00	.0000E+00	-5.0454E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1595E-03	.0000E+00	.0000E+00	-2.1595E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9015E-03	.0000E+00	.0000E+00	-1.9015E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.1094E-03	.0000E+00	.0000E+00	-2.1094E-03

TOTAL 2.1803E-03 .0000E+00 -7.0703E-01 -1.0831E-03 -3.0239E-01 -1.0083E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	282926 16444	2.9879E+00 1.9810E-01	1.3627E-02 9.7230E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7485E-01 3.7684E-04 5.7949E-05 2.1480E-06 8.2811E-06 7.0165E-05 7.9842E-06 2.8553E-08 1.3235E-04 3.2191E-03 1.5955E-03 3.1606E-01 3.7160E-04 6.6513E-06 1.9981E-03 7.6270E-04 9.9724E-10 1.5645E-04 2.9710E-04 1.8583E-07 3.2871E-05 4.2767E-07	98621 856 118 1086 458 264 2201 0 224 15728 1360 145278 938 29 19250 4427 0 310 1910 15 84 5	1.4570E+00 1.0990E-02 1.5748E-03 1.2132E-02 5.2234E-03 3.4565E-03 2.3755E-02 6.3029E-07 2.9543E-03 3.0485E-01 2.0206E-02 2.1514E+00 1.2161E-02 3.5188E-04 3.8659E-01 5.8208E-02 .0000E+00 4.5535E-03 2.4196E-02 2.9848E-04 1.1433E-03 1.0480E-04	1.2302E-03 9.3704E-03 1.3121E-03 1.2011E-02 5.1562E-03 3.0790E-03 2.3693E-02 .0000E+00 1.8699E-03 2.7514E-02 6.5877E-03 1.8249E-01 9.7931E-03 2.3089E-04 7.1110E-02 5.0967E-02 .0000E+00 3.0424E-03 2.1870E-02 3.1230E-05 9.8426E-04 6.8224E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 4.6949E-05 1.3454E-01 3.2038E-04 2.0683E-02 7.6625E-05 1.0053E-05 1.4601E-01 2.3157E-04 .0000E+00 3.2737E-05 2.3672E-04 1.5888E-04 6.5203E-06 3.6096E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 3.3835E-05 .0000E+00 9.8504E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 3 4 709 10	2.7049E-05 2.2029E-05 4.4071E-05 7.5077E-03 1.0755E-04	2.5644E-10 8.1871E-06 5.3011E-06 1.3898E-04 9.5387E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	233 16	1.9323E-03 1.5101E-04	1.0578E-05 3.7852E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	8	1.2902E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	14 0	9.6327E-05 .0000E+00	5.7366E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	196 81 235 48834 488	2.9392E-03 1.2173E-03 3.2550E-03 7.3516E-01 7.2317E-03	8.2483E-07 5.0121E-05 1.5498E-04 6.1208E-03 1.6756E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 6.3380E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63 4	5.1196E-04 2.8584E-05	2.6349E-06 7.1432E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1267554 115073	1.6764E+01 1.6881E+00	4.6851E-02 1.3061E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	78893 6603	1.0460E+00 9.6358E-02	3.3538E-03 6.4439E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26 0	3.2898E-04 .0000E+00	1.9787E-06 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	7 7 19 3569 46	1.0114E-04 9.5013E-05 2.8088E-04 5.3593E-02 7.0493E-04	4.6622E-10 2.1012E-05 1.5914E-05 5.1543E-04 1.3100E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26594 2328	3.5339E-01 3.4093E-02	1.0892E-03 2.3107E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	15 2 14 3140 39	2.0824E-04 2.5992E-05 2.0134E-04 4.6876E-02 5.8706E-04	8.1036E-10 3.1650E-07 1.5454E-05 4.5152E-04 2.0732E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63745 5560	8.4713E-01 8.1489E-02	2.6316E-03 7.4484E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6256 495	8.4282E-02 7.4169E-03	2.6105E-04 3.5587E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 3 3 314 2	.0000E+00 4.8306E-05 4.5496E-05 4.7862E-03 2.4202E-05	.0000E+00 5.8943E-07 3.0285E-06 5.3433E-05 7.4199E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5396 472	7.3634E-02 6.9479E-03	2.1908E-04 5.4255E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59315 4571	7.1320E-01 6.3080E-02	2.3273E-03 3.6422E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	9 34 53 7 3 1376 542 7748 2244 163	1.1808E-04 4.0016E-04 7.0391E-04 8.9661E-05 3.8679E-05 1.8126E-02 7.7121E-03 9.5528E-02 2.8244E-02 2.3520E-03	1.6567E-08 2.2942E-05 9.6334E-06 1.0205E-06 7.7614E-06 1.7458E-03 1.1650E-03 5.4728E-03 1.6995E-03 2.8838E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2351 4	3.4354E-02 4.1482E-05	5.8648E-04 6.5323E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	6 47 49 3 2 1439	6.7865E-05 5.5484E-04 6.8502E-04 3.3212E-05 3.3782E-05 1.8573E-02	3.4014E-09 3.3150E-05 7.8290E-06 6.2738E-07 1.2748E-06 1.9516E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	481	6.8671E-03	8.6131E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7661	9.3488E-02	5.3510E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2252	2.8143E-02	1.7434E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	151	2.0966E-03	3.0955E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1339	1.1621E-02	6.2215E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	72	6.8805E-04	1.9931E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	59573	7.0638E-01	2.3170E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4777	6.5827E-02	2.3931E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	6	8.4980E-05	4.3263E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	5.0277E-04	2.5143E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	7.1168E-04	9.1374E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0374E-04	1.1136E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	7.8320E-06	1.6285E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1469	1.9213E-02	1.9848E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	468	6.6562E-03	8.6024E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7712	9.4895E-02	5.2846E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2324	2.8696E-02	1.7483E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	188	2.4846E-03	3.9553E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2356	3.4302E-02	5.6629E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	5	6.2190E-05	1.0191E-05	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	9	1.1524E-04	4.5422E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	5.5434E-04	2.7184E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	66	9.3959E-04	9.0655E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.3453E-05	1.3836E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.8620E-05	1.7661E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1405	1.8116E-02	1.9622E-03	.0000E+00	1.4957E-05
		25055.50C	2.0356E-02	502	6.9077E-03	9.8788E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7684	9.4867E-02	5.4952E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2349	2.8979E-02	1.7996E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	153	2.0967E-03	3.1881E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1599	1.5401E-02	8.1331E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	74	8.6465E-04	1.9959E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	81671	1.0243E+00	2.6954E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7224	1.0250E-01	6.5007E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	13	1.7768E-04	1.6165E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	6.3203E-04	3.4130E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	92	1.2827E-03	1.4353E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.8136E-05	9.5045E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2180	2.9848E-02	1.9285E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	869	1.2763E-02	1.0537E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10915	1.4152E-01	5.6789E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3265	4.2859E-02	1.7600E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	256	3.7133E-03	3.9535E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1645	1.4675E-02	7.9939E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	61	6.1385E-04	1.8347E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	83295	1.0483E+00	2.8441E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7247	1.0299E-01	5.9103E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	11	1.6093E-04	9.9874E-09	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	60	8.0854E-04	2.4986E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	86	1.2354E-03	8.5556E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	9	1.3106E-04	1.0747E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.7468E-05	4.6190E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2175	3.0141E-02	1.9396E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	812	1.1993E-02	1.0207E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10938	1.4156E-01	5.5907E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3421	4.4659E-02	1.8620E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	243	3.4634E-03	4.2881E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1592	1.4704E-02	7.9755E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	84	8.5816E-04	3.2960E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	427798	3.8909E+00	2.0832E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20338	2.0700E-01	6.4015E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	11	1.2211E-04	3.4801E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	4.2624E-04	2.8828E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	7.3388E-04	1.0860E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	6.8258E-05	1.7300E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.1101E-05	6.6681E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1671	1.8877E-02	2.8873E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	446	5.7439E-03	1.4008E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9597	9.9859E-02	8.3192E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2853	3.0205E-02	2.6988E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	162	1.8821E-03	3.2605E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	13	1.2894E-04	4.1145E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	3.5968E-04	3.4747E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	6.2101E-04	1.0839E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	6.8788E-05	8.9949E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3311E-05	1.9852E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1660	1.8527E-02	2.9955E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	427	5.4421E-03	1.2221E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9466	9.8966E-02	8.2875E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2885	3.0752E-02	2.6841E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	146	1.7767E-03	2.9694E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	3	4.6724E-05	2.1131E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	5.3375E-04	1.2520E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	6.6346E-04	3.2180E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1863E-04	1.8614E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2466E-05	1.3494E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1325	1.8589E-02	9.4000E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	483	7.0912E-03	5.0218E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6689	8.6322E-02	2.6301E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1983	2.5913E-02	8.4640E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	153	2.1560E-03	2.6871E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6224	9.3874E-02	6.0933E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.1959E-04	7.4948E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	48	5.8044E-04	4.5504E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	192	2.4050E-03	6.0282E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	295	4.2441E-03	1.9198E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	24	3.4157E-04	1.8533E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	15	2.0642E-04	1.0974E-05	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7196	1.0022E-01	3.8849E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2364	3.4033E-02	2.1696E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34514	4.3820E-01	1.0932E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10674	1.3761E-01	3.5675E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	872	1.2477E-02	1.1799E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	9	1.2664E-04	9.0753E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.4653E-04	1.3603E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	63	9.1400E-04	5.6255E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.8360E-05	4.2898E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4122E-05	1.6707E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1401	1.9335E-02	1.0512E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	467	6.7655E-03	4.6329E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6900	8.8639E-02	2.7576E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2073	2.7115E-02	8.9068E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	164	2.4127E-03	2.0286E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6326	9.5217E-02	6.4695E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	11	1.6297E-04	3.9368E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	37	5.2568E-04	1.9434E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	202	2.4988E-03	7.0557E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	305	4.5287E-03	2.4921E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	25	3.5178E-04	2.3581E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.2989E-05	2.9257E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7289	1.0083E-01	3.8946E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2530	3.6333E-02	1.9360E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35041	4.4654E-01	1.0872E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10832	1.3979E-01	3.5215E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	851	1.2093E-02	1.0139E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3450	2.8129E-02	1.5400E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	162	1.4686E-03	4.0766E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3008	2.8274E-02	1.5471E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	143	1.4224E-03	4.1954E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	1	1.4387E-05	1.6902E-07	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4	4.9173E-05	4.7701E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4	5.2131E-05	6.3258E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	32	2.7322E-04	1.8585E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3	3.4066E-05	5.5974E-07	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	5.7563E-05	1.6460E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	31	3.2617E-04	2.0689E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	40	5.6723E-04	3.9140E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.0113E-05	2.2952E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	1.4252E-05	3.3850E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1159	1.3585E-02	1.5031E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	350	4.7347E-03	7.1087E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6407	6.9049E-02	4.2334E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1905	2.0873E-02	1.3509E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	123	1.5281E-03	1.9936E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11006	1.1518E-01	3.9604E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	795	9.8839E-03	2.9408E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	974	8.8998E-03	5.0440E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	46	4.3700E-04	1.4636E-08	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	3	3.3036E-05	1.8667E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	2	3.1896E-05	3.8094E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	12	1.6164E-04	1.4615E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	2	2.9991E-05	1.4122E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	31	3.7796E-04	3.6972E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	609	7.9388E-03	4.3986E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	100	1.3066E-03	9.6671E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1058	1.2464E-02	3.9682E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2452	2.9021E-02	1.0183E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	68	8.1227E-04	4.7830E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	69	9.2263E-04	1.2009E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	55	6.7207E-04	3.2920E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	20	2.6227E-04	1.0007E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	1	1.5679E-05	8.7402E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.6879E-05	3.1914E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	160	2.1646E-03	8.1832E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8486	9.8340E-02	1.8185E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	45325	3.8715E-01	2.1060E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2131	1.9985E-02	3.4789E-06	.0000E+00	.0000E+00
TOTAL				3348278	4.1880E+01	7.0703E-01	3.0239E-01	1.0972E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2513290	3.0167E+01	1.0223E-01	.0000E+00	.0000E+00
		2004.50C		8	1.2902E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		237	3.0180E-03	2.9729E-07	.0000E+00	.0000E+00
		7014.50C		865	1.0463E-02	4.0893E-04	.0000E+00	.0000E+00
		8016.50C		293561	4.1505E+00	3.0604E-03	.0000E+00	.0000E+00

13027.50C	17259	2.5778E-01	2.4091E-03	.0000E+00	.0000E+00
14000.50C	1287	1.8255E-02	1.3961E-04	.0000E+00	.0000E+00
15031.50C	116	1.5724E-03	1.2698E-05	.0000E+00	.0000E+00
16032.50C	44	5.9791E-04	4.5487E-05	.0000E+00	.0000E+00
22000.50C	31	3.7796E-04	3.6972E-05	.0000E+00	.0000E+00
24000.50C	32454	4.3338E-01	2.9194E-02	.0000E+00	1.4957E-05
25055.50C	11005	1.5657E-01	1.4538E-02	.0000E+00	.0000E+00
26000.55C	171123	2.1043E+00	8.3333E-02	.0000E+00	.0000E+00
28000.50C	51515	6.4290E-01	2.7192E-02	.0000E+00	.0000E+00
29000.50C	97	1.1985E-03	7.5985E-05	.0000E+00	.0000E+00
40000.50C	56566	8.4792E-01	7.2802E-03	.0000E+00	6.3380E-05
42000.50C	3694	5.1454E-02	5.7442E-03	.0000E+00	.0000E+00
45103.50C	856	1.0990E-02	9.3704E-03	.0000E+00	.0000E+00
47109.50C	118	1.5748E-03	1.3121E-03	.0000E+00	.0000E+00
50000.35C	585	8.6555E-03	2.1168E-04	.0000E+00	.0000E+00
62149.50C	1086	1.2132E-02	1.2011E-02	.0000E+00	.0000E+00
63151.55C	458	5.2234E-03	5.1562E-03	.0000E+00	.0000E+00
63153.55C	264	3.4565E-03	3.0790E-03	.0000E+00	.0000E+00
64155.50C	2201	2.3755E-02	2.3693E-02	.0000E+00	.0000E+00
92233.50C	0	6.3029E-07	.0000E+00	.0000E+00	.0000E+00
92234.50C	224	2.9543E-03	1.8699E-03	4.6949E-05	.0000E+00
92235.50C	15728	3.0485E-01	2.7514E-02	1.3454E-01	3.3835E-05
92236.50C	1360	2.0206E-02	6.5877E-03	3.2038E-04	.0000E+00
92238.50C	145278	2.1514E+00	1.8249E-01	2.0683E-02	9.8504E-04
93237.55C	938	1.2161E-02	9.7931E-03	7.6625E-05	.0000E+00
94238.50C	29	3.5188E-04	2.3089E-04	1.0053E-05	.0000E+00
94239.55C	19250	3.8659E-01	7.1110E-02	1.4601E-01	.0000E+00
94240.50C	4427	5.8208E-02	5.0967E-02	2.3157E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	310	4.5535E-03	3.0424E-03	3.2737E-05	.0000E+00
95241.50C	1910	2.4196E-02	2.1870E-02	2.3672E-04	.0000E+00
95242.50C	15	2.9848E-04	3.1230E-05	1.5888E-04	.0000E+00
95243.50C	84	1.1433E-03	9.8426E-04	6.5203E-06	.0000E+00
96245.35C	5	1.0480E-04	6.8224E-06	3.6096E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59463 CTM = 112.07

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 112.18 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 02:03:04

PROBID = 02/24/95 00:10:40

1MCNP VERSION 4A-B LD=10/04/91

02/24/95 02:03:05

INP=mpc12r OUTP=mpc12r.o

PROBID = 02/24/95 02:03:05

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/500 year (mpc12r)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1908-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	PWR: 3.75% U-235 - 37 Gwd/MTU - 500 YEAR DECAY								
331-	M2	8016.50C	4.8527E-02							
332-		45103.50C	2.7098E-05							
333-		47109.50C	4.1670E-06							
334-		62149.50C	1.5446E-07							
335-		63151.55C	6.4680E-07							
336-		63153.55C	5.0454E-06							
337-		64155.50C	5.7413E-07							
338-		92233.50C	3.9829E-09							
339-		92234.50C	9.9024E-06							
340-		92235.50C	2.3236E-04							
341-		92236.50C	1.1586E-04							
342-		92238.50C	2.2727E-02							
343-		93237.55C	3.2573E-05							
344-		94238.50C	1.0151E-07							
345-		94239.55C	1.4291E-04							
346-		94240.50C	5.3689E-05							
347-		94241.50C	5.1331E-11							
348-		94242.50C	1.1248E-05							
349-		95241.50C	1.5505E-05							
350-		95242.50C	5.3697E-09							
351-		95243.50C	2.3198E-06							
352-		96245.35C	3.0234E-08							
353-	C	He AT 10 ATM DENSITY=1.785E-3 GM/CC								
354-	M3	2004.50C	1.0							
355-	C	ZIRCALOY-4								
356-	M4	8016.50C	-0.0012	24000.50C	-0.0010	26000.55C	-0.0020			

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.  19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.  19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.  17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.  20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.  21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.  17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.  20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.  21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.  22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.  22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.  23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.  23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.  23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.  23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.  27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.  27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.  25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.  28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.  29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.  25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2893
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2893
 POINTS AFTER EXPANSION OR CONTRACTION 3004
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190819E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER	COMPONENT	NUCLIDE	ATOM FRACTION
1	1001,	.66667	8016, .33333
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T
2	8016,	.67485	45103, .00038
	63151,	.00001	63153, .00007
	92234,	.00014	92235, .00323
	93237,	.00045	94238, .00000
	94241,	.00000	94242, .00016
	95243,	.00003	96245, .00000
3	2004,	1.00000	
4	8016,	.00681	24000, .00175
	50000,	.01071	26000, .00325
5	6000,	.00234	13027, .00417
	22000,	.01057	24000, .23247
			14000, .01001
			25055, .01023
			16032, .00053
			26000, .28763
			47109, .00006
			62149, .00000
			64155, .00001
			92233, .00000
			92236, .00161
			92238, .31606
			94239, .00199
			94240, .00075
			95242, .00000

	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				
1 MATERIAL NUMBER	COMPONENT NUCLIDE, MASS FRACTION							
1	1001,	.11191	8016,	.88809				
2	8016,	.12249	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00002	63153,	.00012	64155,	.00001	92233,	.00000
	92234,	.00037	92235,	.00862	92236,	.00432	92238,	.85379
	93237,	.00122	94238,	.00000	94239,	.00539	94240,	.00203
	94241,	.00000	94242,	.00043	95241,	.00059	95242,	.00000
	95243,	.00009	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19080E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19080E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.

1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY	(1301)	79/07/31.
2004.50C	2716	NJOY	(1270)	79/06/19.
6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92233.50C	14205	NJOY	(1393)	79/09/12.
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
94239.55C	67551	NJOY	(1399)	02/21/85
94240.50C	42744	NJOY	(1380)	79/09/13.
TOTAL NU			(1393)	79/09/12.
TOTAL NU			(1395)	79/09/12.
TOTAL NU			(1398)	79/09/13.
TOTAL NU			(1399)	02/21/85
TOTAL NU			(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.
WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.				
92234.50C	76999	NJOY	(1394)	79/10/17.
WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.				
92236.50C	119238	NJOY	(1396)	79/08/30.
WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.				

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU
 TOTAL NU

(1338) 79/09/12.
 (1381) 79/08/30.
 (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/500 year (mpc12r)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	3.308E-01	3.382E-02	6.946E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.987E-01	4.230E+00
2	5.531E-02	1.847E-01	9.155E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.987E-01	4.118E-01
3	1.020E-01	-1.155E-02	9.164E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.987E-01	2.805E+00
4	1.194E-01	-2.684E-02	7.119E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.987E-01	9.415E-01
5	1.165E-02	3.739E-01	7.312E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.987E-01	2.464E+00
6	-1.416E-01	-2.050E-01	5.214E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.987E-01	1.135E+00
7	-2.580E-01	1.054E-01	8.334E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.987E-01	2.278E+00
8	-4.446E-01	6.477E-02	7.415E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.987E-01	2.293E+00
9	3.350E-01	-1.737E-01	8.017E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.987E-01	3.995E-01
10	6.271E-02	-3.784E-01	7.962E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.987E-01	2.474E+00
11	2.712E-01	-3.069E-01	8.036E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.987E-01	4.894E-01
12	7.986E-02	-3.358E-01	8.016E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.987E-01	1.154E+00
13	1.574E-01	-2.428E-01	8.366E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.987E-01	1.211E+00
14	4.199E-01	-1.143E-01	9.255E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.987E-01	9.910E-01
15	2.735E-01	7.959E-02	2.217E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.987E-01	2.377E+00
16	3.115E-01	1.551E-01	2.187E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.987E-01	6.415E-01
17	3.305E-01	2.333E-01	2.183E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.987E-01	1.312E+00
18	-3.411E-01	-1.839E-02	2.587E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.987E-01	6.950E-01
19	3.075E-01	-3.465E-01	5.872E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.987E-01	7.902E-01
20	-3.724E-02	-2.005E-01	5.879E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.987E-01	1.439E+00
21	-3.175E-02	-1.137E-02	5.865E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.987E-01	5.109E-01
22	1.253E-01	-3.062E-01	5.874E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.987E-01	2.075E+00
23	2.595E-01	1.418E-02	1.233E+02	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.987E-01	3.949E+00
24	-4.404E-01	1.085E-01	1.032E+02	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.987E-01	1.108E+00
25	-1.212E-01	-1.161E-01	1.081E+02	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.987E-01	3.296E+00
26	3.865E-01	-4.906E-02	4.643E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.987E-01	3.160E+00
27	-2.177E-01	-3.640E-01	4.726E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.987E-01	7.947E-01
28	1.678E-01	-2.903E-01	4.853E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.987E-01	2.631E+00
29	1.452E-01	-1.627E-01	2.000E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.987E-01	2.972E-01
30	1.567E-01	-4.918E-02	2.608E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.987E-01	8.713E-01
31	2.112E-01	-2.154E-03	2.239E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.987E-01	1.925E+00
32	-2.685E-01	-3.276E-02	1.116E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.987E-01	3.397E+00
33	1.837E-01	3.557E-01	6.621E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.987E-01	1.847E+00
34	-1.938E-01	-4.106E-01	2.299E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.987E-01	3.696E-01
35	4.569E-01	8.021E-02	1.054E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.987E-01	1.229E+00
36	4.569E-01	8.021E-02	1.054E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.987E-01	2.985E+00
37	-2.922E-01	3.252E-01	2.801E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.987E-01	5.484E-01
38	-7.136E-02	1.518E-01	2.755E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.987E-01	1.445E+00
39	-2.761E-02	-1.262E-01	2.578E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.987E-01	5.659E-01
40	2.623E-01	-3.589E-01	3.895E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.987E-01	5.576E+00
41	-7.207E-02	-8.066E-02	4.188E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.987E-01	6.088E-01
42	1.208E-01	3.945E-01	1.964E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.987E-01	6.118E+00
43	3.853E-02	2.948E-01	1.904E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.987E-01	3.164E+00
44	-3.492E-01	-1.414E-01	1.858E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.987E-01	2.143E+00
45	-3.138E-02	-2.276E-01	1.853E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.987E-01	1.715E+00
46	-1.303E-01	-4.131E-01	1.578E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.987E-01	4.603E+00
47	3.151E-01	6.905E-02	1.344E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.987E-01	1.826E+00
48	-1.302E-02	-2.244E-01	1.102E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.987E-01	3.743E-01
49	-1.530E-01	3.145E-01	1.051E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.987E-01	4.942E+00

50 -1.919E-01 -4.236E-01 4.911E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.987E-01 7.226E-01

CYCLE 1 K(COLLISION) .821261 REMOVAL LIFETIME(ABS) 3.1506E+03 SOURCE POINTS GENERATED 2486
 CYCLE 2 K(COLLISION) .795051 REMOVAL LIFETIME(ABS) 3.2530E+03 SOURCE POINTS GENERATED 2914
 CYCLE 3 K(COLLISION) .806778 REMOVAL LIFETIME(ABS) 3.1193E+03 SOURCE POINTS GENERATED 3062
 CYCLE 4 K(COLLISION) .811835 REMOVAL LIFETIME(ABS) 3.0693E+03 SOURCE POINTS GENERATED 3057
 CYCLE 5 K(COLLISION) .796739 REMOVAL LIFETIME(ABS) 2.9675E+03 SOURCE POINTS GENERATED 2907

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 5

CYCLE 6 K(COLLISION) .834446 REMOVAL LIFETIME(ABS) 2.8749E+03 SOURCE POINTS GENERATED 3163

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.821290		.827868	.0079	K(COL/ABS)	.000000 .0000	.000000 .0000
K(ABSORPTION)		.826212		.821747	.0054	K(ABS/TK LN)	.000000 .0000	.000000 .0000
K(TRK LENGTH)		.817357		.820396	.0037	K(TK LN/COL)	.000000 .0000	.000000 .0000
REM LIFE(COL)		3.0258E+03		2.9612E+03	.0218			
REM LIFE(ABS)		3.0312E+03		2.9531E+03	.0265	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000
SOURCE POINTS GENERATED		2907						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.830552		.828762	.0047	K(COL/ABS)	.824881 .0007	.824163 .0002
K(ABSORPTION)		.819507		.821000	.0033	K(ABS/TK LN)	.823517 .0030	.822348 .0031
K(TRK LENGTH)		.837306		.826033	.0071	K(TK LN/COL)	.827398 .0052	.828402 .0067
REM LIFE(COL)		3.0035E+03		2.9753E+03	.0134			
REM LIFE(ABS)		3.0021E+03		2.9694E+03	.0162	LIFE(COL/ABS)	2.9724E+03 .0148	3.0042E+03 .0016
SOURCE POINTS GENERATED		2992						.9999

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.782604		.817223	.0145	K(COL/ABS)	.815242 .0118	.811003 .0111
K(ABSORPTION)		.790043		.813261	.0098	K(ABS/TK LN)	.817835 .0073	.821062 .0087
K(TRK LENGTH)		.811541		.822410	.0067	K(TK LN/COL)	.819816 .0100	.823578 .0078
REM LIFE(COL)		3.2094E+03		3.0338E+03	.0214	K(COL/ABS/TK LN)	.817631 .0095	.818906 .0104
REM LIFE(ABS)		3.1774E+03		3.0214E+03	.0206	LIFE(COL/ABS)	3.0276E+03 .0209	2.9979E+03 .0265
SOURCE POINTS GENERATED		2769						.9916

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.807826		.815343	.0115	K(COL/ABS)	.813824 .0093	.810519 .0080
K(ABSORPTION)		.808476		.812304	.0077	K(ABS/TK LN)	.816793 .0058	.819899 .0066
K(TRK LENGTH)		.816769		.821282	.0054	K(TK LN/COL)	.818313 .0079	.822712 .0059
REM LIFE(COL)		3.1440E+03		3.0559E+03	.0180	K(COL/ABS/TK LN)	.816310 .0076	.818323 .0068
REM LIFE(ABS)		3.1632E+03		3.0498E+03	.0183	LIFE(COL/ABS)	3.0528E+03 .0181	3.0564E+03 .0210
SOURCE POINTS GENERATED		3019						.9862

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.822358		.816512	.0095	K(COL/ABS)	.813724 .0076	.809545 .0073

K(ABSORPTION)	.804093	.810935	.0065	K(ABS/TK LN)	.817474	.0048	.818829	.0057	.2697
K(TRK LENGTH)	.837664	.824012	.0055	K(TK LN/COL)	.820262	.0069	.824723	.0063	.6744
REM LIFE(COL)	3.0924E+03	3.0619E+03	.0148	K(COL/ABS/TK LN)	.817153	.0063	.817967	.0054	
REM LIFE(ABS)	3.1302E+03	3.0632E+03	.0155	LIFE(COL/ABS)	3.0626E+03	.0151	3.0614E+03	.0164	.9755
SOURCE POINTS GENERATED 3024									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.810860		.815705	.0081	K(COL/ABS)	.812987	.0065	.808882
K(ABSORPTION)		.806267		.810269	.0056	K(ABS/TK LN)	.816061	.0044	.816279
K(TRK LENGTH)		.808897		.821853	.0053	K(TK LN/COL)	.818779	.0061	.821691
REM LIFE(COL)		3.1139E+03		3.0694E+03	.0127	K(COL/ABS/TK LN)	.815942	.0055	.815085
REM LIFE(ABS)		3.0955E+03		3.0678E+03	.0132	LIFE(COL/ABS)	3.0686E+03	.0128	3.0696E+03
SOURCE POINTS GENERATED 2954									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.796533		.813308	.0076	K(COL/ABS)	.811300	.0060	.808007
K(ABSORPTION)		.802447		.809291	.0050	K(ABS/TK LN)	.813008	.0054	.810600
K(TRK LENGTH)		.780831		.816725	.0078	K(TK LN/COL)	.815017	.0070	.814863
REM LIFE(COL)		3.0113E+03		3.0621E+03	.0113	K(COL/ABS/TK LN)	.813108	.0059	.809510
REM LIFE(ABS)		3.0324E+03		3.0634E+03	.0115	LIFE(COL/ABS)	3.0627E+03	.0113	3.0623E+03
SOURCE POINTS GENERATED 2956									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.803034		.812167	.0069	K(COL/ABS)	.809869	.0056	.806568
K(ABSORPTION)		.793806		.807570	.0049	K(ABS/TK LN)	.811572	.0051	.809228
K(TRK LENGTH)		.806369		.815574	.0070	K(TK LN/COL)	.813871	.0064	.813716
REM LIFE(COL)		3.0232E+03		3.0578E+03	.0101	K(COL/ABS/TK LN)	.811771	.0055	.808097
REM LIFE(ABS)		3.0019E+03		3.0565E+03	.0104	LIFE(COL/ABS)	3.0572E+03	.0102	3.0579E+03
SOURCE POINTS GENERATED 3095									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.818102		.812760	.0062	K(COL/ABS)	.810490	.0051	.807250
K(ABSORPTION)		.814070		.808220	.0044	K(ABS/TK LN)	.811206	.0045	.809556
K(TRK LENGTH)		.801742		.814191	.0065	K(TK LN/COL)	.813476	.0057	.813369
REM LIFE(COL)		3.0628E+03		3.0583E+03	.0090	K(COL/ABS/TK LN)	.811724	.0049	.807930
REM LIFE(ABS)		3.0708E+03		3.0580E+03	.0093	LIFE(COL/ABS)	3.0581E+03	.0091	3.0583E+03
SOURCE POINTS GENERATED 3052									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.827585		.814108	.0058	K(COL/ABS)	.810721	.0046	.807592
K(ABSORPTION)		.798476		.807335	.0042	K(ABS/TK LN)	.811562	.0041	.809464
K(TRK LENGTH)		.831762		.815788	.0062	K(TK LN/COL)	.814948	.0055	.814786
REM LIFE(COL)		3.1632E+03		3.0678E+03	.0087	K(COL/ABS/TK LN)	.812410	.0045	.808260
REM LIFE(ABS)		3.1620E+03		3.0674E+03	.0090	LIFE(COL/ABS)	3.0676E+03	.0088	3.0678E+03
SOURCE POINTS GENERATED 3059									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.805796		.813415	.0054	K(COL/ABS)	.809568	.0044	.807037

K(ABSORPTION)	.787977	.805721	.0043	K(ABS/TK LN)	.810394	.0040	.808537	.0041	.2769
K(TRK LENGTH)	.807115	.815066	.0058	K(TK LN/COL)	.814241	.0051	.814079	.0053	.6615
REM LIFE(COL)	3.0950E+03	3.0701E+03	.0080	K(COL/ABS/TK LN)	.811401	.0043	.807694	.0052	
REM LIFE(ABS)	3.0864E+03	3.0690E+03	.0082	LIFE(COL/ABS)	3.0695E+03	.0080	3.0701E+03	.0083	.9715
SOURCE POINTS GENERATED 2931									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.806296		.812868	.0050	K(COL/ABS)	.809914	.0041	.5690
K(ABSORPTION)		.821820		.806960	.0042	K(ABS/TK LN)	.810841	.0038	.2287
K(TRK LENGTH)		.810611		.814723	.0053	K(TK LN/COL)	.813795	.0047	.6640
REM LIFE(COL)		2.9366E+03		3.0598E+03	.0081	K(COL/ABS/TK LN)	.811517	.0040	
REM LIFE(ABS)		2.9602E+03		3.0606E+03	.0080	LIFE(COL/ABS)	3.0602E+03	.0080	.9723
SOURCE POINTS GENERATED 3026									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.816140		.813101	.0046	K(COL/ABS)	.810314	.0038	.5699
K(ABSORPTION)		.814885		.807526	.0040	K(ABS/TK LN)	.811315	.0035	.2408
K(TRK LENGTH)		.820065		.815105	.0049	K(TK LN/COL)	.814103	.0044	.6656
REM LIFE(COL)		3.1401E+03		3.0656E+03	.0077	K(COL/ABS/TK LN)	.811911	.0037	
REM LIFE(ABS)		3.1074E+03		3.0640E+03	.0075	LIFE(COL/ABS)	3.0648E+03	.0075	.9684
SOURCE POINTS GENERATED 3038									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.824530		.813863	.0044	K(COL/ABS)	.811491	.0038	.5913
K(ABSORPTION)		.831420		.809119	.0042	K(ABS/TK LN)	.812255	.0035	.2477
K(TRK LENGTH)		.819394		.815391	.0046	K(TK LN/COL)	.814627	.0041	.6648
REM LIFE(COL)		3.0336E+03		3.0634E+03	.0072	K(COL/ABS/TK LN)	.812791	.0036	
REM LIFE(ABS)		3.0659E+03		3.0641E+03	.0070	LIFE(COL/ABS)	3.0638E+03	.0070	.9633
SOURCE POINTS GENERATED 3065									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/500 year (mpc12r)

PROBID = 02/24/95 03:55:32
02/24/95 02:03:05

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59415	1.0098E+00	2.0747E+00	ESCAPE	2	1.1191E-05	5.5788E-13
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.3935E-02	4.4111E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59501	6.3466E-02	3.2467E-05
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2011E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	174	2.3321E-03	2.0065E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9637E+00
				CAPTURE	0	7.0678E-01	3.2583E-02
				LOSS TO (N,XN)	86	1.1525E-03	1.0087E-02
				LOSS TO FISSION	0	3.0471E-01	7.0308E-02

TOTAL	59589	1.0761E+00	2.0767E+00	TOTAL	59589	1.0761E+00	2.0767E+00
NUMBER OF NEUTRONS BANKED	88			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0029E+00			ESCAPE	5.7855E+04	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.6076E+01			CAPTURE	3.0704E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3331779			CAPTURE OR ESCAPE	3.0710E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0012E+00	.0002		ANY TERMINATION	3.3954E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	112.22 MINUTES			MAXIMUM NUMBER EVER IN BANK	2		
COMPUTER TIME IN MCRUN	112.08 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.3010E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	40652667			MOST RANDOM NUMBERS USED WAS	7674 IN HISTORY	15279	

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4847E-01 TO 1.2068E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25672	9355	3.2367E+00	1.1672E-04	3.6498E-01	7.3353E-01	1.0879E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	711344	59503	294044	4.1934E+00	7.6829E-04	7.5817E-01	8.8722E-01	2.5023E+00
33	34	3266	169	655	6.7935E-03	5.6487E-05	2.5182E-01	6.1312E-01	4.3134E+00
34	35	160	16	453	3.0860E-03	4.1290E-05	2.7736E-01	4.6343E-01	8.4417E-01
35	36	1272288	59503	9	1.4106E-04	6.6062E-04	7.1594E-01	8.8361E-01	3.4774E+03
36	37	274	16	21	1.8347E-04	4.2494E-05	2.5616E-01	5.0302E-01	8.2567E-01
37	38	1379561	59503	49577	7.4803E-01	6.3941E-04	7.0556E-01	8.8325E-01	4.1061E+00
38	39	304	17	127	8.9288E-04	4.2287E-05	2.2109E-01	5.0253E-01	7.9404E-01
39	40	2203233	59503	1380250	1.8432E+01	5.5717E-04	6.7421E-01	8.8073E-01	1.6571E+00
40	41	55477	30696	85373	1.1472E+00	4.1606E-04	6.2353E-01	8.8031E-01	1.5626E+00
41	42	13	7	40	3.0422E-04	2.0146E-06	7.0831E-04	4.9309E-01	3.9290E-01
42	43	117376	32426	3509	5.2774E-02	4.4724E-04	6.3963E-01	8.8174E-01	4.1273E+00
43	44	131508	34667	28425	3.8121E-01	4.4552E-04	6.4093E-01	8.8126E-01	1.5939E+00
44	45	143678	35660	3168	4.7493E-02	4.4909E-04	6.4212E-01	8.8127E-01	4.1344E+00
45	46	175049	40803	68392	9.1660E-01	4.5189E-04	6.4466E-01	8.8029E-01	1.6003E+00
46	47	7243	3352	7591	1.0201E-01	3.7975E-04	5.7144E-01	8.7894E-01	1.4905E+00
47	48	9776	3653	309	4.6898E-03	3.9869E-04	5.7409E-01	8.7705E-01	4.0963E+00
48	49	12411	4862	6185	8.2969E-02	4.0641E-04	5.8863E-01	8.7837E-01	1.5253E+00
49	50	32979	14843	63771	7.7125E-01	3.6000E-04	5.8195E-01	8.3090E-01	1.4985E+00
50	51	32861	14119	11876	1.4943E-01	4.1220E-04	5.7258E-01	8.1535E-01	2.1248E+00
51	52	32686	13831	2457	3.5841E-02	4.1153E-04	5.6768E-01	8.1237E-01	9.1429E+00
52	53	32773	13861	11929	1.4950E-01	3.8622E-04	5.5431E-01	8.0900E-01	2.0861E+00
53	54	138	52	911	8.2358E-03	6.2395E-05	2.7464E-01	6.1587E-01	9.0649E-01
54	55	33347	15042	65530	7.9387E-01	3.4803E-04	5.6243E-01	8.3102E-01	1.4682E+00
55	56	33218	14235	12246	1.5408E-01	3.8972E-04	5.6189E-01	8.1005E-01	2.0796E+00
56	57	32963	13893	2364	3.4393E-02	3.8958E-04	5.5666E-01	8.0728E-01	9.1638E+00
57	58	33141	13940	12414	1.5341E-01	3.7807E-04	5.5770E-01	8.0436E-01	2.0998E+00
58	59	204	49	1055	9.2765E-03	3.7651E-05	1.6169E-01	5.8691E-01	6.9422E-01
59	60	52475	18956	90938	1.1565E+00	5.0014E-04	5.6803E-01	8.5380E-01	1.5164E+00
60	61	52096	18066	17620	2.3305E-01	7.0046E-04	5.8706E-01	8.4626E-01	2.2745E+00
61	62	277	62	1190	1.0034E-02	4.3016E-05	2.2393E-01	5.5370E-01	7.9950E-01
62	63	52004	18769	90411	1.1436E+00	4.9139E-04	5.6502E-01	8.5066E-01	1.5096E+00
63	64	51648	17883	17714	2.3345E-01	6.8811E-04	5.8930E-01	8.4377E-01	2.2752E+00
64	65	356	66	1666	1.3964E-02	3.9191E-05	2.4750E-01	5.4855E-01	7.5748E-01
65	66	9945	4911	429494	3.9646E+00	5.5342E-05	2.5752E-01	6.1864E-01	8.4527E-01
66	67	9830	3870	14414	1.5316E-01	1.7580E-04	4.2204E-01	7.0032E-01	1.7907E+00
67	68	9950	3913	14727	1.5640E-01	1.7449E-04	4.2971E-01	6.9834E-01	1.7594E+00
68	69	33631	8940	10913	1.4411E-01	9.7044E-04	5.7238E-01	8.4582E-01	2.3836E+00
69	70	33885	8640	6247	9.3327E-02	1.0578E-03	5.7803E-01	8.4270E-01	8.8837E+00
70	71	18281	8456	56576	7.4077E-01	1.4530E-03	5.9217E-01	8.4616E-01	2.5156E+00
71	72	34020	9066	11301	1.4822E-01	9.9785E-04	5.7633E-01	8.4672E-01	2.3660E+00
72	73	34196	8748	6371	9.5822E-02	1.0883E-03	5.7073E-01	8.4683E-01	8.9132E+00
73	74	18375	8527	57302	7.4750E-01	1.3666E-03	5.8295E-01	8.4322E-01	2.4729E+00
74	75	147	41	2328	2.1533E-02	9.2254E-05	4.1832E-01	6.3193E-01	1.1536E+00
75	76	118	36	2502	2.0357E-02	4.3594E-05	2.2499E-01	5.4036E-01	7.6024E-01
76	77	8	4	10	5.9087E-05	1.8310E-04	4.3933E-01	6.1164E-01	3.4879E+00
77	78	3560	1553	10816	1.1973E-01	3.2547E-04	4.7101E-01	7.3052E-01	2.0322E+00
78	79	2225	910	12647	1.3605E-01	2.3862E-04	4.0732E-01	7.5101E-01	1.2470E+00
79	80	5	3	769	6.9253E-03	2.6416E-05	1.0241E-01	5.9780E-01	6.1473E-01
80	81	1	1	1	4.5051E-06	3.7174E-09	3.7174E-09	2.6767E-01	5.1419E-01
81	82	1714	703	5080	6.1517E-02	7.6992E-04	4.6846E-01	7.8353E-01	2.0187E+00
82	83	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	1020	456	8912	1.0499E-01	1.7283E-03	4.4104E-01	8.0204E-01	4.4333E+00
85	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	87	347	213	46704	3.9349E-01	2.1983E-05	7.9715E-02	5.4764E-01	5.6545E-01

TOTAL 6933057 690369 3331779 4.1515E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.4272E-01	-5.4272E-01
2	2	3.2737E-01	.0000E+00	.0000E+00	-9.0015E-01	-5.7278E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5551E-02	-1.5551E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.2995E-02	-5.2995E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.6672E-02	-1.6672E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.5042E-01	-1.5042E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6387E+00	-1.6387E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0043E+00	-2.0043E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.1005E-01	-2.1005E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-2.1301E-01	-2.1301E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.8543E-01	-3.8543E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.8118E-01	-3.8118E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.8534E-02	-7.8534E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.9330E-02	-7.9330E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.7025E-02	-8.7025E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.2898E-02	-7.2898E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-6.9892E-02	-6.9892E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.4196E-02	-7.4196E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-9.8097E-02	-9.8097E-02
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0151E-01	-1.0151E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9235E-02	-8.9235E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.1094E-02	-8.1094E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1012E-01	-1.1012E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1100E-01	-1.1100E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1552E-01	-1.1552E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1115E-01	-1.1115E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-9.9422E-02	-9.9422E-02
28	29	.0000E+00	.0000E+00	.0000E+00	-8.1625E-02	-8.1625E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.0850E-02	-9.0850E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0033E-01	-1.0033E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8831E+01	-1.8831E+01
32	33	9.6693E+00	1.0098E+00	.0000E+00	-9.4597E+00	1.2194E+00
33	34	3.4092E-02	.0000E+00	.0000E+00	-3.2324E-02	1.7679E-03
34	35	1.2326E-03	.0000E+00	.0000E+00	-1.1517E-03	8.0910E-05
35	36	1.8932E+01	.0000E+00	.0000E+00	-1.8921E+01	1.1424E-02
36	37	2.1583E-03	.0000E+00	.0000E+00	-2.1574E-03	9.3380E-07
37	38	2.0525E+01	.0000E+00	.0000E+00	-2.0448E+01	7.7320E-02
38	39	2.4627E-03	.0000E+00	.0000E+00	-2.4329E-03	2.9810E-05
39	40	3.2708E+01	.0000E+00	.0000E+00	-1.0752E+01	2.1956E+01
40	41	8.2438E-01	.0000E+00	.0000E+00	-8.2095E-01	3.4294E-03
41	42	1.0112E-04	.0000E+00	.0000E+00	-9.9536E-05	1.5881E-06
42	43	1.7411E+00	.0000E+00	.0000E+00	-1.7407E+00	4.6883E-04
43	44	1.9512E+00	.0000E+00	.0000E+00	-1.9501E+00	1.0902E-03
44	45	2.1315E+00	.0000E+00	.0000E+00	-2.1310E+00	4.8305E-04
45	46	2.5980E+00	.0000E+00	.0000E+00	-1.1014E+00	1.4966E+00
46	47	1.0760E-01	.0000E+00	.0000E+00	-6.5397E-02	4.2204E-02
47	48	1.4449E-01	.0000E+00	.0000E+00	-1.3864E-01	5.8534E-03
48	49	1.8368E-01	.0000E+00	.0000E+00	-7.3306E-02	1.1037E-01
49	50	4.6321E-01	.0000E+00	.0000E+00	-2.6068E-01	2.0254E-01
50	51	4.5522E-01	.0000E+00	.0000E+00	-4.3998E-01	1.5234E-02
51	52	4.4956E-01	.0000E+00	.0000E+00	-4.4400E-01	5.5606E-03
52	53	4.5087E-01	.0000E+00	.0000E+00	-1.8932E-01	2.6155E-01
53	54	1.4620E-03	.0000E+00	.0000E+00	-7.3801E-05	1.3882E-03
54	55	4.6812E-01	.0000E+00	.0000E+00	-2.6264E-01	2.0548E-01
55	56	4.5824E-01	.0000E+00	.0000E+00	-4.4291E-01	1.5325E-02
56	57	4.5125E-01	.0000E+00	.0000E+00	-4.4565E-01	5.5994E-03
57	58	4.5340E-01	.0000E+00	.0000E+00	-1.8989E-01	2.6350E-01

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	1.0476E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0476E-05
33	34	.0000E+00	.0000E+00	5.3016E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3016E-06
34	35	.0000E+00	.0000E+00	-4.1686E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1686E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	3.6098E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.6098E-05
38	39	.0000E+00	.0000E+00	-4.2018E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.2018E-06
39	40	.0000E+00	.0000E+00	3.8179E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8179E-05
40	41	.0000E+00	.0000E+00	-5.8230E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.8230E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	1.7207E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7207E-05
43	44	.0000E+00	.0000E+00	2.1246E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1246E-05
44	45	.0000E+00	.0000E+00	-3.7425E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7425E-06
45	46	.0000E+00	.0000E+00	3.8742E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8742E-05
46	47	.0000E+00	.0000E+00	4.2096E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2096E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	1.2649E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2649E-05
49	50	.0000E+00	.0000E+00	-5.3282E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3282E-05
50	51	.0000E+00	.0000E+00	3.3246E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3246E-05
51	52	.0000E+00	.0000E+00	3.0160E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0160E-05
52	53	.0000E+00	.0000E+00	-2.0202E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0202E-04
53	54	.0000E+00	.0000E+00	4.2789E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2789E-06
54	55	.0000E+00	.0000E+00	4.3565E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3565E-05
55	56	.0000E+00	.0000E+00	-1.7626E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7626E-05
56	57	.0000E+00	.0000E+00	-2.9778E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9778E-06
57	58	.0000E+00	.0000E+00	3.9257E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9257E-05
58	59	.0000E+00	.0000E+00	2.5336E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5336E-05
59	60	.0000E+00	.0000E+00	-1.1064E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1064E-05
60	61	.0000E+00	.0000E+00	3.7132E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7132E-04
61	62	.0000E+00	.0000E+00	4.2815E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2815E-06
62	63	.0000E+00	.0000E+00	-3.2317E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2317E-05
63	64	.0000E+00	.0000E+00	9.0808E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.0808E-06
64	65	.0000E+00	.0000E+00	1.9558E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9558E-07
65	66	.0000E+00	.0000E+00	5.7911E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.7911E-05
66	67	.0000E+00	.0000E+00	-8.8212E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8212E-05
67	68	.0000E+00	.0000E+00	-9.8089E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8089E-05
68	70	.0000E+00	.0000E+00	-1.8783E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8783E-06
69	71	.0000E+00	.0000E+00	3.5262E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5262E-05
70	72	.0000E+00	.0000E+00	-2.7378E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7378E-04
71	73	.0000E+00	.0000E+00	7.0798E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.0798E-05
72	74	.0000E+00	.0000E+00	1.6596E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6596E-05
73	75	.0000E+00	.0000E+00	3.1329E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.1329E-04
74	76	.0000E+00	.0000E+00	1.2730E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2730E-05
75	77	.0000E+00	.0000E+00	-4.0570E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0570E-06
76	80	.0000E+00	.0000E+00	-2.9363E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9363E-06
77	81	.0000E+00	.0000E+00	5.9981E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.9981E-06
78	82	.0000E+00	.0000E+00	-3.5815E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.5815E-06
79	83	.0000E+00	.0000E+00	4.2382E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2382E-06
80	84	.0000E+00	.0000E+00	-1.6940E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6940E-06
81	85	.0000E+00	.0000E+00	2.8043E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8043E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-9.5894E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5894E-06

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	1.2953E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2953E-04
TOTAL		.0000E+00	.0000E+00	4.6906E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6906E-04

1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4014E-02	.0000E+00	-1.4014E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.1955E-03	.0000E+00	-4.3296E-01	-1.0842E-03	-3.0471E-01
33	34	.0000E+00	.0000E+00	-1.4937E-04	.0000E+00	-1.4937E-04
34	35	.0000E+00	.0000E+00	-1.7636E-05	.0000E+00	-1.7636E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-9.3380E-07	.0000E+00	-9.3380E-07
37	38	1.0698E-04	.0000E+00	-6.5309E-03	-5.3489E-05	-6.4774E-03
38	39	.0000E+00	.0000E+00	-4.8270E-06	.0000E+00	-4.8270E-06
39	40	.0000E+00	.0000E+00	-4.8169E-02	.0000E+00	-4.8169E-02
40	41	.0000E+00	.0000E+00	-3.3712E-03	.0000E+00	-3.3712E-03
41	42	.0000E+00	.0000E+00	-1.5881E-06	.0000E+00	-1.5881E-06
42	43	.0000E+00	.0000E+00	-4.8603E-04	.0000E+00	-4.8603E-04
43	44	.0000E+00	.0000E+00	-1.1114E-03	.0000E+00	-1.1114E-03
44	45	.0000E+00	.0000E+00	-4.7931E-04	.0000E+00	-4.7931E-04
45	46	.0000E+00	.0000E+00	-2.6365E-03	.0000E+00	-2.6365E-03
46	47	.0000E+00	.0000E+00	-2.9938E-04	.0000E+00	-2.9938E-04
47	48	.0000E+00	.0000E+00	-4.0589E-05	.0000E+00	-4.0589E-05
48	49	.0000E+00	.0000E+00	-2.4584E-04	.0000E+00	-2.4584E-04
49	50	.0000E+00	.0000E+00	-2.3778E-03	.0000E+00	-2.3778E-03
50	51	.0000E+00	.0000E+00	-9.9833E-03	.0000E+00	-9.9833E-03
51	52	.0000E+00	.0000E+00	-6.1549E-04	.0000E+00	-6.1549E-04

52	53	.0000E+00	.0000E+00	-1.0238E-02	.0000E+00	.0000E+00	-1.0238E-02
53	54	.0000E+00	.0000E+00	-4.3483E-05	.0000E+00	.0000E+00	-4.3483E-05
54	55	.0000E+00	.0000E+00	-2.4547E-03	.0000E+00	.0000E+00	-2.4547E-03
55	56	.0000E+00	.0000E+00	-1.0171E-02	.0000E+00	.0000E+00	-1.0171E-02
56	57	.0000E+00	.0000E+00	-5.8975E-04	.0000E+00	.0000E+00	-5.8975E-04
57	58	.0000E+00	.0000E+00	-1.0827E-02	.0000E+00	.0000E+00	-1.0827E-02
58	59	.0000E+00	.0000E+00	-4.9201E-05	.0000E+00	.0000E+00	-4.9201E-05
59	60	.0000E+00	.0000E+00	-2.8835E-03	.0000E+00	.0000E+00	-2.8835E-03
60	61	.0000E+00	.0000E+00	-1.0672E-02	.0000E+00	.0000E+00	-1.0672E-02
61	62	.0000E+00	.0000E+00	-5.2694E-05	.0000E+00	.0000E+00	-5.2694E-05
62	63	.0000E+00	.0000E+00	-2.8619E-03	.0000E+00	.0000E+00	-2.8619E-03
63	64	.0000E+00	.0000E+00	-1.1129E-02	.0000E+00	.0000E+00	-1.1129E-02
64	65	.0000E+00	.0000E+00	-7.4703E-05	.0000E+00	.0000E+00	-7.4703E-05
65	66	.0000E+00	.0000E+00	-2.0100E-02	.0000E+00	.0000E+00	-2.0100E-02
66	67	.0000E+00	.0000E+00	-1.5173E-02	.0000E+00	.0000E+00	-1.5173E-02
67	68	.0000E+00	.0000E+00	-1.5621E-02	.0000E+00	.0000E+00	-1.5621E-02
68	70	.0000E+00	.0000E+00	-5.2406E-03	.0000E+00	.0000E+00	-5.2406E-03
69	71	.0000E+00	.0000E+00	-7.0649E-04	.0000E+00	.0000E+00	-7.0649E-04
70	72	.0000E+00	.0000E+00	-2.0691E-02	.0000E+00	.0000E+00	-2.0691E-02
71	73	.0000E+00	.0000E+00	-5.4154E-03	.0000E+00	.0000E+00	-5.4154E-03
72	74	.0000E+00	.0000E+00	-7.0326E-04	.0000E+00	.0000E+00	-7.0326E-04
73	75	2.9608E-05	.0000E+00	-2.1759E-02	-1.4804E-05	.0000E+00	-2.1744E-02
74	76	.0000E+00	.0000E+00	-1.1087E-04	.0000E+00	.0000E+00	-1.1087E-04
75	77	.0000E+00	.0000E+00	-1.0935E-04	.0000E+00	.0000E+00	-1.0935E-04
76	80	.0000E+00	.0000E+00	-9.2228E-06	.0000E+00	.0000E+00	-9.2228E-06
77	81	.0000E+00	.0000E+00	-8.4131E-03	.0000E+00	.0000E+00	-8.4131E-03
78	82	.0000E+00	.0000E+00	-4.3430E-04	.0000E+00	.0000E+00	-4.3430E-04
79	83	.0000E+00	.0000E+00	-3.7432E-05	.0000E+00	.0000E+00	-3.7432E-05
80	84	.0000E+00	.0000E+00	-2.8111E-06	.0000E+00	.0000E+00	-2.8111E-06
81	85	.0000E+00	.0000E+00	-2.5010E-03	.0000E+00	.0000E+00	-2.5010E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.1360E-03	.0000E+00	.0000E+00	-2.1360E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0657E-03	.0000E+00	.0000E+00	-2.0657E-03

TOTAL 2.3321E-03 .0000E+00 -7.0678E-01 -1.1525E-03 -3.0471E-01 -1.0103E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	286094 16351	3.0374E+00 1.9936E-01	1.3934E-02 7.9722E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7485E-01 3.7684E-04 5.7949E-05 2.1480E-06 8.9948E-06 7.0164E-05 7.9842E-06 5.5389E-08 1.3771E-04 3.2313E-03 1.6112E-03 3.1606E-01 4.5298E-04 1.4117E-06 1.9874E-03 7.4663E-04 7.1384E-10 1.5642E-04 2.1562E-04 7.4674E-08 3.2261E-05 4.2045E-07	98680 901 133 1049 457 251 2284 0 251 15770 1353 146071 1233 4 19322 4516 0 281 1398 4 76 10	1.4586E+00 1.1565E-02 1.7214E-03 1.1620E-02 5.1424E-03 3.1350E-03 2.4574E-02 6.4648E-06 3.3222E-03 3.0848E-01 2.0033E-02 2.1645E+00 1.5793E-02 5.2641E-05 3.8765E-01 5.9713E-02 .0000E+00 4.0372E-03 1.7574E-02 8.2862E-05 1.0843E-03 2.0223E-04	1.2876E-03 1.0161E-02 1.4163E-03 1.1536E-02 5.1160E-03 2.6883E-03 2.4521E-02 .0000E+00 2.2139E-03 2.7715E-02 6.7428E-03 1.8398E-01 1.2265E-02 3.3696E-05 7.1614E-02 5.2142E-02 .0000E+00 2.6208E-03 1.5976E-02 7.5379E-06 9.0500E-04 1.9960E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 3.3592E-05 1.3558E-01 2.9737E-04 2.0666E-02 1.8957E-04 1.7028E-06 1.4732E-01 2.5606E-04 .0000E+00 .0000E+00 5.2724E-05 1.6408E-04 3.6547E-05 1.0382E-05 9.7064E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.1113E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	3 0 4 643 5	3.0593E-05 .0000E+00 3.8451E-05 6.6588E-03 6.5683E-05	1.1013E-09 .0000E+00 4.7403E-06 1.3851E-04 6.1117E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	437 16	2.9551E-03 1.3096E-04	1.7632E-05 4.0309E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	9	1.4106E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	20 1	1.7922E-04 4.2459E-06	9.3366E-07 1.4430E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	177 74 194 48633 499	2.5129E-03 1.1059E-03 2.6333E-03 7.3424E-01 7.5396E-03	4.1829E-06 6.0065E-05 1.2559E-04 6.1579E-03 1.8322E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 5.3489E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	124 3	8.6182E-04 3.1058E-05	4.8260E-06 1.0618E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1266038 114212	1.6756E+01 1.6753E+00	4.6906E-02 1.2630E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	78695 6678	1.0490E+00 9.8201E-02	3.3016E-03 6.9561E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	38 2	2.9316E-04 1.1068E-05	1.5876E-06 5.0438E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 1 12 3454 30	1.6323E-04 1.7093E-05 1.6097E-04 5.1970E-02 4.6289E-04	2.0131E-09 4.0296E-08 1.2328E-05 4.6493E-04 8.7374E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26200 2225	3.4873E-01 3.2483E-02	1.0904E-03 2.1010E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 7 13 3118 21	1.2429E-04 1.1803E-04 1.7711E-04 4.6796E-02 2.7802E-04	2.4126E-09 5.5545E-06 1.0441E-05 4.5615E-04 7.1634E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	62986 5406	8.3735E-01 7.9247E-02	2.5822E-03 5.4326E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7033 558	9.3728E-02 8.2778E-03	2.9632E-04 3.0675E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 0 0 305 3	1.1451E-05 .0000E+00 .0000E+00 4.6429E-03 3.5499E-05	3.7145E-10 .0000E+00 .0000E+00 3.9895E-05 6.9434E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5716 469	7.6013E-02 6.9556E-03	2.4168E-04 4.1597E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59192 4579	7.0841E-01 6.2840E-02	2.3321E-03 4.5679E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	2 33 54 4 0 1427 496 7439 2275 146	3.3083E-05 4.2964E-04 7.6019E-04 4.5911E-05 .0000E+00 1.8516E-02 7.1493E-03 9.2054E-02 2.8411E-02 2.0329E-03	2.7646E-11 1.3819E-05 7.3450E-06 8.3424E-07 .0000E+00 1.9729E-03 8.3398E-04 5.1927E-03 1.7198E-03 2.4198E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2453 4	3.5800E-02 4.1890E-05	6.0908E-04 6.4074E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	8 45 42 6 2 1468	1.1339E-04 5.6828E-04 5.9022E-04 7.2188E-05 3.0939E-05 1.9265E-02	1.0299E-08 3.4804E-05 4.2613E-06 6.3398E-07 2.0829E-06 2.0068E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	427	6.0763E-03	7.9465E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7527	9.2724E-02	5.4050E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2260	2.8082E-02	1.7506E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	144	1.9802E-03	2.3879E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	868	7.8024E-03	4.3470E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	43	4.3341E-04	1.2596E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	60892	7.2968E-01	2.4091E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4638	6.4193E-02	4.5640E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	15	1.9242E-04	1.7208E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.6091E-04	2.3988E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	6.0073E-04	6.2185E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.6053E-05	1.0683E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3800E-05	2.5511E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1525	1.9944E-02	1.8745E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	550	7.8763E-03	8.2559E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7680	9.4701E-02	5.3981E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2221	2.7916E-02	1.7354E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	165	2.2717E-03	3.0580E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2361	3.4344E-02	5.8948E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	3	4.8753E-05	2.6271E-07	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	10	1.2995E-04	2.1446E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.8356E-04	2.3018E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	63	8.7428E-04	1.1031E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.3445E-05	2.8190E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	8.4024E-06	2.6027E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1478	1.9236E-02	2.0099E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	531	7.6052E-03	9.1549E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7858	9.5164E-02	5.6744E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2300	2.7986E-02	1.9348E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	134	1.8796E-03	2.5577E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1007	8.7808E-03	4.8841E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	48	4.9567E-04	3.6023E-07	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	83557	1.0514E+00	2.8185E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7381	1.0508E-01	6.4933E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	15	2.0120E-04	2.4059E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	63	8.0763E-04	3.2152E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	70	1.0317E-03	1.0500E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	9.8382E-05	2.2169E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	4.5344E-05	2.5268E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2216	3.1094E-02	1.9239E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	785	1.1738E-02	9.7632E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10904	1.4136E-01	5.5134E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3316	4.3300E-02	1.7587E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	241	3.3826E-03	4.5424E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1138	9.5726E-03	5.2678E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	52	4.6134E-04	1.6420E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	83101	1.0400E+00	2.8167E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7310	1.0365E-01	4.5124E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	16	2.2491E-04	2.1703E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	51	6.4261E-04	2.3313E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	91	1.3079E-03	8.7944E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.2275E-05	4.1836E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.5619E-05	5.4861E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2138	2.9490E-02	2.0220E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	821	1.2000E-02	1.0908E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11059	1.4280E-01	5.7623E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3282	4.3319E-02	1.8312E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	246	3.5224E-03	3.8472E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1606	1.3456E-02	7.4673E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	60	5.0859E-04	2.9772E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	409593	3.7603E+00	2.0028E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19901	2.0433E-01	7.2243E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	7	6.8717E-05	2.2698E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	5.6950E-04	4.7345E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	68	7.7453E-04	1.5317E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.9829E-05	7.2776E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	2.6762E-05	6.3721E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1560	1.7539E-02	2.7361E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	451	5.7599E-03	1.4145E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9323	9.6993E-02	8.0483E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2801	2.9713E-02	2.6648E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	143	1.6912E-03	2.3929E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	9	9.6194E-05	2.3043E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	5.7686E-04	3.7652E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	5.9099E-04	1.1508E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.6611E-05	1.4189E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1627	1.8184E-02	2.9139E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	461	5.8055E-03	1.4064E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9568	9.9856E-02	8.2775E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2802	2.9338E-02	2.6302E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	154	1.8679E-03	3.4250E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	8	1.1858E-04	6.4905E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	44	5.9355E-04	1.7759E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	9.1560E-04	4.6808E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.7754E-05	1.1368E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.8802E-05	1.3954E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1336	1.8639E-02	9.4143E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	485	7.0968E-03	4.3722E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6710	8.6838E-02	2.6454E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2096	2.7461E-02	9.2984E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	167	2.3623E-03	2.6400E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6230	9.3091E-02	6.9479E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	17	2.3569E-04	1.1696E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	53	7.3961E-04	2.5688E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	201	2.6222E-03	5.8638E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	313	4.5680E-03	1.7642E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	27	3.4330E-04	3.3133E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.5856E-04	3.7363E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7391	1.0273E-01	3.6780E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2505	3.5918E-02	1.9811E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34613	4.4307E-01	1.0449E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10600	1.3827E-01	3.3388E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	863	1.2346E-02	1.1613E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	8	1.2726E-04	8.0598E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	30	4.2511E-04	1.3043E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	60	8.8429E-04	3.6281E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.5531E-05	9.1315E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1371	1.8898E-02	9.1860E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	465	6.8053E-03	4.2390E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7054	9.0979E-02	2.8524E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2134	2.7544E-02	9.5206E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	177	2.5293E-03	2.5162E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6362	9.5697E-02	6.9663E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.2572E-04	6.6254E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	46	6.6388E-04	2.8592E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	222	2.8459E-03	7.4187E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	337	4.9309E-03	2.6254E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	24	3.6803E-04	1.0507E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.9168E-05	9.1971E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7285	1.0048E-01	3.8963E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2378	3.4197E-02	2.1661E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35249	4.5010E-01	1.0813E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10876	1.4133E-01	3.5084E-03	.0000E+00	1.4804E-05
		42000.50C	1.4572E-02	879	1.2474E-02	1.2728E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2217	2.0350E-02	1.1084E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	111	1.1832E-03	2.7519E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2372	1.9322E-02	1.0932E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	130	1.0349E-03	3.5778E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1	8.1587E-06	2.6119E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9	5.0928E-05	6.6109E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	3.5944E-05	7.5788E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	3.9086E-04	2.3310E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	5.9317E-04	1.0046E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	2.9384E-05	3.4194E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1234	1.4584E-02	1.4881E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	366	4.8565E-03	7.7739E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6927	7.5139E-02	4.4999E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2084	2.2628E-02	1.4305E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	117	1.4738E-03	1.8353E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11790	1.2525E-01	4.2972E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	857	1.0804E-02	4.5853E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	742	6.6493E-03	3.7423E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	27	2.7599E-04	9.3217E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1	4.5051E-06	2.8111E-06	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	6.9894E-05	1.4474E-08	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	7	7.9861E-05	2.0973E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	10	1.4236E-04	1.1432E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	2	3.1549E-05	1.6536E-07	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	40	5.3248E-04	5.3750E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	696	8.8359E-03	4.5715E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	79	1.1436E-03	1.0396E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1184	1.4415E-02	4.4961E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2877	3.3918E-02	1.1970E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	94	1.2257E-03	6.3067E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	85	1.1232E-03	1.7308E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	46	5.9778E-04	1.4742E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	26	3.6595E-04	1.0667E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	2	1.9820E-05	3.7026E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	4.0651E-05	6.6458E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	179	2.4879E-03	1.1681E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8656	1.0148E-01	2.0171E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	44682	3.7511E-01	2.0634E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2022	1.8377E-02	2.2833E-06	.0000E+00	.0000E+00
TOTAL				3331779	4.1820E+01	7.0678E-01	3.0471E-01	1.1796E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2496138	3.0079E+01	1.0175E-01	.0000E+00	.0000E+00
		2004.50C		9	1.4106E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		253	3.4128E-03	2.3886E-07	.0000E+00	.0000E+00
		7014.50C		907	1.1417E-02	4.2303E-04	.0000E+00	.0000E+00
		8016.50C		291962	4.1351E+00	3.0677E-03	.0000E+00	.0000E+00

13027.50C	17413	2.5901E-01	2.5921E-03	.0000E+00	.0000E+00
14000.50C	1332	1.8931E-02	1.3944E-04	.0000E+00	.0000E+00
15031.50C	99	1.3385E-03	1.0886E-05	.0000E+00	.0000E+00
16032.50C	41	5.9959E-04	2.4722E-05	.0000E+00	.0000E+00
22000.50C	40	5.3248E-04	5.3750E-05	.0000E+00	.0000E+00
24000.50C	32836	4.3869E-01	2.8911E-02	.0000E+00	.0000E+00
25055.50C	10979	1.5652E-01	1.4264E-02	.0000E+00	.0000E+00
26000.55C	171983	2.1207E+00	8.3157E-02	.0000E+00	.0000E+00
28000.50C	51924	6.4922E-01	2.7382E-02	.0000E+00	1.4804E-05
29000.50C	127	1.6777E-03	8.8058E-05	.0000E+00	.0000E+00
40000.50C	56153	8.4431E-01	7.2574E-03	.0000E+00	5.3489E-05
42000.50C	3661	5.0936E-02	5.7694E-03	.0000E+00	.0000E+00
45103.50C	901	1.1565E-02	1.0161E-02	.0000E+00	.0000E+00
47109.50C	133	1.7214E-03	1.4163E-03	.0000E+00	.0000E+00
50000.35C	558	8.3817E-03	2.0592E-04	.0000E+00	.0000E+00
62149.50C	1049	1.1620E-02	1.1536E-02	.0000E+00	.0000E+00
63151.55C	457	5.1424E-03	5.1160E-03	.0000E+00	.0000E+00
63153.55C	251	3.1350E-03	2.6883E-03	.0000E+00	.0000E+00
64155.50C	2284	2.4574E-02	2.4521E-02	.0000E+00	.0000E+00
92233.50C	0	6.4648E-06	.0000E+00	.0000E+00	.0000E+00
92234.50C	251	3.3222E-03	2.2139E-03	3.3592E-05	.0000E+00
92235.50C	15770	3.0848E-01	2.7715E-02	1.3558E-01	.0000E+00
92236.50C	1353	2.0033E-02	6.7428E-03	2.9737E-04	.0000E+00
92238.50C	146071	2.1645E+00	1.8398E-01	2.0666E-02	1.1113E-03
93237.55C	1233	1.5793E-02	1.2265E-02	1.8957E-04	.0000E+00
94238.50C	4	5.2641E-05	3.3696E-05	1.7028E-06	.0000E+00
94239.55C	19322	3.8765E-01	7.1614E-02	1.4732E-01	.0000E+00
94240.50C	4516	5.9713E-02	5.2142E-02	2.5606E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	281	4.0372E-03	2.6208E-03	5.2724E-05	.0000E+00
95241.50C	1398	1.7574E-02	1.5976E-02	1.6408E-04	.0000E+00
95242.50C	4	8.2862E-05	7.5379E-06	3.6547E-05	.0000E+00
95243.50C	76	1.0843E-03	9.0500E-04	1.0382E-05	.0000E+00
96245.35C	10	2.0223E-04	1.9960E-05	9.7064E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59415 CTM = 112.08

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 112.23 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 03:55:32

PROBID = 02/24/95 02:03:05

1MCNP VERSION 4A-B LD=10/04/91

02/24/95 03:55:33

INP=mpc12s OUTP=mpc12s.o

PROBID = 02/24/95 03:55:33

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1000 year (mpc12s)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP -.00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1908-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57-      36      3 -1.785-3  17 -18 -5 IMP:N=1 U=2
58-      37      1 -1.0000  17 -18  5 IMP:N=1 U=2
59-      38      4 -6.6000  18 -19 -5 IMP:N=1 U=2
60-      39      1 -1.0000  18 -19  5 IMP:N=1 U=2
61-      40      1 -1.0000  19      IMP:N=1 U=2
62-      C      CONTROL ROD/GUIDE TUBE
63-      41      1 -1.0000 -21  -5 IMP:N=1 U=3
64-      42      1 -1.0000 -21   5 IMP:N=1 U=3
65-      43      4 -6.6000  21 -22 IMP:N=1 U=3
66-      44      1 -1.0000  22 -23 IMP:N=1 U=3
67-      45      4 -6.6000  23 -24 IMP:N=1 U=3
68-      46      1 -1.0000  24      IMP:N=1 U=3
69-      C      INSTRUMENTATION TUBE
70-      47      1 -1.0000 -25      IMP:N=1 U=4
71-      48      4 -6.6000  25 -26 IMP:N=1 U=4
72-      49      1 -1.0000  26      IMP:N=1 U=4
73-      C      WATER GAP - ASSEMBLY TOP
74-      50      1 -1.0000 -35  -4 IMP:N=1 U=5
75-      C      SS TUBE WALL - ASSEMBLY TOP
76-      51      8 -8.2380  35 -44 -4 IMP:N=1 U=5
77-      C      AL-B WALL -ASSEMBLY TOP
78-      52      6 -2.700  44 -46 -4 IMP:N=1 U=5
79-      C      SS WALL - ASSEMBLY TOP
80-      53      8 -8.2380  46  -4 IMP:N=1 U=5
81-      C      WATER ABOVE BASKET
82-      54      1 -1.000  4 IMP:N=1 U=5
83-      C      WATER GAP - ASSEMBLY RIGHT
84-      55      1 -1.0000 -36  -4 IMP:N=1 U=6
85-      C      SS TUBE WALL - ASSEMBLY RIGHT
86-      56      8 -8.2380  36 -43 -4 IMP:N=1 U=6
87-      C      AL-B WALL - ASSEMBLY RIGHT
88-      57      6 -2.7000  43 -45 -4 IMP:N=1 U=6
89-      C      SS WALL - ASSEMBLY RIGHT
90-      58      8 -8.2380  45  -4 IMP:N=1 U=6
91-      C      WATER ABOVE BASKET
92-      59      1 -1.000  4 IMP:N=1 U=6
93-      C      WATER GAP - ASSEMBLY BOTTOM
94-      60      1 -1.0000  37  -4 IMP:N=1 U=7
95-      C      SS TUBE WALL - ASSEMBLY BOTTOM
96-      61      8 -8.2380 -37  -4 IMP:N=1 U=7
97-      C      WATER ABOVE BASKET
98-      62      1 -1.000  4 IMP:N=1 U=7
99-      C      WATER GAP - ASSEMBLY LEFT
100-     63      1 -1.0000  38  -4 IMP:N=1 U=8
101-     C      LOWER ST COMB - ASSEMBLY LEFT
102-     64      8 -8.2380 -38  -4 IMP:N=1 U=8
103-     C      WATER ABOVE BASKET
104-     65      1 -1.000  4 IMP:N=1 U=8
105-     C      SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106-     66      1 -1.0000  74 75 IMP:N=1 U=10
107-     67      8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108-     68      8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109-     C      AXIS MATERIALS
110-     70      8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111-     71      6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112-     72      8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113-     73      8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114-     74      6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115-     75      8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116-     76      1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1     1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1    LWTR.01T
330- C      PWR: 3.75% U-235 - 37 GWd/MTU - 1000 YEAR DECAY
331- M2     8016.50C 4.8527E-02
332-      45103.50C 2.7099E-05
333-      47109.50C 4.1670E-06
334-      62149.50C 1.5446E-07
335-      63151.55C 6.6059E-07
336-      63153.55C 5.0455E-06
337-      64155.50C 5.7413E-07
338-      92233.50C 1.0029E-08
339-      92234.50C 9.9938E-06
340-      92235.50C 2.3443E-04
341-      92236.50C 1.1865E-04
342-      92238.50C 2.2727E-02
343-      93237.55C 4.1155E-05
344-      94238.50C 2.4594E-09
345-      94239.55C 1.4097E-04
346-      94240.50C 5.0920E-05
347-      94241.50C 4.9270E-11
348-      94242.50C 1.1239E-05
349-      95241.50C 6.9529E-06
350-      95242.50C 5.4915E-10
351-      95243.50C 2.2142E-06
352-      96245.35C 2.9031E-08
353- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354- M3     2004.50C 1.0
355- C      ZIRCALOY-4
356- M4     8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3065
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3065
 POINTS AFTER EXPANSION OR CONTRACTION 3007
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190827E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
2	8016, .67485 45103, .00038 47109, .00006 62149, .00000 63151, .00001 63153, .00007 64155, .00001 92233, .00000 92234, .00014 92235, .00326 92236, .00165 92238, .31606 93237, .00057 94238, .00000 94239, .00196 94240, .00071 94241, .00000 94242, .00016 95241, .00010 95242, .00000 95243, .00003 96245, .00000
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748 50000, .01071
5	6000, .00234 13027, .00417 14000, .01001 16032, .00053 22000, .01057 24000, .23247 25055, .01023 26000, .28763

6	28000, .40235	29000, .02212	42000, .01758		
7	13027, .99949	29000, .00051			
	6000, .01011	14000, .00541	15031, .00062	16032, .00060	
8	25055, .00905	26000, .97421			
	6000, .00140	7014, .00399	14000, .01493	15031, .00081	
	16032, .00052	24000, .18282	25055, .02036	26000, .64626	
	28000, .11433	42000, .01457			

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001, .11191	8016, .88809			
2	8016, .12249	45103, .00044	47109, .00007	62149, .00000	
	63151, .00002	63153, .00012	64155, .00001	92233, .00000	
	92234, .00037	92235, .00870	92236, .00442	92238, .85379	
	93237, .00154	94238, .00000	94239, .00532	94240, .00193	
	94241, .00000	94242, .00043	95241, .00026	95242, .00000	
	95243, .00008	96245, .00000			
3	2004, 1.00000				
4	8016, .00120	24000, .00100	26000, .00200	40000, .98180	
	50000, .01400				
5	6000, .00050	13027, .00200	14000, .00499	16032, .00030	
	22000, .00898	24000, .21446	25055, .00998	26000, .28499	
	28000, .41895	29000, .02494	42000, .02993		
6	13027, .99880	29000, .00120			
7	6000, .00220	14000, .00275	15031, .00035	16032, .00035	
	25055, .00900	26000, .98535			
8	6000, .00030	7014, .00101	14000, .00758	15031, .00045	
	16032, .00030	24000, .17172	25055, .02020	26000, .65197	
	28000, .12121	42000, .02525			

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19080E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19080E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80		PZ	3.1235000E+02
72	81		CZ	1.0652500E+02
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
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18	2.5300E-08
19	2.5300E-08
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28	2.5300E-08
29	2.5300E-08
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64	2.5300E-08
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74	2.5300E-08
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77	2.5300E-08
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81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.

1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY	(1301)	79/07/31.
2004.50C	2716	NJOY	(1270)	79/06/19.
6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92233.50C	14205	NJOY	(1393)	79/09/12.
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
94239.55C	67551	NJOY	(1399)	02/21/85
94240.50C	42744	NJOY	(1380)	79/09/13.
		TOTAL NU		
		TOTAL NU		
		TOTAL NU		
		TOTAL NU		
		TOTAL NU		

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.
WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.				
92234.50C	76999	NJOY	(1394)	79/10/17.
WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.				
92236.50C	119238	NJOY	(1396)	79/08/30.
WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.				

94238.50C	16458	NJOY		(1338)	79/09/12.
94241.50C	22523	NJOY	TOTAL NU	(1381)	79/08/30.
94242.50C	43433	NJOY	TOTAL NU	(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY		(1315)	79/10/29.
16032.50C	2684	NJOY		(1316)	79/10/29.
22000.50C	25231	NJOY		(1322)	79/06/21.
25055.50C	60097	NJOY		(1325)	79/06/21.
42000.50C	18467	NJOY		(1321)	79/08/01.
62149.50C	11116	NJOY		(1319)	02/12/85
64155.50C	31471	NJOY		(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY		(1310)	11/01/85
47109.50C	10147	NJOY		(1373)	11/01/85
93237.55C	29142	NJOY	TOTAL NU	(1337)	04/04/85

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24 T=OK	(48)	86/02/01
WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL. 96245.35C 15310	ZA=96245 ENDL-85	85/04/24 T=OK	(93)	86/04/23	

TABLES FROM FILE NEWXS2

63151.55C	33336				06/28/88
63153.55C	30265				06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
TOTAL	1347491				

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102258
TALLIES	0
BANK	18403
CROSS SECTIONS	1347491
TOTAL	1468152

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1000 year (mpc12s)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-3.154E-03	-7.860E-03	6.834E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.977E-01	1.800E+00
2	-5.966E-02	3.938E-01	6.648E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.977E-01	2.768E+00
3	-2.663E-01	2.373E-01	4.796E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.977E-01	1.106E+00
4	3.005E-01	-1.095E-01	5.807E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.977E-01	3.254E+00
5	-8.246E-02	2.046E-01	5.747E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.977E-01	7.021E-01
6	-5.687E-03	-1.734E-01	5.632E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.977E-01	2.772E+00
7	6.064E-02	-2.142E-02	5.621E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.977E-01	1.629E+00
8	4.361E-03	4.474E-01	4.497E+01	33	0	3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.977E-01	2.173E+00
9	-4.108E-01	-6.156E-02	4.607E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.977E-01	9.507E-01
10	-5.823E-02	3.655E-01	4.735E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.977E-01	4.316E+00
11	7.260E-02	1.589E-01	6.819E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.977E-01	3.239E+00
12	-1.914E-02	3.882E-01	7.076E+00	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.977E-01	1.810E+00
13	-3.449E-01	-7.115E-02	6.563E+00	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.977E-01	5.460E+00
14	1.481E-02	-4.286E-01	1.076E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.977E-01	1.376E+00
15	-2.109E-01	-2.422E-02	1.187E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.977E-01	1.520E+00
16	-4.121E-01	-6.756E-02	1.154E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.977E-01	9.261E+00
17	1.364E-01	-2.961E-01	3.707E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.977E-01	4.014E+00
18	-3.900E-01	2.185E-01	4.364E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.977E-01	1.539E+00
19	-4.233E-01	1.767E-01	4.404E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.977E-01	2.436E+00
20	-3.272E-01	-2.768E-01	8.315E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.977E-01	9.312E-01
21	-5.589E-02	1.672E-01	1.213E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.977E-01	5.223E+00
22	-1.823E-01	-1.902E-01	1.196E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.977E-01	4.872E-01
23	-3.205E-01	-1.078E-01	1.174E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.977E-01	7.571E+00
24	-2.808E-01	2.867E-01	1.342E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.977E-01	1.305E+00
25	-3.310E-01	7.144E-02	2.541E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.977E-01	4.050E+00
26	-5.099E-02	-2.960E-01	2.990E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.977E-01	1.781E+00
27	4.544E-01	3.354E-02	8.883E+00	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.977E-01	2.199E+00
28	3.793E-01	3.360E-02	8.813E+00	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.977E-01	4.519E+00
29	1.206E-01	-2.101E-01	7.790E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.977E-01	4.082E+00
30	1.508E-01	-2.848E-01	2.253E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.977E-01	1.472E+00
31	-8.218E-02	-4.244E-01	1.865E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.977E-01	3.119E+00
32	-3.102E-01	3.170E-01	1.756E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.977E-01	2.153E+00
33	-1.665E-02	-1.213E-01	9.828E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.977E-01	1.709E+00
34	-2.732E-01	3.925E-03	1.187E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.977E-01	6.261E-01
35	-4.279E-01	1.066E-01	6.726E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.977E-01	2.803E+00
36	-7.036E-02	2.448E-01	7.859E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.977E-01	2.042E+00
37	-2.453E-01	-3.302E-02	5.619E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.977E-01	4.026E-01
38	-1.335E-01	4.420E-01	1.049E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.977E-01	1.334E+00
39	1.035E-01	2.642E-02	1.029E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.977E-01	1.884E+00
40	1.447E-01	2.035E-02	1.026E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.977E-01	4.254E+00
41	1.386E-01	2.778E-01	1.025E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.977E-01	1.564E+00
42	-2.720E-01	-1.720E-01	1.856E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.977E-01	3.141E+00
43	2.729E-01	-2.419E-01	1.775E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.977E-01	8.374E-01
44	1.102E-01	-2.531E-01	3.881E+00	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.977E-01	9.446E-01
45	3.734E-01	-2.585E-01	3.063E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.977E-01	2.965E+00
46	2.479E-01	2.598E-01	3.223E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.977E-01	3.159E+00
47	1.838E-01	2.739E-02	3.295E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.977E-01	3.929E-01
48	4.104E-01	-1.909E-01	3.349E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.977E-01	3.060E+00
49	-1.077E-01	-3.291E-01	7.063E-01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.977E-01	2.477E+00

K(ABSORPTION)	.821526	.823090	.0082	K(ABS/TK LN)	.813072	.0058	.810573	.0071	.1994
K(TRK LENGTH)	.828609	.803054	.0068	K(TK LN/COL)	.804501	.0069	.803562	.0077	.8424
REM LIFE(COL)	3.0790E+03	3.0327E+03	.0139	K(COL/ABS/TK LN)	.810697	.0059	.810532	.0113	
REM LIFE(ABS)	3.0724E+03	3.0519E+03	.0115	LIFE(COL/ABS)	3.0423E+03	.0126	3.0739E+03	.0121	.9613
SOURCE POINTS GENERATED 3041									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.822156		.808265	.0070	K(COL/ABS)	.814666	.814190	.1231
K(ABSORPTION)		.808942		.821068	.0073	K(ABS/TK LN)	.813134	.811789	.0299
K(TRK LENGTH)		.818074		.805199	.0063	K(TK LN/COL)	.806732	.805593	.8695
REM LIFE(COL)		3.1794E+03		3.0537E+03	.0135	K(COL/ABS/TK LN)	.811511	.811590	.0079
REM LIFE(ABS)		3.1491E+03		3.0658E+03	.0107	LIFE(COL/ABS)	3.0597E+03	3.0827E+03	.9653
SOURCE POINTS GENERATED 3015									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.806759		.808076	.0061	K(COL/ABS)	.815533	.814476	.1022
K(ABSORPTION)		.836434		.822989	.0068	K(ABS/TK LN)	.814940	.813432	.1494
K(TRK LENGTH)		.818736		.806891	.0059	K(TK LN/COL)	.807484	.807387	.7978
REM LIFE(COL)		3.1732E+03		3.0686E+03	.0126	K(COL/ABS/TK LN)	.812652	.813493	.0073
REM LIFE(ABS)		3.1702E+03		3.0788E+03	.0102	LIFE(COL/ABS)	3.0737E+03	3.0947E+03	.9703
SOURCE POINTS GENERATED 3037									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.827263		.810208	.0059	K(COL/ABS)	.817032	.816750	.1672
K(ABSORPTION)		.830788		.823856	.0061	K(ABS/TK LN)	.815867	.814421	.1832
K(TRK LENGTH)		.815775		.807879	.0053	K(TK LN/COL)	.809043	.808400	.7980
REM LIFE(COL)		3.0422E+03		3.0657E+03	.0112	K(COL/ABS/TK LN)	.813981	.814605	.0069
REM LIFE(ABS)		3.0217E+03		3.0725E+03	.0092	LIFE(COL/ABS)	3.0691E+03	3.0806E+03	.9613
SOURCE POINTS GENERATED 3108									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.825516		.811739	.0056	K(COL/ABS)	.818174	.818264	.2111
K(ABSORPTION)		.831389		.824609	.0055	K(ABS/TK LN)	.817734	.818392	.2448
K(TRK LENGTH)		.837691		.810860	.0060	K(TK LN/COL)	.811299	.811433	.7993
REM LIFE(COL)		3.1852E+03		3.0776E+03	.0107	K(COL/ABS/TK LN)	.815736	.817958	.0063
REM LIFE(ABS)		3.1797E+03		3.0832E+03	.0089	LIFE(COL/ABS)	3.0804E+03	3.0906E+03	.9664
SOURCE POINTS GENERATED 2999									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.820799		.812563	.0052	K(COL/ABS)	.817671	.817322	.1092
K(ABSORPTION)		.804474		.822779	.0054	K(ABS/TK LN)	.817246	.817244	.1415
K(TRK LENGTH)		.820251		.811714	.0055	K(TK LN/COL)	.812138	.812270	.8067
REM LIFE(COL)		3.1602E+03		3.0851E+03	.0100	K(COL/ABS/TK LN)	.815685	.817060	.0051
REM LIFE(ABS)		3.1635E+03		3.0905E+03	.0084	LIFE(COL/ABS)	3.0878E+03	3.0977E+03	.9680
SOURCE POINTS GENERATED 2942									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.799083		.811439	.0049	K(COL/ABS)	.817225	.817088	.0887

50 1.269E-01 6.184E-02 3.371E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.977E-01 4.941E+00

CYCLE 1 K(COLLISION) .796921 REMOVAL LIFETIME(ABS) 3.1798E+03 SOURCE POINTS GENERATED 2338
 CYCLE 2 K(COLLISION) .812239 REMOVAL LIFETIME(ABS) 3.1412E+03 SOURCE POINTS GENERATED 3100
 CYCLE 3 K(COLLISION) .801634 REMOVAL LIFETIME(ABS) 3.1455E+03 SOURCE POINTS GENERATED 3001
 CYCLE 4 K(COLLISION) .817811 REMOVAL LIFETIME(ABS) 2.9074E+03 SOURCE POINTS GENERATED 3062
 CYCLE 5 K(COLLISION) .817013 REMOVAL LIFETIME(ABS) 3.1206E+03 SOURCE POINTS GENERATED 2992

SOURCE DISTRIBUTION WRITTEN TO FILE SRCPT CYCLE = 5
 CYCLE 6 K(COLLISION) .806044 REMOVAL LIFETIME(ABS) 3.1583E+03 SOURCE POINTS GENERATED 2997

SOURCE DISTRIBUTION WRITTEN TO FILE SRCPT CYCLE = 6
 ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COLLISION) .793612 .799828 .0078 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
 K(ABSORPTION) .842818 .833511 .0112 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
 K(TRK LENGTH) .790816 .801989 .0040 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
 REM LIFE(COL) 2.8663E+03 3.0172E+03 .0500
 REM LIFE(ABS) 2.9264E+03 3.0423E+03 .0381
 SOURCE POINTS GENERATED 2966 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000

SOURCE DISTRIBUTION WRITTEN TO FILE SRCPT CYCLE = 7
 ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COLLISION) .785918 .795191 .0074 K(COL/ABS) .807638 .0112 .799835 .0135 .5067
 K(ABSORPTION) .793234 .820085 .0176 K(ABS/TK LN) .809044 .0110 .794181 .0087 .6883
 K(TRK LENGTH) .790034 .798004 .0055 K(TK LN/COL) .796598 .0064 .802661 .0064 .9742
 REM LIFE(COL) 3.0750E+03 3.0364E+03 .0294
 REM LIFE(ABS) 3.1291E+03 3.0712E+03 .0237
 SOURCE POINTS GENERATED 2957 LIFE(COL/ABS) 3.0538E+03 .0264 3.1459E+03 .0293 .9820

SOURCE DISTRIBUTION WRITTEN TO FILE SRCPT CYCLE = 8
 ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COLLISION) .811246 .799205 .0072 K(COL/ABS) .811043 .0090 .799381 .0111 .5346
 K(ABSORPTION) .831266 .822880 .0129 K(ABS/TK LN) .810604 .0080 .794159 .0054 .6878
 K(TRK LENGTH) .799300 .798328 .0039 K(TK LN/COL) .798766 .0053 .798094 .0045 .7684
 REM LIFE(COL) 3.0336E+03 3.0355E+03 .0208 K(COL/ABS/TK LN) .806804 .0071 .794368 .0109 .0109
 REM LIFE(ABS) 3.0297E+03 3.0609E+03 .0172 LIFE(COL/ABS) 3.0482E+03 .0188 3.0936E+03 .0200 .9655
 SOURCE POINTS GENERATED 3059

SOURCE DISTRIBUTION WRITTEN TO FILE SRCPT CYCLE = 9
 ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COLLISION) .810204 .801405 .0062 K(COL/ABS) .812404 .0071 .803152 .0086 .5067
 K(ABSORPTION) .825490 .823402 .0100 K(ABS/TK LN) .810672 .0062 .793886 .0041 .6678
 K(TRK LENGTH) .796401 .797943 .0031 K(TK LN/COL) .799674 .0042 .797623 .0036 .6113
 REM LIFE(COL) 2.9754E+03 3.0235E+03 .0166 K(COL/ABS/TK LN) .807583 .0056 .793877 .0082 .0082
 REM LIFE(ABS) 2.9955E+03 3.0478E+03 .0140 LIFE(COL/ABS) 3.0356E+03 .0152 3.0773E+03 .0157 .9657
 SOURCE POINTS GENERATED 2986

SOURCE DISTRIBUTION WRITTEN TO FILE SRCPT CYCLE = 10
 ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COLLISION) .828672 .805949 .0076 K(COL/ABS) .814519 .0064 .813324 .0077 .5029

K(ABSORPTION)	.825574	.823011	.0050	K(ABS/TK LN)	.816227	.0040	.817214	.0042	.0959
K(TRK LENGTH)	.784469	.809443	.0058	K(TK LN/COL)	.810441	.0051	.811217	.0052	.8131
REM LIFE(COL)	3.0664E+03	3.0836E+03	.0091	K(COL/ABS/TK LN)	.814631	.0039	.817009	.0049	
REM LIFE(ABS)	3.1050E+03	3.0917E+03	.0077	LIFE(COL/ABS)	3.0877E+03	.0083	3.1010E+03	.0074	.9624
SOURCE POINTS GENERATED	2896								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.833419		.813130		.0050	K(COL/ABS)	.818345	.0036	.818728
K(ABSORPTION)	.830135		.823559		.0046	K(ABS/TK LN)	.817329	.0039	.818693
K(TRK LENGTH)	.830972		.811099		.0057	K(TK LN/COL)	.812115	.0051	.812885
REM LIFE(COL)	3.2999E+03		3.1002E+03		.0099	K(COL/ABS/TK LN)	.815930	.0039	.818654
REM LIFE(ABS)	3.2718E+03		3.1056E+03		.0083	LIFE(COL/ABS)	3.1029E+03	.0091	3.1141E+03
SOURCE POINTS GENERATED	3131							.0075	.9733

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.812530		.813087		.0046	K(COL/ABS)	.817883	.0034	.818067
K(ABSORPTION)	.811233		.822679		.0044	K(ABS/TK LN)	.817200	.0036	.818230
K(TRK LENGTH)	.819792		.811720		.0053	K(TK LN/COL)	.812404	.0048	.812928
REM LIFE(COL)	3.1586E+03		3.1044E+03		.0093	K(COL/ABS/TK LN)	.815829	.0036	.817939
REM LIFE(ABS)	3.1622E+03		3.1096E+03		.0078	LIFE(COL/ABS)	3.1070E+03	.0085	3.1180E+03
SOURCE POINTS GENERATED	2958							.0070	.9737

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.821554		.813652		.0044	K(COL/ABS)	.817051	.0033	.816585
K(ABSORPTION)	.789252		.820450		.0049	K(ABS/TK LN)	.817077	.0034	.817366
K(TRK LENGTH)	.841483		.813704		.0055	K(TK LN/COL)	.813678	.0047	.813650
REM LIFE(COL)	3.1240E+03		3.1057E+03		.0086	K(COL/ABS/TK LN)	.815935	.0034	.816778
REM LIFE(ABS)	3.1350E+03		3.1113E+03		.0073	LIFE(COL/ABS)	3.1085E+03	.0079	3.1202E+03
SOURCE POINTS GENERATED	3071							.0066	.9734

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1000 year (mpc12s)

PROBID = 02/24/95 05:48:14
02/24/95 03:55:33

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59592	1.0068E+00	2.0752E+00	ESCAPE	2	3.2191E-05	7.9688E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.4858E-02	3.3281E-05	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59663	6.4535E-02	4.6977E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2269E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	146	1.9894E-03	1.5553E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9675E+00
				CAPTURE	0	6.9980E-01	3.2214E-02
				LOSS TO (N,XN)	73	9.9468E-04	8.4280E-03
				LOSS TO FISSION	0	3.0833E-01	6.8526E-02

TOTAL	59738	1.0737E+00	2.0768E+00	TOTAL	59738	1.0737E+00	2.0768E+00
NUMBER OF NEUTRONS BANKED	73			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0024E+00			ESCAPE	2.9564E+00	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.6543E+01			CAPTURE	3.1042E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3369491			CAPTURE OR ESCAPE	3.1041E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0010E+00	.0003		ANY TERMINATION	3.4404E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	112.45 MINUTES			MAXIMUM NUMBER EVER IN BANK	1		
COMPUTER TIME IN MCRUN	112.33 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.3049E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	40959386			MOST RANDOM NUMBERS USED WAS	9033	IN HISTORY	50649

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5816E-01 TO 1.2831E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26324	9725	3.3194E+00	1.1906E-04	3.7510E-01	7.3312E-01	1.0987E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	713215	59665	293409	4.1568E+00	7.5729E-04	7.5149E-01	8.8400E-01	2.5025E+00
33	34	2951	154	600	6.5609E-03	5.1162E-05	2.1662E-01	6.3253E-01	4.2633E+00
34	35	182	17	428	3.3381E-03	3.7606E-05	2.3104E-01	5.0216E-01	7.0720E-01
35	36	1273712	59665	5	7.7351E-05	6.5492E-04	7.1307E-01	8.8071E-01	3.4761E+03
36	37	309	17	28	2.0928E-04	4.2610E-05	1.9343E-01	5.4740E-01	7.2012E-01
37	38	1381294	59665	50236	7.5268E-01	6.3115E-04	7.0127E-01	8.8008E-01	4.1046E+00
38	39	350	18	159	1.2854E-03	3.5663E-05	1.8574E-01	5.1303E-01	6.8308E-01
39	40	2209088	59665	1390389	1.8469E+01	5.4606E-04	6.6795E-01	8.7762E-01	1.6485E+00
40	41	55800	30823	86167	1.1473E+00	4.0250E-04	6.1672E-01	8.7549E-01	1.5503E+00
41	42	10	5	22	1.8507E-04	5.1041E-05	2.4788E-01	5.6123E-01	8.0862E-01
42	43	118028	32549	3637	5.4424E-02	4.2361E-04	6.2627E-01	8.7678E-01	4.1247E+00
43	44	132191	34876	29080	3.8803E-01	4.2932E-04	6.2727E-01	8.7716E-01	1.5703E+00
44	45	144374	35845	3169	4.7498E-02	4.4031E-04	6.3299E-01	8.7812E-01	4.1229E+00
45	46	176121	40990	69638	9.3244E-01	4.4232E-04	6.3112E-01	8.7854E-01	1.5805E+00
46	47	7200	3318	7536	1.0105E-01	4.0813E-04	6.2724E-01	8.7594E-01	1.5646E+00
47	48	9574	3626	358	5.3453E-03	4.6028E-04	6.4591E-01	8.7460E-01	4.1245E+00
48	49	12522	4982	6462	8.5997E-02	4.4488E-04	6.4210E-01	8.7632E-01	1.5885E+00
49	50	33705	15155	65888	7.9531E-01	3.5049E-04	5.7285E-01	8.3032E-01	1.4850E+00
50	51	33894	14448	12527	1.5731E-01	3.9878E-04	5.7671E-01	8.1198E-01	2.0968E+00
51	52	33694	14097	2469	3.5663E-02	3.8590E-04	5.5940E-01	8.0673E-01	9.1813E+00
52	53	33902	14148	12723	1.5779E-01	3.8080E-04	5.5309E-01	8.0475E-01	2.0762E+00
53	54	163	49	1051	9.2362E-03	6.0320E-05	2.5939E-01	5.9151E-01	8.5741E-01
54	55	33233	14952	64747	7.7993E-01	3.6667E-04	5.7906E-01	8.2904E-01	1.4970E+00
55	56	33115	14222	12198	1.5251E-01	4.1952E-04	5.7848E-01	8.1167E-01	2.1147E+00
56	57	32769	13894	2397	3.4509E-02	4.0867E-04	5.7125E-01	8.0428E-01	9.1976E+00
57	58	32839	13924	12439	1.5312E-01	4.0235E-04	5.7954E-01	8.0330E-01	2.1086E+00
58	59	144	38	1075	9.8234E-03	4.9567E-05	2.1571E-01	6.1359E-01	8.1242E-01
59	60	51460	18553	90470	1.1321E+00	4.8173E-04	5.5704E-01	8.4685E-01	1.4991E+00
60	61	51170	17688	17539	2.2921E-01	6.7929E-04	5.7986E-01	8.4138E-01	2.2782E+00
61	62	194	50	931	8.6685E-03	4.2035E-05	1.5004E-01	6.1774E-01	7.1362E-01
62	63	51064	18554	87517	1.1097E+00	4.9782E-04	5.7251E-01	8.5288E-01	1.5236E+00
63	64	50668	17676	17167	2.2429E-01	7.1676E-04	5.9481E-01	8.4396E-01	2.2904E+00
64	65	322	65	1314	1.1733E-02	4.7835E-05	2.0389E-01	5.8848E-01	7.8044E-01
65	66	10320	5114	453867	4.1883E+00	5.4093E-05	2.5353E-01	6.1871E-01	8.3604E-01
66	67	10281	4000	14908	1.5723E-01	1.7970E-04	4.4820E-01	6.9548E-01	1.7929E+00
67	68	10276	4016	15153	1.6192E-01	1.8176E-04	4.2800E-01	7.0272E-01	1.8188E+00
68	70	33122	8891	10917	1.4266E-01	1.0231E-03	6.0042E-01	8.4470E-01	2.4075E+00
69	71	33277	8587	6104	9.1650E-02	1.1256E-03	6.0445E-01	8.4495E-01	8.7751E+00
70	72	17962	8389	56022	7.2605E-01	1.3922E-03	5.8796E-01	8.4263E-01	2.5104E+00
71	73	32918	8692	11156	1.4574E-01	9.2159E-04	5.6285E-01	8.3955E-01	2.3655E+00
72	74	33063	8387	6040	9.0058E-02	1.0017E-03	5.5647E-01	8.4013E-01	8.9719E+00
73	75	17760	8163	54769	7.1095E-01	1.3471E-03	5.7335E-01	8.3997E-01	2.4955E+00
74	76	117	40	2825	2.4990E-02	3.3626E-05	1.5056E-01	5.8238E-01	6.6823E-01
75	77	75	28	1274	1.1427E-02	3.6319E-05	1.2632E-01	5.9948E-01	6.8320E-01
76	80	10	4	39	3.6992E-04	5.9456E-04	4.7201E-01	6.2452E-01	2.6523E+00
77	81	3457	1512	9956	1.0807E-01	3.4212E-04	5.1699E-01	7.2748E-01	2.0463E+00
78	82	2167	892	12337	1.2907E-01	2.4963E-04	4.4814E-01	7.4543E-01	1.2831E+00
79	83	7	4	539	4.7554E-03	3.0625E-05	7.3981E-02	5.7784E-01	5.9820E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1606	693	4656	5.5460E-02	8.7856E-04	5.6516E-01	7.8642E-01	2.1826E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	994	466	7804	9.1258E-02	2.1628E-03	5.7089E-01	8.0507E-01	4.7186E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	391	220	46273	4.0089E-01	2.8661E-05	1.1042E-01	5.7136E-01	6.3018E-01
TOTAL		6943384	691216	3369491	4.1713E+01				

1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

	CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.2530E-01	-5.2530E-01
2	2	3.3391E-01	.0000E+00	.0000E+00	.0000E+00	-9.0528E-01	-5.7137E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6023E-02	-1.6023E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6016E-02	-5.6016E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5892E-02	-1.5892E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5489E-01	-1.5489E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6472E+00	-1.6472E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9886E+00	-1.9886E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1345E-01	-2.1345E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0897E-01	-2.0897E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7415E-01	-3.7415E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7545E-01	-3.7545E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8659E-02	-7.8659E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0127E-02	-8.0127E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5791E-02	-8.5791E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4403E-02	-7.4403E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.7227E-02	-6.7227E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1704E-02	-7.1704E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0029E-01	-1.0029E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9944E-02	-9.9944E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1989E-02	-9.1989E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4669E-02	-8.4669E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1333E-01	-1.1333E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0889E-01	-1.0889E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1032E-01	-1.1032E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0948E-01	-1.0948E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9727E-02	-9.9727E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3805E-02	-8.3805E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.2827E-02	-9.2827E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0140E-01	-1.0140E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8782E+01	-1.8782E+01
32	33	9.6294E+00	1.0068E+00	.0000E+00	.0000E+00	-9.4141E+00	1.2221E+00
33	34	3.1242E-02	.0000E+00	.0000E+00	.0000E+00	-2.9317E-02	1.9250E-03
34	35	1.6098E-03	.0000E+00	.0000E+00	.0000E+00	-1.4582E-03	1.5167E-04
35	36	1.8831E+01	.0000E+00	.0000E+00	.0000E+00	-1.8819E+01	1.2198E-02
36	37	2.7291E-03	.0000E+00	.0000E+00	.0000E+00	-2.7207E-03	8.3528E-06
37	38	2.0416E+01	.0000E+00	.0000E+00	.0000E+00	-2.0340E+01	7.6509E-02
38	39	3.1032E-03	.0000E+00	.0000E+00	.0000E+00	-3.0962E-03	6.9812E-06
39	40	3.2586E+01	.0000E+00	.0000E+00	.0000E+00	-1.0695E+01	2.1891E+01
40	41	8.2259E-01	.0000E+00	.0000E+00	.0000E+00	-8.1908E-01	3.5161E-03
41	42	9.5405E-05	.0000E+00	.0000E+00	.0000E+00	-9.4295E-05	1.1107E-06
42	43	1.7368E+00	.0000E+00	.0000E+00	.0000E+00	-1.7363E+00	5.3255E-04
43	44	1.9461E+00	.0000E+00	.0000E+00	.0000E+00	-1.9450E+00	1.1152E-03
44	45	2.1260E+00	.0000E+00	.0000E+00	.0000E+00	-2.1255E+00	4.6295E-04
45	46	2.5971E+00	.0000E+00	.0000E+00	.0000E+00	-1.0986E+00	1.4985E+00
46	47	1.0597E-01	.0000E+00	.0000E+00	.0000E+00	-6.3920E-02	4.2052E-02
47	48	1.4079E-01	.0000E+00	.0000E+00	.0000E+00	-1.3594E-01	4.8548E-03
48	49	1.8455E-01	.0000E+00	.0000E+00	.0000E+00	-7.2064E-02	1.1248E-01
49	50	4.7209E-01	.0000E+00	.0000E+00	.0000E+00	-2.6629E-01	2.0580E-01
50	51	4.6638E-01	.0000E+00	.0000E+00	.0000E+00	-4.4998E-01	1.6404E-02
51	52	4.5935E-01	.0000E+00	.0000E+00	.0000E+00	-4.5377E-01	5.5770E-03
52	53	4.6268E-01	.0000E+00	.0000E+00	.0000E+00	-1.9420E-01	2.6849E-01
53	54	1.6507E-03	.0000E+00	.0000E+00	.0000E+00	-1.1648E-04	1.5342E-03
54	55	4.6386E-01	.0000E+00	.0000E+00	.0000E+00	-2.6287E-01	2.0099E-01
55	56	4.5523E-01	.0000E+00	.0000E+00	.0000E+00	-4.3955E-01	1.5686E-02
56	57	4.4689E-01	.0000E+00	.0000E+00	.0000E+00	-4.4125E-01	5.6378E-03
57	58	4.4797E-01	.0000E+00	.0000E+00	.0000E+00	-1.8640E-01	2.6157E-01

TOTAL	1.0097E+02	1.0068E+00	.0000E+00	.0000E+00	-1.0097E+02	1.0068E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	.0000E+00	.0000E+00	5.0532E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0532E-04
34	35	.0000E+00	.0000E+00	2.5854E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5854E-05
35	36	.0000E+00	.0000E+00	-4.1465E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1465E-06
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	4.2228E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2228E-06
38	39	.0000E+00	.0000E+00	4.1145E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1145E-05
39	40	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
40	41	.0000E+00	.0000E+00	-1.3723E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3723E-04
41	42	.0000E+00	.0000E+00	-7.0644E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.0644E-05
42	43	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
43	44	.0000E+00	.0000E+00	-3.6837E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6837E-06
44	45	.0000E+00	.0000E+00	1.7025E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7025E-05
45	46	.0000E+00	.0000E+00	9.0145E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.0145E-06
46	47	.0000E+00	.0000E+00	-7.7881E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7881E-06
47	48	.0000E+00	.0000E+00	4.9278E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.9278E-08
48	49	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
49	50	.0000E+00	.0000E+00	4.7602E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.7602E-08
50	51	.0000E+00	.0000E+00	-6.9772E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9772E-05
51	52	.0000E+00	.0000E+00	-3.4004E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4004E-05
52	53	.0000E+00	.0000E+00	2.2129E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2129E-06
53	54	.0000E+00	.0000E+00	8.3142E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3142E-05
54	55	.0000E+00	.0000E+00	1.3722E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3722E-07
55	56	.0000E+00	.0000E+00	8.1262E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.1262E-05
56	57	.0000E+00	.0000E+00	-1.1524E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1524E-04
57	58	.0000E+00	.0000E+00	1.9596E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9596E-05
58	59	.0000E+00	.0000E+00	1.1850E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1850E-04
59	60	.0000E+00	.0000E+00	-8.3363E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3363E-06
60	61	.0000E+00	.0000E+00	8.5881E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5881E-05
61	62	.0000E+00	.0000E+00	8.2716E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.2716E-05
62	63	.0000E+00	.0000E+00	-8.3395E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3395E-06
63	64	.0000E+00	.0000E+00	3.5078E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5078E-05
64	65	.0000E+00	.0000E+00	1.8110E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8110E-05
65	66	.0000E+00	.0000E+00	4.9934E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.9934E-08
66	67	.0000E+00	.0000E+00	-5.3673E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3673E-05
67	68	.0000E+00	.0000E+00	-1.4206E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4206E-04
68	70	.0000E+00	.0000E+00	-7.3710E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3710E-05
69	71	.0000E+00	.0000E+00	-9.3363E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3363E-05
70	72	.0000E+00	.0000E+00	2.1527E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1527E-06
71	73	.0000E+00	.0000E+00	-5.8355E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.8355E-05
72	74	.0000E+00	.0000E+00	-6.4553E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.4553E-05
73	75	.0000E+00	.0000E+00	-4.6109E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6109E-05
74	76	.0000E+00	.0000E+00	6.2702E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.2702E-05
75	77	.0000E+00	.0000E+00	1.0363E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0363E-07
76	78	.0000E+00	.0000E+00	5.2607E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2607E-08
77	80	.0000E+00	.0000E+00	-3.0848E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.0848E-06
78	81	.0000E+00	.0000E+00	2.3900E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3900E-05
79	82	.0000E+00	.0000E+00	3.8343E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8343E-05
80	83	.0000E+00	.0000E+00	2.7719E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.7719E-08
81	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
82	85	.0000E+00	.0000E+00	2.4114E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4114E-05
83	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	2.1262E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1262E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-3.4515E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4515E-05
TOTAL		.0000E+00	.0000E+00	3.2304E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2304E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS				PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4416E-02	.0000E+00	-1.4416E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.8622E-03	.0000E+00	-4.2415E-01	-9.3108E-04	-3.0833E-01
33	34	.0000E+00	.0000E+00	-1.3377E-04	.0000E+00	-1.3377E-04
34	35	.0000E+00	.0000E+00	-1.8427E-05	.0000E+00	-1.8427E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.2146E-06	.0000E+00	-1.2146E-06
37	38	6.7020E-05	.0000E+00	-6.6197E-03	-3.3510E-05	-6.5862E-03
38	39	.0000E+00	.0000E+00	-6.9812E-06	.0000E+00	-6.9812E-06
39	40	.0000E+00	.0000E+00	-4.8588E-02	.0000E+00	-4.8588E-02
40	41	.0000E+00	.0000E+00	-3.4455E-03	.0000E+00	-3.4455E-03
41	42	.0000E+00	.0000E+00	-1.1107E-06	.0000E+00	-1.1107E-06
42	43	.0000E+00	.0000E+00	-5.2886E-04	.0000E+00	-5.2886E-04
43	44	.0000E+00	.0000E+00	-1.1322E-03	.0000E+00	-1.1322E-03
44	45	3.2068E-05	.0000E+00	-4.8800E-04	-1.6034E-05	-4.7197E-04
45	46	.0000E+00	.0000E+00	-2.6907E-03	.0000E+00	-2.6907E-03
46	47	.0000E+00	.0000E+00	-3.0250E-04	.0000E+00	-3.0250E-04
47	48	.0000E+00	.0000E+00	-5.5058E-05	.0000E+00	-5.5058E-05
48	49	.0000E+00	.0000E+00	-2.4532E-04	.0000E+00	-2.4532E-04
49	50	.0000E+00	.0000E+00	-2.4791E-03	.0000E+00	-2.4791E-03
50	51	2.8106E-05	.0000E+00	-1.0590E-02	-1.4053E-05	-1.0576E-02
51	52	.0000E+00	.0000E+00	-6.2686E-04	.0000E+00	-6.2686E-04

52	53	.0000E+00	.0000E+00	-1.1016E-02	.0000E+00	.0000E+00	-1.1016E-02
53	54	.0000E+00	.0000E+00	-4.7214E-05	.0000E+00	.0000E+00	-4.7214E-05
54	55	.0000E+00	.0000E+00	-2.3805E-03	.0000E+00	.0000E+00	-2.3805E-03
55	56	.0000E+00	.0000E+00	-1.0128E-02	.0000E+00	.0000E+00	-1.0128E-02
56	57	.0000E+00	.0000E+00	-5.7633E-04	.0000E+00	.0000E+00	-5.7633E-04
57	58	.0000E+00	.0000E+00	-1.0600E-02	.0000E+00	.0000E+00	-1.0600E-02
58	59	.0000E+00	.0000E+00	-5.3564E-05	.0000E+00	.0000E+00	-5.3564E-05
59	60	.0000E+00	.0000E+00	-2.8513E-03	.0000E+00	.0000E+00	-2.8513E-03
60	61	.0000E+00	.0000E+00	-1.0629E-02	.0000E+00	.0000E+00	-1.0629E-02
61	62	.0000E+00	.0000E+00	-4.5312E-05	.0000E+00	.0000E+00	-4.5312E-05
62	63	.0000E+00	.0000E+00	-2.8096E-03	.0000E+00	.0000E+00	-2.8096E-03
63	64	.0000E+00	.0000E+00	-1.0552E-02	.0000E+00	.0000E+00	-1.0552E-02
64	65	.0000E+00	.0000E+00	-5.9967E-05	.0000E+00	.0000E+00	-5.9967E-05
65	66	.0000E+00	.0000E+00	-2.1268E-02	.0000E+00	.0000E+00	-2.1268E-02
66	67	.0000E+00	.0000E+00	-1.5710E-02	.0000E+00	.0000E+00	-1.5710E-02
67	68	.0000E+00	.0000E+00	-1.5944E-02	.0000E+00	.0000E+00	-1.5944E-02
68	70	.0000E+00	.0000E+00	-5.1759E-03	.0000E+00	.0000E+00	-5.1759E-03
69	71	.0000E+00	.0000E+00	-6.5675E-04	.0000E+00	.0000E+00	-6.5675E-04
70	72	.0000E+00	.0000E+00	-2.1020E-02	.0000E+00	.0000E+00	-2.1020E-02
71	73	.0000E+00	.0000E+00	-5.3509E-03	.0000E+00	.0000E+00	-5.3509E-03
72	74	.0000E+00	.0000E+00	-6.8779E-04	.0000E+00	.0000E+00	-6.8779E-04
73	75	.0000E+00	.0000E+00	-2.0661E-02	.0000E+00	.0000E+00	-2.0661E-02
74	76	.0000E+00	.0000E+00	-1.3138E-04	.0000E+00	.0000E+00	-1.3138E-04
75	77	.0000E+00	.0000E+00	-5.9679E-05	.0000E+00	.0000E+00	-5.9679E-05
76	80	.0000E+00	.0000E+00	-2.8553E-05	.0000E+00	.0000E+00	-2.8553E-05
77	81	.0000E+00	.0000E+00	-8.0173E-03	.0000E+00	.0000E+00	-8.0173E-03
78	82	.0000E+00	.0000E+00	-4.2194E-04	.0000E+00	.0000E+00	-4.2194E-04
79	83	.0000E+00	.0000E+00	-2.5110E-05	.0000E+00	.0000E+00	-2.5110E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.3575E-03	.0000E+00	.0000E+00	-2.3575E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9440E-03	.0000E+00	.0000E+00	-1.9440E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0799E-03	.0000E+00	.0000E+00	-2.0799E-03

TOTAL 1.9894E-03 .0000E+00 -6.9980E-01 -9.9468E-04 -3.0833E-01 -1.0071E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	293928 17149	3.1117E+00 2.0771E-01	1.4320E-02 9.6561E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7485E-01 3.7686E-04 5.7949E-05 2.1480E-06 9.1866E-06 7.0166E-05 7.9842E-06 1.3947E-07 1.3898E-04 3.2601E-03 1.6500E-03 3.1606E-01 5.7233E-04 3.4202E-08 1.9604E-03 7.0812E-04 6.8518E-10 1.5630E-04 9.6691E-05 7.6368E-09 3.0792E-05 4.0372E-07	97941 829 152 1074 532 262 2184 1 252 16414 1359 146162 1471 0 19333 4347 0 312 677 0 102 5	1.4383E+00 1.0513E-02 2.0601E-03 1.1912E-02 5.9441E-03 3.3421E-03 2.3246E-02 1.6999E-05 3.2248E-03 3.1500E-01 1.9990E-02 2.1517E+00 1.9037E-02 .0000E+00 3.8608E-01 5.7038E-02 .0000E+00 4.4350E-03 8.4154E-03 3.7815E-06 1.4348E-03 1.3571E-04	1.2055E-03 9.1047E-03 1.7187E-03 1.1777E-02 5.8689E-03 2.8778E-03 2.3102E-02 1.0899E-06 2.0344E-03 2.8211E-02 6.5600E-03 1.8345E-01 1.5121E-02 .0000E+00 7.1670E-02 4.9879E-02 .0000E+00 2.9392E-03 7.4515E-03 .0000E+00 1.1700E-03 9.2660E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2367E-05 6.0546E-05 1.3984E-01 3.2288E-04 2.0552E-02 1.9698E-04 .0000E+00 1.4691E-01 2.5242E-04 .0000E+00 4.0700E-05 8.7001E-05 .0000E+00 1.5186E-05 3.9119E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.9593E-05 .0000E+00 9.1149E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	3 1 2 585 9	4.0572E-05 1.2369E-05 3.1757E-05 6.3616E-03 1.1466E-04	5.6724E-10 3.8971E-06 3.4387E-06 1.1841E-04 8.0271E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	413 15	3.2377E-03 1.0035E-04	1.8424E-05 3.6835E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	5	7.7351E-05	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	28 0	2.0928E-04 .0000E+00	1.2146E-06 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	228 87 206 49239 476	3.3706E-03 1.3065E-03 2.8711E-03 7.3804E-01 7.0944E-03	1.8076E-06 7.0864E-05 1.4526E-04 6.2418E-03 1.5992E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 3.3510E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	155 4	1.2483E-03 3.7123E-05	6.9800E-06 1.2438E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1274883 115506	1.6785E+01 1.6840E+00	4.7358E-02 1.2307E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	79511 6656	1.0507E+00 9.6573E-02	3.3687E-03 7.6778E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	21 1	1.7742E-04 7.6455E-06	1.1105E-06 2.6842E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	11 2 12 3566 46	1.4434E-04 3.2294E-05 1.8744E-04 5.3387E-02 6.7302E-04	1.4906E-09 6.2315E-08 3.9912E-06 5.0368E-04 2.1126E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26815 2265	3.5460E-01 3.3433E-02	1.1061E-03 2.6083E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	8 6 12 3114 29	1.2043E-04 8.3332E-05 1.5768E-04 4.6694E-02 4.4254E-04	1.2885E-09 7.4618E-06 8.5976E-06 4.5701E-04 1.4928E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.6034E-05 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	64065 5573	8.5105E-01 8.1387E-02	2.6201E-03 7.0592E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6969 567	9.2632E-02 8.4166E-03	2.9805E-04 4.4561E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 1 0 351 4	3.7167E-05 1.6775E-05 .0000E+00 5.2202E-03 7.1089E-05	5.5478E-13 4.2129E-08 .0000E+00 5.4040E-05 9.7614E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5988 474	7.9245E-02 6.7526E-03	2.4100E-04 4.3189E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	61104 4784	7.2960E-01 6.5707E-02	2.4161E-03 6.2991E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	10 40 50 6 1 1528 543 7864 2327 158	1.2652E-04 4.2839E-04 6.6566E-04 8.9152E-05 1.6078E-05 2.0181E-02 7.8862E-03 9.6704E-02 2.8967E-02 2.2487E-03	2.6029E-08 2.3207E-05 1.3081E-05 2.5989E-07 3.5980E-08 1.9606E-03 9.6273E-04 5.5646E-03 1.7705E-03 2.9528E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.4053E-05 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2465 4	3.5620E-02 4.3370E-05	6.2188E-04 4.9732E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	10 56 67 4 2 1483	1.3503E-04 6.7282E-04 9.3485E-04 5.7280E-05 1.5903E-05 1.9149E-02	3.3745E-08 3.6372E-05 1.0715E-05 1.9449E-06 3.5352E-06 2.0378E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	509	7.1139E-03	1.1145E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8025	9.8200E-02	5.6673E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2384	2.9070E-02	1.8089E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	183	2.4379E-03	3.3481E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	992	8.6647E-03	4.7198E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	59	5.7151E-04	1.5601E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	59993	7.1477E-01	2.3275E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4754	6.5154E-02	5.2954E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	13	1.3739E-04	2.6282E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	3.7333E-04	3.0522E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	7.2160E-04	8.0341E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	8.4089E-06	2.7046E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1415	1.8660E-02	1.7992E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	507	7.3527E-03	8.8096E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7715	9.4794E-02	5.3301E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2305	2.8306E-02	1.7560E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	157	2.1585E-03	3.2239E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2394	3.4455E-02	5.7581E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	3	5.4415E-05	5.1531E-07	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	6	9.3673E-05	1.0181E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	3.7986E-04	3.0688E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	8.3362E-04	7.3742E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.6693E-05	3.5949E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1487	1.9147E-02	1.9160E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	520	7.3828E-03	9.5713E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7789	9.4071E-02	5.4925E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2370	2.8826E-02	1.8718E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	169	2.3468E-03	3.2447E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1025	9.2818E-03	5.3548E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	50	5.4169E-04	1.6710E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	83248	1.0307E+00	2.7924E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7222	1.0135E-01	5.8933E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	15	2.2721E-04	3.0912E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	76	9.6659E-04	3.5145E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	70	1.0196E-03	7.5323E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.6655E-05	1.1114E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5573E-05	8.7967E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2174	2.9754E-02	2.0166E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	840	1.2304E-02	9.5250E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10843	1.3896E-01	5.4585E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3273	4.2441E-02	1.7749E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	241	3.4505E-03	3.8141E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	888	8.2384E-03	4.5302E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	43	4.3001E-04	1.0812E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	80482	1.0100E+00	2.7501E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7035	9.9700E-02	5.9451E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	6	9.5852E-05	5.0341E-09	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	59	7.4887E-04	4.5228E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	93	1.2756E-03	1.3095E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0680E-04	8.5581E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5098E-05	5.2369E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2115	2.8938E-02	1.9522E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	820	1.2023E-02	9.7603E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10629	1.3618E-01	5.4170E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3199	4.1430E-02	1.7402E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	237	3.4729E-03	4.0642E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1244	1.1081E-02	5.9948E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	70	6.5247E-04	1.9600E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	433069	3.9753E+00	2.1202E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20798	2.1302E-01	6.6397E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	12	1.2393E-04	2.0960E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	59	6.0791E-04	4.2293E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	53	6.6020E-04	1.4836E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.9002E-05	1.9216E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.7238E-05	3.9521E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1575	1.7475E-02	2.7872E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	487	6.1306E-03	1.4810E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9656	1.0006E-01	8.4120E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2908	3.0245E-02	2.6917E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	151	1.8063E-03	2.7634E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	12	1.2408E-04	4.0731E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	5.5365E-04	3.5333E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	64	8.5432E-04	1.2288E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.4066E-05	7.5661E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.5657E-05	4.6488E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1598	1.8017E-02	2.7161E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	477	5.9356E-03	1.5970E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9885	1.0308E-01	8.6392E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2909	3.1468E-02	2.5898E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	154	1.8129E-03	3.4950E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	12	1.7068E-04	5.4126E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	4.6102E-04	1.4961E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	58	8.4721E-04	2.9517E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.7287E-05	1.0223E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	5.6246E-06	1.1009E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1395	1.9342E-02	9.0460E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	513	7.4532E-03	4.5247E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6698	8.5745E-02	2.6947E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2051	2.6434E-02	9.2173E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	2.1502E-03	1.8240E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6096	9.1533E-02	6.5337E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.1747E-04	3.3755E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	41	5.5875E-04	2.6899E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	182	2.3140E-03	5.1144E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	303	4.4335E-03	2.3257E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	24	3.4359E-04	1.3473E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	10	1.5041E-04	4.8301E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7207	9.9723E-02	3.7137E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2438	3.4816E-02	2.0033E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34196	4.3256E-01	1.0631E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10760	1.3889E-01	3.4631E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	861	1.2261E-02	1.1281E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	5	6.8844E-05	2.5991E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	5.2359E-04	2.1921E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	58	7.8632E-04	4.8488E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.8330E-05	5.7929E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1414	1.9551E-02	9.3130E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	508	7.3000E-03	4.4803E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6883	8.7964E-02	2.8195E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2095	2.7334E-02	8.8074E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	147	2.1426E-03	2.4396E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6033	8.9968E-02	6.8290E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	8.9671E-05	4.8850E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	28	4.0039E-04	1.5301E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	163	2.0554E-03	5.1646E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	285	4.1941E-03	1.7188E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	25	3.3366E-04	2.5187E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0982E-04	4.6275E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7085	9.8173E-02	3.6053E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2433	3.5138E-02	1.9682E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33532	4.2449E-01	1.0487E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10374	1.3414E-01	3.4355E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	837	1.1907E-02	1.0888E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2710	2.3829E-02	1.3134E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	115	1.1614E-03	3.7100E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	1208	1.0764E-02	5.9659E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	66	6.6213E-04	1.9485E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5	6.0874E-05	2.7494E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	30	2.7336E-04	2.3844E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	4	3.5688E-05	1.9603E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	5.2829E-05	4.5052E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	3.0100E-04	1.9214E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	23	3.0844E-04	2.7045E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.7973E-05	1.5587E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.9374E-05	2.1644E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1162	1.3397E-02	1.4793E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	324	4.2055E-03	7.3305E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6325	6.7061E-02	4.1944E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1961	2.1229E-02	1.3792E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	119	1.4364E-03	2.0713E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11575	1.1970E-01	4.1528E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	762	9.3691E-03	6.6646E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	522	4.5862E-03	2.5104E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	17	1.6920E-04	5.1611E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	2	2.4108E-05	7.4229E-10	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	3	4.7326E-05	2.9359E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	11	1.3954E-04	1.2742E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	32	3.5081E-04	6.7154E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	658	8.3187E-03	4.6110E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	88	1.2570E-03	7.7564E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1079	1.2637E-02	4.2665E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2630	3.0632E-02	1.1866E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	93	1.2201E-03	5.8501E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	60	8.3412E-04	7.8711E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	43	5.2938E-04	1.8646E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	15	2.1276E-04	5.3215E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	1	1.2911E-05	2.4154E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	124	1.7052E-03	8.3799E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7621	8.8798E-02	1.8597E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	44287	3.8214E-01	2.0789E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1986	1.8755E-02	1.0006E-06	.0000E+00	.0000E+00
TOTAL				3369491	4.2018E+01	6.9980E-01	3.0833E-01	9.9468E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2535123	3.0368E+01	1.0374E-01	.0000E+00	.0000E+00
		2004.50C		5	7.7351E-05	.0000E+00	.0000E+00	.0000E+00
		6000.50C		219	2.8687E-03	2.3099E-07	.0000E+00	.0000E+00
		7014.50C		862	1.0386E-02	4.3767E-04	.0000E+00	.0000E+00
		8016.50C		294164	4.1377E+00	3.0254E-03	.0000E+00	.0000E+00

13027.50C	16991	2.5162E-01	2.5340E-03	.0000E+00	.0000E+00
14000.50C	1260	1.7887E-02	1.3971E-04	.0000E+00	.0000E+00
15031.50C	96	1.3218E-03	1.0717E-05	.0000E+00	.0000E+00
16032.50C	32	4.5079E-04	2.6298E-05	.0000E+00	.0000E+00
22000.50C	32	3.5081E-04	6.7154E-05	.0000E+00	.0000E+00
24000.50C	32398	4.3134E-01	2.8366E-02	.0000E+00	1.4053E-05
25055.50C	11131	1.5800E-01	1.4688E-02	.0000E+00	.0000E+00
26000.55C	169002	2.0648E+00	8.3279E-02	.0000E+00	.0000E+00
28000.50C	51550	6.3945E-01	2.7273E-02	.0000E+00	.0000E+00
29000.50C	115	1.5250E-03	7.2250E-05	.0000E+00	.0000E+00
40000.50C	56855	8.4970E-01	7.3750E-03	.0000E+00	4.9544E-05
42000.50C	3624	5.0466E-02	5.6198E-03	.0000E+00	.0000E+00
45103.50C	829	1.0513E-02	9.1047E-03	.0000E+00	.0000E+00
47109.50C	152	2.0601E-03	1.7187E-03	.0000E+00	.0000E+00
50000.35C	564	8.3957E-03	2.0498E-04	.0000E+00	.0000E+00
62149.50C	1074	1.1912E-02	1.1777E-02	.0000E+00	.0000E+00
63151.55C	532	5.9441E-03	5.8689E-03	.0000E+00	.0000E+00
63153.55C	262	3.3421E-03	2.8778E-03	.0000E+00	.0000E+00
64155.50C	2184	2.3246E-02	2.3102E-02	.0000E+00	.0000E+00
92233.50C	1	1.6999E-05	1.0899E-06	1.2367E-05	.0000E+00
92234.50C	252	3.2248E-03	2.0344E-03	6.0546E-05	.0000E+00
92235.50C	16414	3.1500E-01	2.8211E-02	1.3984E-01	1.9593E-05
92236.50C	1359	1.9990E-02	6.5600E-03	3.2288E-04	.0000E+00
92238.50C	146162	2.1517E+00	1.8345E-01	2.0552E-02	9.1149E-04
93237.55C	1471	1.9037E-02	1.5121E-02	1.9698E-04	.0000E+00
94238.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94239.55C	19333	3.8608E-01	7.1670E-02	1.4691E-01	.0000E+00
94240.50C	4347	5.7038E-02	4.9879E-02	2.5242E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	312	4.4350E-03	2.9392E-03	4.0700E-05	.0000E+00
95241.50C	677	8.4154E-03	7.4515E-03	8.7001E-05	.0000E+00
95242.50C	0	3.7815E-06	.0000E+00	.0000E+00	.0000E+00
95243.50C	102	1.4348E-03	1.1700E-03	1.5186E-05	.0000E+00
96245.35C	5	1.3571E-04	9.2660E-06	3.9119E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59592 CTM = 112.33

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 112.47 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 05:48:15

PROBID = 02/24/95 03:55:33

1MCNP VERSION 4A-B LD=10/04/91

02/24/95 05:48:15

PROBID = 02/24/95 05:48:15

INP=mpc12t OUTP=mpc12t.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/5000 year (mpc12t)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1910-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117-      77      1  -1.0000      -58 2 55 4 -6 -9 3  IMP:N=1  $ WATER ABOVE BASKET
118-      C      SS316L MPC LID
119-      80      8  -8.2380      1  2  -9  6  -7      IMP:N=1
120-      C      SS316L MPC LINER
121-      81      8  -8.2380      9 -10  1  2  3 -7  IMP:N=1
122-      C      GAP SS316L/INNER 825 BARRIER
123-      82      1  -1.0000      10 -11  1  2  3 -71  IMP:N=1
124-      C      GAP BETWEEN MPC LID AND INNER BARRIER LID
125-      83      1  -1.0000      -10 1 2 7  -71  IMP:N=1
126-      C      INNER BARRIER LID - ALLOY 825
127-      84      5  -8.1400      1  2 -11 71  -8      IMP:N=1
128-      C      INNER BARRIER - ALLOY 825
129-      85      5  -8.1400      11 -12  1  2  3 -8  IMP:N=1
130-      C      GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131-      86      1  -1.0000      8  -72  -12  1  2  IMP:N=1
132-      C      OUTER BARRIER LID A516 CARBON STEEL
133-      87      7  -7.832      -12 72 -73  1  2  IMP:N=1
134-      C      OUTER BARRIER - A516 CARBON STEEL
135-      88      7  -7.832      1 2 3 -73 12 -70  IMP:N=1
136-      C      WATER, ENDS
137-      89      1  -1.0000      1  2  73 -80 -81      IMP:N=1
138-      C      WATER, SIDE
139-      90      1  -1.0000      1  2  3 70 -73 -81  IMP:N=1
140-      C      OUTSIDE WORLD
141-      91      0  -1:-2:-3:80:81  IMP:N=0
142-
143-      C      SURFACE SPECIFICATIONS
144-      1*      PX      0.0
145-      2*      PY      0.00
146-      3*      PZ      0.00
147-      4      PZ 203.2000      $ TOP ACTIVE FUEL
148-      5      PZ 222.2500      $ TOP FUEL HARDWARE
149-      6      PZ 229.2500      $ TOP FUEL REGION
150-      7      PZ 231.7500      $ TOP ALLOY 825 LID
151-      8      PZ 248.8500      $ TOP INNER BARRIER ALLOY 825 LID
152-      9      CZ 60.7949      $ ID OF WASTE CONTAINER
153-      10     CZ 63.0174      $ OD OF ALLOY 825 CONTAINER
154-      11     CZ 64.5250      $ ID OF INNER BARRIER ALLOY 825
155-      12     CZ 66.5250      $ OD OF INNER BARRIER ALLOY 825
156-      C      PIN LATTICE BOUNDS
157-      13     PX 0.72135
158-      14     PX -0.72135
159-      15     PY 0.72135
160-      16     PY -0.72135
161-      C      FUEL ROD
162-      17     CZ 0.468122
163-      18     CZ 0.478790
164-      19     CZ 0.546100
165-      C      CONTROL ROD/GUIDE TUBE
166-      20     CZ 0.49022  $ EXCESSED FOR CURRENT DCRA
167-      21     CZ 0.50292
168-      22     CZ 0.56007
169-      23     CZ 0.63246
170-      24     CZ 0.67310
171-      C      INSTRUMENTATION TUBE
172-      25     CZ 0.56007
173-      26     CZ 0.62611
174-      C      CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175-      27     PX 12.80923
176-      28     PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	PWR: 3.75% U-235 - 37 GWd/MTU - 5000 YEAR DECAY								
331-	M2	8016.50C	4.8528E-02							
332-		45103.50C	2.7099E-05							
333-		47109.50C	4.1671E-06							
334-		62149.50C	1.5447E-07							
335-		63151.55C	6.6099E-07							
336-		63153.55C	5.0456E-06							
337-		64155.50C	5.7414E-07							
338-		92233.50C	7.0211E-08							
339-		92234.50C	9.8977E-06							
340-		92235.50C	2.5007E-04							
341-		92236.50C	1.3631E-04							
342-		92238.50C	2.2727E-02							
343-		93237.55C	4.8032E-05							
344-		94238.50C	7.4585E-18							
345-		94239.55C	1.2633E-04							
346-		94240.50C	3.3322E-05							
347-		94241.50C	3.5557E-11							
348-		94242.50C	1.1162E-05							
349-		95241.50C	1.2645E-08							
350-		95242.50C	6.5804E-18							
351-		95243.50C	1.5204E-06							
352-		96245.35C	2.0954E-08							
353-	C	He AT 10 ATM DENSITY=1.785E-3 GM/CC								
354-	M3	2004.50C	1.0							
355-	C	ZIRCALOY-4								
356-	M4	8016.50C	-0.0012	24000.50C	-0.0010	26000.55C	-0.0020			

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357-      40000.50C -0.9818  50000.35C -0.0140
358-      C      ALLOY 825
359-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
360-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
361-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
362-      29000.50C -0.0250  42000.50C -0.0300
363-      C      1100 ALUMINUM ALLOY
364-      M6      13027.50C -0.99880  29000.50C -0.00120
365-      C      A516 CARBON STEEL
366-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
367-      16032.50C -0.00035  25055.50C -0.0090
368-      26000.55C -0.98535
369-      C      SS316L
370-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
371-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
372-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
373-      42000.50C -0.02500
374-      C      TALLIES
375-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.

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SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3071
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3071
 POINTS AFTER EXPANSION OR CONTRACTION 3007
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.190945E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001, .66667	8016, .33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:		LWTR.01T			
2	8016, .67485	45103, .00038	47109, .00006	62149, .00000	
	63151, .00001	63153, .00007	64155, .00001	92233, .00000	
	92234, .00014	92235, .00348	92236, .00190	92238, .31605	
	93237, .00067	94238, .00000	94239, .00176	94240, .00046	
	94241, .00000	94242, .00016	95241, .00000	95242, .00000	
	95243, .00002	96245, .00000			
3	2004, 1.00000				
4	8016, .00681	24000, .00175	26000, .00325	40000, .97748	
	50000, .01071				
5	6000, .00234	13027, .00417	14000, .01001	16032, .00053	
	22000, .01057	24000, .23247	25055, .01023	26000, .28763	

6	28000, .40235	29000, .02212	42000, .01758		
7	13027, .99949	29000, .00051			
8	6000, .01011	14000, .00541	15031, .00062	16032, .00060	
	25055, .00905	26000, .97421			
	6000, .00140	7014, .00399	14000, .01493	15031, .00081	
	16032, .00052	24000, .18282	25055, .02036	26000, .64626	
	28000, .11433	42000, .01457			

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001, .11191	8016, .88809			
2	8016, .12250	45103, .00044	47109, .00007	62149, .00000	
	63151, .00002	63153, .00012	64155, .00001	92233, .00000	
	92234, .00037	92235, .00928	92236, .00508	92238, .85380	
	93237, .00180	94238, .00000	94239, .00477	94240, .00126	
	94241, .00000	94242, .00043	95241, .00000	95242, .00000	
	95243, .00006	96245, .00000			
3	2004, 1.00000				
4	8016, .00120	24000, .00100	26000, .00200	40000, .98180	
	50000, .01400				
5	6000, .00050	13027, .00200	14000, .00499	16032, .00030	
	22000, .00898	24000, .21446	25055, .00998	26000, .28499	
	28000, .41895	29000, .02494	42000, .02993		
6	13027, .99880	29000, .00120			
7	6000, .00220	14000, .00275	15031, .00035	16032, .00035	
	25055, .00900	26000, .98535			
8	6000, .00030	7014, .00101	14000, .00758	15031, .00045	
	16032, .00030	24000, .17172	25055, .02020	26000, .65197	
	28000, .12121	42000, .02525			

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19100E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19100E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1SURFACES 3.11148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80		PZ	3.1235000E+02
72	81		CZ	1.0652500E+02
73	2040	1001	PX	2.5991819E+01
74	2042	1001	PX	2.1437590E+00
75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

PRINT TABLE 72

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396)	79/08/30.
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WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/5000 year (mpc12t)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-1.365E-01	-2.534E-01	7.534E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.977E-01	9.521E-01
2	1.293E-01	-5.143E-02	6.274E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.977E-01	7.505E-01
3	2.333E-01	4.670E-02	6.291E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.977E-01	9.657E-01
4	-3.915E-01	-2.300E-01	6.866E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.977E-01	2.363E+00
5	-1.717E-01	-2.209E-01	4.148E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.977E-01	7.029E-01
6	4.066E-01	8.593E-02	3.599E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.977E-01	2.468E+00
7	-4.210E-01	-1.652E-01	3.500E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.977E-01	2.317E+00
8	3.450E-01	-3.698E-02	9.570E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.977E-01	7.080E-01
9	2.883E-01	-8.880E-02	9.603E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.977E-01	1.196E+00
10	-1.661E-01	4.065E-01	5.377E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.977E-01	3.844E-01
11	2.911E-01	1.799E-02	7.906E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.977E-01	5.649E-01
12	8.830E-02	4.323E-01	8.068E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.977E-01	1.377E+00
13	3.442E-01	3.050E-01	1.325E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.977E-01	2.870E+00
14	-3.132E-01	-2.127E-01	1.250E+02	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.977E-01	3.681E+00
15	1.094E-01	-3.244E-01	1.146E+02	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.977E-01	4.112E-02
16	-2.164E-01	1.176E-01	1.127E+02	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.977E-01	1.143E+00
17	2.339E-01	-4.921E-03	1.096E+02	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.977E-01	1.607E+00
18	3.344E-02	-3.223E-01	4.910E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.977E-01	1.511E-01
19	-3.560E-01	-1.437E-01	4.972E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.977E-01	1.331E+00
20	-2.677E-01	1.979E-01	4.877E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.977E-01	1.502E+00
21	-2.699E-01	3.729E-01	6.896E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.977E-01	8.577E+00
22	3.454E-01	-7.093E-02	5.357E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.977E-01	1.507E+00
23	-1.465E-01	-2.030E-01	5.317E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.977E-01	6.928E-01
24	3.684E-01	2.007E-01	3.475E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.977E-01	1.542E+00
25	-2.154E-01	2.294E-01	3.330E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.977E-01	1.476E+00
26	-3.772E-01	9.405E-02	3.374E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.977E-01	7.342E+00
27	-2.686E-01	2.170E-01	2.695E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.977E-01	1.902E+00
28	-7.115E-02	-1.094E-01	2.282E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.977E-01	3.402E+00
29	-2.770E-01	-1.662E-01	2.003E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.977E-01	6.220E-01
30	4.037E-01	9.106E-02	3.314E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.977E-01	1.168E+00
31	1.144E-01	-3.443E-01	3.389E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.977E-01	2.342E+00
32	2.428E-02	1.456E-01	3.645E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.977E-01	1.724E+00
33	2.960E-01	2.056E-02	1.239E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.977E-01	3.030E+00
34	-2.410E-01	-2.027E-01	2.606E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.977E-01	2.716E-01
35	-2.818E-01	2.941E-01	5.221E+00	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.977E-01	7.168E-01
36	6.700E-02	-1.421E-01	3.546E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.977E-01	4.011E+00
37	-4.199E-01	1.791E-01	3.487E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.977E-01	2.499E+00
38	8.375E-02	1.537E-01	7.785E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.977E-01	4.421E-01
39	-8.910E-02	-2.208E-01	6.507E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.977E-01	1.583E+00
40	2.993E-02	6.556E-02	6.167E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.977E-01	1.882E+00
41	2.335E-02	3.942E-01	3.520E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.977E-01	7.301E-01
42	-1.685E-01	-4.193E-02	6.519E+00	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.977E-01	6.345E-01
43	-1.803E-01	-2.462E-01	1.922E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.977E-01	2.182E+00
44	1.117E-01	3.548E-01	2.234E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.977E-01	2.897E-01
45	-4.446E-01	-7.166E-02	2.788E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.977E-01	3.985E+00
46	2.021E-01	-9.071E-02	3.040E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.977E-01	9.519E-01
47	3.490E-01	-2.063E-01	3.070E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.977E-01	2.928E+00
48	1.563E-02	4.224E-01	2.190E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.977E-01	2.570E+00
49	-2.534E-01	1.695E-01	3.086E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.977E-01	8.785E-01

50 -1.489E-01 -4.097E-01 7.337E+01 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.977E-01 1.733E+00

CYCLE 1 K(COLLISION) .837263 REMOVAL LIFETIME(ABS) 3.1498E+03 SOURCE POINTS GENERATED 2533

CYCLE 2 K(COLLISION) .835683 REMOVAL LIFETIME(ABS) 3.1783E+03 SOURCE POINTS GENERATED 3079

CYCLE 3 K(COLLISION) .808570 REMOVAL LIFETIME(ABS) 2.9640E+03 SOURCE POINTS GENERATED 2892

CYCLE 4 K(COLLISION) .835180 REMOVAL LIFETIME(ABS) 3.1395E+03 SOURCE POINTS GENERATED 3100

CYCLE 5 K(COLLISION) .837929 REMOVAL LIFETIME(ABS) 3.0955E+03 SOURCE POINTS GENERATED 2947

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .819119 REMOVAL LIFETIME(ABS) 3.3132E+03 SOURCE POINTS GENERATED 2961

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.833730	.826424	.0088	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	.856840	.843196	.0162	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	.831356	.816230	.0185	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	2.9051E+03	3.0990E+03	.0626				
REM LIFE(ABS)	2.9632E+03	3.1382E+03	.0558	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	3046						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.808997	.820615	.0087	K(COL/ABS)	.831149 .0085	.826914 .0218	.7296
K(ABSORPTION)	.838658	.841683	.0095	K(ABS/TK LN)	.829779 .0100	.846054 .0419	.9302
K(TRK LENGTH)	.821162	.817874	.0109	K(TK LN/COL)	.819245 .0083	.819740 .0115	.4277
REM LIFE(COL)	3.1218E+03	3.1066E+03	.0361				
REM LIFE(ABS)	3.1207E+03	3.1323E+03	.0323	LIFE(COL/ABS)	3.1195E+03 .0341	3.2204E+03 .0422	.9921
SOURCE POINTS GENERATED	2955						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.848175	.827505	.0103	K(COL/ABS)	.837162 .0093	.844629 .0180	.8611
K(ABSORPTION)	.862223	.846818	.0090	K(ABS/TK LN)	.835979 .0102	.872959 .0208	.9587
K(TRK LENGTH)	.846934	.825139	.0116	K(TK LN/COL)	.826322 .0104	.826913 .0125	.7749
REM LIFE(COL)	3.2341E+03	3.1385E+03	.0272	K(COL/ABS/TK LN)	.833154 .0098	.878899 .0757	
REM LIFE(ABS)	3.2606E+03	3.1644E+03	.0248	LIFE(COL/ABS)	3.1514E+03 .0260	3.2521E+03 .0294	.9926
SOURCE POINTS GENERATED	3210						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.814512	.824906	.0086	K(COL/ABS)	.834855 .0078	.844605 .0140	.8766
K(ABSORPTION)	.836742	.844803	.0074	K(ABS/TK LN)	.833753 .0084	.873749 .0158	.9628
K(TRK LENGTH)	.812957	.822703	.0095	K(TK LN/COL)	.823805 .0086	.824315 .0099	.7992
REM LIFE(COL)	3.1417E+03	3.1391E+03	.0211	K(COL/ABS/TK LN)	.830804 .0082	.882376 .0538	
REM LIFE(ABS)	3.1374E+03	3.1590E+03	.0193	LIFE(COL/ABS)	3.1490E+03 .0201	3.2017E+03 .0217	.9878
SOURCE POINTS GENERATED	2875						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.848714	.828874	.0085	K(COL/ABS)	.836942 .0068	.845524 .0080	.7462

K(ABSORPTION)	.846044	.845010	.0061	K(ABS/TK LN)	.834942	.0070	.859580	.0100	.9239
K(TRK LENGTH)	.835733	.824874	.0082	K(TK LN/COL)	.826874	.0079	.826446	.0090	.8063
REM LIFE(COL)	3.0796E+03	3.1292E+03	.0176	K(COL/ABS/TK LN)	.832920	.0071	.859265	.0233	
REM LIFE(ABS)	3.1072E+03	3.1504E+03	.0160	LIFE(COL/ABS)	3.1398E+03	.0168	3.1977E+03	.0175	.9881
SOURCE POINTS GENERATED	3144								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.832299	.829364	.0072	K(COL/ABS)	.835878	.0059	.838469	.0068
K(ABSORPTION)	.826686	.842392	.0060	K(ABS/TK LN)	.832961	.0064	.844381	.0096
K(TRK LENGTH)	.815461	.823530	.0071	K(TK LN/COL)	.826447	.0067	.826225	.0075
REM LIFE(COL)	3.2737E+03	3.1498E+03	.0161	K(COL/ABS/TK LN)	.831762	.0062	.848375	.0207
REM LIFE(ABS)	3.3057E+03	3.1725E+03	.0152	LIFE(COL/ABS)	3.1612E+03	.0156	3.2092E+03	.0173
SOURCE POINTS GENERATED	2893							.9885

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.823380	.828616	.0063	K(COL/ABS)	.835152	.0052	.837774	.0059
K(ABSORPTION)	.836763	.841689	.0053	K(ABS/TK LN)	.832357	.0056	.843169	.0083
K(TRK LENGTH)	.819489	.823025	.0062	K(TK LN/COL)	.825820	.0059	.825540	.0065
REM LIFE(COL)	3.2801E+03	3.1661E+03	.0148	K(COL/ABS/TK LN)	.831110	.0054	.846804	.0186
REM LIFE(ABS)	3.2708E+03	3.1848E+03	.0136	LIFE(COL/ABS)	3.1755E+03	.0142	3.2219E+03	.0142
SOURCE POINTS GENERATED	2963							.9874

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.820794	.827747	.0057	K(COL/ABS)	.834923	.0046	.837771	.0052
K(ABSORPTION)	.845380	.842099	.0047	K(ABS/TK LN)	.832223	.0049	.841713	.0070
K(TRK LENGTH)	.816924	.822347	.0055	K(TK LN/COL)	.825047	.0053	.824695	.0057
REM LIFE(COL)	3.2372E+03	3.1740E+03	.0133	K(COL/ABS/TK LN)	.830731	.0048	.845504	.0161
REM LIFE(ABS)	3.2554E+03	3.1927E+03	.0123	LIFE(COL/ABS)	3.1833E+03	.0127	3.2298E+03	.0127
SOURCE POINTS GENERATED	2947							.9878

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.835745	.828546	.0052	K(COL/ABS)	.834110	.0042	.834102	.0046
K(ABSORPTION)	.817839	.839673	.0051	K(ABS/TK LN)	.831648	.0045	.831624	.0051
K(TRK LENGTH)	.835114	.823623	.0052	K(TK LN/COL)	.826085	.0049	.826077	.0053
REM LIFE(COL)	3.1235E+03	3.1689E+03	.0120	K(COL/ABS/TK LN)	.830614	.0043	.833228	.0080
REM LIFE(ABS)	3.0965E+03	3.1830E+03	.0114	LIFE(COL/ABS)	3.1760E+03	.0116	3.1912E+03	.0122
SOURCE POINTS GENERATED	2999							.9792

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.848686	.830377	.0051	K(COL/ABS)	.835077	.0040	.835777	.0042
K(ABSORPTION)	.840808	.839776	.0046	K(ABS/TK LN)	.832559	.0042	.833761	.0046
K(TRK LENGTH)	.842531	.825342	.0051	K(TK LN/COL)	.827860	.0049	.827700	.0052
REM LIFE(COL)	3.3258E+03	3.1832E+03	.0117	K(COL/ABS/TK LN)	.831832	.0041	.835462	.0070
REM LIFE(ABS)	3.3199E+03	3.1955E+03	.0110	LIFE(COL/ABS)	3.1893E+03	.0113	3.2074E+03	.0114
SOURCE POINTS GENERATED	3053							.9816

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.828340	.830207	.0047	K(COL/ABS)	.834178	.0038	.834206	.0040

K(ABSORPTION)	.820248	.838149	.0046	K(ABS/TK LN)	.831534	.0040	.831512	.0044	.4708
K(TRK LENGTH)	.820266	.824919	.0047	K(TK LN/COL)	.827563	.0045	.827469	.0048	.8169
REM LIFE(COL)	3.0586E+03	3.1728E+03	.0112	K(COL/ABS/TK LN)	.831092	.0039	.833714	.0065	
REM LIFE(ABS)	3.0763E+03	3.1856E+03	.0105	LIFE(COL/ABS)	3.1792E+03	.0108	3.1991E+03	.0109	.9832
SOURCE POINTS GENERATED 2969									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.842172	.831128	.0045	K(COL/ABS)	.834259	.0035	.834320	.0037	.2508
K(ABSORPTION)	.828300	.837391	.0044	K(ABS/TK LN)	.831112	.0037	.830837	.0040	.4654
K(TRK LENGTH)	.823806	.824834	.0043	K(TK LN/COL)	.827981	.0042	.827425	.0044	.7851
REM LIFE(COL)	3.1757E+03	3.1730E+03	.0103	K(COL/ABS/TK LN)	.831117	.0036	.833730	.0061	
REM LIFE(ABS)	3.1849E+03	3.1855E+03	.0097	LIFE(COL/ABS)	3.1793E+03	.0100	3.1988E+03	.0100	.9831
SOURCE POINTS GENERATED 3056									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.831488	.831154	.0041	K(COL/ABS)	.834250	.0032	.834310	.0034	.2506
K(ABSORPTION)	.836761	.837346	.0040	K(ABS/TK LN)	.831620	.0035	.831879	.0037	.4390
K(TRK LENGTH)	.839674	.825894	.0042	K(TK LN/COL)	.828524	.0039	.828638	.0041	.7499
REM LIFE(COL)	3.2932E+03	3.1816E+03	.0099	K(COL/ABS/TK LN)	.831464	.0033	.833908	.0050	
REM LIFE(ABS)	3.2874E+03	3.1928E+03	.0092	LIFE(COL/ABS)	3.1872E+03	.0095	3.2072E+03	.0093	.9839
SOURCE POINTS GENERATED 2996									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.833324	.831298	.0038	K(COL/ABS)	.833623	.0031	.833404	.0032	.2105
K(ABSORPTION)	.816367	.835947	.0041	K(ABS/TK LN)	.831677	.0033	.831859	.0034	.1913
K(TRK LENGTH)	.848581	.827406	.0043	K(TK LN/COL)	.829352	.0038	.830041	.0039	.6976
REM LIFE(COL)	3.2227E+03	3.1844E+03	.0092	K(COL/ABS/TK LN)	.831551	.0031	.832582	.0038	
REM LIFE(ABS)	3.2595E+03	3.1972E+03	.0087	LIFE(COL/ABS)	3.1908E+03	.0089	3.2093E+03	.0089	.9819
SOURCE POINTS GENERATED 3059									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/5000 year (mpc12t)

02/24/95 07:43:33
PROBID = 02/24/95 05:48:15

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59625	1.0063E+00	2.0691E+00	ESCAPE	1	5.2078E-06	4.0683E-13
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	6.4736E-02	1.9894E-05	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59709	6.4369E-02	4.8561E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.2485E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	170	2.2934E-03	1.5703E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9574E+00
				CAPTURE	0	6.9089E-01	3.2461E-02
				LOSS TO (N,XN)	85	1.1467E-03	9.5742E-03
				LOSS TO FISSION	0	3.1691E-01	7.1291E-02

TOTAL	59795	1.0733E+00	2.0707E+00	TOTAL	59795	1.0733E+00	2.0707E+00
NUMBER OF NEUTRONS BANKED	85			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0029E+00			ESCAPE	6.9508E+04	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.7132E+01			CAPTURE	3.1692E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3406504			CAPTURE OR ESCAPE	3.1695E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0011E+00	.0002		ANY TERMINATION	3.5043E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	115.00 MINUTES			MAXIMUM NUMBER EVER IN BANK	1		
COMPUTER TIME IN MCRUN	114.88 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.1900E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	41385227			MOST RANDOM NUMBERS USED WAS	7334	IN HISTORY	34960

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3458E-01 TO 1.1844E+00
 WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	25341	9450	3.1965E+00	1.1907E-04	3.7954E-01	7.3023E-01	1.1064E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

32	33	726169	59710	298977	4.2158E+00	7.3279E-04	7.5365E-01	8.8095E-01	2.5045E+00
33	34	3243	166	613	6.0667E-03	5.3616E-05	2.6314E-01	5.8936E-01	4.3279E+00
34	35	159	17	370	3.0214E-03	2.3468E-05	1.0058E-01	5.3387E-01	5.7739E-01
35	36	1299402	59710	10	1.6054E-04	6.3465E-04	7.1333E-01	8.7748E-01	3.4845E+03
36	37	287	17	20	1.7147E-04	4.0179E-05	2.3958E-01	5.3653E-01	7.9526E-01
37	38	1408139	59710	50782	7.5755E-01	6.1191E-04	7.0037E-01	8.7685E-01	4.1098E+00
38	39	319	17	118	9.2137E-04	3.9722E-05	1.9277E-01	5.2241E-01	7.2230E-01
39	40	2245242	59710	1429446	1.8847E+01	5.2915E-04	6.6802E-01	8.7423E-01	1.6447E+00
40	41	56430	30886	88909	1.1785E+00	3.8985E-04	6.1748E-01	8.7233E-01	1.5528E+00
41	42	27	9	88	5.9345E-04	6.4903E-05	5.3301E-01	4.5447E-01	1.0090E+00
42	43	119263	32610	3697	5.4880E-02	4.1520E-04	6.3294E-01	8.7327E-01	4.1262E+00
43	44	133663	34905	29401	3.8757E-01	4.2397E-04	6.3496E-01	8.7349E-01	1.5823E+00
44	45	146235	35922	3143	4.6771E-02	4.2969E-04	6.3456E-01	8.7408E-01	4.1166E+00
45	46	178261	41072	70728	9.3724E-01	4.3144E-04	6.3743E-01	8.7424E-01	1.5850E+00
46	47	7014	3232	7641	1.0207E-01	3.6045E-04	5.7584E-01	8.7310E-01	1.4897E+00
47	48	9382	3558	343	5.0464E-03	3.8743E-04	5.7494E-01	8.7425E-01	4.1028E+00
48	49	12359	4990	6416	8.4569E-02	4.0617E-04	6.3277E-01	8.7119E-01	1.5696E+00
49	50	33087	14874	64238	7.6663E-01	3.4989E-04	5.6267E-01	8.2476E-01	1.4751E+00
50	51	32919	14148	12242	1.5269E-01	3.9924E-04	5.7403E-01	8.0679E-01	2.0922E+00
51	52	32644	13819	2327	3.3644E-02	3.9948E-04	5.7083E-01	8.0475E-01	9.1576E+00
52	53	32669	13888	12114	1.4990E-01	3.8628E-04	5.6667E-01	8.0248E-01	2.0915E+00
53	54	139	37	847	7.5870E-03	5.0440E-05	2.5585E-01	5.8653E-01	8.3353E-01
54	55	34129	15200	67199	8.0031E-01	3.4409E-04	5.7844E-01	8.2299E-01	1.4853E+00
55	56	33684	14424	12434	1.5448E-01	3.9394E-04	5.7853E-01	8.0805E-01	2.0983E+00
56	57	33185	14101	2396	3.4349E-02	4.0329E-04	5.7825E-01	8.0778E-01	9.1339E+00
57	58	33342	14152	12236	1.4976E-01	3.8064E-04	5.6998E-01	8.0157E-01	2.1068E+00
58	59	215	51	1440	1.2358E-02	4.5602E-05	2.3766E-01	5.8090E-01	8.1153E-01
59	60	52477	19035	90757	1.1396E+00	4.9177E-04	5.6247E-01	8.4755E-01	1.5105E+00
60	61	51992	18096	17779	2.3197E-01	7.0153E-04	5.8952E-01	8.4034E-01	2.2848E+00
61	62	301	59	1156	1.0383E-02	5.0494E-05	2.0149E-01	6.0500E-01	7.9099E-01
62	63	52797	19086	91342	1.1450E+00	4.9272E-04	5.6461E-01	8.4695E-01	1.5133E+00
63	64	52526	18224	18226	2.3786E-01	6.8331E-04	5.8588E-01	8.3980E-01	2.2850E+00
64	65	334	71	1641	1.3893E-02	5.1927E-05	2.5810E-01	5.7059E-01	8.5970E-01
65	66	9853	4931	450216	4.1168E+00	5.3766E-05	2.5304E-01	6.1220E-01	8.3837E-01
66	67	9708	3852	14421	1.5038E-01	1.8133E-04	4.4050E-01	6.9330E-01	1.8120E+00
67	68	9725	3923	14681	1.5457E-01	1.7969E-04	4.2638E-01	6.9732E-01	1.8122E+00
68	70	33948	9076	11237	1.4586E-01	9.9251E-04	5.9053E-01	8.3983E-01	2.3978E+00
69	71	34112	8752	6110	9.1327E-02	1.0857E-03	5.8606E-01	8.4185E-01	8.8329E+00
70	72	18312	8567	56229	7.2743E-01	1.3810E-03	5.9042E-01	8.3786E-01	2.5156E+00
71	73	34372	9190	11318	1.4738E-01	9.8773E-04	5.8616E-01	8.4274E-01	2.3810E+00
72	74	34678	8843	6319	9.4562E-02	1.0632E-03	5.7350E-01	8.4164E-01	8.9423E+00
73	75	18565	8617	57019	7.3985E-01	1.3766E-03	5.8165E-01	8.4064E-01	2.4874E+00
74	76	120	39	2506	2.1828E-02	3.9597E-05	2.3616E-01	5.6398E-01	7.7130E-01
75	77	113	39	2470	2.3717E-02	4.3642E-05	1.7935E-01	6.3391E-01	7.5691E-01
76	80	4	3	6	9.9357E-05	4.7306E-01	9.1015E-01	9.9221E-01	3.2288E+00
77	81	3351	1439	9975	1.0900E-01	3.5602E-04	4.9780E-01	7.2866E-01	2.1332E+00
78	82	2105	836	11366	1.2042E-01	2.7229E-04	4.3501E-01	7.4924E-01	1.3039E+00
79	83	5	2	643	5.5269E-03	1.5209E-05	5.3599E-02	5.4990E-01	5.0274E-01
80	84	3	1	13	8.1469E-05	2.3626E-08	2.5243E-08	3.4833E-01	7.1757E-01
81	85	1569	632	4464	5.2935E-02	8.7475E-04	4.8025E-01	7.8403E-01	2.1413E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	932	422	8341	9.8497E-02	2.3602E-03	4.6355E-01	8.0477E-01	4.4751E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	333	195	39734	3.4063E-01	2.5279E-05	9.6185E-02	5.6165E-01	5.9999E-01

TOTAL 7059183 694315 3406504 4.2006E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL ENTERING SOURCE ENERGY TIME EXITING TOTAL

				CUTOFF	CUTOFF		
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3926E-01	-5.3926E-01
2	2	3.2041E-01	.0000E+00	.0000E+00	.0000E+00	-8.9433E-01	-5.7393E-01
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5699E-02	-1.5699E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.0906E-02	-5.0906E-02
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5439E-02	-1.5439E-02
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4649E-01	-1.4649E-01
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6562E+00	-1.6562E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0082E+00	-2.0082E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0803E-01	-2.0803E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1435E-01	-2.1435E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8315E-01	-3.8315E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8294E-01	-3.8294E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7729E-02	-7.7729E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7574E-02	-7.7574E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8982E-02	-8.8982E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1278E-02	-7.1278E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.0690E-02	-7.0690E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3686E-02	-7.3686E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0300E-01	-1.0300E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0050E-01	-1.0050E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0950E-02	-9.0950E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4549E-02	-8.4549E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1202E-01	-1.1202E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1037E-01	-1.1037E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1582E-01	-1.1582E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1459E-01	-1.1459E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8342E-02	-9.8342E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2759E-02	-8.2759E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1418E-02	-9.1418E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6752E-02	-9.6752E-02
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8984E+01	-1.8984E+01
32	33	9.7808E+00	1.0063E+00	.0000E+00	.0000E+00	-9.5635E+00	1.2236E+00
33	34	3.1928E-02	.0000E+00	.0000E+00	.0000E+00	-3.0258E-02	1.6702E-03
34	35	1.3845E-03	.0000E+00	.0000E+00	.0000E+00	-1.3028E-03	8.1699E-05
35	36	1.9131E+01	.0000E+00	.0000E+00	.0000E+00	-1.9120E+01	1.0986E-02
36	37	2.4916E-03	.0000E+00	.0000E+00	.0000E+00	-2.4909E-03	7.2199E-07
37	38	2.0727E+01	.0000E+00	.0000E+00	.0000E+00	-2.0649E+01	7.8045E-02
38	39	2.7451E-03	.0000E+00	.0000E+00	.0000E+00	-2.7061E-03	3.8997E-05
39	40	3.2976E+01	.0000E+00	.0000E+00	.0000E+00	-1.0854E+01	2.2122E+01
40	41	8.2811E-01	.0000E+00	.0000E+00	.0000E+00	-8.2451E-01	3.5975E-03
41	42	1.9685E-04	.0000E+00	.0000E+00	.0000E+00	-1.9322E-04	3.6344E-06
42	43	1.7468E+00	.0000E+00	.0000E+00	.0000E+00	-1.7462E+00	5.5280E-04
43	44	1.9583E+00	.0000E+00	.0000E+00	.0000E+00	-1.9572E+00	1.1244E-03
44	45	2.1429E+00	.0000E+00	.0000E+00	.0000E+00	-2.1424E+00	4.8600E-04
45	46	2.6163E+00	.0000E+00	.0000E+00	.0000E+00	-1.1078E+00	1.5085E+00
46	47	1.0261E-01	.0000E+00	.0000E+00	.0000E+00	-6.2320E-02	4.0286E-02
47	48	1.3727E-01	.0000E+00	.0000E+00	.0000E+00	-1.3250E-01	4.7731E-03
48	49	1.8113E-01	.0000E+00	.0000E+00	.0000E+00	-7.0262E-02	1.1087E-01
49	50	4.5971E-01	.0000E+00	.0000E+00	.0000E+00	-2.5847E-01	2.0124E-01
50	51	4.5055E-01	.0000E+00	.0000E+00	.0000E+00	-4.3566E-01	1.4890E-02
51	52	4.4321E-01	.0000E+00	.0000E+00	.0000E+00	-4.3811E-01	5.0961E-03
52	53	4.4449E-01	.0000E+00	.0000E+00	.0000E+00	-1.8603E-01	2.5846E-01
53	54	1.4053E-03	.0000E+00	.0000E+00	.0000E+00	-5.1229E-05	1.3541E-03
54	55	4.7269E-01	.0000E+00	.0000E+00	.0000E+00	-2.6513E-01	2.0756E-01
55	56	4.6073E-01	.0000E+00	.0000E+00	.0000E+00	-4.4518E-01	1.5553E-02
56	57	4.5075E-01	.0000E+00	.0000E+00	.0000E+00	-4.4524E-01	5.5109E-03
57	58	4.5264E-01	.0000E+00	.0000E+00	.0000E+00	-1.8955E-01	2.6309E-01
58	59	2.2364E-03	.0000E+00	.0000E+00	.0000E+00	-1.4869E-04	2.0878E-03

TOTAL	1.0225E+02	1.0063E+00	.0000E+00	.0000E+00	-1.0225E+02	1.0063E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

[illegible]

26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	3.2193E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2193E-05
33	34	.0000E+00	.0000E+00	-2.3252E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3252E-05
34	35	.0000E+00	.0000E+00	-8.3340E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3340E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	1.2150E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2150E-05
38	39	.0000E+00	.0000E+00	4.2020E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2020E-06
39	40	.0000E+00	.0000E+00	1.4369E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4369E-04
40	41	.0000E+00	.0000E+00	8.2084E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.2084E-07
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	7.3623E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.3623E-06
43	44	.0000E+00	.0000E+00	2.1334E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1334E-05
44	45	.0000E+00	.0000E+00	-2.9019E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9019E-05
45	46	.0000E+00	.0000E+00	-2.8932E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8932E-05
46	47	.0000E+00	.0000E+00	6.5675E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5675E-08
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	4.2388E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2388E-06
49	50	.0000E+00	.0000E+00	-5.6941E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.6941E-05
50	51	.0000E+00	.0000E+00	9.6381E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.6381E-05
51	52	.0000E+00	.0000E+00	5.0080E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0080E-06
52	53	.0000E+00	.0000E+00	-8.0766E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0766E-05
53	54	.0000E+00	.0000E+00	3.0897E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.0897E-08
54	55	.0000E+00	.0000E+00	2.6768E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6768E-05
55	56	.0000E+00	.0000E+00	-9.5161E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5161E-05
56	57	.0000E+00	.0000E+00	2.8515E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8515E-05
57	58	.0000E+00	.0000E+00	1.8821E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8821E-04
58	59	.0000E+00	.0000E+00	4.2720E-06	.0000E+00	.0000E+00	.0000E+00	.0000	

86 90 .0000E+00 .0000E+00 -8.9616E-05 .0000E+00 .0000E+00 .0000E+00 .0000E+00 -8.9616E-05
 TOTAL .0000E+00 .0000E+00 3.6678E-04 .0000E+00 .0000E+00 .0000E+00 3.6678E-04
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3941E-02	.0000E+00	-1.3941E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.2350E-03	.0000E+00	-4.1490E-01	-1.1175E-03	-3.1691E-01
33	34	.0000E+00	.0000E+00	-1.3006E-04	.0000E+00	-1.3006E-04
34	35	.0000E+00	.0000E+00	-1.6411E-05	.0000E+00	-1.6411E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-7.2199E-07	.0000E+00	-7.2199E-07
37	38	5.8367E-05	.0000E+00	-6.6576E-03	-2.9183E-05	-6.6284E-03
38	39	.0000E+00	.0000E+00	-5.3735E-06	.0000E+00	-5.3735E-06
39	40	.0000E+00	.0000E+00	-5.0482E-02	.0000E+00	-5.0482E-02
40	41	.0000E+00	.0000E+00	-3.5983E-03	.0000E+00	-3.5983E-03
41	42	.0000E+00	.0000E+00	-3.6344E-06	.0000E+00	-3.6344E-06
42	43	.0000E+00	.0000E+00	-5.6016E-04	.0000E+00	-5.6016E-04
43	44	.0000E+00	.0000E+00	-1.1457E-03	.0000E+00	-1.1457E-03
44	45	.0000E+00	.0000E+00	-4.5698E-04	.0000E+00	-4.5698E-04
45	46	.0000E+00	.0000E+00	-2.7589E-03	.0000E+00	-2.7589E-03
46	47	.0000E+00	.0000E+00	-3.1075E-04	.0000E+00	-3.1075E-04
47	48	.0000E+00	.0000E+00	-5.9416E-05	.0000E+00	-5.9416E-05
48	49	.0000E+00	.0000E+00	-2.5836E-04	.0000E+00	-2.5836E-04
49	50	.0000E+00	.0000E+00	-2.3618E-03	.0000E+00	-2.3618E-03
50	51	.0000E+00	.0000E+00	-1.0214E-02	.0000E+00	-1.0214E-02
51	52	.0000E+00	.0000E+00	-5.9430E-04	.0000E+00	-5.9430E-04
52	53	.0000E+00	.0000E+00	-1.0133E-02	.0000E+00	-1.0133E-02

53	54	.0000E+00	.0000E+00	-3.9941E-05	.0000E+00	.0000E+00	-3.9941E-05
54	55	.0000E+00	.0000E+00	-2.5301E-03	.0000E+00	.0000E+00	-2.5301E-03
55	56	.0000E+00	.0000E+00	-1.0814E-02	.0000E+00	.0000E+00	-1.0814E-02
56	57	.0000E+00	.0000E+00	-6.0041E-04	.0000E+00	.0000E+00	-6.0041E-04
57	58	.0000E+00	.0000E+00	-1.0577E-02	.0000E+00	.0000E+00	-1.0577E-02
58	59	.0000E+00	.0000E+00	-6.6791E-05	.0000E+00	.0000E+00	-6.6791E-05
59	60	.0000E+00	.0000E+00	-2.8733E-03	.0000E+00	.0000E+00	-2.8733E-03
60	61	.0000E+00	.0000E+00	-1.0751E-02	.0000E+00	.0000E+00	-1.0751E-02
61	62	.0000E+00	.0000E+00	-5.1682E-05	.0000E+00	.0000E+00	-5.1682E-05
62	63	.0000E+00	.0000E+00	-2.8870E-03	.0000E+00	.0000E+00	-2.8870E-03
63	64	.0000E+00	.0000E+00	-1.1025E-02	.0000E+00	.0000E+00	-1.1025E-02
64	65	.0000E+00	.0000E+00	-7.1298E-05	.0000E+00	.0000E+00	-7.1298E-05
65	66	.0000E+00	.0000E+00	-2.0949E-02	.0000E+00	.0000E+00	-2.0949E-02
66	67	.0000E+00	.0000E+00	-1.5051E-02	.0000E+00	.0000E+00	-1.5051E-02
67	68	.0000E+00	.0000E+00	-1.5482E-02	.0000E+00	.0000E+00	-1.5482E-02
68	70	.0000E+00	.0000E+00	-5.3186E-03	.0000E+00	.0000E+00	-5.3186E-03
69	71	.0000E+00	.0000E+00	-6.6605E-04	.0000E+00	.0000E+00	-6.6605E-04
70	72	.0000E+00	.0000E+00	-2.1085E-02	.0000E+00	.0000E+00	-2.1085E-02
71	73	.0000E+00	.0000E+00	-5.3897E-03	.0000E+00	.0000E+00	-5.3897E-03
72	74	.0000E+00	.0000E+00	-6.9725E-04	.0000E+00	.0000E+00	-6.9725E-04
73	75	.0000E+00	.0000E+00	-2.1430E-02	.0000E+00	.0000E+00	-2.1430E-02
74	76	.0000E+00	.0000E+00	-1.1766E-04	.0000E+00	.0000E+00	-1.1766E-04
75	77	.0000E+00	.0000E+00	-1.2207E-04	.0000E+00	.0000E+00	-1.2207E-04
76	80	.0000E+00	.0000E+00	-3.4952E-07	.0000E+00	.0000E+00	-3.4952E-07
77	81	.0000E+00	.0000E+00	-7.8089E-03	.0000E+00	.0000E+00	-7.8089E-03
78	82	.0000E+00	.0000E+00	-3.8298E-04	.0000E+00	.0000E+00	-3.8298E-04
79	83	.0000E+00	.0000E+00	-2.9697E-05	.0000E+00	.0000E+00	-2.9697E-05
80	84	.0000E+00	.0000E+00	-1.6808E-05	.0000E+00	.0000E+00	-1.6808E-05
81	85	.0000E+00	.0000E+00	-2.0744E-03	.0000E+00	.0000E+00	-2.0744E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.6329E-03	.0000E+00	.0000E+00	-1.6329E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7620E-03	.0000E+00	.0000E+00	-1.7620E-03

TOTAL 2.2934E-03 .0000E+00 -6.9089E-01 -1.1467E-03 -3.1691E-01 -1.0067E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	284090 16270	3.0000E+00 1.9656E-01	1.3826E-02 1.1467E-04	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7485E-01	100091	1.4638E+00	1.2371E-03	.0000E+00	.0000E+00
		45103.50C	3.7685E-04	869	1.0920E-02	9.5832E-03	.0000E+00	.0000E+00
		47109.50C	5.7949E-05	126	1.6584E-03	1.3698E-03	.0000E+00	.0000E+00
		62149.50C	2.1481E-06	1148	1.2556E-02	1.2455E-02	.0000E+00	.0000E+00
		63151.55C	9.1920E-06	559	6.2471E-03	6.1577E-03	.0000E+00	.0000E+00
		63153.55C	7.0166E-05	260	3.1957E-03	2.8026E-03	.0000E+00	.0000E+00
		64155.50C	7.9842E-06	2423	2.5294E-02	2.5216E-02	.0000E+00	.0000E+00
		92233.50C	9.7638E-07	4	7.9906E-05	9.1437E-06	3.1378E-05	.0000E+00
		92234.50C	1.3764E-04	270	3.4785E-03	2.3989E-03	5.0407E-05	.0000E+00
		92235.50C	3.4776E-03	18281	3.5167E-01	3.1378E-02	1.5587E-01	1.3741E-05
		92236.50C	1.8956E-03	1479	2.1764E-02	7.3163E-03	3.3730E-04	1.2396E-05
		92238.50C	3.1605E-01	149669	2.1928E+00	1.8818E-01	2.0980E-02	1.0914E-03
		93237.55C	6.6795E-04	1751	2.2155E-02	1.7566E-02	2.1716E-04	.0000E+00
		94238.50C	1.0372E-16	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94239.55C	1.7568E-03	18446	3.6625E-01	6.7845E-02	1.3916E-01	.0000E+00
		94240.50C	4.6339E-04	3248	4.2947E-02	3.8014E-02	1.7924E-04	.0000E+00
		94241.50C	4.9447E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94242.50C	1.5522E-04	286	4.1270E-03	2.6448E-03	5.8105E-05	.0000E+00
		95241.50C	1.7585E-07	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95242.50C	9.1510E-17	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95243.50C	2.1143E-05	65	8.8020E-04	7.2345E-04	5.0285E-06	.0000E+00
		96245.35C	2.9139E-07	2	9.4655E-05	4.3856E-06	2.1121E-05	.0000E+00
33	34	8016.50C	6.8138E-03	4	3.3977E-05	1.6404E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	4.6116E-06	1.3214E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	7	6.4800E-05	8.0046E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	595	5.9187E-03	1.1635E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	6	4.4596E-05	4.3773E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	357	2.8878E-03	1.6407E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	13	1.3367E-04	4.0999E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	10	1.6054E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	17	1.3194E-04	7.2099E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	3.9537E-05	1.0061E-09	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	189	2.7932E-03	1.0933E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	66	9.1670E-04	7.3016E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	212	3.0031E-03	1.2792E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	49817	7.4344E-01	6.2649E-03	.0000E+00	2.9183E-05
		50000.35C	1.0711E-02	498	7.3932E-03	1.9071E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	115	8.9399E-04	5.3726E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	2.7384E-05	9.4321E-10	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1312731	1.7151E+01	4.9235E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	116715	1.6964E+00	1.2468E-03	.0000E+00	.0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	82118 6791	1.0792E+00 9.9224E-02	3.5180E-03 8.0323E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	85 3	5.7198E-04 2.1475E-05	3.6336E-06 8.2288E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	18 10 15 3615 39	2.6548E-04 1.4055E-04 2.0964E-04 5.3704E-02 5.6005E-04	2.3417E-09 1.4178E-05 1.3325E-05 5.1510E-04 1.7558E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	27092 2309	3.5402E-01 3.3553E-02	1.1252E-03 2.0585E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	16 4 12 3078 33	2.3859E-04 5.9551E-05 1.7517E-04 4.5782E-02 5.1529E-04	9.7397E-10 1.2146E-07 6.6380E-06 4.3851E-04 1.1703E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	65221 5507	8.5715E-01 8.0093E-02	2.7037E-03 5.5199E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7068 573	9.3782E-02 8.2889E-03	3.0531E-04 5.4369E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	3 0 1 337 2	3.6923E-05 .0000E+00 1.4542E-05 4.9631E-03 3.1784E-05	4.2678E-10 .0000E+00 5.8289E-09 5.8704E-05 7.0557E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5889 527	7.7022E-02 7.5468E-03	2.5492E-04 3.4425E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59714 4524	7.0502E-01 6.1615E-02	2.3250E-03 3.6801E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	5 39 46 2 3 1342 496 7783 2357 169	7.2455E-05 4.4466E-04 6.2994E-04 2.1424E-05 3.6126E-05 1.7389E-02 6.9970E-03 9.5602E-02 2.9199E-02 2.3035E-03	6.1626E-09 2.7945E-05 6.2169E-06 1.3119E-07 2.3063E-06 1.8292E-03 8.7046E-04 5.4017E-03 1.7332E-03 3.4250E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2326 1	3.3631E-02 1.2840E-05	5.9106E-04 3.2466E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02	5 33 39 4 0 1408 471	6.2221E-05 4.1962E-04 5.1560E-04 5.0294E-05 .0000E+00 1.8482E-02 6.6781E-03	2.3193E-08 1.6892E-05 6.5648E-06 3.4120E-07 .0000E+00 1.7861E-03 8.1673E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		26000.55C	6.4626E-01	7629	9.2832E-02	5.3839E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2359	2.8735E-02	1.8054E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	166	2.1200E-03	3.1658E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	814	7.2415E-03	3.9912E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	33	3.4544E-04	2.8829E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	62531	7.3670E-01	2.4708E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4668	6.3609E-02	5.9263E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	8	7.5025E-05	2.9022E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	44	5.0721E-04	3.3020E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	58	7.7756E-04	9.3605E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0344E-04	1.4064E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.1109E-05	9.3199E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1483	1.9479E-02	1.8956E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	491	6.8326E-03	1.0423E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7764	9.4815E-02	5.6170E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2413	2.9609E-02	1.8822E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	165	2.2685E-03	3.3171E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2388	3.4235E-02	5.9674E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	8	1.1393E-04	3.6735E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	8	1.1846E-04	1.5844E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	53	6.8887E-04	3.5018E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.7940E-04	6.5404E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.5452E-05	6.0713E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.0567E-05	3.4175E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1434	1.8240E-02	1.8999E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	449	6.2092E-03	9.2177E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7763	9.3127E-02	5.6697E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2323	2.8658E-02	1.7992E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	1.9328E-03	2.4376E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1377	1.1746E-02	6.6774E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	63	6.1229E-04	1.7210E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	83511	1.0383E+00	2.8125E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7246	1.0130E-01	6.0810E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.7500E-04	1.9173E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	6.3044E-04	2.6401E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	74	1.0051E-03	8.5423E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	9.1308E-05	8.6318E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2164	2.9506E-02	1.9238E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	829	1.2076E-02	1.0457E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11160	1.4302E-01	5.6281E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3275	4.2569E-02	1.7804E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	211	2.8966E-03	3.3725E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1102	9.8275E-03	5.1671E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	54	5.5505E-04	1.1179E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	83943	1.0409E+00	2.8254E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7399	1.0415E-01	6.1655E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	11	1.3303E-04	2.6383E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	64	8.1048E-04	2.6136E-05	.0000E+00	.0000E+00

		14000.50C	1.4932E-02	104	1.5289E-03	1.0648E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.0192E-05	6.4116E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.7469E-05	1.4863E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2132	2.9402E-02	1.8125E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	865	1.2643E-02	1.0487E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11414	1.4628E-01	5.8531E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3364	4.3163E-02	1.8914E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	259	3.7107E-03	3.7996E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1572	1.3193E-02	7.1284E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	69	6.9959E-04	1.3750E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	429533	3.9077E+00	2.0895E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20683	2.0912E-01	5.4851E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	9	1.0359E-04	3.4694E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	64	6.0556E-04	5.8957E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	6.4483E-04	9.8710E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	3.0938E-05	1.1859E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	8.0745E-06	2.1397E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1633	1.7608E-02	2.8331E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	431	5.4897E-03	1.1873E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9342	9.6014E-02	8.0697E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2742	2.8073E-02	2.5918E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	144	1.8040E-03	2.9721E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	13	1.5279E-04	3.5335E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	56	5.6135E-04	4.3489E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	5.4456E-04	1.0622E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.4831E-05	2.2803E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.7413E-05	2.1375E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1668	1.8314E-02	2.9649E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	484	5.9942E-03	1.5484E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9466	9.7776E-02	8.0757E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2786	2.9299E-02	2.5373E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	1.8799E-03	2.9944E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	5	5.7543E-05	4.7320E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.0922E-04	1.6891E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	56	8.0116E-04	4.7109E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.8939E-05	1.7685E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.3248E-05	3.6846E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1351	1.8380E-02	9.6839E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	510	7.2694E-03	4.5676E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7002	8.9412E-02	2.7151E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2124	2.7347E-02	9.4069E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	2.0974E-03	2.1223E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6098	9.1174E-02	6.6033E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.5257E-04	5.7192E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	31	4.4367E-04	6.9851E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	198	2.4589E-03	5.9483E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	321	4.7478E-03	2.4473E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	19	2.5194E-04	1.1317E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0223E-04	5.4270E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7199	9.9216E-02	3.5968E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2460	3.5240E-02	1.9736E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34453	4.3543E-01	1.0683E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10627	1.3660E-01	3.4949E-03	.0000E+00	.0000E+00

		42000.50C	1.4572E-02	914	1.2943E-02	1.2459E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	6	8.8994E-05	7.0423E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	4.7320E-04	1.6606E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	8.1598E-04	3.2649E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.2733E-05	3.6119E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	1.9910E-05	2.8064E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1343	1.8417E-02	9.1198E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	528	7.6277E-03	5.1418E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7025	8.9828E-02	2.7888E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2144	2.7653E-02	8.6213E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	174	2.4290E-03	2.8956E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6305	9.4372E-02	6.8651E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	14	1.9072E-04	1.0741E-05	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	39	5.2197E-04	2.7300E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	183	2.3172E-03	4.6599E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	295	4.3083E-03	2.1627E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	24	3.2554E-04	1.8551E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.1088E-05	4.2009E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7383	1.0245E-01	3.7614E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2572	3.6888E-02	2.2104E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34631	4.3868E-01	1.0703E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11011	1.4187E-01	3.5112E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	877	1.2429E-02	1.1697E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2401	2.0873E-02	1.1763E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	105	9.5543E-04	3.3205E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2387	2.2881E-02	1.2205E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	83	8.3661E-04	2.2764E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1	1.6320E-05	7.0469E-08	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5	8.3037E-05	2.7905E-07	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	3	3.5369E-05	2.8305E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	4.5435E-04	2.6846E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	32	4.0860E-04	2.7712E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.6640E-05	2.7337E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1147	1.3240E-02	1.4761E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	397	5.1385E-03	7.9325E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6358	6.7738E-02	4.0408E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1869	2.0447E-02	1.2572E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	122	1.4949E-03	2.1155E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10567	1.1048E-01	3.7983E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	799	9.9384E-03	3.1510E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	618	5.2987E-03	2.9689E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	25	2.2823E-04	7.7137E-09	.0000E+00	.0000E+00

80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1	8.3857E-06	3.1931E-06	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	6	3.5223E-05	6.7916E-06	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	6	3.7860E-05	6.8229E-06	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	3	3.8856E-05	6.0234E-10	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	5.0978E-05	6.8123E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	12	1.7588E-04	3.9848E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	37	4.4924E-04	3.7872E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	577	7.3550E-03	4.0996E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	64	8.9158E-04	6.5995E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1100	1.2743E-02	4.2173E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2507	2.9203E-02	9.8789E-04	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	92	1.1497E-03	4.6115E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	68	8.7790E-04	1.0374E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	56	7.5544E-04	1.1124E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	20	2.7745E-04	5.1179E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	6	8.2395E-05	1.3582E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	2.5946E-05	5.3884E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	186	2.3967E-03	1.0350E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8071	9.4959E-02	1.5287E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	37909	3.2345E-01	1.7601E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1825	1.7183E-02	1.8438E-06	.0000E+00	.0000E+00
TOTAL				3406504	4.2320E+01	6.9089E-01	3.1691E-01	1.1467E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2562762	3.0570E+01	1.0496E-01	.0000E+00	.0000E+00
		2004.50C		10	1.6054E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		214	2.8344E-03	2.4408E-07	.0000E+00	.0000E+00
		7014.50C		898	1.0781E-02	4.3428E-04	.0000E+00	.0000E+00
		8016.50C		296611	4.1601E+00	3.0432E-03	.0000E+00	.0000E+00
		13027.50C		17121	2.5346E-01	2.5353E-03	.0000E+00	.0000E+00

14000.50C	1257	1.7861E-02	1.2612E-04	.0000E+00	.0000E+00
15031.50C	95	1.2361E-03	9.3382E-06	.0000E+00	.0000E+00
16032.50C	34	4.8318E-04	2.5209E-05	.0000E+00	.0000E+00
22000.50C	37	4.4924E-04	3.7872E-05	.0000E+00	.0000E+00
24000.50C	32347	4.2862E-01	2.8162E-02	.0000E+00	.0000E+00
25055.50C	11233	1.5837E-01	1.4599E-02	.0000E+00	.0000E+00
26000.55C	171219	2.0918E+00	8.2743E-02	.0000E+00	.0000E+00
28000.50C	51907	6.4246E-01	2.7082E-02	.0000E+00	.0000E+00
29000.50C	127	1.6197E-03	6.9495E-05	.0000E+00	.0000E+00
40000.50C	57442	8.5381E-01	7.3935E-03	.0000E+00	2.9183E-05
42000.50C	3726	5.1187E-02	5.7811E-03	.0000E+00	.0000E+00
45103.50C	869	1.0920E-02	9.5832E-03	.0000E+00	.0000E+00
47109.50C	126	1.6584E-03	1.3698E-03	.0000E+00	.0000E+00
50000.35C	578	8.5449E-03	2.2505E-04	.0000E+00	.0000E+00
62149.50C	1148	1.2556E-02	1.2455E-02	.0000E+00	.0000E+00
63151.55C	559	6.2471E-03	6.1577E-03	.0000E+00	.0000E+00
63153.55C	260	3.1957E-03	2.8026E-03	.0000E+00	.0000E+00
64155.50C	2423	2.5294E-02	2.5216E-02	.0000E+00	.0000E+00
92233.50C	4	7.9906E-05	9.1437E-06	3.1378E-05	.0000E+00
92234.50C	270	3.4785E-03	2.3989E-03	5.0407E-05	.0000E+00
92235.50C	18281	3.5167E-01	3.1378E-02	1.5587E-01	1.3741E-05
92236.50C	1479	2.1764E-02	7.3163E-03	3.3730E-04	1.2396E-05
92238.50C	149669	2.1928E+00	1.8818E-01	2.0980E-02	1.0914E-03
93237.55C	1751	2.2155E-02	1.7566E-02	2.1716E-04	.0000E+00
94238.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94239.55C	18446	3.6625E-01	6.7845E-02	1.3916E-01	.0000E+00
94240.50C	3248	4.2947E-02	3.8014E-02	1.7924E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	286	4.1270E-03	2.6448E-03	5.8105E-05	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95242.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	65	8.8020E-04	7.2345E-04	5.0285E-06	.0000E+00
96245.35C	2	9.4655E-05	4.3856E-06	2.1121E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59625 CTM = 114.88

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 115.00 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 07:43:34

PROBID = 02/24/95 05:48:15

1MCNP VERSION 4A-B LD=10/04/91 02/24/95 07:43:34

PROBID = 02/24/95 07:43:34

INP=mpc12u OUTP=mpc12u.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/10000 year (mpc12u)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1911-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923
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177-    29 PY 12.80923
178-    30 PY -12.80923
179-    C ASSEMBLY LATTICE BOUNDS
180-    31 PY 10.82024 $ ACTUAL 10.82025
181-    32 PX 10.82024 $ ACTUAL 10.82025
182-    33 PY -10.82024 $ ACTUAL -10.82025
183-    34 PX -10.82024 $ ACTUAL -10.82025
184-    35 PY 11.4300
185-    36 PX 11.4300
186-    37 PY -11.4300
187-    38 PX -11.4300
188-    39 PY 12.17930
189-    40 PX 12.17930
190-    41 PY -11.66876
191-    42 PX -11.66876
192-    43 PX 11.66876
193-    44 PY 11.66876
194-    45 PX 11.94054
195-    46 PY 11.94054
196-    C BLANK PIN CELL
197-    48 PX -0.7213
198-    49 PX 0.7213
199-    50 PY -0.7213
200-    51 PY 0.7213
201-    52 PY 0.0001
202-    53 PY -0.0001
203-    54 PY 0.0
204-    55 P 1. -1. 0. 0.
205-    56 P 1. 1. 0. 0. $ 24.35
206-    C EXTRA CARDS
207-    57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208-    58 PY 2.14376
209-    59 PX 1.9050
210-    60 PY 1.9050
211-    61 PX 1.270
212-    62 PY 1.270050
213-    64 PX -.0000005
214-    65 PY -.0000005
215-    66 PX 95.
216-    67 PY 95.
217-    C OUTER BARRIER
218-    70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219-    71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220-    72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221-    73 PZ 282.3500 $TOP OF OUTER BARRIER
222-    74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223-    75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224-    80 PZ 312.3500 $ WET TUFF OVERPACK, END
225-    81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227-    MODE N
228-    C VOL 88J
229-    KCODE 3000 1. 5 20
230-    C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231-    C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232-    C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233-    C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234-    C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235-    C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236-    C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297-      C      34.57 22.19 10.   38.90  4.87 10.   38.90  9.20 10.
298-      C      38.90 17.86 10.   38.90 22.19 10.   43.23  4.87 10.
299-      C      43.23  9.20 10.   43.23 13.53 10.   43.23 17.86 10.
300-      C      43.23 22.19 10.   47.55  4.87 10.   47.55  9.20 10.
301-      C      47.55 13.53 10.   47.55 17.86 10.   47.55 22.19 10.
302-      C      30.24  4.87 75.   30.24  9.20 75.   30.24 13.53 75.
303-      C      30.24 17.86 75.   30.24 22.19 75.   34.57  4.87 75.
304-      C      34.57  9.20 75.   34.57 13.53 75.   34.57 17.86 75.
305-      C      34.57 22.19 75.   38.90  4.87 75.   38.90  9.20 75.
306-      C      38.90 17.86 75.   38.90 22.19 75.   43.23  4.87 75.
307-      C      43.23  9.20 75.   43.23 13.53 75.   43.23 17.86 75.
308-      C      43.23 22.19 75.   47.55  4.87 75.   47.55  9.20 75.
309-      C      47.55 13.53 75.   47.55 17.86 75.   47.55 22.19 75.
310-      C      30.24  4.87 150.  30.24  9.20 150.  30.24 13.53 150.
311-      C      30.24 17.86 150.  30.24 22.19 150.  34.57  4.87 150.
312-      C      34.57  9.20 150.  34.57 13.53 150.  34.57 17.86 150.
313-      C      34.57 22.19 150.  38.90  4.87 150.  38.90  9.20 150.
314-      C      38.90 17.86 150.  38.90 22.19 150.  43.23  4.87 150.
315-      C      43.23  9.20 150.  43.23 13.53 150.  43.23 17.86 150.
316-      C      43.23 22.19 150.  47.55  4.87 150.  47.55  9.20 150.
317-      C      47.55 13.53 150.  47.55 17.86 150.  47.55 22.19 150.
318-      C      30.24  4.87 200.  30.24  9.20 200.  30.24 13.53 200.
319-      C      30.24 17.86 200.  30.24 22.19 200.  34.57  4.87 200.
320-      C      34.57  9.20 200.  34.57 13.53 200.  34.57 17.86 200.
321-      C      34.57 22.19 200.  38.90  4.87 200.  38.90  9.20 200.
322-      C      38.90 17.86 200.  38.90 22.19 200.  43.23  4.87 200.
323-      C      43.23  9.20 200.  43.23 13.53 200.  43.23 17.86 200.
324-      C      43.23 22.19 200.  47.55  4.87 200.  47.55  9.20 200.
325-      C      47.55 13.53 200.  47.55 17.86 200.  47.55 22.19 200.
326-      C      MATERIAL SPECIFICATIONS
327-      C      WATER AT 300 K
328-      M1      1001.50C  6.6878-2      8016.50C  3.3439-2
329-      MT1     LWTR.01T
330-      C      PWR: 3.75% U-235 - 37 Gwd/MTU - 10000 YEAR DECAY
331-      M2      8016.50C  4.8529E-02
332-      45103.50C  2.7100E-05
333-      47109.50C  4.1671E-06
334-      62149.50C  1.5447E-07
335-      63151.55C  6.6100E-07
336-      63153.55C  5.0457E-06
337-      64155.50C  5.7416E-07
338-      92233.50C  1.4563E-07
339-      92234.50C  9.7793E-06
340-      92235.50C  2.6729E-04
341-      92236.50C  1.5005E-04
342-      92238.50C  2.2728E-02
343-      93237.55C  4.7984E-05
344-      94238.50C  9.3549E-28
345-      94239.55C  1.0991E-04
346-      94240.50C  1.9606E-05
347-      94241.50C  2.3648E-11
348-      94242.50C  1.1062E-05
349-      95241.50C  7.1474E-10
350-      95242.50C  8.2496E-28
351-      95243.50C  9.5068E-07
352-      96245.35C  1.3934E-08
353-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
354-      M3      2004.50C  1.0
355-      C      ZIRCALOY-4
356-      M4      8016.50C -0.0012  24000.50C -0.0010  26000.55C -0.0020

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357-		40000.50C	-0.9818	50000.35C	-0.0140	
358-	C	ALLOY 825				
359-	M5	6000.50C	-0.0005	13027.50C	-0.0020	14000.50C -0.0050
360-		16032.50C	-0.0003	22000.50C	-0.0090	24000.50C -0.2150
361-		25055.50C	-0.0100	26000.55C	-0.2857	28000.50C -0.4200
362-		29000.50C	-0.0250	42000.50C	-0.0300	
363-	C	1100 ALUMINUM ALLOY				
364-	M6	13027.50C	-0.99880	29000.50C	-0.00120	
365-	C	A516 CARBON STEEL				
366-	M7	6000.50C	-0.0022	14000.50C	-0.00275	15031.50C -0.00035
367-		16032.50C	-0.00035	25055.50C	-0.0090	
368-		26000.55C	-0.98535			
369-	C	SS316L				
370-	M8	6000.50C	-0.00030	7014.50C	-0.00100	14000.50C -0.00750
371-		15031.50C	-0.00045	16032.50C	-0.00030	24000.50C -0.17000
372-		25055.50C	-0.02000	26000.55C	-0.64545	28000.50C -0.12000
373-		42000.50C	-0.02500			
374-	C	TALLIES				
375-	PRINT					

SURFACES	16048 AND	19048 OF CELL	8 ARE THE SAME.	19048 WILL BE DELETED.
SURFACES	16049 AND	19049 OF CELL	8 ARE THE SAME.	19049 WILL BE DELETED.
SURFACES	16050 AND	17050 OF CELL	8 ARE THE SAME.	17050 WILL BE DELETED.
SURFACES	16050 AND	20050 OF CELL	8 ARE THE SAME.	20050 WILL BE DELETED.
SURFACES	16050 AND	21050 OF CELL	8 ARE THE SAME.	21050 WILL BE DELETED.
SURFACES	16051 AND	17051 OF CELL	8 ARE THE SAME.	17051 WILL BE DELETED.
SURFACES	16051 AND	20051 OF CELL	8 ARE THE SAME.	20051 WILL BE DELETED.
SURFACES	16051 AND	21051 OF CELL	8 ARE THE SAME.	21051 WILL BE DELETED.
SURFACES	18050 AND	22050 OF CELL	8 ARE THE SAME.	22050 WILL BE DELETED.
SURFACES	18051 AND	22051 OF CELL	8 ARE THE SAME.	22051 WILL BE DELETED.
SURFACES	19050 AND	23050 OF CELL	8 ARE THE SAME.	23050 WILL BE DELETED.
SURFACES	19051 AND	23051 OF CELL	8 ARE THE SAME.	23051 WILL BE DELETED.
SURFACES	20048 AND	23048 OF CELL	8 ARE THE SAME.	23048 WILL BE DELETED.
SURFACES	20049 AND	23049 OF CELL	8 ARE THE SAME.	23049 WILL BE DELETED.
SURFACES	24048 AND	27048 OF CELL	9 ARE THE SAME.	27048 WILL BE DELETED.
SURFACES	24049 AND	27049 OF CELL	9 ARE THE SAME.	27049 WILL BE DELETED.
SURFACES	24050 AND	25050 OF CELL	9 ARE THE SAME.	25050 WILL BE DELETED.
SURFACES	24050 AND	28050 OF CELL	9 ARE THE SAME.	28050 WILL BE DELETED.
SURFACES	24050 AND	29050 OF CELL	9 ARE THE SAME.	29050 WILL BE DELETED.
SURFACES	24051 AND	25051 OF CELL	9 ARE THE SAME.	25051 WILL BE DELETED.

SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3059
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3059
 POINTS AFTER EXPANSION OR CONTRACTION 3006
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.191149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER	COMPONENT NUCLIDE, ATOM FRACTION
1	1001, .66667 8016, .33333
ASSOCIATED THERMAL S(A,B) DATA SETS:	LWTR.01T
2	8016, .67484 45103, .00038 47109, .00006 62149, .00000 63151, .00001 63153, .00007 64155, .00001 92233, .00000 92234, .00014 92235, .00372 92236, .00209 92238, .31606 93237, .00067 94238, .00000 94239, .00153 94240, .00027 94241, .00000 94242, .00015 95241, .00000 95242, .00000 95243, .00001 96245, .00000
3	2004, 1.00000
4	8016, .00681 24000, .00175 26000, .00325 40000, .97748 50000, .01071
5	6000, .00234 13027, .00417 14000, .01001 16032, .00053 22000, .01057 24000, .23247 25055, .01023 26000, .28763

6	28000,	.40235	29000,	.02212	42000,	.01758		
	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER

COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
	8016,	.12250	45103,	.00044	47109,	.00007	62149,	.00000
2	63151,	.00002	63153,	.00012	64155,	.00001	92233,	.00001
	92234,	.00036	92235,	.00991	92236,	.00559	92238,	.85382
	93237,	.00180	94238,	.00000	94239,	.00415	94240,	.00074
	94241,	.00000	94242,	.00042	95241,	.00000	95242,	.00000
	95243,	.00004	96245,	.00000				
3	2004,	1.00000						
	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
4	50000,	.01400						
	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
5	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
7	25055,	.00900	26000,	.98535				
	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
8	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	7	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19110E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE		INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE

53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE

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113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19110E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01

11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			

71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL TMP 1
2 2.5300E-08

3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08

64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314) 79/06/21.
(1340) 79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394) 79/10/17.

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

(1396) 79/08/30.

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.

94238.50C 16458 NJOY
 94241.50C 22523 NJOY
 94242.50C 43433 NJOY

TOTAL NU (1338) 79/09/12.
 TOTAL NU (1381) 79/08/30.
 (1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
 16032.50C 2684 NJOY
 22000.50C 25231 NJOY
 25055.50C 60097 NJOY
 42000.50C 18467 NJOY
 62149.50C 11116 NJOY
 64155.50C 31471 NJOY

(1315) 79/10/29.
 (1316) 79/10/29.
 (1322) 79/06/21.
 (1325) 79/06/21.
 (1321) 79/08/01.
 (1319) 02/12/85
 (1365) 79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
 95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU (1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 10 DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 102258
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1468152

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/10000 year (mpc12u)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-3.148E-01	2.631E-01	3.691E+00	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.980E-01	8.382E-01
2	1.447E-01	-3.745E-01	2.491E+00	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.980E-01	1.533E+00
3	3.592E-01	2.682E-01	4.113E+00	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.980E-01	1.696E+00
4	7.267E-02	2.880E-01	5.494E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.980E-01	2.387E+00
5	4.755E-02	-1.239E-02	4.993E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.980E-01	1.136E+00
6	-1.208E-01	-4.254E-01	5.254E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.980E-01	3.446E+00
7	2.074E-01	-1.263E-01	5.542E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.980E-01	1.045E+00
8	-2.272E-01	-3.964E-01	5.621E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.980E-01	1.210E+00
9	2.004E-01	-2.862E-01	3.028E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.980E-01	4.099E-01
10	1.803E-02	-1.991E-01	2.842E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.980E-01	7.268E+00
11	-6.081E-02	7.392E-02	1.301E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.980E-01	6.983E-01
12	-3.202E-02	-3.837E-01	1.110E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.980E-01	2.645E+00
13	-9.771E-02	-3.543E-01	1.120E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.980E-01	3.250E+00
14	-2.604E-01	-1.108E-02	1.109E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.980E-01	2.946E-01
15	3.217E-01	2.737E-01	1.630E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.980E-01	3.047E+00
16	-4.318E-02	-1.517E-01	2.087E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.980E-01	4.029E+00
17	1.553E-01	1.285E-01	2.421E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.980E-01	5.770E-01
18	-4.384E-01	-1.476E-01	1.159E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.980E-01	9.658E-01
19	2.257E-01	-7.245E-02	2.297E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.980E-01	6.215E-01
20	2.127E-01	-8.777E-02	2.298E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.980E-01	5.172E+00
21	2.408E-01	1.049E-01	2.241E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.980E-01	1.971E+00
22	-1.305E-01	1.808E-01	1.407E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.980E-01	1.779E+00
23	4.164E-01	1.010E-01	1.343E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.980E-01	2.054E+00
24	-7.593E-03	4.777E-02	5.127E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.980E-01	8.507E-01
25	-2.815E-01	1.923E-01	4.637E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.980E-01	7.766E-01
26	-2.590E-01	-3.037E-01	3.345E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.980E-01	2.209E-01
27	-1.877E-01	-3.695E-01	3.317E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.980E-01	2.912E+00
28	-2.466E-01	-2.812E-01	2.414E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.980E-01	6.059E-01
29	-1.028E-01	-3.133E-01	2.417E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.980E-01	4.628E+00
30	2.107E-01	4.626E-02	2.359E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.980E-01	3.565E+00
31	1.645E-01	1.641E-01	2.426E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.980E-01	5.982E+00
32	-1.052E-02	3.700E-01	3.160E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.980E-01	1.624E+00
33	-2.077E-01	4.033E-01	3.073E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.980E-01	2.703E-02
34	1.904E-01	-9.339E-02	1.567E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.980E-01	1.399E+00
35	-6.234E-02	-1.913E-01	2.202E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.980E-01	1.002E-01
36	-1.249E-01	2.629E-01	4.298E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.980E-01	3.656E+00
37	2.710E-01	4.329E-02	3.394E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.980E-01	1.213E+00
38	-1.368E-01	-8.871E-02	3.198E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.980E-01	1.849E+00
39	-1.958E-01	3.797E-01	1.022E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.980E-01	2.934E+00
40	3.575E-01	-3.664E-03	3.489E+00	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.980E-01	1.149E-01
41	2.693E-01	-1.305E-01	3.811E+00	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.980E-01	3.449E-01
42	1.170E-01	-3.234E-01	1.627E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.980E-01	3.592E+00
43	2.112E-01	-3.645E-01	1.098E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.980E-01	6.203E+00
44	-4.679E-02	-8.942E-02	1.047E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.980E-01	6.875E+00
45	-2.155E-01	4.004E-01	2.074E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.980E-01	4.197E-01
46	1.241E-01	-2.634E-01	2.120E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.980E-01	2.596E+00
47	-1.013E-01	2.703E-01	3.306E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.980E-01	8.406E-01
48	-8.641E-02	-6.725E-02	3.349E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.980E-01	3.353E-01
49	-1.822E-01	-3.977E-01	9.640E+00	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.980E-01	4.614E+00

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50 3.019E-01 -3.217E-01 5.913E+00 33 0 -1.053E-01 -9.805E-01 1.658E-01 .000E+00 9.980E-01 4.414E-01
CYCLE 1 K(COLLISION) .821944 REMOVAL LIFETIME(ABS) 3.2152E+03 SOURCE POINTS GENERATED 2447
CYCLE 2 K(COLLISION) .843821 REMOVAL LIFETIME(ABS) 3.3205E+03 SOURCE POINTS GENERATED 3098
CYCLE 3 K(COLLISION) .829321 REMOVAL LIFETIME(ABS) 3.2845E+03 SOURCE POINTS GENERATED 2997
CYCLE 4 K(COLLISION) .853523 REMOVAL LIFETIME(ABS) 3.3005E+03 SOURCE POINTS GENERATED 3063
CYCLE 5 K(COLLISION) .827488 REMOVAL LIFETIME(ABS) 3.2153E+03 SOURCE POINTS GENERATED 2902
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5
CYCLE 6 K(COLLISION) .834314 REMOVAL LIFETIME(ABS) 3.3185E+03 SOURCE POINTS GENERATED 2992
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6
ESTIMATOR CYCLE 7 AVE OF 2 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .828804 .831559 .0033 K(COL/ABS) .000000 .0000 .000000 .0000 .0000
K(ABSORPTION) .829025 .824925 .0050 K(ABS/TK LN) .000000 .0000 .000000 .0000 .0000
K(TRK LENGTH) .835508 .838865 .0040 K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
REM LIFE(COL) 3.2379E+03 3.2857E+03 .0146 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000
REM LIFE(ABS) 3.2622E+03 3.2904E+03 .0086
SOURCE POINTS GENERATED 2970
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7
ESTIMATOR CYCLE 8 AVE OF 3 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .837570 .833563 .0031 K(COL/ABS) .829854 .0020 .829978 .0035 -.1941
K(ABSORPTION) .828583 .826145 .0032 K(ABS/TK LN) .831385 .0007 .831096 .0011 -.9280
K(TRK LENGTH) .832147 .836626 .0035 K(TK LN/COL) .835094 .0021 .834906 .0031 -.1853
REM LIFE(COL) 3.2596E+03 3.2770E+03 .0088 LIFE(COL/ABS) 3.2751E+03 .0078 3.2725E+03 .0102 .8752
REM LIFE(ABS) 3.2390E+03 3.2733E+03 .0072
SOURCE POINTS GENERATED 3021
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8
ESTIMATOR CYCLE 9 AVE OF 4 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .817662 .829588 .0053 K(COL/ABS) .827980 .0027 .827015 .0024 -.1888
K(ABSORPTION) .827053 .826372 .0023 K(ABS/TK LN) .828627 .0034 .827130 .0022 -.4282
K(TRK LENGTH) .813653 .830883 .0074 K(TK LN/COL) .830235 .0060 .829263 .0064 .8288
REM LIFE(COL) 3.2518E+03 3.2707E+03 .0066 K(COL/ABS/TK LN) .828947 .0038 .827113 .0033
REM LIFE(ABS) 3.2677E+03 3.2719E+03 .0051 LIFE(COL/ABS) 3.2713E+03 .0056 3.2721E+03 .0062 .8580
SOURCE POINTS GENERATED 2872
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9
ESTIMATOR CYCLE 10 AVE OF 5 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .838855 .831441 .0046 K(COL/ABS) .831264 .0045 .831335 .0050 .4095
K(ABSORPTION) .849948 .831087 .0059 K(ABS/TK LN) .831780 .0046 .831770 .0053 .1833
K(TRK LENGTH) .838835 .832473 .0060 K(TK LN/COL) .831957 .0051 .831253 .0053 .8420
REM LIFE(COL) 3.1463E+03 3.2458E+03 .0092 K(COL/ABS/TK LN) .831667 .0044 .831341 .0062
REM LIFE(ABS) 3.1737E+03 3.2522E+03 .0072 LIFE(COL/ABS) 3.2490E+03 .0081 3.2597E+03 .0073 .9565
SOURCE POINTS GENERATED 3111
SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10
ESTIMATOR CYCLE 11 AVE OF 6 CYCLES COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COLLISION) .831414 .831437 .0038 K(COL/ABS) .830761 .0037 .831057 .0040 .3977

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K(ABSORPTION) .825082 .830086 .0050
 K(TRK LENGTH) .836330 .833116 .0050
 REM LIFE(COL) 3.3233E+03 3.2588E+03 .0085
 REM LIFE(ABS) 3.3277E+03 3.2648E+03 .0070
 SOURCE POINTS GENERATED 2949

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .817624 .829463 .0040
 K(ABSORPTION) .834879 .830771 .0043
 K(TRK LENGTH) .821875 .831510 .0046
 REM LIFE(COL) 3.0361E+03 3.2269E+03 .0122
 REM LIFE(ABS) 3.0554E+03 3.2349E+03 .0110
 SOURCE POINTS GENERATED 2952

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .856049 .832787 .0053
 K(ABSORPTION) .825956 .830169 .0038
 K(TRK LENGTH) .855776 .834543 .0054
 REM LIFE(COL) 3.3057E+03 3.2368E+03 .0110
 REM LIFE(ABS) 3.2473E+03 3.2364E+03 .0096
 SOURCE POINTS GENERATED 3188

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .855655 .835328 .0055
 K(ABSORPTION) .841899 .831472 .0037
 K(TRK LENGTH) .850109 .836273 .0052
 REM LIFE(COL) 3.2930E+03 3.2430E+03 .0099
 REM LIFE(ABS) 3.2958E+03 3.2430E+03 .0087
 SOURCE POINTS GENERATED 2949

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .856515 .837446 .0056
 K(ABSORPTION) .831936 .831519 .0033
 K(TRK LENGTH) .853363 .837982 .0051
 REM LIFE(COL) 3.3427E+03 3.2530E+03 .0093
 REM LIFE(ABS) 3.3240E+03 3.2511E+03 .0081
 SOURCE POINTS GENERATED 2949

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .821832 .836027 .0053
 K(ABSORPTION) .815908 .830099 .0034
 K(TRK LENGTH) .832151 .837452 .0046
 REM LIFE(COL) 3.4014E+03 3.2665E+03 .0094
 REM LIFE(ABS) 3.3670E+03 3.2617E+03 .0080
 SOURCE POINTS GENERATED 2866

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .826038 .835194 .0050

K(ABS/TK LN) .831601 .0038 .831612 .0042 .1382
 K(TK LN/COL) .832276 .0042 .831156 .0042 .8315
 K(COL/ABS/TK LN) .831546 .0036 .831104 .0048
 LIFE(COL/ABS) 3.2618E+03 .0077 3.2723E+03 .0071 .9635

CYCLE = 11

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .830117 .0032 .830055 .0035 .1996
 K(ABS/TK LN) .831140 .0032 .831113 .0035 .0432
 K(TK LN/COL) .830487 .0042 .829508 .0044 .8558
 K(COL/ABS/TK LN) .830581 .0033 .830538 .0043
 LIFE(COL/ABS) 3.2309E+03 .0116 3.2527E+03 .0109 .9866

CYCLE = 12

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .831478 .0032 .831067 .0033 -.0163
 K(ABS/TK LN) .832356 .0031 .831673 .0032 -.0972
 K(TK LN/COL) .833665 .0052 .833380 .0057 .9233
 K(COL/ABS/TK LN) .832500 .0036 .831704 .0038
 LIFE(COL/ABS) 3.2366E+03 .0102 3.2361E+03 .0098 .9607

CYCLE = 13

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .833400 .0037 .832460 .0036 .2203
 K(ABS/TK LN) .833872 .0033 .833008 .0034 .0887
 K(TK LN/COL) .835800 .0053 .836221 .0055 .9268
 K(COL/ABS/TK LN) .834358 .0039 .833255 .0037
 LIFE(COL/ABS) 3.2430E+03 .0092 3.2430E+03 .0088 .9617

CYCLE = 14

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .834482 .0035 .832742 .0033 .2038
 K(ABS/TK LN) .834750 .0031 .833321 .0031 .0879
 K(TK LN/COL) .837714 .0052 .838099 .0053 .9387
 K(COL/ABS/TK LN) .835649 .0038 .833451 .0034
 LIFE(COL/ABS) 3.2521E+03 .0086 3.2491E+03 .0081 .9653

CYCLE = 15

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .833063 .0036 .831323 .0035 .3261
 K(ABS/TK LN) .833776 .0031 .832533 .0031 .1436
 K(TK LN/COL) .836739 .0049 .837910 .0048 .9249
 K(COL/ABS/TK LN) .834526 .0037 .833135 .0033
 LIFE(COL/ABS) 3.2641E+03 .0086 3.2549E+03 .0076 .9707

CYCLE = 16

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .833408 .0033 .832756 .0033 .1750

K(ABSORPTION)	.848354	.831621	.0036	K(ABS/TK LN)	.834184	.0028	.833732	.0030	.0233
K(TRK LENGTH)	.828999	.836747	.0043	K(TK LN/COL)	.835971	.0045	.837301	.0045	.9279
REM LIFE(COL)	3.3065E+03	3.2698E+03	.0086	K(COL/ABS/TK LN)	.834521	.0034	.834547	.0031	
REM LIFE(ABS)	3.3172E+03	3.2663E+03	.0074	LIFE(COL/ABS)	3.2681E+03	.0079	3.2619E+03	.0072	.9687
SOURCE POINTS GENERATED 2997									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.813684		.833540	.0050	K(COL/ABS)	.832413	.0033	.831892
K(ABSORPTION)		.827281		.831287	.0034	K(ABS/TK LN)	.833560	.0027	.833079
K(TRK LENGTH)		.824869		.835834	.0041	K(TK LN/COL)	.834687	.0045	.837073
REM LIFE(COL)		3.3095E+03		3.2729E+03	.0079	K(COL/ABS/TK LN)	.833553	.0033	.834501
REM LIFE(ABS)		3.3323E+03		3.2714E+03	.0070	LIFE(COL/ABS)	3.2721E+03	.0074	3.2699E+03
SOURCE POINTS GENERATED 2935									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.838464		.833891	.0046	K(COL/ABS)	.832225	.0030	.831539
K(ABSORPTION)		.821089		.830558	.0032	K(ABS/TK LN)	.833766	.0025	.833081
K(TRK LENGTH)		.851784		.836973	.0040	K(TK LN/COL)	.835432	.0042	.837311
REM LIFE(COL)		3.3529E+03		3.2786E+03	.0075	K(COL/ABS/TK LN)	.833808	.0031	.834416
REM LIFE(ABS)		3.3064E+03		3.2739E+03	.0065	LIFE(COL/ABS)	3.2762E+03	.0070	3.2695E+03
SOURCE POINTS GENERATED 3068									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.846322		.834720	.0044	K(COL/ABS)	.833386	.0032	.832977
K(ABSORPTION)		.852968		.832052	.0035	K(ABS/TK LN)	.834355	.0025	.834188
K(TRK LENGTH)		.832237		.836657	.0038	K(TK LN/COL)	.835689	.0039	.836612
REM LIFE(COL)		3.2685E+03		3.2779E+03	.0070	K(COL/ABS/TK LN)	.834477	.0030	.834852
REM LIFE(ABS)		3.2843E+03		3.2746E+03	.0061	LIFE(COL/ABS)	3.2762E+03	.0065	3.2716E+03
SOURCE POINTS GENERATED 3163									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/10000 year (mpc12u)

PROBID = 02/24/95 09:40:34
02/24/95 07:43:34

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER SOURCE PARTICLE)	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER SOURCE PARTICLE)
SOURCE	59332	1.0113E+00	2.0619E+00	ESCAPE	0	0.	0.
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	6.6789E-02	4.9627E-07	WEIGHT CUTOFF	59404	6.6923E-02	4.6481E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.2870E-07	DOWNSCATTERING	0	0.	1.9537E+00
				CAPTURE	0	6.9350E-01	3.2402E-02
(N,XN)	144	1.9209E-03	1.3857E-03	LOSS TO (N,XN)	72	9.6045E-04	7.9517E-03
FISSION	0	0.	0.	LOSS TO FISSION	0	3.1858E-01	6.9306E-02

TOTAL	59476	1.0800E+00	2.0633E+00	TOTAL	59476	1.0800E+00	2.0633E+00
NUMBER OF NEUTRONS BANKED	72			AVERAGE LIFETIME, SHAKES			
NEUTRON TRACKS PER SOURCE PARTICLE	1.0024E+00			ESCAPE	.0000E+00	CUTOFFS	
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.8240E+01			CAPTURE	3.2701E+03	TCO	1.0000E+34
TOTAL NEUTRON COLLISIONS	3455490			CAPTURE OR ESCAPE	3.2701E+03	ECO	.0000E+00
NET MULTIPLICATION	1.0009E+00	.0002		ANY TERMINATION	3.6129E+03	WC1	-5.0000E-01
						WC2	-2.5000E-01
COMPUTER TIME SO FAR IN THIS RUN	116.70 MINUTES			MAXIMUM NUMBER EVER IN BANK	1		
COMPUTER TIME IN MCRUN	116.57 MINUTES			BANK OVERFLOWS TO BACKUP FILE	0		
SOURCE PARTICLES PER MINUTE	5.0900E+02			FIELD LENGTH	0		
RANDOM NUMBERS GENERATED	41799575			MOST RANDOM NUMBERS USED WAS	9521 IN HISTORY	3625	

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4103E-01 TO 1.2260E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	26290	9700	3.3438E+00	1.1816E-04	3.7985E-01	7.3260E-01	1.1030E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	727766	59403	299610	4.2509E+00	6.9430E-04	7.4112E-01	8.8199E-01	2.4960E+00
33	34	2838	185	583	6.2745E-03	6.2585E-05	2.6670E-01	6.3386E-01	4.2325E+00
34	35	129	12	342	2.7896E-03	1.0636E-04	5.0430E-01	5.8949E-01	1.2033E+00
35	36	1302128	59403	8	1.2126E-04	6.0685E-04	7.0686E-01	8.7869E-01	3.4936E+03
36	37	227	11	12	1.1131E-04	1.1206E-04	3.9730E-01	6.5676E-01	1.0965E+00
37	38	1411462	59403	50628	7.6049E-01	5.8339E-04	6.9281E-01	8.7792E-01	4.1108E+00
38	39	255	11	92	7.9901E-04	7.5458E-05	3.7035E-01	6.0678E-01	1.0026E+00
39	40	2253461	59403	1452913	1.9230E+01	5.0954E-04	6.6076E-01	8.7556E-01	1.6320E+00
40	41	56869	30881	91021	1.2110E+00	3.7688E-04	6.0663E-01	8.7381E-01	1.5345E+00
41	42	13	4	37	2.8763E-04	1.1858E-06	4.0961E-05	6.0324E-01	4.8810E-01
42	43	120086	32582	3507	5.2433E-02	4.0233E-04	6.1648E-01	8.7521E-01	4.1330E+00
43	44	134564	35022	30026	4.0060E-01	4.1057E-04	6.2880E-01	8.7602E-01	1.5705E+00
44	45	147368	35982	3154	4.7144E-02	4.1239E-04	6.2649E-01	8.7602E-01	4.1371E+00
45	46	179490	41000	71998	9.5917E-01	4.1524E-04	6.3176E-01	8.7582E-01	1.5755E+00
46	47	7271	3374	7878	1.0462E-01	3.9988E-04	6.3552E-01	8.7395E-01	1.5773E+00
47	48	9752	3657	296	4.5057E-03	4.2530E-04	6.2588E-01	8.7358E-01	4.1581E+00
48	49	12560	4947	6219	8.3182E-02	4.3088E-04	6.4961E-01	8.7799E-01	1.6004E+00
49	50	34697	15292	68770	8.2453E-01	3.4200E-04	5.7644E-01	8.2509E-01	1.4800E+00
50	51	34380	14528	12964	1.6185E-01	3.8871E-04	5.7916E-01	8.0672E-01	2.1044E+00
51	52	33885	14184	2476	3.5979E-02	3.9721E-04	5.8243E-01	8.0473E-01	9.1793E+00
52	53	33819	14251	12697	1.5698E-01	3.7323E-04	5.7106E-01	8.0051E-01	2.0903E+00
53	54	169	49	1248	1.1801E-02	3.5192E-05	1.6122E-01	6.2687E-01	7.0252E-01
54	55	33590	15081	66517	8.0360E-01	3.4645E-04	5.6595E-01	8.2979E-01	1.4730E+00
55	56	33395	14256	12391	1.5660E-01	4.0517E-04	5.8039E-01	8.1456E-01	2.1106E+00
56	57	33106	13954	2404	3.4935E-02	4.0997E-04	5.8057E-01	8.1054E-01	9.0965E+00
57	58	33183	13974	12436	1.5454E-01	3.8752E-04	5.7079E-01	8.0563E-01	2.1080E+00
58	59	185	58	1069	1.0564E-02	4.0566E-05	1.2832E-01	6.5085E-01	6.9575E-01
59	60	51607	18586	89580	1.1324E+00	4.7903E-04	5.6815E-01	8.5006E-01	1.5121E+00
60	61	50717	17700	17273	2.2638E-01	6.8559E-04	5.8784E-01	8.4147E-01	2.2977E+00
61	62	330	77	1492	1.2950E-02	3.9169E-05	1.9265E-01	5.6678E-01	7.3836E-01
62	63	52595	18942	92523	1.1628E+00	4.6812E-04	5.5315E-01	8.4742E-01	1.4941E+00
63	64	51986	18015	17721	2.3398E-01	6.5870E-04	5.8002E-01	8.4056E-01	2.2699E+00
64	65	370	68	1609	1.4647E-02	3.5817E-05	1.3311E-01	6.0617E-01	6.7616E-01
65	66	10339	5105	440967	4.0877E+00	5.3839E-05	2.5069E-01	6.1904E-01	8.3329E-01
66	67	10422	4052	15435	1.6604E-01	1.7722E-04	4.3547E-01	7.0168E-01	1.8034E+00
67	68	9878	3885	14776	1.5670E-01	1.8476E-04	4.4188E-01	6.9653E-01	1.8075E+00
68	70	33847	9105	11154	1.4653E-01	9.3250E-04	5.8574E-01	8.4303E-01	2.3807E+00
69	71	33910	8804	6227	9.3793E-02	9.8246E-04	5.7388E-01	8.3882E-01	8.8830E+00
70	72	18211	8556	56328	7.2898E-01	1.3046E-03	5.7967E-01	8.3989E-01	2.5263E+00
71	73	32770	8774	10686	1.4072E-01	9.5489E-04	5.7081E-01	8.4422E-01	2.4031E+00
72	74	32803	8456	6215	9.3936E-02	1.0515E-03	5.7274E-01	8.4433E-01	8.8399E+00
73	75	17635	8230	54430	7.0443E-01	1.3137E-03	5.8435E-01	8.3896E-01	2.5198E+00
74	76	179	38	3898	3.4014E-02	2.6929E-05	1.3792E-01	5.5454E-01	6.2657E-01
75	77	153	42	2763	2.3445E-02	4.5952E-05	2.0388E-01	5.7193E-01	7.9137E-01
76	80	12	5	23	2.6513E-04	2.7523E-03	1.5129E+00	8.1929E-01	3.8002E+00
77	81	3662	1574	10859	1.2122E-01	3.2800E-04	4.7055E-01	7.3776E-01	2.0298E+00
78	82	2317	936	13255	1.4310E-01	2.3565E-04	4.0221E-01	7.5403E-01	1.2312E+00
79	83	3	3	341	2.7468E-03	3.9742E-05	2.0408E-01	5.3189E-01	6.9972E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1722	718	5146	6.1680E-02	8.0051E-04	5.1212E-01	7.7936E-01	2.0771E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1050	472	8959	1.0568E-01	2.1005E-03	4.8556E-01	8.0676E-01	4.7945E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	400	233	49972	4.2623E-01	2.5258E-05	9.3316E-02	5.5577E-01	5.9167E-01
TOTAL		7079856	692983	3455490	4.2830E+01				
1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS									

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-5.3689E-01	-5.3689E-01
2	3.3513E-01	-0000E+00	-0000E+00	-0000E+00	-9.0919E-01	-5.7406E-01
3	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.7236E-02	-1.7236E-02
4	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-5.3537E-02	-5.3537E-02
5	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.5776E-02	-1.5776E-02
6	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.5408E-01	-1.5408E-01
7	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.6948E+00	-1.6948E+00
8	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-2.0225E+00	-2.0225E+00
9	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-2.1820E-01	-2.1820E-01
10	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-2.1401E-01	-2.1401E-01
11	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-3.8075E-01	-3.8075E-01
12	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-3.8497E-01	-3.8497E-01
13	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-7.8167E-02	-7.8167E-02
14	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-8.0473E-02	-8.0473E-02
15	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-8.8410E-02	-8.8410E-02
16	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-7.6549E-02	-7.6549E-02
17	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-7.4369E-02	-7.4369E-02
18	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-7.6616E-02	-7.6616E-02
19	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.0206E-01	-1.0206E-01
20	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.0116E-01	-1.0116E-01
21	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-9.2428E-02	-9.2428E-02
22	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-8.3791E-02	-8.3791E-02
23	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.160E-01	-1.160E-01
24	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.1373E-01	-1.1373E-01
25	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.1532E-01	-1.1532E-01
26	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.168E-01	-1.168E-01
27	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.0209E-01	-1.0209E-01
28	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-8.2924E-02	-8.2924E-02
29	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-9.0010E-02	-9.0010E-02
30	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.0145E-01	-1.0145E-01
31	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-1.9188E+01	-1.9188E+01
32	-0000E+00	-0000E+00	-0000E+00	-0000E+00	-9.6518E+00	-9.6518E+00
33	9.8685E+00	1.0113E+00	-0000E+00	-0000E+00	-2.9075E-02	1.2279E+00
34	3.0311E-02	-0000E+00	-0000E+00	-0000E+00	-1.9285E+01	1.0611E-04
35	1.2017E-03	-0000E+00	-0000E+00	-0000E+00	-1.0956E-03	1.0725E-02
36	1.9296E+01	-0000E+00	-0000E+00	-0000E+00	-2.1094E-03	6.4520E-07
37	2.1101E-03	-0000E+00	-0000E+00	-0000E+00	-2.0831E+01	7.7914E-02
38	2.0909E+01	-0000E+00	-0000E+00	-0000E+00	-2.3166E-03	6.5864E-05
39	2.3825E-03	-0000E+00	-0000E+00	-0000E+00	-1.0946E+01	2.2371E+01
40	3.3317E+01	-0000E+00	-0000E+00	-0000E+00	-8.3734E-01	3.7489E-03
41	8.4109E-01	-0000E+00	-0000E+00	-0000E+00	-1.2402E-04	1.5342E-06
42	1.2555E-04	-0000E+00	-0000E+00	-0000E+00	-1.7718E+00	5.3095E-04
43	1.7723E+00	-0000E+00	-0000E+00	-0000E+00	-1.9857E+00	1.2095E-03
44	1.9869E+00	-0000E+00	-0000E+00	-0000E+00	-2.1762E+00	4.7201E-04
45	2.1767E+00	-0000E+00	-0000E+00	-0000E+00	-1.1258E+00	1.5271E+00
46	2.6529E+00	-0000E+00	-0000E+00	-0000E+00	-6.5857E-02	4.1539E-02
47	1.0740E-01	-0000E+00	-0000E+00	-0000E+00	-1.3892E-01	5.0218E-03
48	1.4394E-01	-0000E+00	-0000E+00	-0000E+00	-7.3091E-02	1.1271E-01
49	1.8580E-01	-0000E+00	-0000E+00	-0000E+00	-2.7240E-01	2.1150E-01
50	4.8390E-01	-0000E+00	-0000E+00	-0000E+00	-4.5650E-01	1.6129E-02
51	4.7263E-01	-0000E+00	-0000E+00	-0000E+00	-1.9345E-01	2.6841E-01
52	4.6187E-01	-0000E+00	-0000E+00	-0000E+00	-6.7605E-05	1.7000E-03
53	1.7676E-03	-0000E+00	-0000E+00	-0000E+00	-2.6445E-01	2.0749E-01
54	4.7194E-01	-0000E+00	-0000E+00	-0000E+00	-4.4639E-01	1.5429E-02
55	4.6182E-01	-0000E+00	-0000E+00	-0000E+00	-4.4970E-01	5.2452E-03
56	4.5495E-01	-0000E+00	-0000E+00	-0000E+00	-1.9291E-01	2.6234E-01
57	4.5525E-01	-0000E+00	-0000E+00	-0000E+00		
58						

TOTAL	1.0323E+02	1.0113E+00	.0000E+00	.0000E+00	-1.0323E+02	1.0113E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

[illegible]

25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	5.4704E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4704E-04
33	34	.0000E+00	.0000E+00	-2.3380E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3380E-06
34	35	.0000E+00	.0000E+00	8.9879E-09	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.9879E-09
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-4.4574E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.4574E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	1.1500E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1500E-04
40	41	.0000E+00	.0000E+00	9.4474E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.4474E-06
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-1.9640E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9640E-06
43	44	.0000E+00	.0000E+00	-8.1547E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1547E-06
44	45	.0000E+00	.0000E+00	4.4964E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4964E-07
45	46	.0000E+00	.0000E+00	-3.7308E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.7308E-05
46	47	.0000E+00	.0000E+00	-8.3877E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3877E-06
47	48	.0000E+00	.0000E+00	-4.2019E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.2019E-06
48	49	.0000E+00	.0000E+00	-4.1979E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1979E-06
49	50	.0000E+00	.0000E+00	-1.5091E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5091E-05
50	51	.0000E+00	.0000E+00	5.0712E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0712E-05
51	52	.0000E+00	.0000E+00	2.8308E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8308E-05
52	53	.0000E+00	.0000E+00	5.2387E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2387E-05
53	54	.0000E+00	.0000E+00	8.5152E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5152E-06
54	55	.0000E+00	.0000E+00	-1.1627E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1627E-04
55	56	.0000E+00	.0000E+00	-1.0447E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0447E-04
56	57	.0000E+00	.0000E+00	-1.7349E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7349E-05
57	58	.0000E+00	.0000E+00	-9.7253E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.7253E-05
58	59	.0000E+00	.0000E+00	-8.3467E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3467E-06
59	60	.0000E+00	.0000E+00	6.0539E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.0539E-05
60	61	.0000E+00	.0000E+00	-1.4064E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4064E-04
61	62	.0000E+00	.0000E+00	1.2719E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2719E-05
62	63	.0000E+00	.0000E+00	4.8211E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8211E-05
63	64	.0000E+00	.0000E+00	2.7617E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.7617E-05
64	65	.0000E+00	.0000E+00	8.4892E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4892E-06
65	66	.0000E+00	.0000E+00	-1.3504E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3504E-04
66	67	.0000E+00	.0000E+00	-2.2349E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2349E-04
67	68	.0000E+00	.0000E+00	1.7931E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7931E-04
68	70	.0000E+00	.0000E+00	1.0514E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0514E-04
69	71	.0000E+00	.0000E+00	1.8483E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8483E-05
70	72	.0000E+00	.0000E+00	7.3796E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.3796E-06
71	73	.0000E+00	.0000E+00	-1.4649E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4649E-04
72	74	.0000E+00	.0000E+00	-2.6228E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.6228E-05
73	75	.0000E+00	.0000E+00	2.5344E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5344E-04
74	76	.0000E+00	.0000E+00	2.1342E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1342E-05
75	77	.0000E+00	.0000E+00	-1.6647E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6647E-05
76	80	.0000E+00	.0000E+00	-4.4645E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.4645E-07
77	81	.0000E+00	.0000E+00	-1.1674E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1674E-04
78	82	.0000E+00	.0000E+00	9.1862E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.1862E-06
79	83	.0000E+00	.0000E+00	-4.1704E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1704E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-8.0964E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0964E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-4.4630E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.4630E-05

85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	2.0180E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0180E-05
TOTAL		.0000E+00	.0000E+00	-1.3455E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3455E-04

1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.4574E-02	.0000E+00	-1.4574E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.8297E-03	.0000E+00	-4.0725E-01	-9.1484E-04	-3.1858E-01
33	34	.0000E+00	.0000E+00	-1.4207E-04	.0000E+00	-1.4207E-04
34	35	.0000E+00	.0000E+00	-1.4311E-05	.0000E+00	-1.4311E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-6.4520E-07	.0000E+00	-6.4520E-07
37	38	6.7170E-05	.0000E+00	-6.8274E-03	-3.3585E-05	-6.7938E-03
38	39	.0000E+00	.0000E+00	-4.4194E-06	.0000E+00	-4.4194E-06
39	40	.0000E+00	.0000E+00	-5.2499E-02	.0000E+00	-5.2499E-02
40	41	.0000E+00	.0000E+00	-3.7583E-03	.0000E+00	-3.7583E-03
41	42	.0000E+00	.0000E+00	-1.5342E-06	.0000E+00	-1.5342E-06
42	43	.0000E+00	.0000E+00	-5.2898E-04	.0000E+00	-5.2898E-04
43	44	.0000E+00	.0000E+00	-1.2013E-03	.0000E+00	-1.2013E-03
44	45	.0000E+00	.0000E+00	-4.7246E-04	.0000E+00	-4.7246E-04
45	46	.0000E+00	.0000E+00	-2.8662E-03	.0000E+00	-2.8662E-03
46	47	.0000E+00	.0000E+00	-3.2362E-04	.0000E+00	-3.2362E-04
47	48	.0000E+00	.0000E+00	-4.1835E-05	.0000E+00	-4.1835E-05
48	49	.0000E+00	.0000E+00	-2.4558E-04	.0000E+00	-2.4558E-04
49	50	.0000E+00	.0000E+00	-2.5885E-03	.0000E+00	-2.5885E-03
50	51	.0000E+00	.0000E+00	-1.1276E-02	.0000E+00	-1.1276E-02
51	52	.0000E+00	.0000E+00	-6.2217E-04	.0000E+00	-6.2217E-04

52	53	.0000E+00	.0000E+00	-1.1178E-02	.0000E+00	.0000E+00	-1.1178E-02
53	54	.0000E+00	.0000E+00	-6.0814E-05	.0000E+00	.0000E+00	-6.0814E-05
54	55	.0000E+00	.0000E+00	-2.4881E-03	.0000E+00	.0000E+00	-2.4881E-03
55	56	.0000E+00	.0000E+00	-1.0533E-02	.0000E+00	.0000E+00	-1.0533E-02
56	57	.0000E+00	.0000E+00	-6.6187E-04	.0000E+00	.0000E+00	-6.6187E-04
57	58	.0000E+00	.0000E+00	-1.0889E-02	.0000E+00	.0000E+00	-1.0889E-02
58	59	.0000E+00	.0000E+00	-5.1357E-05	.0000E+00	.0000E+00	-5.1357E-05
59	60	.0000E+00	.0000E+00	-2.9184E-03	.0000E+00	.0000E+00	-2.9184E-03
60	61	.0000E+00	.0000E+00	-1.0723E-02	.0000E+00	.0000E+00	-1.0723E-02
61	62	.0000E+00	.0000E+00	-6.5381E-05	.0000E+00	.0000E+00	-6.5381E-05
62	63	.0000E+00	.0000E+00	-2.9863E-03	.0000E+00	.0000E+00	-2.9863E-03
63	64	.0000E+00	.0000E+00	-1.1289E-02	.0000E+00	.0000E+00	-1.1289E-02
64	65	.0000E+00	.0000E+00	-7.3685E-05	.0000E+00	.0000E+00	-7.3685E-05
65	66	.0000E+00	.0000E+00	-2.0722E-02	.0000E+00	.0000E+00	-2.0722E-02
66	67	.0000E+00	.0000E+00	-1.6331E-02	.0000E+00	.0000E+00	-1.6331E-02
67	68	.0000E+00	.0000E+00	-1.5555E-02	.0000E+00	.0000E+00	-1.5555E-02
68	70	.0000E+00	.0000E+00	-5.4805E-03	.0000E+00	.0000E+00	-5.4805E-03
69	71	.0000E+00	.0000E+00	-7.2926E-04	.0000E+00	.0000E+00	-7.2926E-04
70	72	.0000E+00	.0000E+00	-2.2251E-02	.0000E+00	.0000E+00	-2.2251E-02
71	73	.0000E+00	.0000E+00	-5.2442E-03	.0000E+00	.0000E+00	-5.2442E-03
72	74	.0000E+00	.0000E+00	-7.1438E-04	.0000E+00	.0000E+00	-7.1438E-04
73	75	.0000E+00	.0000E+00	-2.1358E-02	.0000E+00	.0000E+00	-2.1358E-02
74	76	.0000E+00	.0000E+00	-1.8749E-04	.0000E+00	.0000E+00	-1.8749E-04
75	77	.0000E+00	.0000E+00	-1.2274E-04	.0000E+00	.0000E+00	-1.2274E-04
76	80	.0000E+00	.0000E+00	-2.9221E-05	.0000E+00	.0000E+00	-2.9221E-05
77	81	2.4051E-05	.0000E+00	-8.4330E-03	-1.2025E-05	.0000E+00	-8.4210E-03
78	82	.0000E+00	.0000E+00	-4.6378E-04	.0000E+00	.0000E+00	-4.6378E-04
79	83	.0000E+00	.0000E+00	-1.4960E-05	.0000E+00	.0000E+00	-1.4960E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.4978E-03	.0000E+00	.0000E+00	-2.4978E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9956E-03	.0000E+00	.0000E+00	-1.9956E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.2142E-03	.0000E+00	.0000E+00	-2.2142E-03

TOTAL 1.9209E-03 .0000E+00 -6.9350E-01 -9.6045E-04 -3.1858E-01 -1.0111E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	295450 17112	3.1352E+00 2.0857E-01	1.4480E-02 9.4261E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7484E-01 3.7685E-04 5.7948E-05 2.1481E-06 9.1919E-06 7.0165E-05 7.9843E-06 2.0251E-06 1.3599E-04 3.7169E-03 2.0866E-03 3.1606E-01 6.6726E-04 1.3009E-26 1.5284E-03 2.7264E-04 3.2885E-10 1.5383E-04 9.9392E-09 1.1472E-26 1.3220E-05 1.9377E-07	101206 908 146 1103 560 277 2524 12 250 20180 1662 149908 1860 0 16349 2298 0 327 0 0 36 4	1.4878E+00 1.1721E-02 1.9812E-03 1.2301E-02 6.1658E-03 3.4776E-03 2.6764E-02 2.3862E-04 3.3826E-03 3.9086E-01 2.4390E-02 2.2112E+00 2.4025E-02 .0000E+00 3.3037E-01 3.0646E-02 .0000E+00 4.6702E-03 .0000E+00 .0000E+00 5.0148E-04 8.6807E-05	1.2570E-03 1.0090E-02 1.6571E-03 1.2171E-02 6.0738E-03 3.1123E-03 2.6695E-02 1.8030E-05 2.1243E-03 3.4438E-02 8.1786E-03 1.9114E-01 1.8982E-02 .0000E+00 6.0587E-02 2.7012E-02 .0000E+00 3.3012E-03 .0000E+00 .0000E+00 4.0416E-04 8.3492E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.0960E-04 6.2726E-05 1.7237E-01 3.4459E-04 2.0881E-02 2.7376E-04 .0000E+00 1.2436E-01 1.0542E-04 .0000E+00 2.6048E-05 .0000E+00 .0000E+00 6.6646E-06 3.8219E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 9.1484E-04 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 4 5 569 3	1.9345E-05 4.2714E-05 5.0853E-05 6.1302E-03 3.1416E-05	7.6847E-10 1.2333E-05 7.8896E-06 1.1871E-04 3.1390E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	336 6	2.7392E-03 5.0414E-05	1.4310E-05 1.7859E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	8	1.2126E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	11 1	9.4236E-05 1.7077E-05	6.4520E-07 1.2511E-13	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	181 75 237 49643 492	2.6575E-03 1.1558E-03 3.2944E-03 7.4601E-01 7.3783E-03	1.0179E-06 1.0517E-04 1.7614E-04 6.3564E-03 1.8863E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 3.3585E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	87 5	7.6280E-04 3.6208E-05	4.4185E-06 9.3579E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1336073 116840	1.7522E+01 1.7081E+00	5.1201E-02 1.2981E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00

40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	84148 6873	1.1107E+00 1.0033E-01	3.6846E-03 7.3689E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	36 1	2.8139E-04 6.2447E-06	1.5341E-06 1.7741E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 10 16 3436 33	1.8253E-04 1.4181E-04 2.2003E-04 5.1418E-02 4.7112E-04	1.6400E-07 1.0750E-05 1.9085E-05 4.8562E-04 1.3361E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	27699 2327	3.6682E-01 3.3783E-02	1.1765E-03 2.4849E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	15 5 14 3092 28	2.1527E-04 6.8981E-05 2.0147E-04 4.6236E-02 4.2198E-04	1.9082E-07 1.5847E-06 1.3819E-05 4.4656E-04 1.0307E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	66473 5525	8.7865E-01 8.0517E-02	2.8155E-03 5.0680E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7275 603	9.5848E-02 8.7681E-03	3.1795E-04 5.6704E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 2 1 289 3	1.6328E-05 2.3445E-05 8.0975E-06 4.4067E-03 5.1135E-05	4.4861E-13 1.2877E-06 3.6536E-06 3.5131E-05 1.7626E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5739 480	7.6188E-02 6.9944E-03	2.4383E-04 1.7490E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	63953 4817	7.5816E-01 6.6377E-02	2.5500E-03 3.8482E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	10 49 45 5 0 1556 542 8220 2363 174	1.3746E-04 5.8874E-04 6.6004E-04 6.9918E-05 .0000E+00 2.0354E-02 7.7161E-03 1.0069E-01 2.9291E-02 2.3406E-03	1.9246E-08 2.6487E-05 1.3130E-05 7.5646E-07 .0000E+00 2.1417E-03 9.5102E-04 5.9521E-03 1.7818E-03 4.0853E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2466 10	3.5858E-02 1.2114E-04	6.0833E-04 1.3838E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01	10 51 48 6 2 1454	1.3276E-04 6.1143E-04 7.0181E-04 6.4163E-05 3.6353E-05 1.8915E-02	2.7177E-08 3.1188E-05 6.2344E-06 1.2650E-06 3.0444E-08 2.0138E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00

		25055.50C	2.0356E-02	492	6.9728E-03	9.8770E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8094	9.7958E-02	5.9870E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2376	2.9307E-02	1.8182E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	164	2.2793E-03	3.3285E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1189	1.1166E-02	5.9832E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	59	6.3464E-04	9.8129E-07	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	61658	7.3659E-01	2.4478E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4859	6.7005E-02	4.0307E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	9	8.9992E-05	3.6646E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	3.9143E-04	2.2160E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	6.8529E-04	8.5021E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.6932E-05	1.1430E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1463	1.9242E-02	1.9315E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	531	7.6261E-03	9.5189E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7755	9.6360E-02	5.5448E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2392	3.0069E-02	1.8257E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	2.0556E-03	2.4695E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2402	3.4901E-02	6.5614E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	2	3.3659E-05	5.7348E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	8	1.1022E-04	2.9856E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	5.7353E-04	3.1394E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	6.0847E-04	6.7669E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.9809E-05	1.6113E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.2957E-05	3.1013E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1415	1.8347E-02	1.9913E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	510	6.9817E-03	1.0799E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7837	9.5864E-02	5.6369E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2410	2.9877E-02	1.8595E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	156	2.0942E-03	2.7820E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1016	9.9718E-03	5.1345E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	53	5.9173E-04	1.2135E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	82382	1.0297E+00	2.8528E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7198	1.0261E-01	6.5681E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	12	1.4254E-04	1.7080E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	5.5568E-04	1.7149E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	85	1.1902E-03	7.4584E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.4155E-05	6.9725E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2410E-05	2.7608E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2090	2.8799E-02	1.9413E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	747	1.1086E-02	8.6434E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10746	1.3831E-01	5.6614E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3298	4.2767E-02	1.8216E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	245	3.4459E-03	4.0685E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1414	1.2229E-02	6.5359E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	78	7.2160E-04	2.1735E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	85226	1.0596E+00	2.9393E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7297	1.0320E-01	4.7011E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	8	9.3845E-05	3.3702E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	48	6.0658E-04	3.0164E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	74	1.0972E-03	7.0269E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0285E-04	1.2034E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.3567E-05	3.0308E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2140	2.9813E-02	1.9814E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	814	1.1801E-02	1.1090E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11002	1.4239E-01	5.8616E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3376	4.4454E-02	1.8498E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	249	3.5874E-03	4.4558E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1534	1.3964E-02	7.3665E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	75	6.8295E-04	2.0676E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	420497	3.8771E+00	2.0657E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20470	2.1053E-01	6.4717E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	11	1.3621E-04	2.8086E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	53	5.4478E-04	4.3018E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	5.4723E-04	1.4879E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	5.9231E-05	1.3045E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	3.9575E-05	3.7713E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1747	1.9369E-02	3.1184E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	439	5.4457E-03	1.4487E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10037	1.0645E-01	8.6390E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2954	3.1752E-02	2.8400E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	139	1.7042E-03	2.2198E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	11	1.2523E-04	2.4521E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	5.2797E-04	4.3925E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.1193E-04	1.1521E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.2946E-05	1.2332E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.1105E-05	2.7416E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1615	1.7652E-02	2.8583E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	454	5.6339E-03	1.4304E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9667	1.0152E-01	8.2466E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2769	2.8637E-02	2.6109E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	159	1.9584E-03	3.5015E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	12	1.6188E-04	2.3861E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.9209E-04	1.7744E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	7.2287E-04	4.3319E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.4803E-05	5.9822E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6817E-05	5.6168E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1412	1.9531E-02	1.0260E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	432	6.2650E-03	4.4233E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6946	8.9399E-02	2.8789E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2098	2.7535E-02	8.8219E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.3640E-03	2.2846E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6220	9.3700E-02	7.2652E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	7	9.3676E-05	2.7355E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	45	5.9786E-04	4.7872E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	170	2.1361E-03	6.5585E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	304	4.4010E-03	2.1261E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	22	2.9899E-04	1.7111E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0397E-04	1.8905E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7294	1.0095E-01	4.1119E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2241	3.2369E-02	1.8840E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	34670	4.3844E-01	1.1232E-02	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	10703	1.3730E-01	3.7374E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	872	1.2392E-02	1.1959E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	6	8.2831E-05	4.8278E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	5.3834E-04	2.1149E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	65	9.0683E-04	5.2686E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.9286E-05	9.6672E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.2118E-05	2.8993E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1360	1.8861E-02	1.0196E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	478	6.9043E-03	4.4957E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6538	8.4687E-02	2.5516E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2036	2.6539E-02	9.0900E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	2.1070E-03	2.8504E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6204	9.3779E-02	7.1174E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	11	1.5716E-04	2.6402E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	37	5.1040E-04	3.4027E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	193	2.5076E-03	6.1660E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	278	3.9787E-03	1.8925E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	28	3.6618E-04	2.1404E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	11	1.6774E-04	5.7971E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6952	9.6208E-02	3.6948E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2250	3.2079E-02	2.0193E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	33474	4.2291E-01	1.0974E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10335	1.3332E-01	3.5265E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	872	1.2382E-02	1.0542E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3713	3.2249E-02	1.8677E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	185	1.7654E-03	7.2116E-07	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2642	2.2311E-02	1.2271E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	121	1.1343E-03	3.2602E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2	2.0828E-05	2.2893E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2	1.9420E-05	1.7343E-05	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	15	1.7896E-04	7.6427E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	4	4.5926E-05	1.9461E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	7	8.5814E-05	1.8392E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	3.1296E-04	1.5587E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	31	4.2104E-04	2.7552E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	5.2097E-05	3.7494E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.7027E-05	3.1875E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1334	1.6000E-02	1.6070E-03	.0000E+00	1.2025E-05
		25055.50C	2.0356E-02	368	4.7770E-03	7.8199E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6809	7.4476E-02	4.3506E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2141	2.3430E-02	1.4888E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	133	1.6503E-03	1.8592E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	12391	1.3213E-01	4.5854E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	864	1.0976E-02	5.2415E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	328	2.5982E-03	1.4958E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	13	1.4855E-04	2.1703E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	3	3.6426E-05	3.0081E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	5	7.3315E-05	1.5799E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	13	1.6048E-04	1.3691E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	40	5.4777E-04	4.3192E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	631	8.0229E-03	4.7588E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	72	1.0195E-03	8.7882E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1250	1.4431E-02	4.8389E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2967	3.5228E-02	1.2101E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	79	1.0196E-03	5.7480E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	86	1.1404E-03	1.3792E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	55	7.5408E-04	1.7181E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	16	2.3596E-04	5.2126E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	3	4.8344E-05	6.3711E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	2.5862E-05	1.4227E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	200	2.8080E-03	8.9398E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8683	1.0181E-01	1.9042E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	47746	4.0533E-01	2.2134E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2226	2.0903E-02	8.3618E-07	.0000E+00	.0000E+00
TOTAL				3455490	4.3150E+01	6.9350E-01	3.1858E-01	9.6045E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2609016	3.1292E+01	1.0863E-01	.0000E+00	.0000E+00
		2004.50C		8	1.2126E-04	.0000E+00	.0000E+00	.0000E+00
		6000.50C		244	3.1975E-03	3.6548E-07	.0000E+00	.0000E+00
		7014.50C		859	1.0387E-02	4.2721E-04	.0000E+00	.0000E+00
		8016.50C		299505	4.2253E+00	3.0714E-03	.0000E+00	.0000E+00

13027.50C	17297	2.5831E-01	2.7029E-03	.0000E+00	.0000E+00
14000.50C	1199	1.6929E-02	1.2995E-04	.0000E+00	.0000E+00
15031.50C	101	1.3597E-03	1.2462E-05	.0000E+00	.0000E+00
16032.50C	38	5.4951E-04	2.7483E-05	.0000E+00	.0000E+00
22000.50C	40	5.4777E-04	4.3192E-05	.0000E+00	.0000E+00
24000.50C	32561	4.3351E-01	3.0046E-02	.0000E+00	1.2025E-05
25055.50C	10572	1.4950E-01	1.4595E-02	.0000E+00	.0000E+00
26000.55C	172016	2.1096E+00	8.6133E-02	.0000E+00	.0000E+00
28000.50C	52222	6.4955E-01	2.8163E-02	.0000E+00	.0000E+00
29000.50C	109	1.4252E-03	8.2429E-05	.0000E+00	.0000E+00
40000.50C	57029	8.5420E-01	7.4425E-03	.0000E+00	3.3585E-05
42000.50C	3711	5.1501E-02	5.7785E-03	.0000E+00	.0000E+00
45103.50C	908	1.1721E-02	1.0090E-02	.0000E+00	.0000E+00
47109.50C	146	1.9812E-03	1.6571E-03	.0000E+00	.0000E+00
50000.35C	559	8.3540E-03	2.1720E-04	.0000E+00	.0000E+00
62149.50C	1103	1.2301E-02	1.2171E-02	.0000E+00	.0000E+00
63151.55C	560	6.1658E-03	6.0738E-03	.0000E+00	.0000E+00
63153.55C	277	3.4776E-03	3.1123E-03	.0000E+00	.0000E+00
64155.50C	2524	2.6764E-02	2.6695E-02	.0000E+00	.0000E+00
92233.50C	12	2.3862E-04	1.8030E-05	1.0960E-04	.0000E+00
92234.50C	250	3.3826E-03	2.1243E-03	6.2726E-05	.0000E+00
92235.50C	20180	3.9086E-01	3.4438E-02	1.7237E-01	.0000E+00
92236.50C	1662	2.4390E-02	8.1786E-03	3.4459E-04	.0000E+00
92238.50C	149908	2.2112E+00	1.9114E-01	2.0881E-02	9.1484E-04
93237.55C	1860	2.4025E-02	1.8982E-02	2.7376E-04	.0000E+00
94238.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94239.55C	16349	3.3037E-01	6.0587E-02	1.2436E-01	.0000E+00
94240.50C	2298	3.0646E-02	2.7012E-02	1.0542E-04	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	327	4.6702E-03	3.3012E-03	2.6048E-05	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95242.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	36	5.0148E-04	4.0416E-04	6.6646E-06	.0000E+00
96245.35C	4	8.6807E-05	8.3492E-06	3.8219E-05	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59332 CTM = 116.57

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 116.70 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 09:40:35

PROBID = 02/24/95 07:43:34

1MCNP VERSION 4A-B LD=10/04/91

02/24/95 09:40:35

PROBID = 02/24/95 09:40:35

INP=mpc12v OUTP=mpc12v.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/50000 year (mpc12v)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1917-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57-      36      3 -1.785-3  17 -18 -5 IMP:N=1 U=2
58-      37      1 -1.0000  17 -18  5 IMP:N=1 U=2
59-      38      4 -6.6000  18 -19 -5 IMP:N=1 U=2
60-      39      1 -1.0000  18 -19  5 IMP:N=1 U=2
61-      40      1 -1.0000  19      IMP:N=1 U=2
62-      C      CONTROL ROD/GUIDE TUBE
63-      41      1 -1.0000 -21  -5 IMP:N=1 U=3
64-      42      1 -1.0000 -21   5 IMP:N=1 U=3
65-      43      4 -6.6000  21 -22 IMP:N=1 U=3
66-      44      1 -1.0000  22 -23 IMP:N=1 U=3
67-      45      4 -6.6000  23 -24 IMP:N=1 U=3
68-      46      1 -1.0000  24      IMP:N=1 U=3
69-      C      INSTRUMENTATION TUBE
70-      47      1 -1.0000 -25      IMP:N=1 U=4
71-      48      4 -6.6000  25 -26 IMP:N=1 U=4
72-      49      1 -1.0000  26      IMP:N=1 U=4
73-      C      WATER GAP - ASSEMBLY TOP
74-      50      1 -1.0000 -35  -4 IMP:N=1 U=5
75-      C      SS TUBE WALL - ASSEMBLY TOP
76-      51      8 -8.2380  35 -44  -4 IMP:N=1 U=5
77-      C      AL-B WALL -ASSEMBLY TOP
78-      52      6 -2.700  44 -46  -4 IMP:N=1 U=5
79-      C      SS WALL - ASSEMBLY TOP
80-      53      8 -8.2380  46  -4 IMP:N=1 U=5
81-      C      WATER ABOVE BASKET
82-      54      1 -1.000  4 IMP:N=1 U=5
83-      C      WATER GAP - ASSEMBLY RIGHT
84-      55      1 -1.0000 -36  -4 IMP:N=1 U=6
85-      C      SS TUBE WALL - ASSEMBLY RIGHT
86-      56      8 -8.2380  36 -43  -4 IMP:N=1 U=6
87-      C      AL-B WALL - ASSEMBLY RIGHT
88-      57      6 -2.7000  43 -45  -4 IMP:N=1 U=6
89-      C      SS WALL - ASSEMBLY RIGHT
90-      58      8 -8.2380  45  -4 IMP:N=1 U=6
91-      C      WATER ABOVE BASKET
92-      59      1 -1.000  4 IMP:N=1 U=6
93-      C      WATER GAP - ASSEMBLY BOTTOM
94-      60      1 -1.0000  37  -4 IMP:N=1 U=7
95-      C      SS TUBE WALL - ASSEMBLY BOTTOM
96-      61      8 -8.2380 -37  -4 IMP:N=1 U=7
97-      C      WATER ABOVE BASKET
98-      62      1 -1.000  4 IMP:N=1 U=7
99-      C      WATER GAP - ASSEMBLY LEFT
100-     63      1 -1.0000  38  -4 IMP:N=1 U=8
101-     C      LOWER ST COMB - ASSEMBLY LEFT
102-     64      8 -8.2380 -38  -4 IMP:N=1 U=8
103-     C      WATER ABOVE BASKET
104-     65      1 -1.000  4 IMP:N=1 U=8
105-     C      SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106-     66      1 -1.0000  74  75 IMP:N=1 U=10
107-     67      8 -8.2380 -75  55 IMP:N=1 U=10 $ BOTTOM
108-     68      8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109-     C      AXIS MATERIALS
110-     70      8 -8.2380 -57  59 -55 -9 3 -4 IMP:N=1 $ LEFT
111-     71      6 -2.70000 -59  61 -55 -9 3 -4 IMP:N=1
112-     72      8 -8.2380 -61  1 -55 -9 3 -4 IMP:N=1
113-     73      8 -8.2380 -58  60  55 -9 3 -4 IMP:N=1 $ BOTTOM
114-     74      6 -2.7000 -60  62  55 -9 3 -4 IMP:N=1
115-     75      8 -8.2380 -62  2  55 -9 3 -4 IMP:N=1
116-     76      1 -1.0000 -57  1 -55  4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117-      77      1 -1.0000    -58 2 55 4 -6 -9 3  IMP:N=1 $ WATER ABOVE BASKET
118-      C      SS316L MPC LID
119-      80      8 -8.2380      1  2  -9  6  -7      IMP:N=1
120-      C      SS316L MPC LINER
121-      81      8 -8.2380      9 -10  1  2  3 -7  IMP:N=1
122-      C      GAP SS316L/INNER 825 BARRIER
123-      82      1 -1.0000     10 -11  1  2  3 -71  IMP:N=1
124-      C      GAP BETWEEN MPC LID AND INNER BARRIER LID
125-      83      1 -1.0000     -10 1 2 7  -71  IMP:N=1
126-      C      INNER BARRIER LID - ALLOY 825
127-      84      5 -8.1400      1  2 -11 71  -8      IMP:N=1
128-      C      INNER BARRIER - ALLOY 825
129-      85      5 -8.1400     11 -12  1  2  3 -8  IMP:N=1
130-      C      GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131-      86      1 -1.0000      8 -72 -12  1  2  IMP:N=1
132-      C      OUTER BARRIER LID A516 CARBON STEEL
133-      87      7 -7.832      -12 72 -73  1  2  IMP:N=1
134-      C      OUTER BARRIER - A516 CARBON STEEL
135-      88      7 -7.832      1 2 3 -73 12 -70  IMP:N=1
136-      C      WATER, ENDS
137-      89      1 -1.0000      1  2  73 -80 -81      IMP:N=1
138-      C      WATER, SIDE
139-      90      1 -1.0000      1  2  3 70 -73 -81  IMP:N=1
140-      C      OUTSIDE WORLD
141-      91      0 -1:-2:-3:80:81  IMP:N=0
142-
143-      C      SURFACE SPECIFICATIONS
144-      1*      PX      0.0
145-      2*      PY      0.00
146-      3*      PZ      0.00
147-      4      PZ 203.2000    $ TOP ACTIVE FUEL
148-      5      PZ 222.2500    $ TOP FUEL HARDWARE
149-      6      PZ 229.2500    $ TOP FUEL REGION
150-      7      PZ 231.7500    $ TOP ALLOY 825 LID
151-      8      PZ 248.8500    $ TOP INNER BARRIER ALLOY 825 LID
152-      9      CZ  60.7949    $ ID OF WASTE CONTAINER
153-      10     CZ  63.0174    $ OD OF ALLOY 825 CONTAINER
154-      11     CZ  64.5250    $ ID OF INNER BARRIER ALLOY 825
155-      12     CZ  66.5250    $ OD OF INNER BARRIER ALLOY 825
156-      C      PIN LATTICE BOUNDS
157-      13     PX 0.72135
158-      14     PX -0.72135
159-      15     PY 0.72135
160-      16     PY -0.72135
161-      C      FUEL ROD
162-      17     CZ 0.468122
163-      18     CZ 0.478790
164-      19     CZ 0.546100
165-      C      CONTROL ROD/GUIDE TUBE
166-      20     CZ 0.49022    $ EXCESSED FOR CURRENT DCRA
167-      21     CZ 0.50292
168-      22     CZ 0.56007
169-      23     CZ 0.63246
170-      24     CZ 0.67310
171-      C      INSTRUMENTATION TUBE
172-      25     CZ 0.56007
173-      26     CZ 0.62611
174-      C      CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175-      27     PX 12.80923
176-      28     PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297-      C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298-      C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299-      C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300-      C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301-      C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302-      C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303-      C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304-      C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305-      C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306-      C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307-      C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308-      C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309-      C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310-      C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311-      C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312-      C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313-      C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314-      C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315-      C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316-      C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317-      C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318-      C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319-      C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320-      C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321-      C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322-      C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323-      C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324-      C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325-      C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326-      C      MATERIAL SPECIFICATIONS
327-      C      WATER AT 300 K
328-      M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329-      MT1     LWTR.01T
330-      C      PWR: 3.75% U-235 - 37 Gwd/MTU - 50000 YEAR DECAY
331-      M2      8016.50C 4.8533E-02
332-      45103.50C 2.7102E-05
333-      47109.50C 4.1675E-06
334-      62149.50C 1.5448E-07
335-      63151.55C 6.6105E-07
336-      63153.55C 5.0461E-06
337-      64155.50C 5.7420E-07
338-      92233.50C 6.8904E-07
339-      92234.50C 8.8663E-06
340-      92235.50C 3.4429E-04
341-      92236.50C 1.6926E-04
342-      92238.50C 2.2730E-02
343-      93237.55C 4.7378E-05
344-      94239.55C 3.5157E-05
345-      94240.50C 2.8220E-07
346-      94241.50C 9.0567E-13
347-      94242.50C 1.0299E-05
348-      95241.50C 2.7192E-11
349-      95243.50C 2.2209E-08
350-      96245.35C 5.3376E-10
351-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
352-      M3      2004.50C 1.0
353-      C      ZIRCALOY-4
354-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
355-      40000.50C -0.9818 50000.35C -0.0140
356-      C      ALLOY 825

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357-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
358-          16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
359-          25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
360-          29000.50C -0.0250 42000.50C -0.0300
361-      C          1100 ALUMINUM ALLOY
362-      M6      13027.50C -0.99880 29000.50C -0.00120
363-      C          A516 CARBON STEEL
364-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
365-          16032.50C -0.00035 25055.50C -0.0090
366-          26000.55C -0.98535
367-      C          SS316L
368-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
369-          15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
370-          25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
371-          42000.50C -0.02500
372-      C          TALLIES
373-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.
SURFACES 24051 AND 28051 OF CELL      9 ARE THE SAME.      28051 WILL BE DELETED.

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SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3163
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3163
 POINTS AFTER EXPANSION OR CONTRACTION 2997
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.191695E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

MATERIAL NUMBER	COMPONENT NUCLIDE	ATOM FRACTION
1	1001, .66667	8016, .33333
2	8016, .67485	45103, .00038
	63151, .00001	63153, .00007
	92234, .00012	92235, .00479
	93237, .00066	94239, .00049
	94242, .00014	95241, .00000
3	2004, 1.00000	95243, .00000
4	8016, .00681	24000, .00175
	50000, .01071	26000, .00325
5	6000, .00234	40000, .97748
	22000, .01057	13027, .00417
	28000, .40235	24000, .23247
6	13027, .99949	29000, .02212
7	6000, .01011	29000, .00051
		14000, .00541
		15031, .00062
		16032, .00060

8	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				
1	COMPONENT NUCLIDE, MASS FRACTION							
1	1001,	.11191	8016,	.88809				
2	8016,	.12251	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00002	63153,	.00012	64155,	.00001	92233,	.00003
	92234,	.00033	92235,	.01277	92236,	.00631	92238,	.85390
	93237,	.00177	94239,	.00133	94240,	.00001	94241,	.00000
	94242,	.00039	95241,	.00000	95243,	.00000	96245,	.00000
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19170E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC

57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE

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117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.19170E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00

48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01

15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	1001 PX	2.5991819E+01			
74	2042	1001 PX	2.1437590E+00			

75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08

8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08

68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY	(1301)	79/07/31.
2004.50C	2716	NJOY	(1270)	79/06/19.
6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92233.50C	14205	NJOY	(1393)	79/09/12.
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
94239.55C	67551	NJOY	(1399)	02/21/85
94240.50C	42744	NJOY	(1380)	79/09/13.
TOTAL NU			(1393)	79/09/12.
TOTAL NU			(1395)	79/09/12.
TOTAL NU			(1398)	79/09/13.
TOTAL NU			(1399)	02/21/85
TOTAL NU			(1380)	79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.
WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.				
92234.50C	76999	NJOY	(1394)	79/10/17.
WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.				
92236.50C	119238	NJOY	(1396)	79/08/30.
94241.50C	22523	NJOY	(1381)	79/08/30.
94242.50C	43433	NJOY	(1342)	79/09/06.
TOTAL NU			(1396)	79/08/30.
TOTAL NU			(1381)	79/08/30.
TOTAL NU			(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
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16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.
62149.50C	11116	NJOY	(1319)	02/12/85
64155.50C	31471	NJOY	(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
 95241.50C 29300 NJOY (1361) 79/08/29.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
 95243.50C 51474 NJOY (1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY	(1310)	11/01/85
47109.50C	10147	NJOY	(1373)	11/01/85
93237.55C	29142	NJOY	(1337)	04/04/85

TOTAL NU

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=OK	(48)	86/02/01
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WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK (93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C	33336					06/28/88
63153.55C	30265					06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
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TOTAL 1325785

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	101900
TALLIES	0
BANK	18403
CROSS SECTIONS	1325785

TOTAL 1446088

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

8 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/50000 year (mpc12v)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
-----	---	---	---	------	------	---	---	---	------	--------	--------

1	-4.048E-02	1.766E-01	1.950E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.001E+00	3.157E+00
2	-2.800E-01	2.469E-01	1.760E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.001E+00	1.212E+00
3	-3.882E-01	1.979E-01	3.610E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.001E+00	8.160E-02
4	-7.950E-02	1.807E-01	3.886E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.001E+00	2.841E+00
5	-2.148E-01	9.174E-02	4.567E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.001E+00	1.490E+00
6	-3.856E-01	-7.592E-02	4.527E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.001E+00	1.668E+00
7	1.869E-01	-8.404E-03	2.221E+00	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.001E+00	2.502E+00
8	1.402E-01	-3.138E-01	1.872E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.001E+00	2.221E+00
9	4.143E-02	-4.451E-01	1.844E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.001E+00	9.109E-01
10	-2.235E-01	-1.403E-01	7.810E+00	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.001E+00	3.052E+00
11	2.641E-01	1.084E-01	2.990E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.001E+00	2.214E+00
12	3.686E-02	3.653E-01	2.872E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.001E+00	5.140E-01
13	-3.180E-01	-9.603E-02	2.641E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.001E+00	1.784E+00
14	1.959E-01	9.250E-02	1.087E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.001E+00	8.699E-01
15	-1.827E-01	-1.869E-01	2.832E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.001E+00	2.298E+00
16	-1.622E-01	-1.990E-02	1.058E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.001E+00	6.755E-01
17	2.576E-01	1.234E-01	9.585E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.001E+00	1.605E+00
18	3.012E-01	4.066E-02	6.517E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.001E+00	1.251E+00
19	2.259E-01	-1.524E-01	4.481E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.001E+00	6.220E+00
20	-2.927E-02	-1.554E-01	4.375E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.001E+00	2.792E+00
21	8.549E-02	3.370E-01	8.638E+00	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.001E+00	4.748E+00
22	4.097E-01	2.059E-01	2.500E-01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.001E+00	7.218E-01
23	3.174E-01	-7.941E-02	4.504E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.001E+00	2.166E+00
24	2.002E-02	-1.307E-01	4.851E-01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.001E+00	4.158E-01
25	-2.046E-01	8.800E-02	1.476E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.001E+00	2.461E+00
26	-2.229E-01	2.589E-01	6.484E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.001E+00	1.554E+00
27	3.397E-01	2.198E-01	6.729E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.001E+00	1.083E+00
28	2.304E-02	3.934E-02	7.045E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.001E+00	3.042E+00
29	8.523E-02	-8.406E-02	6.998E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.001E+00	2.003E+00
30	1.518E-01	4.310E-01	1.994E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.001E+00	1.337E+00
31	-2.022E-01	-3.139E-01	3.326E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.001E+00	2.212E+00
32	-1.196E-01	3.931E-01	3.583E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.001E+00	1.643E+00
33	-8.038E-02	2.630E-01	5.067E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.001E+00	2.679E-01
34	3.930E-01	6.118E-02	4.915E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.001E+00	9.141E-01
35	2.715E-02	-3.200E-01	5.529E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.001E+00	4.247E+00
36	-2.703E-01	-1.679E-01	5.307E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.001E+00	2.186E+00
37	-3.200E-01	-7.531E-02	3.512E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.001E+00	1.526E+00
38	2.413E-01	2.495E-01	2.392E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.001E+00	6.527E-01
39	-1.187E-01	-3.940E-01	2.398E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.001E+00	1.041E+00
40	-4.233E-01	-1.427E-01	3.964E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.001E+00	3.142E-01
41	1.082E-01	1.880E-01	3.421E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.001E+00	8.594E-01
42	2.422E-01	3.682E-01	4.595E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.001E+00	6.980E-01
43	4.567E-02	-8.861E-02	4.509E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.001E+00	2.679E+00
44	-8.197E-02	-4.248E-01	4.521E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.001E+00	5.720E-01
45	1.263E-01	4.444E-01	6.653E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.001E+00	8.619E-01
46	9.067E-02	1.116E-01	8.104E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.001E+00	3.192E+00
47	-2.032E-01	-1.084E-01	8.268E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.001E+00	1.081E+00
48	-3.535E-02	4.616E-01	8.116E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.001E+00	3.536E+00
49	2.864E-02	-1.768E-02	7.697E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.001E+00	2.427E-01
50	7.336E-02	-1.496E-01	7.969E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.001E+00	3.326E-01

CYCLE	1	K(COLLISION)	.813735	REMOVAL LIFETIME(ABS)	3.5540E+03	SOURCE POINTS GENERATED	2452
CYCLE	2	K(COLLISION)	.804744	REMOVAL LIFETIME(ABS)	3.6393E+03	SOURCE POINTS GENERATED	2999
CYCLE	3	K(COLLISION)	.830409	REMOVAL LIFETIME(ABS)	3.5161E+03	SOURCE POINTS GENERATED	3118
CYCLE	4	K(COLLISION)	.818072	REMOVAL LIFETIME(ABS)	3.4692E+03	SOURCE POINTS GENERATED	2917

CYCLE 5 K(COLLISION) .820015 REMOVAL LIFETIME(ABS) 3.5760E+03 SOURCE POINTS GENERATED 2903

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .801567 REMOVAL LIFETIME(ABS) 3.5999E+03 SOURCE POINTS GENERATED 2947

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.823438	.812503	.0135	K(COL/ABS)	.000000	.0000	.000000	.0000	.0000
K(ABSORPTION)	.836725	.830275	.0078	K(ABS/TK LN)	.000000	.0000	.000000	.0000	.0000
K(TRK LENGTH)	.823771	.812929	.0133	K(TK LN/COL)	.000000	.0000	.000000	.0000	.0000
REM LIFE(COL)	3.5097E+03	3.5509E+03	.0116						
REM LIFE(ABS)	3.5505E+03	3.5752E+03	.0069	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000	.0000
SOURCE POINTS GENERATED	3062								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.825708	.816904	.0094	K(COL/ABS)	.822381	.0062	.826451	.0087	.3768
K(ABSORPTION)	.823026	.827859	.0054	K(ABS/TK LN)	.821039	.0061	.828186	.0121	.7117
K(TRK LENGTH)	.816801	.814220	.0078	K(TK LN/COL)	.815562	.0085	.813013	.0115	.9189
REM LIFE(COL)	3.5830E+03	3.5616E+03	.0073						
REM LIFE(ABS)	3.6054E+03	3.5852E+03	.0049	LIFE(COL/ABS)	3.5734E+03	.0061	3.6222E+03	.0051	.9817
SOURCE POINTS GENERATED	2995								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.833518	.821058	.0083	K(COL/ABS)	.822476	.0044	.822802	.0051	-.2897
K(ABSORPTION)	.812001	.823894	.0061	K(ABS/TK LN)	.820401	.0044	.820535	.0056	-.0211
K(TRK LENGTH)	.824972	.816908	.0064	K(TK LN/COL)	.818983	.0073	.813277	.0078	.9379
REM LIFE(COL)	3.6945E+03	3.5948E+03	.0106	K(COL/ABS/TK LN)	.820620	.0049	.825355	.0178	
REM LIFE(ABS)	3.6600E+03	3.6039E+03	.0062	LIFE(COL/ABS)	3.5994E+03	.0084	3.6161E+03	.0023	.9921
SOURCE POINTS GENERATED	3075								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.808851	.818617	.0071	K(COL/ABS)	.822216	.0034	.822943	.0038	-.4205
K(ABSORPTION)	.833506	.825816	.0053	K(ABS/TK LN)	.819885	.0035	.820546	.0042	-.2740
K(TRK LENGTH)	.802139	.813954	.0062	K(TK LN/COL)	.816285	.0065	.811699	.0078	.9352
REM LIFE(COL)	3.5596E+03	3.5878E+03	.0084	K(COL/ABS/TK LN)	.819462	.0041	.823327	.0094	
REM LIFE(ABS)	3.5832E+03	3.5998E+03	.0050	LIFE(COL/ABS)	3.5938E+03	.0067	3.6159E+03	.0017	.9926
SOURCE POINTS GENERATED	2864								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.810851	.817322	.0060	K(COL/ABS)	.819198	.0046	.818869	.0051	-.0342
K(ABSORPTION)	.797354	.821073	.0072	K(ABS/TK LN)	.817111	.0044	.815793	.0048	-.0078
K(TRK LENGTH)	.809129	.813150	.0051	K(TK LN/COL)	.815236	.0055	.810770	.0061	.9361
REM LIFE(COL)	3.5465E+03	3.5809E+03	.0072	K(COL/ABS/TK LN)	.817182	.0043	.814383	.0086	
REM LIFE(ABS)	3.5697E+03	3.5948E+03	.0043	LIFE(COL/ABS)	3.5878E+03	.0057	3.6140E+03	.0016	.9914
SOURCE POINTS GENERATED	3005								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.842786	.820960	.0067	K(COL/ABS)	.822233	.0054	.822222	.0059	.2637

K(ABS/TK LN)	.820546	.0056	.820626	.0062	.3370
K(TK LN/COL)	.819273	.0068	.820158	.0077	.9537
K(COL/ABS/TK LN)	.820684	.0056	.823401	.0088	
LIFE(COL/ABS)	3.5942E+03	.0051	3.6088E+03	.0016	.9855

CYCLE = 12

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.821843	.0047	.821894	.0051	.2372
K(ABS/TK LN)	.819604	.0050	.820253	.0054	.2725
K(TK LN/COL)	.817563	.0062	.820793	.0068	.9402
K(COL/ABS/TK LN)	.819670	.0050	.823397	.0076	
LIFE(COL/ABS)	3.5727E+03	.0075	3.5726E+03	.0081	.9073

CYCLE = 13

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.819616	.0049	.819370	.0052	.3234
K(ABS/TK LN)	.817803	.0049	.817330	.0052	.2347
K(TK LN/COL)	.816965	.0055	.818475	.0060	.9229
K(COL/ABS/TK LN)	.818128	.0048	.818500	.0068	
LIFE(COL/ABS)	3.5701E+03	.0067	3.5701E+03	.0071	.9076

CYCLE = 14

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.818140	.0048	.818367	.0048	.2988
K(ABS/TK LN)	.816514	.0047	.816143	.0048	.1772
K(TK LN/COL)	.817005	.0050	.818309	.0053	.9190
K(COL/ABS/TK LN)	.817220	.0045	.817301	.0061	
LIFE(COL/ABS)	3.5841E+03	.0071	3.5836E+03	.0074	.9343

CYCLE = 15

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.819204	.0045	.818877	.0043	.2710
K(ABS/TK LN)	.818157	.0047	.817471	.0047	.2653
K(TK LN/COL)	.817546	.0045	.818437	.0047	.8797
K(COL/ABS/TK LN)	.818302	.0042	.818820	.0049	
LIFE(COL/ABS)	3.5861E+03	.0064	3.5868E+03	.0067	.9248

CYCLE = 16

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.818817	.818619	.2739
K(ABS/TK LN)	.817947	.817433	.2557
K(TK LN/COL)	.817582	.818300	.8750
K(COL/ABS/TK LN)	.818115	.818523	
LIFE(COL/ABS)	3.5785E+03	3.5785E+03	.9260

CYCLE = 17

COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COL/ABS)	.818994 .0038	.819121 .0037	.2398

K(ABSORPTION)	.813391	.818736	.0058	K(ABS/TK LN)	.818488	.0040	.818417	.0041	.1932
K(TRK LENGTH)	.836582	.818240	.0045	K(TK LN/COL)	.818745	.0041	.819360	.0040	.8759
REM LIFE(COL)	3.5012E+03	3.5723E+03	.0061	K(COL/ABS/TK LN)	.818742	.0036	.819189	.0039	
REM LIFE(ABS)	3.4963E+03	3.5724E+03	.0062	LIFE(COL/ABS)	3.5724E+03	.0060	3.5724E+03	.0063	.9317
SOURCE POINTS GENERATED 3003									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.799481	.817839	.0040	K(COL/ABS)	.818358	.0036	.818170	.0036	.2016
K(ABSORPTION)	.820699	.818877	.0053	K(ABS/TK LN)	.817962	.0038	.817764	.0038	.1719
K(TRK LENGTH)	.801533	.817046	.0045	K(TK LN/COL)	.817443	.0041	.817836	.0041	.8875
REM LIFE(COL)	3.5091E+03	3.5678E+03	.0058	K(COL/ABS/TK LN)	.817921	.0035	.818158	.0038	
REM LIFE(ABS)	3.5886E+03	3.5735E+03	.0057	LIFE(COL/ABS)	3.5707E+03	.0056	3.5711E+03	.0058	.8954
SOURCE POINTS GENERATED 2853									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.810616	.817357	.0037	K(COL/ABS)	.819069	.0035	.818364	.0034	.1133
K(ABSORPTION)	.847447	.820781	.0055	K(ABS/TK LN)	.818409	.0035	.817839	.0036	.0282
K(TRK LENGTH)	.801913	.816038	.0043	K(TK LN/COL)	.816697	.0039	.817476	.0039	.8850
REM LIFE(COL)	3.5173E+03	3.5644E+03	.0055	K(COL/ABS/TK LN)	.818059	.0033	.818298	.0036	
REM LIFE(ABS)	3.5569E+03	3.5724E+03	.0053	LIFE(COL/ABS)	3.5684E+03	.0053	3.5695E+03	.0055	.8905
SOURCE POINTS GENERATED 3074									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/50000 year (mpc12v)

02/24/95 11:44:05
PROBID = 02/24/95 09:40:35

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59262	1.0125E+00	2.0465E+00	ESCAPE	2	3.1517E-05	3.3509E-06
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	7.0060E-02	4.6072E-07	WEIGHT CUTOFF	59348	7.1145E-02	4.9178E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.3804E-07	DOWNSCATTERING	0	0.	1.9372E+00
(N,XN)	176	2.3378E-03	1.8873E-03	CAPTURE	0	6.8459E-01	3.2096E-02
FISSION	0	0.	0.	LOSS TO (N,XN)	88	1.1689E-03	1.0019E-02
TOTAL	59438	1.0849E+00	2.0484E+00	LOSS TO FISSION	0	3.2792E-01	6.9102E-02
				TOTAL	59438	1.0849E+00	2.0484E+00

NUMBER OF NEUTRONS BANKED 88
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0030E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.0954E+01
 TOTAL NEUTRON COLLISIONS 3612268
 NET MULTIPLICATION 1.0012E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 1.2725E+01
 CAPTURE 3.5669E+03
 CAPTURE OR ESCAPE 3.5668E+03
 ANY TERMINATION 3.9092E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 120.33 MINUTES
 COMPUTER TIME IN MCRUN 120.20 MINUTES

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0

SOURCE PARTICLES PER MINUTE
RANDOM NUMBERS GENERATED

4.9303E+02
43409704

FIELD LENGTH
MOST RANDOM NUMBERS USED WAS

0
9801 IN HISTORY 29829

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6216E-01 TO 1.2235E+00
1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
83	NO DATA AVAILABLE YET FOR THIS CELL.						
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	24783	9289	292615	3.1423E+00	1.1990E-04	3.7652E-01	7.3448E-01
3	3	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	756011	59350	309724	4.3503E+00	5.9584E-04	7.1660E-01	8.7235E-01
33	34	3247	185	713	8.1920E-03	7.1675E-05	3.0750E-01	6.3644E-01
34	35	276	20	615	5.1526E-03	3.7756E-05	2.8622E-01	5.2755E-01
35	36	1358496	59350	11	1.7315E-04	5.2554E-04	6.7986E-01	8.6921E-01
36	37	483	20	24	1.9651E-04	3.4715E-05	2.4485E-01	5.3205E-01
37	38	1472944	59350	52271	7.7846E-01	5.0712E-04	6.6860E-01	8.6867E-01
38	39	532	20	215	1.6868E-03	3.4435E-05	2.4456E-01	5.1216E-01
39	40	2350724	59350	1583004	2.0626E+01	4.4515E-04	6.3667E-01	8.6610E-01

40	41	58872	31245	96762	1.2648E+00	3.3670E-04	5.8732E-01	8.6462E-01	1.4942E+00
41	42	18	6	43	3.1965E-04	1.0233E-04	2.5129E-01	5.5511E-01	1.0487E+00
42	43	124571	33017	3830	5.6806E-02	3.5181E-04	5.9846E-01	8.6479E-01	4.1412E+00
43	44	139843	35253	33090	4.3265E-01	3.5675E-04	5.9925E-01	8.6602E-01	1.5167E+00
44	45	153023	36197	3257	4.8265E-02	3.5959E-04	6.0374E-01	8.6578E-01	4.1430E+00
45	46	186317	41229	78046	1.0249E+00	3.6393E-04	6.0373E-01	8.6594E-01	1.5267E+00
46	47	7177	3322	7806	1.0361E-01	3.8782E-04	6.3857E-01	8.7453E-01	1.5616E+00
47	48	9590	3590	318	4.7276E-03	3.8198E-04	6.4516E-01	8.6941E-01	4.1577E+00
48	49	12438	4926	6409	8.5069E-02	3.9880E-04	6.2208E-01	8.7513E-01	1.5511E+00
49	50	33916	14788	70157	8.3379E-01	3.0421E-04	5.4915E-01	8.1801E-01	1.4383E+00
50	51	33297	13988	12643	1.5728E-01	3.5932E-04	5.6054E-01	8.0422E-01	2.0470E+00
51	52	32855	13636	2367	3.4178E-02	3.6699E-04	5.6196E-01	8.0235E-01	9.2379E+00
52	53	33002	13661	12807	1.5743E-01	3.5173E-04	5.5271E-01	7.9839E-01	2.0614E+00
53	54	208	53	1457	1.4343E-02	2.9579E-05	1.7265E-01	6.2349E-01	6.4275E-01
54	55	34346	15128	69226	8.2341E-01	3.1665E-04	5.5167E-01	8.2094E-01	1.4457E+00
55	56	33929	14377	12656	1.5637E-01	3.7511E-04	5.6863E-01	8.0353E-01	2.0730E+00
56	57	33517	14039	2363	3.4155E-02	3.7511E-04	5.6741E-01	7.9980E-01	9.1998E+00
57	58	33582	14105	12632	1.5591E-01	3.6582E-04	5.5505E-01	8.0020E-01	2.0746E+00
58	59	199	55	1405	1.2695E-02	7.1466E-05	3.0725E-01	6.1834E-01	9.3293E-01
59	60	55467	19368	101430	1.2680E+00	4.1768E-04	5.3717E-01	8.4212E-01	1.4583E+00
60	61	54656	18443	19298	2.5208E-01	6.1976E-04	5.6732E-01	8.3690E-01	2.2646E+00
61	62	272	62	1344	1.2765E-02	2.0695E-05	9.8323E-02	6.0519E-01	5.7339E-01
62	63	54275	19305	98265	1.2260E+00	4.3188E-04	5.4234E-01	8.4280E-01	1.4745E+00
63	64	53737	18386	18654	2.4407E-01	6.1624E-04	5.6596E-01	8.3610E-01	2.2496E+00
64	65	375	73	1722	1.4839E-02	4.7481E-05	2.2989E-01	5.8905E-01	7.8827E-01
65	66	9628	4840	438436	4.0630E+00	5.2230E-05	2.4787E-01	6.1677E-01	8.2707E-01
66	67	9599	3821	14233	1.5182E-01	1.7768E-04	4.3195E-01	7.0152E-01	1.8013E+00
67	68	9440	3778	14063	1.4905E-01	1.8198E-04	4.3831E-01	6.9878E-01	1.8157E+00
68	70	34816	9249	11581	1.5137E-01	8.8145E-04	5.6264E-01	8.3773E-01	2.3608E+00
69	71	34970	8910	6467	9.6793E-02	9.5597E-04	5.5312E-01	8.3824E-01	8.9153E+00
70	72	18920	8711	60123	7.7649E-01	1.1966E-03	5.4110E-01	8.3495E-01	2.4465E+00
71	73	36286	9644	12098	1.5769E-01	8.7355E-04	5.5814E-01	8.3960E-01	2.3664E+00
72	74	36243	9286	6806	1.0237E-01	9.5373E-04	5.4946E-01	8.4029E-01	9.0010E+00
73	75	19504	9070	60362	7.8101E-01	1.2057E-03	5.6371E-01	8.3638E-01	2.4825E+00
74	76	136	35	2903	2.4204E-02	3.7023E-05	2.2138E-01	5.4570E-01	7.4427E-01
75	77	107	32	2053	1.7707E-02	3.2887E-05	1.7546E-01	5.6261E-01	7.1043E-01
76	80	9	7	31	3.5884E-04	4.5792E-05	2.9359E-02	7.1839E-01	1.2039E+00
77	81	3340	1461	10311	1.1238E-01	3.1886E-04	4.7641E-01	7.2309E-01	2.0235E+00
78	82	2085	835	11414	1.2297E-01	2.5851E-04	4.3944E-01	7.5517E-01	1.3011E+00
79	83	1	1	207	1.8265E-03	5.2106E-08	7.6318E-07	5.2926E-01	3.0928E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1615	632	4699	5.6464E-02	7.7971E-04	5.1899E-01	7.8217E-01	2.0693E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1013	425	8484	9.7675E-02	1.7299E-03	4.8567E-01	7.9068E-01	4.4161E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	358	201	40818	3.5078E-01	3.0593E-05	1.3313E-01	5.6049E-01	6.4741E-01
TOTAL		7365048	696124	3612268	4.4544E+01				

1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.6509E-01	-5.6509E-01
2	2	3.1730E-01	.0000E+00	.0000E+00	-8.9975E-01	-5.8245E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.5181E-02	-1.5181E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.0355E-02	-5.0355E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.6128E-02	-1.6128E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.4594E-01	-1.4594E-01

7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7202E+00	-1.7202E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0992E+00	-2.0992E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1235E-01	-2.1235E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1602E-01	-2.1602E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0466E-01	-4.0466E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9498E-01	-3.9498E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9294E-02	-7.9294E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8471E-02	-7.8471E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0780E-02	-9.0780E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8836E-02	-7.8836E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3859E-02	-7.3859E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.5030E-02	-7.5030E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0105E-01	-1.0105E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0427E-01	-1.0427E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6443E-02	-9.6443E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8553E-02	-8.8553E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1759E-01	-1.1759E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1611E-01	-1.1611E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1670E-01	-1.1670E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1742E-01	-1.1742E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0490E-01	-1.0490E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.6276E-02	-8.6276E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5809E-02	-9.5809E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0330E-01	-1.0330E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9824E+01	-1.9824E+01
32	33	1.0184E+01	1.0125E+00	.0000E+00	.0000E+00	-9.9713E+00	1.2253E+00
33	34	3.4840E-02	.0000E+00	.0000E+00	.0000E+00	-3.2863E-02	1.9767E-03
34	35	2.4624E-03	.0000E+00	.0000E+00	.0000E+00	-2.2703E-03	1.9211E-04
35	36	1.9932E+01	.0000E+00	.0000E+00	.0000E+00	-1.9922E+01	1.0720E-02
36	37	4.3973E-03	.0000E+00	.0000E+00	.0000E+00	-4.3962E-03	1.0729E-06
37	38	2.1608E+01	.0000E+00	.0000E+00	.0000E+00	-2.1527E+01	8.0737E-02
38	39	4.7953E-03	.0000E+00	.0000E+00	.0000E+00	-4.7510E-03	4.4343E-05
39	40	3.4415E+01	.0000E+00	.0000E+00	.0000E+00	-1.1314E+01	2.3101E+01
40	41	8.6164E-01	.0000E+00	.0000E+00	.0000E+00	-8.5751E-01	4.1231E-03
41	42	1.8028E-04	.0000E+00	.0000E+00	.0000E+00	-1.7851E-04	1.7634E-06
42	43	1.8196E+00	.0000E+00	.0000E+00	.0000E+00	-1.8190E+00	6.2513E-04
43	44	2.0438E+00	.0000E+00	.0000E+00	.0000E+00	-2.0424E+00	1.3758E-03
44	45	2.2365E+00	.0000E+00	.0000E+00	.0000E+00	-2.2360E+00	5.5288E-04
45	46	2.7262E+00	.0000E+00	.0000E+00	.0000E+00	-1.1560E+00	1.5702E+00
46	47	1.0624E-01	.0000E+00	.0000E+00	.0000E+00	-6.4985E-02	4.1251E-02
47	48	1.4146E-01	.0000E+00	.0000E+00	.0000E+00	-1.3663E-01	4.8264E-03
48	49	1.8395E-01	.0000E+00	.0000E+00	.0000E+00	-7.1686E-02	1.1226E-01
49	50	4.7126E-01	.0000E+00	.0000E+00	.0000E+00	-2.6539E-01	2.0587E-01
50	51	4.5710E-01	.0000E+00	.0000E+00	.0000E+00	-4.4060E-01	1.6501E-02
51	52	4.4782E-01	.0000E+00	.0000E+00	.0000E+00	-4.4266E-01	5.1614E-03
52	53	4.4989E-01	.0000E+00	.0000E+00	.0000E+00	-1.8613E-01	2.6376E-01
53	54	2.1619E-03	.0000E+00	.0000E+00	.0000E+00	-6.0522E-05	2.1014E-03
54	55	4.7753E-01	.0000E+00	.0000E+00	.0000E+00	-2.6830E-01	2.0923E-01
55	56	4.6505E-01	.0000E+00	.0000E+00	.0000E+00	-4.4873E-01	1.6321E-02
56	57	4.5630E-01	.0000E+00	.0000E+00	.0000E+00	-4.5084E-01	5.4648E-03
57	58	4.5771E-01	.0000E+00	.0000E+00	.0000E+00	-1.9120E-01	2.6652E-01
58	59	2.0245E-03	.0000E+00	.0000E+00	.0000E+00	-4.3591E-05	1.9809E-03
59	60	7.9177E-01	.0000E+00	.0000E+00	.0000E+00	-3.9439E-01	3.9738E-01
60	61	7.7672E-01	.0000E+00	.0000E+00	.0000E+00	-3.6995E-01	4.0676E-01
61	62	2.8142E-03	.0000E+00	.0000E+00	.0000E+00	-1.0593E-04	2.7083E-03
62	63	7.7523E-01	.0000E+00	.0000E+00	.0000E+00	-3.8820E-01	3.8703E-01
63	64	7.6315E-01	.0000E+00	.0000E+00	.0000E+00	-3.6136E-01	4.0178E-01
64	65	3.6854E-03	.0000E+00	.0000E+00	.0000E+00	-1.5446E-04	3.5310E-03
65	66	1.1848E-01	.0000E+00	.0000E+00	.0000E+00	-7.2466E-02	4.6018E-02
66	67	1.1623E-01	.0000E+00	.0000E+00	.0000E+00	-5.8936E-02	5.7291E-02

67	68	1.1450E-01	.0000E+00	.0000E+00	.0000E+00	-5.8304E-02	5.6200E-02
68	70	4.9455E-01	.0000E+00	.0000E+00	.0000E+00	-4.8834E-01	6.2154E-03
69	71	4.9575E-01	.0000E+00	.0000E+00	.0000E+00	-4.9495E-01	8.0144E-04
70	72	2.6984E-01	.0000E+00	.0000E+00	.0000E+00	-2.4578E-01	2.4066E-02
71	73	5.1570E-01	.0000E+00	.0000E+00	.0000E+00	-5.0951E-01	6.1856E-03
72	74	5.1422E-01	.0000E+00	.0000E+00	.0000E+00	-5.1342E-01	7.9736E-04
73	75	2.7828E-01	.0000E+00	.0000E+00	.0000E+00	-2.5391E-01	2.4370E-02
74	76	1.3069E-03	.0000E+00	.0000E+00	.0000E+00	-1.1743E-03	1.3256E-04
75	77	1.0726E-03	.0000E+00	.0000E+00	.0000E+00	-9.8907E-04	8.3537E-05
76	80	8.9372E-05	.0000E+00	.0000E+00	.0000E+00	-6.0782E-05	2.8590E-05
77	81	4.0714E-02	.0000E+00	.0000E+00	.0000E+00	-3.2566E-02	8.1479E-03
78	82	2.6874E-02	.0000E+00	.0000E+00	.0000E+00	-2.6535E-02	3.3872E-04
79	83	1.5386E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5386E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.1635E-02	.0000E+00	.0000E+00	.0000E+00	-1.9376E-02	2.2590E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.3276E-02	.0000E+00	.0000E+00	.0000E+00	-1.1315E-02	1.9607E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	4.7159E-03	.0000E+00	.0000E+00	.0000E+00	-2.9429E-03	1.7730E-03

TOTAL	1.0645E+02	1.0125E+00	.0000E+00	.0000E+00	-1.0645E+02	1.0124E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-9.4205E-05	.0000E+00	.0000E+00	.0000E+00	-9.4205E-05
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-5.0233E-04	.0000E+00	.0000E+00	.0000E+00	-5.0233E-04
33	34	.0000E+00	.0000E+00	-1.2073E-05	.0000E+00	.0000E+00	.0000E+00	-1.2073E-05

1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.3590E-02	.0000E+00	.0000E+00	-1.3590E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.2628E-03	.0000E+00	-3.8160E-01	-1.1314E-03	-3.2792E-01	-7.0838E-01
33	34	.0000E+00	.0000E+00	-1.6622E-04	.0000E+00	.0000E+00	-1.6622E-04
34	35	.0000E+00	.0000E+00	-2.8738E-05	.0000E+00	.0000E+00	-2.8738E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.0729E-06	.0000E+00	.0000E+00	-1.0729E-06
37	38	2.8036E-05	.0000E+00	-7.3691E-03	-1.4018E-05	.0000E+00	-7.3551E-03
38	39	.0000E+00	.0000E+00	-9.6286E-06	.0000E+00	.0000E+00	-9.6286E-06
39	40	.0000E+00	.0000E+00	-5.9882E-02	.0000E+00	.0000E+00	-5.9882E-02
40	41	.0000E+00	.0000E+00	-4.0946E-03	.0000E+00	.0000E+00	-4.0946E-03
41	42	.0000E+00	.0000E+00	-1.7634E-06	.0000E+00	.0000E+00	-1.7634E-06
42	43	.0000E+00	.0000E+00	-6.0676E-04	.0000E+00	.0000E+00	-6.0676E-04
43	44	.0000E+00	.0000E+00	-1.3845E-03	.0000E+00	.0000E+00	-1.3845E-03
44	45	.0000E+00	.0000E+00	-5.5337E-04	.0000E+00	.0000E+00	-5.5337E-04
45	46	.0000E+00	.0000E+00	-3.2218E-03	.0000E+00	.0000E+00	-3.2218E-03
46	47	.0000E+00	.0000E+00	-3.1783E-04	.0000E+00	.0000E+00	-3.1783E-04
47	48	.0000E+00	.0000E+00	-4.4732E-05	.0000E+00	.0000E+00	-4.4732E-05
48	49	.0000E+00	.0000E+00	-2.5209E-04	.0000E+00	.0000E+00	-2.5209E-04
49	50	.0000E+00	.0000E+00	-2.7152E-03	.0000E+00	.0000E+00	-2.7152E-03
50	51	.0000E+00	.0000E+00	-1.1442E-02	.0000E+00	.0000E+00	-1.1442E-02
51	52	.0000E+00	.0000E+00	-6.2815E-04	.0000E+00	.0000E+00	-6.2815E-04
52	53	.0000E+00	.0000E+00	-1.1568E-02	.0000E+00	.0000E+00	-1.1568E-02
53	54	.0000E+00	.0000E+00	-7.7303E-05	.0000E+00	.0000E+00	-7.7303E-05
54	55	.0000E+00	.0000E+00	-2.6637E-03	.0000E+00	.0000E+00	-2.6637E-03
55	56	.0000E+00	.0000E+00	-1.1310E-02	.0000E+00	.0000E+00	-1.1310E-02
56	57	.0000E+00	.0000E+00	-6.3591E-04	.0000E+00	.0000E+00	-6.3591E-04
57	58	.0000E+00	.0000E+00	-1.0993E-02	.0000E+00	.0000E+00	-1.0993E-02
58	59	.0000E+00	.0000E+00	-6.3634E-05	.0000E+00	.0000E+00	-6.3634E-05
59	60	.0000E+00	.0000E+00	-3.4221E-03	.0000E+00	.0000E+00	-3.4221E-03
60	61	.0000E+00	.0000E+00	-1.2652E-02	.0000E+00	.0000E+00	-1.2652E-02

61	62	.0000E+00	.0000E+00	-6.7306E-05	.0000E+00	.0000E+00	-6.7306E-05
62	63	.0000E+00	.0000E+00	-3.2895E-03	.0000E+00	.0000E+00	-3.2895E-03
63	64	.0000E+00	.0000E+00	-1.2083E-02	.0000E+00	.0000E+00	-1.2083E-02
64	65	.0000E+00	.0000E+00	-7.9930E-05	.0000E+00	.0000E+00	-7.9930E-05
65	66	.0000E+00	.0000E+00	-2.0677E-02	.0000E+00	.0000E+00	-2.0677E-02
66	67	.0000E+00	.0000E+00	-1.5333E-02	.0000E+00	.0000E+00	-1.5333E-02
67	68	.0000E+00	.0000E+00	-1.5071E-02	.0000E+00	.0000E+00	-1.5071E-02
68	70	.0000E+00	.0000E+00	-6.0348E-03	.0000E+00	.0000E+00	-6.0348E-03
69	71	.0000E+00	.0000E+00	-7.9355E-04	.0000E+00	.0000E+00	-7.9355E-04
70	72	1.4284E-05	.0000E+00	-2.4069E-02	-7.1420E-06	.0000E+00	-2.4061E-02
71	73	.0000E+00	.0000E+00	-6.1921E-03	.0000E+00	.0000E+00	-6.1921E-03
72	74	.0000E+00	.0000E+00	-7.8925E-04	.0000E+00	.0000E+00	-7.8925E-04
73	75	3.2629E-05	.0000E+00	-2.4119E-02	-1.6315E-05	.0000E+00	-2.4102E-02
74	76	.0000E+00	.0000E+00	-1.2856E-04	.0000E+00	.0000E+00	-1.2856E-04
75	77	.0000E+00	.0000E+00	-9.6313E-05	.0000E+00	.0000E+00	-9.6313E-05
76	80	.0000E+00	.0000E+00	-1.7421E-05	.0000E+00	.0000E+00	-1.7421E-05
77	81	.0000E+00	.0000E+00	-8.0060E-03	.0000E+00	.0000E+00	-8.0060E-03
78	82	.0000E+00	.0000E+00	-3.9833E-04	.0000E+00	.0000E+00	-3.9833E-04
79	83	.0000E+00	.0000E+00	-1.1185E-05	.0000E+00	.0000E+00	-1.1185E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.3076E-03	.0000E+00	.0000E+00	-2.3076E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9129E-03	.0000E+00	.0000E+00	-1.9129E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.8182E-03	.0000E+00	.0000E+00	-1.8182E-03

TOTAL 2.3378E-03 .0000E+00 -6.8459E-01 -1.1689E-03 -3.2792E-01 -1.0113E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 6.6667E-01 8016.50C 3.3333E-01	276795 15820	2.9481E+00 1.9415E-01	1.3523E-02 6.7090E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
3	3	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 6.6667E-01 8016.50C 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95243.50C 96245.35C	6.7485E-01 3.7685E-04 5.7949E-05 2.1480E-06 9.1919E-06 7.0166E-05 7.9842E-06 9.5811E-06 1.2329E-04 4.7873E-03 2.3535E-03 3.1606E-01 6.5879E-04 4.8886E-04 3.9240E-06 1.2593E-11 1.4321E-04 3.7810E-10 3.0881E-07 7.4219E-09	106142 1050 137 1347 676 318 3032 54 253 30338 1872 155986 2016 6168 46 0 286 0 3 0	1.5432E+00 1.3256E-02 1.8181E-03 1.4622E-02 7.5001E-03 3.8178E-03 3.1726E-02 1.2004E-03 3.3174E-03 5.9181E-01 2.7484E-02 2.2810E+00 2.5426E-02 1.2667E-01 6.3620E-04 .0000E+00 4.1307E-03 .0000E+00 3.5599E-05 3.2913E-07	1.2646E-03 1.1501E-02 1.5771E-03 1.4520E-02 7.4216E-03 3.4472E-03 3.1628E-02 7.2901E-05 2.2319E-03 5.0926E-02 8.5811E-03 2.0204E-01 2.0357E-02 2.2842E-02 5.4933E-04 .0000E+00 2.6061E-03 .0000E+00 3.1481E-05 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 5.2249E-04 5.4046E-05 2.5924E-01 4.2010E-04 2.0750E-02 2.0953E-04 4.6662E-02 5.0324E-07 5.3768E-05 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.3034E-05 4.2010E-04 1.1184E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 1 6 695 9	2.1849E-05 1.1440E-05 6.2386E-05 7.9970E-03 9.9291E-05	2.1185E-10 4.6871E-06 1.2377E-05 1.4578E-04 3.3730E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	590 25	4.9030E-03 2.4955E-04	2.8729E-05 8.6059E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	11	1.7315E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	23 1	1.7980E-04 1.6709E-05	1.0729E-06 6.7538E-14	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	197 76 249 51246 503	2.8659E-03 1.0687E-03 3.4028E-03 7.6366E-01 7.4620E-03	5.7653E-07 1.0702E-04 1.7541E-04 6.9145E-03 1.7168E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.4018E-05 .0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	210 5	1.6453E-03 4.1472E-05	9.6270E-06 1.6305E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1459568 123436	1.8840E+01 1.7851E+00	5.8599E-02 1.2823E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	89791 6971	1.1643E+00 1.0053E-01	4.0296E-03 6.4966E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	42 1	3.1501E-04 4.6392E-06	1.7632E-06 1.7147E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01	20 8 12 3752	2.8394E-04 1.3028E-04 1.7009E-04 5.5667E-02	3.7954E-09 6.1005E-06 5.0785E-06 5.8114E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00

		50000.35C	1.0711E-02	38	5.5504E-04	1.4441E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	30666	3.9767E-01	1.3604E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2424	3.4976E-02	2.4107E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	14	2.1639E-04	3.8965E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	4.8689E-05	2.8824E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	17	2.2627E-04	1.9500E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3196	4.7361E-02	5.1338E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	27	4.1191E-04	1.7602E-05	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	72317	9.4226E-01	3.1564E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5729	8.2635E-02	6.5396E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	7203	9.4829E-02	3.1213E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	603	8.7777E-03	5.6981E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	2	3.2226E-05	2.0447E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	314	4.6717E-03	4.0543E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	2	2.3677E-05	2.1443E-06	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	5905	7.7636E-02	2.5060E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	504	7.4326E-03	1.4896E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	65342	7.6824E-01	2.6796E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4815	6.5548E-02	3.5581E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	11	1.6396E-04	9.7226E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	5.3198E-04	2.7899E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	6.8977E-04	9.2810E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.8421E-05	7.7057E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1465	1.9299E-02	2.0586E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	520	7.3440E-03	1.0874E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7969	9.7179E-02	6.0286E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2432	3.0003E-02	1.9331E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	2.0218E-03	2.9733E-04	.0000E+00	.0000E+00
51	52	13027.50C	9.9949E-01	2358	3.4079E-02	6.1814E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	9.9033E-05	1.0013E-05	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	14	1.8885E-04	2.8408E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	5.4413E-04	2.8557E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	5.9166E-04	1.0006E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.6601E-05	2.4284E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.1261E-05	4.5814E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1534	1.9926E-02	2.1426E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	517	7.2920E-03	1.1865E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8049	9.7003E-02	5.9530E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2441	2.9689E-02	1.9469E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	156	2.1339E-03	2.9385E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1391	1.3624E-02	7.7282E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	66	7.1914E-04	2.0505E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	64434	7.5790E-01	2.6255E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4792	6.5514E-02	3.8151E-05	.0000E+00	.0000E+00

55	56	6000.50C	1.3966E-03	9	1.1233E-04	1.7605E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	38	4.3180E-04	2.8196E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	5.8041E-04	1.0383E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.5308E-05	5.6259E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1435	1.9009E-02	1.9419E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	538	7.5770E-03	1.0380E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8095	9.7830E-02	6.0378E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2336	2.8553E-02	1.8745E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	2.2421E-03	3.7890E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2363	3.4155E-02	6.3591E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	6	9.1615E-05	1.3855E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	6.1020E-04	4.1041E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	62	8.3706E-04	8.8544E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.5444E-05	8.9450E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.5271E-05	4.0066E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1469	1.9306E-02	1.8894E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	487	6.8982E-03	1.0018E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8032	9.7316E-02	5.8934E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2372	2.8803E-02	1.8766E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	144	1.9510E-03	2.7743E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1330	1.1994E-02	6.3615E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	75	7.0151E-04	1.8698E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	93686	1.1587E+00	3.3690E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7744	1.0921E-01	5.3085E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	8	1.0507E-04	6.2929E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	62	7.2905E-04	2.6756E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	122	1.7649E-03	1.2875E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	9	1.1114E-04	8.4341E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2836E-05	2.1143E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2260	3.1147E-02	2.2108E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	923	1.3604E-02	1.2742E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11960	1.5291E-01	6.4582E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3646	4.7336E-02	2.1482E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	306	4.3318E-03	5.2001E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1295	1.2263E-02	6.7290E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	49	5.0250E-04	1.6147E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	90716	1.1196E+00	3.2359E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7549	1.0632E-01	5.3579E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	11	1.7169E-04	6.2752E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	54	6.9519E-04	3.3791E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	91	1.3008E-03	9.4027E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	9	1.3276E-04	4.2694E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.9711E-05	1.2522E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2334	3.2184E-02	2.1992E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	857	1.2437E-02	1.1010E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11583	1.4873E-01	6.2650E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3448	4.4548E-02	1.9919E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	263	3.8138E-03	4.8146E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1639	1.4124E-02	7.8709E-05	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	83	7.1495E-04	1.2208E-06	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	418376	3.8565E+00	2.0626E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20060	2.0653E-01	5.1494E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	6	7.0918E-05	1.4764E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	4.9369E-04	3.3279E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	7.6552E-04	1.0467E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.1000E-05	2.1829E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	6.0691E-06	1.0891E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1617	1.8232E-02	2.8696E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	461	5.6460E-03	1.6739E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9199	9.6868E-02	7.9996E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2710	2.8214E-02	2.5026E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	129	1.4359E-03	2.3970E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	4	4.8482E-05	2.5977E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	4.7508E-04	3.7553E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	7.2867E-04	1.0560E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.6607E-05	1.0942E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1576	1.7589E-02	2.7970E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	401	5.1420E-03	1.2818E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9111	9.4800E-02	8.1110E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2705	2.8331E-02	2.5265E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	158	1.8646E-03	3.0513E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	7	7.7489E-05	7.8725E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	5.4814E-04	1.7085E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	8.3738E-04	5.5162E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.4218E-05	1.1155E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	6.6643E-05	2.8066E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1416	1.9642E-02	9.7434E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	472	6.8501E-03	6.0354E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7189	9.2061E-02	3.1039E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2214	2.8762E-02	1.0396E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	173	2.4781E-03	2.8789E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6461	9.6701E-02	7.9268E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	6	9.1491E-05	8.6967E-07	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	46	6.5752E-04	2.4875E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	187	2.3811E-03	6.4760E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	331	4.7256E-03	2.9784E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	29	3.7446E-04	3.5786E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.1485E-04	7.9388E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7680	1.0634E-01	4.2650E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2595	3.7283E-02	2.2439E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36813	4.6402E-01	1.2022E-02	.0000E+00	7.1420E-06
		28000.50C	1.1433E-01	11499	1.4750E-01	3.9759E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	934	1.3090E-02	1.4556E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	2	1.9839E-05	2.7697E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	42	5.4498E-04	1.6119E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	69	1.0067E-03	3.4558E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	7.3734E-05	3.0294E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.9045E-05	1.4736E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1497	2.0942E-02	1.0253E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	557	8.1564E-03	6.1875E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7487	9.5006E-02	3.1571E-03	.0000E+00	.0000E+00

		28000.50C	1.1433E-01	2247	2.9206E-02	1.0100E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	190	2.7046E-03	3.5960E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	6794	1.0220E-01	7.8291E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.7212E-04	6.3433E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	34	4.4251E-04	1.8874E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	211	2.7958E-03	7.0208E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	334	4.9241E-03	1.7142E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	22	3.3656E-04	3.0425E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	1.0043E-04	2.0159E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7565	1.0508E-01	4.2182E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2606	3.7680E-02	2.2306E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	37092	4.6715E-01	1.2393E-02	.0000E+00	1.6315E-05
		28000.50C	1.1433E-01	11588	1.4946E-01	4.0163E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	904	1.3045E-02	1.1679E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2751	2.2822E-02	1.2755E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	152	1.3830E-03	1.0139E-06	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	1984	1.7116E-02	9.6293E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	69	5.9084E-04	1.9442E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5	5.1502E-05	7.1517E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	21	2.4599E-04	8.6784E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	5	6.1344E-05	1.5911E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	9	1.1629E-04	2.2965E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	5.0895E-04	2.4507E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	31	4.1561E-04	4.7438E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.6845E-05	1.4881E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.6689E-05	4.8084E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1119	1.3016E-02	1.4037E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	359	4.5275E-03	7.6197E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6647	7.0967E-02	4.2658E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1987	2.1414E-02	1.3755E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	107	1.3541E-03	1.6480E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10644	1.1327E-01	3.9516E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	770	9.7072E-03	3.1736E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	203	1.7899E-03	1.1184E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4	3.6665E-05	1.4007E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	8.6629E-05	7.7150E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	2	2.0953E-05	5.9568E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	15	1.9943E-04	7.2880E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	8.0922E-06	1.9578E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	30	3.8478E-04	3.5767E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	633	8.1498E-03	4.3276E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	91	1.3186E-03	7.0139E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1164	1.3552E-02	4.4325E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2564	3.0326E-02	1.1162E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	104	1.2258E-03	6.7617E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	89	1.1927E-03	1.3861E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	39	4.9517E-04	3.0616E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	17	2.3867E-04	3.6464E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	2.8209E-05	2.3382E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	154	2.0525E-03	9.9015E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8272	9.4860E-02	1.8135E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	38953	3.3335E-01	1.8168E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1865	1.7433E-02	1.3840E-06	.0000E+00	.0000E+00
TOTAL				3612268	4.4872E+01	6.8459E-01	3.2792E-01	1.1689E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE								
			TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)	
		1001.50C	2735854	3.2674E+01	1.1654E-01	.0000E+00	.0000E+00	
		2004.50C	11	1.7315E-04	.0000E+00	.0000E+00	.0000E+00	
		6000.50C	212	2.8484E-03	2.1521E-07	.0000E+00	.0000E+00	
		7014.50C	919	1.1290E-02	4.4975E-04	.0000E+00	.0000E+00	
		8016.50C	309987	4.3455E+00	3.0149E-03	.0000E+00	.0000E+00	
		13027.50C	17978	2.6715E-01	2.8302E-03	.0000E+00	.0000E+00	
		14000.50C	1381	1.9606E-02	1.4356E-04	.0000E+00	.0000E+00	
		15031.50C	103	1.4131E-03	1.5694E-05	.0000E+00	.0000E+00	
		16032.50C	41	5.6911E-04	3.1975E-05	.0000E+00	.0000E+00	
		22000.50C	30	3.8478E-04	3.5767E-05	.0000E+00	.0000E+00	
		24000.50C	33693	4.5118E-01	3.0556E-02	.0000E+00	.0000E+00	
		25055.50C	11538	1.6381E-01	1.6272E-02	.0000E+00	.0000E+00	
		26000.55C	178969	2.1844E+00	9.0169E-02	.0000E+00	2.3457E-05	
		28000.50C	54194	6.7220E-01	2.9335E-02	.0000E+00	.0000E+00	
		29000.50C	131	1.5885E-03	8.4843E-05	.0000E+00	.0000E+00	
		40000.50C	59203	8.7936E-01	8.1953E-03	.0000E+00	1.4018E-05	

42000.50C	3863	5.3660E-02	6.3682E-03	.0000E+00	.0000E+00
45103.50C	1050	1.3256E-02	1.1501E-02	.0000E+00	.0000E+00
47109.50C	137	1.8181E-03	1.5771E-03	.0000E+00	.0000E+00
50000.35C	579	8.5520E-03	2.0924E-04	.0000E+00	.0000E+00
62149.50C	1347	1.4622E-02	1.4520E-02	.0000E+00	.0000E+00
63151.55C	676	7.5001E-03	7.4216E-03	.0000E+00	.0000E+00
63153.55C	318	3.8178E-03	3.4472E-03	.0000E+00	.0000E+00
64155.50C	3032	3.1726E-02	3.1628E-02	.0000E+00	.0000E+00
92233.50C	54	1.2004E-03	7.2901E-05	5.2249E-04	.0000E+00
92234.50C	253	3.3174E-03	2.2319E-03	5.4046E-05	.0000E+00
92235.50C	30338	5.9181E-01	5.0926E-02	2.5924E-01	1.3034E-05
92236.50C	1872	2.7484E-02	8.5811E-03	4.2010E-04	.0000E+00
92238.50C	155986	2.2810E+00	2.0204E-01	2.0750E-02	1.1184E-03
93237.55C	2016	2.5426E-02	2.0357E-02	2.0953E-04	.0000E+00
94239.55C	6168	1.2667E-01	2.2842E-02	4.6662E-02	.0000E+00
94240.50C	46	6.3620E-04	5.4933E-04	5.0324E-07	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	286	4.1307E-03	2.6061E-03	5.3768E-05	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	3	3.5599E-05	3.1481E-05	.0000E+00	.0000E+00
96245.35C	0	3.2913E-07	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59262 CTM = 120.20

8 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 120.33 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 11:44:06

PROBID = 02/24/95 09:40:35

1MCNP VERSION 4A-B LD=10/04/91

02/24/95 11:44:07

PROBID = 02/24/95 11:44:07

INP=mpc12w OUTP=mpc12w.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/100000 year (mpc12w)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1922-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923
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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1    1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1   LWTR.01T
330- C      PWR: 3.75% U-235 - 37 Gwd/MTU - 100000 YEAR DECAY
331- M2    8016.50C 4.8538E-02
332-      45103.50C 2.7105E-05
333-      47109.50C 4.1679E-06
334-      62149.50C 1.5450E-07
335-      63151.55C 6.6112E-07
336-      63153.55C 5.0466E-06
337-      64155.50C 5.7426E-07
338-      92233.50C 1.2373E-06
339-      92234.50C 7.8619E-06
340-      92235.50C 3.7137E-04
341-      92236.50C 1.6930E-04
342-      92238.50C 2.2732E-02
343-      93237.55C 4.6627E-05
344-      94239.55C 8.3355E-06
345-      94240.50C 1.4066E-09
346-      94241.50C 1.5345E-14
347-      94242.50C 9.4189E-06
348-      95241.50C 4.6067E-13
349-      95243.50C 2.0287E-10
350-      96245.35C 9.0415E-12
351- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
352- M3    2004.50C 1.0
353- C      ZIRCALOY-4
354- M4    8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
355-      40000.50C -0.9818 50000.35C -0.0140
356- C      ALLOY 825

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357-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
358-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
359-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
360-      29000.50C -0.0250 42000.50C -0.0300
361-      C      1100 ALUMINUM ALLOY
362-      M6      13027.50C -0.99880 29000.50C -0.00120
363-      C      A516 CARBON STEEL
364-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
365-      16032.50C -0.00035 25055.50C -0.0090
366-      26000.55C -0.98535
367-      C      SS316L
368-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
369-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
370-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
371-      42000.50C -0.02500
372-      C      TALLIES
373-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.
SURFACES 24051 AND 28051 OF CELL      9 ARE THE SAME.      28051 WILL BE DELETED.

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SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3074
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3074
POINTS AFTER EXPANSION OR CONTRACTION	3006
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.192186E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B) DATA SETS:	LWTR.01T							
2	8016,	.67487	45103,	.00038	47109,	.00006	62149,	.00000
	63151,	.00001	63153,	.00007	64155,	.00001	92233,	.00002
	92234,	.00011	92235,	.00516	92236,	.00235	92238,	.31607
	93237,	.00065	94239,	.00012	94240,	.00000	94241,	.00000
	94242,	.00013	95241,	.00000	95243,	.00000	96245,	.00000
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060

8	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				
1	MATERIAL NUMBER COMPONENT NUCLIDE, MASS FRACTION							
1	1001,	.11191	8016,	.88809				
2	8016,	.12252	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00002	63153,	.00012	64155,	.00001	92233,	.00005
	92234,	.00029	92235,	.01378	92236,	.00631	92238,	.85398
	93237,	.00174	94239,	.00031	94240,	.00000	94241,	.00000
	94242,	.00036	95241,	.00000	95243,	.00000	96245,	.00000
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19220E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC

57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE

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117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE	
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00	
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00	
32	33	2	7.19220E-02	1.05225E+01	.00000E+00	0	1.0000E+00	
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00

48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2250000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01

15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	1001 PX	2.5991819E+01			
74	2042	1001 PX	2.1437590E+00			

75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08

8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08

68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY	(1301)	79/07/31.
2004.50C	2716	NJOY	(1270)	79/06/19.
6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92233.50C	14205	NJOY	(1393)	79/09/12.
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
94239.55C	67551	NJOY	(1399)	02/21/85
94240.50C	42744	NJOY	(1380)	79/09/13.
TOTAL NU			(1301)	
TOTAL NU			(1306)	
TOTAL NU			(1398)	
TOTAL NU			(1399)	
TOTAL NU			(1380)	

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

(1394) 79/10/17.

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU	(1396)	79/08/30.
TOTAL NU	(1381)	79/08/30.
TOTAL NU	(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
-----------	------	------	---------	-----------

16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.
62149.50C	11116	NJOY	(1319)	02/12/85
64155.50C	31471	NJOY	(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY
47109.50C	10147	NJOY
93237.55C	29142	NJOY

TOTAL NU

(1310)	11/01/85
(1373)	11/01/85
(1337)	04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C	33336
63153.55C	30265

06/28/88
06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1325785

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	101900
TALLIES	0
BANK	18403
CROSS SECTIONS	1325785

TOTAL 1446088

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

8 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/100000 year (mpc12w)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
-----	---	---	---	------	------	---	---	---	------	--------	--------

1	5.822E-02	-2.545E-01	8.501E+00	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.980E-01	3.080E+00
2	-1.895E-01	-6.506E-02	1.399E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.980E-01	1.951E+00
3	-1.696E-01	4.149E-01	1.510E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.980E-01	2.540E+00
4	-8.221E-02	-1.700E-01	1.415E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.980E-01	2.090E+00
5	3.245E-02	-2.943E-01	2.807E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.980E-01	1.138E+00
6	-4.723E-02	-4.075E-01	6.069E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.980E-01	4.154E-01
7	1.683E-01	-5.416E-02	6.060E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.980E-01	6.796E-01
8	2.199E-02	-1.997E-01	4.549E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.980E-01	2.224E-01
9	2.714E-02	-3.055E-01	4.488E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.980E-01	3.533E+00
10	2.823E-01	-3.586E-01	4.449E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.980E-01	1.224E+00
11	-3.203E-01	1.924E-01	3.833E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.980E-01	2.873E+00
12	1.444E-01	5.339E-03	3.414E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.980E-01	1.956E-01
13	4.483E-01	-2.451E-03	4.363E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.980E-01	2.442E+00
14	4.675E-02	-1.797E-01	4.321E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.980E-01	1.352E-01
15	-3.465E-01	6.419E-02	1.607E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.980E-01	3.834E-01
16	-4.255E-01	1.282E-01	6.634E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.980E-01	2.477E+00
17	-2.762E-01	-1.082E-01	6.795E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.980E-01	8.582E-01
18	-4.485E-02	1.705E-01	2.263E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.980E-01	2.202E+00
19	-6.722E-02	-4.138E-02	1.656E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.980E-01	1.449E-01
20	-3.563E-01	-1.851E-03	3.614E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.980E-01	4.458E-01
21	2.957E-01	-2.301E-01	3.559E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.980E-01	2.341E+00
22	1.487E-01	-3.278E-01	4.510E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.980E-01	6.967E-01
23	-4.363E-01	-9.864E-03	4.560E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.980E-01	1.565E+00
24	-4.477E-01	-4.605E-04	4.560E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.980E-01	3.662E+00
25	-2.171E-01	-2.349E-01	4.625E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.980E-01	3.286E+00
26	-2.222E-01	-1.908E-02	4.625E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.980E-01	1.042E+00
27	3.754E-01	-2.734E-01	4.675E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.980E-01	2.843E+00
28	1.369E-01	-2.851E-01	4.707E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.980E-01	1.164E+00
29	3.015E-01	-5.255E-02	7.380E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.980E-01	2.687E+00
30	3.712E-01	2.733E-01	9.677E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.980E-01	8.272E-01
31	-2.620E-02	-2.142E-01	9.604E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.980E-01	2.202E+00
32	3.772E-01	2.567E-01	3.245E+00	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.980E-01	1.691E+00
33	2.045E-01	-1.316E-01	3.240E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.980E-01	7.031E-01
34	5.181E-02	-2.261E-01	1.283E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.980E-01	2.440E+00
35	-4.226E-02	-1.257E-02	1.325E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.980E-01	1.098E+00
36	2.867E-01	-8.026E-02	6.362E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.980E-01	1.220E+00
37	7.235E-02	-2.226E-01	8.054E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.980E-01	1.654E+00
38	5.102E-02	-2.362E-01	8.055E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.980E-01	2.965E+00
39	-2.803E-01	3.850E-02	1.210E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.980E-01	2.857E-01
40	-1.018E-01	-1.202E-01	1.220E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.980E-01	1.227E+01
41	-3.078E-02	-5.767E-02	1.164E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.980E-01	4.516E+00
42	2.228E-01	-2.076E-01	1.211E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.980E-01	2.599E-01
43	2.566E-02	-3.636E-02	1.216E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.980E-01	1.033E+00
44	-2.499E-02	-1.976E-01	1.078E+02	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.980E-01	2.238E+00
45	2.947E-01	3.533E-02	1.063E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.980E-01	2.700E+00
46	4.223E-02	-9.417E-02	9.876E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.980E-01	3.439E+00
47	1.606E-01	8.172E-02	4.949E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.980E-01	1.718E+00
48	6.049E-02	-1.436E-01	4.730E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.980E-01	1.772E+00
49	-4.790E-02	2.267E-01	3.400E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.980E-01	3.344E-01
50	3.697E-01	1.606E-01	2.842E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.980E-01	1.801E+00

CYCLE	1	K(COLLISION)	.824383	REMOVAL LIFETIME(ABS)	3.7976E+03	SOURCE POINTS GENERATED	2474
CYCLE	2	K(COLLISION)	.820323	REMOVAL LIFETIME(ABS)	3.8239E+03	SOURCE POINTS GENERATED	3009
CYCLE	3	K(COLLISION)	.802120	REMOVAL LIFETIME(ABS)	3.7780E+03	SOURCE POINTS GENERATED	2933
CYCLE	4	K(COLLISION)	.785170	REMOVAL LIFETIME(ABS)	3.7056E+03	SOURCE POINTS GENERATED	2953

CYCLE 5 K(COLLISION) .779107 REMOVAL LIFETIME(ABS) 3.6118E+03 SOURCE POINTS GENERATED 3000

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .797317 REMOVAL LIFETIME(ABS) 3.5823E+03 SOURCE POINTS GENERATED 3024

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.792422	.794869	.0031	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	.776626	.778454	.0023	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	.793017	.784307	.0111	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.7894E+03	3.6735E+03	.0315				
REM LIFE(ABS)	3.7841E+03	3.6832E+03	.0274	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	2917						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.791098	.793612	.0024	K(COL/ABS)	.786756 .0016	.786412 .0051	-.0962
K(ABSORPTION)	.782791	.779900	.0023	K(ABS/TK LN)	.783288 .0035	.780810 .0032	-.1891
K(TRK LENGTH)	.791417	.786677	.0071	K(TK LN/COL)	.790145 .0024	.791878 .0008	-.9592
REM LIFE(COL)	3.8245E+03	3.7239E+03	.0225				
REM LIFE(ABS)	3.8084E+03	3.7249E+03	.0192	LIFE(COL/ABS)	3.7244E+03 .0209	3.7310E+03 .0044	.9997
SOURCE POINTS GENERATED	2949						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.794135	.793743	.0017	K(COL/ABS)	.792689 .0076	.793736 .0021	.0865
K(ABSORPTION)	.826839	.791635	.0149	K(ABS/TK LN)	.790791 .0098	.789736 .0077	.6202
K(TRK LENGTH)	.799755	.789946	.0065	K(TK LN/COL)	.791845 .0027	.793087 .0013	-.6717
REM LIFE(COL)	3.6683E+03	3.7100E+03	.0164	K(COL/ABS/TK LN)	.791775 .0065	.792916 .0010	
REM LIFE(ABS)	3.6783E+03	3.7133E+03	.0140	LIFE(COL/ABS)	3.7116E+03 .0152	3.7322E+03 .0027	.9997
SOURCE POINTS GENERATED	2979						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.783753	.791745	.0028	K(COL/ABS)	.792408 .0059	.791845 .0031	-.0981
K(ABSORPTION)	.798815	.793071	.0117	K(ABS/TK LN)	.791230 .0076	.789032 .0058	.5851
K(TRK LENGTH)	.787161	.789389	.0051	K(TK LN/COL)	.790567 .0027	.791095 .0026	-.1838
REM LIFE(COL)	3.6418E+03	3.6963E+03	.0133	K(COL/ABS/TK LN)	.791402 .0050	.790999 .0034	
REM LIFE(ABS)	3.6809E+03	3.7068E+03	.0110	LIFE(COL/ABS)	3.7016E+03 .0121	3.7407E+03 .0079	.9923
SOURCE POINTS GENERATED	2971						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.784921	.790608	.0027	K(COL/ABS)	.792095 .0048	.790907 .0028	-.1188
K(ABSORPTION)	.796143	.793583	.0095	K(ABS/TK LN)	.791322 .0062	.788662 .0046	.5741
K(TRK LENGTH)	.787421	.789061	.0042	K(TK LN/COL)	.789834 .0024	.790113 .0024	-.1030
REM LIFE(COL)	3.7934E+03	3.7125E+03	.0116	K(COL/ABS/TK LN)	.791084 .0041	.790075 .0030	
REM LIFE(ABS)	3.8282E+03	3.7270E+03	.0105	LIFE(COL/ABS)	3.7198E+03 .0110	3.7501E+03 .0112	.9808
SOURCE POINTS GENERATED	3047						

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.790066	.790530	.0023	K(COL/ABS)	.791786 .0041	.790780 .0024	-.1148

K(ABSORPTION)	.789799	.793042	.0081	K(ABS/TK LN)	.790621	.0053	.787821	.0040	.5713
K(TRK LENGTH)	.783034	.788200	.0037	K(TK LN/COL)	.789365	.0021	.789832	.0021	-.0857
REM LIFE(COL)	3.7059E+03	3.7116E+03	.0098	K(COL/ABS/TK LN)	.790591	.0035	.789824	.0026	
REM LIFE(ABS)	3.7241E+03	3.7266E+03	.0088	LIFE(COL/ABS)	3.7191E+03	.0093	3.7505E+03	.0093	.9807
SOURCE POINTS GENERATED 3023									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.788580		.790287		.0020	K(COL/ABS)	.792554	.0037	-.1543
K(ABSORPTION)	.807269		.794821		.0073	K(ABS/TK LN)	.791121	.0047	.4297
K(TRK LENGTH)	.781967		.787421		.0033	K(TK LN/COL)	.788854	.0019	-.0359
REM LIFE(COL)	3.6596E+03		3.7051E+03		.0087	K(COL/ABS/TK LN)	.790843	.0031	
REM LIFE(ABS)	3.6697E+03		3.7195E+03		.0079	LIFE(COL/ABS)	3.7123E+03	.0083	.9808
SOURCE POINTS GENERATED 2991									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.788120		.790046		.0018	K(COL/ABS)	.791580	.0035	-.0916
K(ABSORPTION)	.779467		.793115		.0068	K(ABS/TK LN)	.790928	.0041	.1992
K(TRK LENGTH)	.799304		.788741		.0034	K(TK LN/COL)	.789394	.0018	-.1138
REM LIFE(COL)	3.7909E+03		3.7146E+03		.0081	K(COL/ABS/TK LN)	.790634	.0027	
REM LIFE(ABS)	3.7484E+03		3.7227E+03		.0070	LIFE(COL/ABS)	3.7187E+03	.0075	.9620
SOURCE POINTS GENERATED 2943									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.800855		.791127		.0021	K(COL/ABS)	.790832	.0032	-.3641
K(ABSORPTION)	.767347		.790538		.0070	K(ABS/TK LN)	.791376	.0037	-.2867
K(TRK LENGTH)	.823473		.792215		.0053	K(TK LN/COL)	.791671	.0033	.4816
REM LIFE(COL)	3.7682E+03		3.7200E+03		.0074	K(COL/ABS/TK LN)	.791293	.0026	
REM LIFE(ABS)	3.7398E+03		3.7244E+03		.0063	LIFE(COL/ABS)	3.7222E+03	.0067	.9552
SOURCE POINTS GENERATED 3022									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.788650		.790901		.0019	K(COL/ABS)	.790163	.0031	-.3193
K(ABSORPTION)	.778285		.789424		.0065	K(ABS/TK LN)	.790786	.0034	-.2759
K(TRK LENGTH)	.791487		.792148		.0048	K(TK LN/COL)	.791525	.0030	.4788
REM LIFE(COL)	3.8584E+03		3.7326E+03		.0074	K(COL/ABS/TK LN)	.790825	.0024	
REM LIFE(ABS)	3.8327E+03		3.7343E+03		.0063	LIFE(COL/ABS)	3.7334E+03	.0068	.9631
SOURCE POINTS GENERATED 2971									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.769457		.789114		.0029	K(COL/ABS)	.787786	.0041	.2573
K(ABSORPTION)	.753828		.786458		.0070	K(ABS/TK LN)	.788731	.0041	-.0532
K(TRK LENGTH)	.778429		.791005		.0046	K(TK LN/COL)	.790060	.0033	.5262
REM LIFE(COL)	3.8313E+03		3.7408E+03		.0071	K(COL/ABS/TK LN)	.788859	.0033	
REM LIFE(ABS)	3.8443E+03		3.7434E+03		.0062	LIFE(COL/ABS)	3.7421E+03	.0066	.9636
SOURCE POINTS GENERATED 2886									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.791110		.789268		.0027	K(COL/ABS)	.787071	.0039	.2231

K(ABSORPTION)	.765868	.784874	.0068	K(ABS/TK LN)	.788007	.0039	.789269	.0037	-.0627
K(TRK LENGTH)	.792763	.791140	.0043	K(TK LN/COL)	.790204	.0030	.789417	.0028	.5273
REM LIFE(COL)	3.8888E+03	3.7522E+03	.0072	K(COL/ABS/TK LN)	.788427	.0031	.789117	.0029	
REM LIFE(ABS)	3.8334E+03	3.7503E+03	.0060	LIFE(COL/ABS)	3.7513E+03	.0065	3.7482E+03	.0057	.9612
SOURCE POINTS GENERATED 3162									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.795799		.789734		.0025	K(COL/ABS)	.787657	.0037	.789469
K(ABSORPTION)	.794741		.785579		.0063	K(ABS/TK LN)	.788293	.0036	.789401
K(TRK LENGTH)	.789286		.791008		.0040	K(TK LN/COL)	.790371	.0028	.789878
REM LIFE(COL)	3.7677E+03		3.7533E+03		.0067	K(COL/ABS/TK LN)	.788774	.0029	.789583
REM LIFE(ABS)	3.7735E+03		3.7520E+03		.0056	LIFE(COL/ABS)	3.7526E+03	.0061	3.7505E+03
SOURCE POINTS GENERATED 3010									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.805120		.790760		.0027	K(COL/ABS)	.788733	.0037	.790522
K(ABSORPTION)	.802481		.786705		.0061	K(ABS/TK LN)	.789415	.0036	.790523
K(TRK LENGTH)	.807750		.792124		.0039	K(TK LN/COL)	.791442	.0030	.790894
REM LIFE(COL)	3.7141E+03		3.7507E+03		.0063	K(COL/ABS/TK LN)	.789863	.0030	.790635
REM LIFE(ABS)	3.6970E+03		3.7483E+03		.0053	LIFE(COL/ABS)	3.7495E+03	.0057	3.7459E+03
SOURCE POINTS GENERATED 3052									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/100000 year (mpc12w)

02/24/95 13:48:52
PROBID = 02/24/95 11:44:07

0

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59270	1.0123E+00	2.0452E+00	ESCAPE	2	1.5945E-05	5.5012E-13
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	7.5330E-02	4.7461E-07	WEIGHT CUTOFF	59351	7.4468E-02	4.3343E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.4473E-07	DOWNSCATTERING	0	0.	1.9364E+00
				CAPTURE	0	6.9174E-01	3.2543E-02
(N,XN)	166	2.3071E-03	1.8283E-03	LOSS TO (N,XN)	83	1.1535E-03	1.0059E-02
FISSION	0	0.	0.	LOSS TO FISSION	0	3.2258E-01	6.8017E-02
TOTAL	59436	1.0900E+00	2.0471E+00	TOTAL	59436	1.0900E+00	2.0471E+00

NUMBER OF NEUTRONS BANKED 83
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0028E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.2786E+01
 TOTAL NEUTRON COLLISIONS 3721308
 NET MULTIPLICATION 1.0011E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 5.4102E+04
 CAPTURE 3.7389E+03
 CAPTURE OR ESCAPE 3.7397E+03
 ANY TERMINATION 4.1028E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 121.57 MINUTES
 COMPUTER TIME IN MCRUN 121.45 MINUTES

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0

SOURCE PARTICLES PER MINUTE
RANDOM NUMBERS GENERATED

4.8802E+02
44352354

FIELD LENGTH
MOST RANDOM NUMBERS USED WAS

0
8450 IN HISTORY 26180

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4877E-01 TO 1.2126E+00
1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
62	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	27150	9900	3.4842E+00	1.0980E-04	3.5964E-01	7.2390E-01	1.0707E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	764094	59353	4.3690E+00	5.6801E-04	7.0887E-01	8.6811E-01	2.4895E+00
33	34	2953	161	619	7.0419E-03	3.1656E-01	6.4007E-01	4.2248E+00
34	35	190	15	544	3.9497E-03	5.7279E-06	2.3591E-02	4.5341E-01
35	36	1373495	59353	15	2.4802E-04	5.0335E-04	6.7537E-01	8.6525E-01
36	37	350	15	26	1.9606E-04	4.3815E-06	1.8481E-02	4.7025E-01
37	38	1489067	59353	53200	7.8924E-01	4.8512E-04	6.6275E-01	8.6480E-01
38	39	380	15	168	1.3086E-03	4.4293E-06	1.7020E-02	4.7693E-01
39	40	2381359	59353	1630410	2.1069E+01	4.2490E-04	6.3159E-01	8.6208E-01
40	41	60233	31586	100228	1.3028E+00	3.2669E-04	5.8330E-01	8.6003E-01
41	42	6	5	24	2.4825E-04	3.7792E-08	5.6728E-08	6.1501E-01

42	43	127343	33279	3775	5.5840E-02	3.4394E-04	5.9728E-01	8.6085E-01	4.1328E+00
43	44	142490	35475	33355	4.3228E-01	3.4418E-04	5.9744E-01	8.5984E-01	1.5124E+00
44	45	155674	36431	3373	5.0095E-02	3.5072E-04	5.9998E-01	8.6063E-01	4.1331E+00
45	46	189798	41357	81311	1.0545E+00	3.4802E-04	5.9817E-01	8.6030E-01	1.5164E+00
46	47	7787	3578	8518	1.1084E-01	3.4683E-04	6.0056E-01	8.6052E-01	1.5115E+00
47	48	10504	3893	356	5.2409E-03	3.3838E-04	5.7678E-01	8.6187E-01	4.1241E+00
48	49	13732	5342	7324	9.4848E-02	3.6321E-04	6.0170E-01	8.6242E-01	1.5281E+00
49	50	35460	15326	73104	8.6435E-01	3.0036E-04	5.3756E-01	8.1595E-01	1.4256E+00
50	51	35034	14527	13282	1.6385E-01	3.5952E-04	5.5828E-01	8.0011E-01	2.0541E+00
51	52	34547	14215	2499	3.6354E-02	3.5430E-04	5.4507E-01	7.9789E-01	9.2366E+00
52	53	34840	14267	13226	1.6235E-01	3.4045E-04	5.3204E-01	7.9471E-01	2.0544E+00
53	54	133	41	775	6.6303E-03	7.3657E-05	3.8303E-01	5.9093E-01	1.0030E+00
54	55	35635	15340	73179	8.6437E-01	3.0043E-04	5.4355E-01	8.1406E-01	1.4328E+00
55	56	35323	14529	13343	1.6281E-01	3.4885E-04	5.5819E-01	7.9310E-01	2.0672E+00
56	57	34934	14193	2563	3.6532E-02	3.5034E-04	5.5036E-01	7.9008E-01	9.2351E+00
57	58	35111	14277	13337	1.6063E-01	3.2519E-04	5.2337E-01	7.8478E-01	2.0422E+00
58	59	194	52	1230	1.2001E-02	8.0750E-05	4.3419E-01	6.5057E-01	1.0672E+00
59	60	54507	19175	99303	1.2378E+00	4.1951E-04	5.4150E-01	8.4070E-01	1.4667E+00
60	61	53891	18210	18761	2.4256E-01	5.8931E-04	5.5912E-01	8.3235E-01	2.2365E+00
61	62	227	58	1005	9.6552E-03	4.4600E-05	2.3797E-01	6.3075E-01	7.8743E-01
62	63	53206	18796	96902	1.2051E+00	4.1911E-04	5.4678E-01	8.3979E-01	1.4713E+00
63	64	52701	17923	18491	2.3948E-01	5.8685E-04	5.6790E-01	8.3142E-01	2.2298E+00
64	65	276	64	989	9.6719E-03	1.2219E-04	6.1423E-01	6.4786E-01	1.3074E+00
65	66	10406	5145	439142	4.0706E+00	5.6283E-05	2.7267E-01	6.1875E-01	8.5905E-01
66	67	10276	4016	15161	1.6072E-01	1.7536E-04	4.3035E-01	6.9667E-01	1.8147E+00
67	68	10329	4037	15364	1.6071E-01	1.6742E-04	4.2809E-01	6.8862E-01	1.7900E+00
68	70	34049	8989	11585	1.5001E-01	8.3557E-04	5.8250E-01	8.3532E-01	2.3399E+00
69	71	34093	8656	6353	9.5153E-02	9.4003E-04	5.7834E-01	8.3528E-01	8.9040E+00
70	72	18478	8475	56555	7.2915E-01	1.2199E-03	5.8784E-01	8.3566E-01	2.5186E+00
71	73	34858	9121	11774	1.5231E-01	8.4179E-04	5.6210E-01	8.3424E-01	2.3449E+00
72	74	34791	8798	6355	9.4987E-02	9.0466E-04	5.6544E-01	8.3443E-01	9.0092E+00
73	75	18738	8598	58819	7.5612E-01	1.1748E-03	5.7345E-01	8.3367E-01	2.4792E+00
74	76	88	28	2334	2.0265E-02	7.0831E-05	4.2605E-01	5.8613E-01	9.8353E-01
75	77	91	34	2246	1.8790E-02	3.9334E-05	1.4814E-01	5.6384E-01	7.0913E-01
76	80	10	8	36	2.2403E-04	2.4292E-04	1.1435E+00	4.4648E-01	1.7319E+00
77	81	3480	1544	10201	1.1230E-01	3.3969E-04	5.4041E-01	7.3025E-01	2.1021E+00
78	82	2148	886	11701	1.3002E-01	2.5710E-04	4.6679E-01	7.6983E-01	1.3150E+00
79	83	5	3	393	3.3257E-03	1.7732E-04	5.7252E-01	6.2279E-01	1.4924E+00
80	84	5	1	15	1.5294E-04	1.4304E-05	8.4631E-03	5.3578E-01	9.8929E-01
81	85	1603	699	4674	5.7313E-02	8.6106E-04	5.9791E-01	7.9736E-01	2.1483E+00
82	86	3	1	31	3.2950E-04	9.3109E-06	2.8816E-03	6.1132E-01	5.0732E-01
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	935	456	7347	8.6683E-02	2.4457E-03	6.2142E-01	8.0941E-01	4.6350E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	381	220	54528	4.5752E-01	2.6071E-05	1.0543E-01	5.4842E-01	6.0253E-01

TOTAL 7457391 699172 3721308 4.5502E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.4996E-01	-5.4996E-01
2	2	3.4293E-01	.0000E+00	.0000E+00	-9.3584E-01	-5.9291E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.7139E-02	-1.7139E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.5527E-02	-5.5527E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5572E-02	-1.5572E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.5519E-01	-1.5519E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.7423E+00	-1.7423E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.1144E+00	-2.1144E+00

9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2320E-01	-2.2320E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2239E-01	-2.2239E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9244E-01	-3.9244E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8446E-01	-3.8446E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4649E-02	-8.4649E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5138E-02	-8.5138E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5058E-02	-9.5058E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0428E-02	-8.0428E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6417E-02	-7.6417E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8778E-02	-7.8778E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0463E-01	-1.0463E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9774E-02	-9.9774E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4630E-02	-9.4630E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7810E-02	-8.7810E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1982E-01	-1.1982E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1342E-01	-1.1342E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1816E-01	-1.1816E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2046E-01	-1.2046E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0853E-01	-1.0853E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.7167E-02	-8.7167E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.7891E-02	-9.7891E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0466E-01	-1.0466E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0012E+01	-2.0012E+01
32	33	1.0252E+01	1.0123E+00	.0000E+00	.0000E+00	-1.0043E+01	1.2217E+00
33	34	3.2030E-02	.0000E+00	.0000E+00	.0000E+00	-3.0479E-02	1.5512E-03
34	35	1.5224E-03	.0000E+00	.0000E+00	.0000E+00	-1.4309E-03	9.1531E-05
35	36	2.0062E+01	.0000E+00	.0000E+00	.0000E+00	-2.0050E+01	1.2438E-02
36	37	2.7806E-03	.0000E+00	.0000E+00	.0000E+00	-2.7794E-03	1.2291E-06
37	38	2.1744E+01	.0000E+00	.0000E+00	.0000E+00	-2.1663E+01	8.1544E-02
38	39	3.0048E-03	.0000E+00	.0000E+00	.0000E+00	-2.9880E-03	1.6826E-05
39	40	3.4701E+01	.0000E+00	.0000E+00	.0000E+00	-1.1380E+01	2.3321E+01
40	41	8.7653E-01	.0000E+00	.0000E+00	.0000E+00	-8.7224E-01	4.2921E-03
41	42	4.9990E-05	.0000E+00	.0000E+00	.0000E+00	-4.4462E-05	5.5279E-06
42	43	1.8495E+00	.0000E+00	.0000E+00	.0000E+00	-1.8489E+00	5.7891E-04
43	44	2.0701E+00	.0000E+00	.0000E+00	.0000E+00	-2.0688E+00	1.3711E-03
44	45	2.2615E+00	.0000E+00	.0000E+00	.0000E+00	-2.2609E+00	5.5207E-04
45	46	2.7610E+00	.0000E+00	.0000E+00	.0000E+00	-1.1700E+00	1.5911E+00
46	47	1.1315E-01	.0000E+00	.0000E+00	.0000E+00	-6.9742E-02	4.3410E-02
47	48	1.5296E-01	.0000E+00	.0000E+00	.0000E+00	-1.4770E-01	5.2686E-03
48	49	1.9986E-01	.0000E+00	.0000E+00	.0000E+00	-7.8032E-02	1.2183E-01
49	50	4.9064E-01	.0000E+00	.0000E+00	.0000E+00	-2.7477E-01	2.1587E-01
50	51	4.7747E-01	.0000E+00	.0000E+00	.0000E+00	-4.5993E-01	1.7537E-02
51	52	4.6744E-01	.0000E+00	.0000E+00	.0000E+00	-4.6200E-01	5.4355E-03
52	53	4.7141E-01	.0000E+00	.0000E+00	.0000E+00	-1.9741E-01	2.7401E-01
53	54	1.3382E-03	.0000E+00	.0000E+00	.0000E+00	-8.8174E-05	1.2500E-03
54	55	4.9148E-01	.0000E+00	.0000E+00	.0000E+00	-2.7642E-01	2.1506E-01
55	56	4.7848E-01	.0000E+00	.0000E+00	.0000E+00	-4.6160E-01	1.6879E-02
56	57	4.6941E-01	.0000E+00	.0000E+00	.0000E+00	-4.6336E-01	6.0474E-03
57	58	4.7144E-01	.0000E+00	.0000E+00	.0000E+00	-1.9701E-01	2.7443E-01
58	59	2.1229E-03	.0000E+00	.0000E+00	.0000E+00	-1.2875E-04	1.9941E-03
59	60	7.7471E-01	.0000E+00	.0000E+00	.0000E+00	-3.8920E-01	3.8550E-01
60	61	7.6224E-01	.0000E+00	.0000E+00	.0000E+00	-3.5895E-01	4.0329E-01
61	62	2.4569E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4569E-03
62	63	7.5581E-01	.0000E+00	.0000E+00	.0000E+00	-3.7863E-01	3.7718E-01
63	64	7.4477E-01	.0000E+00	.0000E+00	.0000E+00	-3.5091E-01	3.9386E-01
64	65	2.9699E-03	.0000E+00	.0000E+00	.0000E+00	-1.6434E-05	2.9535E-03
65	66	1.2574E-01	.0000E+00	.0000E+00	.0000E+00	-7.7822E-02	4.7916E-02
66	67	1.2318E-01	.0000E+00	.0000E+00	.0000E+00	-6.1718E-02	6.1461E-02
67	68	1.2274E-01	.0000E+00	.0000E+00	.0000E+00	-6.1668E-02	6.1075E-02
68	70	4.8271E-01	.0000E+00	.0000E+00	.0000E+00	-4.7662E-01	6.0946E-03

PRINT TABLE 130

PRINT TABLE									
CELL		WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	1.7727E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7727E-04
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	2.5901E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	.0000E+00	.0000E+00	5.1818E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5901E-04
34	35	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.1818E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	7.9220E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.9220E-06
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	1.0022E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0022E-04
40	41	.0000E+00	.0000E+00	-3.2713E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2713E-05
41	42	.0000E+00	.0000E+00	-4.1928E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1928E-06
42	43	.0000E+00	.0000E+00	1.8016E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8016E-05
43	44	.0000E+00	.0000E+00	3.4023E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4023E-05
44	45	.0000E+00	.0000E+00	-1.2526E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2526E-05
45	46	.0000E+00	.0000E+00	-1.5951E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5951E-05
46	47	.0000E+00	.0000E+00	-4.0436E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0436E-06
47	48	.0000E+00	.0000E+00	1.2883E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2883E-07
48	49	.0000E+00	.0000E+00	4.2570E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2570E-06
49	50	.0000E+00	.0000E+00	-1.9180E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9180E-05
50	51	.0000E+00	.0000E+00	1.6140E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6140E-05
51	52	.0000E+00	.0000E+00	1.6057E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6057E-05
52	53	.0000E+00	.0000E+00	-1.0749E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0749E-04
53	54	.0000E+00	.0000E+00	-8.3442E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3442E-06
54	55	.0000E+00	.0000E+00	6.9284E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.9284E-05
55	56	.0000E+00	.0000E+00	1.7082E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7082E-04
56	57	.0000E+00	.0000E+00	-2.9348E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9348E-05
57	58	.0000E+00	.0000E+00	-1.3097E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3097E-04
58	59	.0000E+00	.0000E+00	1.6928E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6928E-05
59	60	.0000E+00	.0000E+00	-3.2148E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2148E-05
60	61	.0000E+00	.0000E+00	8.6523E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6523E-05
61	62	.0000E+00	.0000E+00	-8.3959E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3959E-06
62	63	.0000E+00	.0000E+00	-5.3030E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.3030E-05
63	64	.0000E+00	.0000E+00	-5.9875E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.9875E-05
64	65	.0000E+00	.0000E+00	4.2545E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2545E-06
65	66	.0000E+00	.0000E+00	8.3463E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3463E-05
66	67	.0000E+00	.0000E+00	-2.7287E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7287E-05
67	68	.0000E+00	.0000E+00	2.8432E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8432E-04
68	70	.0000E+00	.0000E+00	1.8022E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8022E-05
69	71	.0000E+00	.0000E+00	-1.1074E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1074E-05
70	72	.0000E+00	.0000E+00	-4.1807E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1807E-04
71	73	.0000E+00	.0000E+00	1.0737E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0737E-04
72	74	.0000E+00	.0000E+00	-3.9529E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9529E-05
73	75	.0000E+00	.0000E+00	1.2716E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2716E-04
74	76	.0000E+00	.0000E+00	4.4097E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4097E-06
75	77	.0000E+00	.0000E+00	1.0436E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0436E-07
76	80	.0000E+00	.0000E+00	4.8387E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8387E-06
77	81	.0000E+00	.0000E+00	9.3476E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.3476E-05
78	82	.0000E+00	.0000E+00	4.4752E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4752E-06
79	83	.0000E+00	.0000E+00	2.6947E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6947E-08
80	84	.0000E+00	.0000E+00	3.7356E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7356E-07
81	85	.0000E+00	.0000E+00	6.0677E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.0677E-06
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	8.8587E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.8587E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	6.7435E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.7435E-05

TOTAL		.0000E+00	.0000E+00	8.6201E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6201E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS							
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.5389E-02	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5389E-02

PRINT TABLE 130

3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.9897E-03	.0000E+00	-3.7783E-01	-9.9486E-04	-3.2258E-01	-6.9941E-01
33	34	.0000E+00	.0000E+00	-1.2441E-04	.0000E+00	.0000E+00	-1.2441E-04
34	35	.0000E+00	.0000E+00	-2.2452E-05	.0000E+00	.0000E+00	-2.2452E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.2291E-06	.0000E+00	.0000E+00	-1.2291E-06
37	38	2.8449E-04	.0000E+00	-7.6497E-03	-1.4225E-04	.0000E+00	-7.5075E-03
38	39	.0000E+00	.0000E+00	-7.6145E-06	.0000E+00	.0000E+00	-7.6145E-06
39	40	.0000E+00	.0000E+00	-6.2502E-02	.0000E+00	.0000E+00	-6.2502E-02
40	41	.0000E+00	.0000E+00	-4.2594E-03	.0000E+00	.0000E+00	-4.2594E-03
41	42	.0000E+00	.0000E+00	-1.3351E-06	.0000E+00	.0000E+00	-1.3351E-06
42	43	.0000E+00	.0000E+00	-5.9692E-04	.0000E+00	.0000E+00	-5.9692E-04
43	44	.0000E+00	.0000E+00	-1.4052E-03	.0000E+00	.0000E+00	-1.4052E-03
44	45	.0000E+00	.0000E+00	-5.3955E-04	.0000E+00	.0000E+00	-5.3955E-04
45	46	.0000E+00	.0000E+00	-3.4042E-03	.0000E+00	.0000E+00	-3.4042E-03
46	47	.0000E+00	.0000E+00	-3.5665E-04	.0000E+00	.0000E+00	-3.5665E-04
47	48	.0000E+00	.0000E+00	-6.9089E-05	.0000E+00	.0000E+00	-6.9089E-05
48	49	.0000E+00	.0000E+00	-2.9129E-04	.0000E+00	.0000E+00	-2.9129E-04
49	50	.0000E+00	.0000E+00	-2.8485E-03	.0000E+00	.0000E+00	-2.8485E-03
50	51	.0000E+00	.0000E+00	-1.1980E-02	.0000E+00	.0000E+00	-1.1980E-02
51	52	.0000E+00	.0000E+00	-6.3438E-04	.0000E+00	.0000E+00	-6.3438E-04
52	53	.0000E+00	.0000E+00	-1.1948E-02	.0000E+00	.0000E+00	-1.1948E-02
53	54	.0000E+00	.0000E+00	-3.3269E-05	.0000E+00	.0000E+00	-3.3269E-05
54	55	.0000E+00	.0000E+00	-2.8362E-03	.0000E+00	.0000E+00	-2.8362E-03
55	56	.0000E+00	.0000E+00	-1.2094E-02	.0000E+00	.0000E+00	-1.2094E-02
56	57	.0000E+00	.0000E+00	-7.1747E-04	.0000E+00	.0000E+00	-7.1747E-04
57	58	.0000E+00	.0000E+00	-1.2212E-02	.0000E+00	.0000E+00	-1.2212E-02
58	59	.0000E+00	.0000E+00	-5.9704E-05	.0000E+00	.0000E+00	-5.9704E-05
59	60	.0000E+00	.0000E+00	-3.3347E-03	.0000E+00	.0000E+00	-3.3347E-03
60	61	.0000E+00	.0000E+00	-1.2553E-02	.0000E+00	.0000E+00	-1.2553E-02
61	62	.0000E+00	.0000E+00	-5.1460E-05	.0000E+00	.0000E+00	-5.1460E-05
62	63	.0000E+00	.0000E+00	-3.2888E-03	.0000E+00	.0000E+00	-3.2888E-03

63	64	.0000E+00	.0000E+00	-1.2486E-02	.0000E+00	.0000E+00	-1.2486E-02
64	65	.0000E+00	.0000E+00	-4.7339E-05	.0000E+00	.0000E+00	-4.7339E-05
65	66	.0000E+00	.0000E+00	-2.0703E-02	.0000E+00	.0000E+00	-2.0703E-02
66	67	.0000E+00	.0000E+00	-1.6107E-02	.0000E+00	.0000E+00	-1.6107E-02
67	68	.0000E+00	.0000E+00	-1.6589E-02	.0000E+00	.0000E+00	-1.6589E-02
68	70	.0000E+00	.0000E+00	-6.1126E-03	.0000E+00	.0000E+00	-6.1126E-03
69	71	.0000E+00	.0000E+00	-7.5850E-04	.0000E+00	.0000E+00	-7.5850E-04
70	72	3.2864E-05	.0000E+00	-2.3343E-02	-1.6432E-05	.0000E+00	-2.3326E-02
71	73	.0000E+00	.0000E+00	-6.1132E-03	.0000E+00	.0000E+00	-6.1132E-03
72	74	.0000E+00	.0000E+00	-8.4291E-04	.0000E+00	.0000E+00	-8.4291E-04
73	75	.0000E+00	.0000E+00	-2.4179E-02	.0000E+00	.0000E+00	-2.4179E-02
74	76	.0000E+00	.0000E+00	-1.0723E-04	.0000E+00	.0000E+00	-1.0723E-04
75	77	.0000E+00	.0000E+00	-9.8430E-05	.0000E+00	.0000E+00	-9.8430E-05
76	80	.0000E+00	.0000E+00	-3.5362E-05	.0000E+00	.0000E+00	-3.5362E-05
77	81	.0000E+00	.0000E+00	-8.1948E-03	.0000E+00	.0000E+00	-8.1948E-03
78	82	.0000E+00	.0000E+00	-4.2101E-04	.0000E+00	.0000E+00	-4.2101E-04
79	83	.0000E+00	.0000E+00	-1.7462E-05	.0000E+00	.0000E+00	-1.7462E-05
80	84	.0000E+00	.0000E+00	-1.1928E-05	.0000E+00	.0000E+00	-1.1928E-05
81	85	.0000E+00	.0000E+00	-2.3192E-03	.0000E+00	.0000E+00	-2.3192E-03
82	86	.0000E+00	.0000E+00	-9.2258E-07	.0000E+00	.0000E+00	-9.2258E-07
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.7891E-03	.0000E+00	.0000E+00	-1.7891E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.4216E-03	.0000E+00	.0000E+00	-2.4216E-03

TOTAL 2.3071E-03 .0000E+00 -6.9174E-01 -1.1535E-03 -3.2258E-01 -1.0132E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	311184 17610	3.2708E+00 2.1344E-01	1.5305E-02 8.4114E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

32	33	8016.50C	6.7487E-01	107295	1.5536E+00	1.2948E-03	.0000E+00	.0000E+00
		45103.50C	3.7687E-04	991	1.2672E-02	1.1170E-02	.0000E+00	.0000E+00
		47109.50C	5.7950E-05	166	2.2343E-03	1.8487E-03	.0000E+00	.0000E+00
		62149.50C	2.1482E-06	1372	1.4677E-02	1.4546E-02	.0000E+00	.0000E+00
		63151.55C	9.1922E-06	747	8.2727E-03	8.1831E-03	.0000E+00	.0000E+00
		63153.55C	7.0168E-05	305	3.8576E-03	3.3949E-03	.0000E+00	.0000E+00
		64155.50C	7.9845E-06	3292	3.4126E-02	3.4054E-02	.0000E+00	.0000E+00
		92233.50C	1.7203E-05	102	2.2708E-03	1.0466E-04	9.7328E-04	.0000E+00
		92234.50C	1.0931E-04	231	2.9393E-03	2.0772E-03	4.5493E-05	.0000E+00
		92235.50C	5.1635E-03	33887	6.6607E-01	5.6540E-02	2.8784E-01	1.0962E-05
		92236.50C	2.3539E-03	1906	2.7962E-02	8.7594E-03	4.2414E-04	.0000E+00
		92238.50C	3.1607E-01	158438	2.3018E+00	2.0622E-01	2.0667E-02	9.8390E-04
		93237.55C	6.4830E-04	2034	2.5595E-02	2.0878E-02	1.6939E-04	.0000E+00
		94239.55C	1.1590E-04	1625	3.3163E-02	6.1457E-03	1.2430E-02	.0000E+00
		94240.50C	1.9557E-08	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94241.50C	2.1336E-13	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94242.50C	1.3096E-04	274	3.8960E-03	2.6112E-03	3.0523E-05	.0000E+00
		95241.50C	6.4051E-12	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95243.50C	2.8207E-09	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		96245.35C	1.2571E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	4	4.8582E-05	6.0908E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	2	2.1798E-05	4.5045E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	4	4.1555E-05	5.8656E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	604	6.8771E-03	1.1185E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	5	5.2799E-05	2.1897E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	510	3.6929E-03	2.2442E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	34	2.5685E-04	9.8901E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	15	2.4802E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	26	1.9606E-04	1.2291E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	208	2.9737E-03	2.8006E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	102	1.4971E-03	1.3861E-04	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	237	3.2568E-03	1.7912E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	52163	7.7432E-01	7.1355E-03	.0000E+00	1.4225E-04
		50000.35C	1.0711E-02	490	7.1926E-03	1.9366E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	166	1.2864E-03	7.6141E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	2.2256E-05	4.0610E-10	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1505674	1.9275E+01	6.1218E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	124736	1.7939E+00	1.2837E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	92968	1.1979E+00	4.2000E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7260	1.0488E-01	5.9449E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	23	2.3474E-04	1.3348E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	1.3503E-05	2.1380E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	17	2.4866E-04	1.4233E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	4	6.0579E-05	2.3542E-07	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	23	2.9352E-04	2.6094E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3703	5.4828E-02	5.5617E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	28	4.0933E-04	1.4425E-05	.0000E+00	.0000E+00

43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	30947 2408	3.9761E-01 3.4670E-02	1.3791E-03 2.6089E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	13 6 22 3302 30	1.7238E-04 7.3969E-05 3.0745E-04 4.9120E-02 4.2187E-04	2.5285E-09 1.1443E-05 1.5240E-05 4.9643E-04 1.6427E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	75324 5987	9.6884E-01 8.5634E-02	3.3542E-03 4.9967E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7906 612	1.0201E-01 8.8308E-03	3.4979E-04 6.8600E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 2 2 346 5	1.6816E-05 2.4744E-05 3.0354E-05 5.0923E-03 7.6759E-05	2.4791E-13 7.1058E-06 5.7337E-06 5.3376E-05 2.8732E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6790 534	8.7158E-02 7.6900E-03	2.9070E-04 5.9016E-07	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68140 4964	7.9733E-01 6.7018E-02	2.8084E-03 4.0139E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	10 51 61 6 0 1481 547 8510 2432 184	1.4364E-04 5.9380E-04 8.5353E-04 7.1433E-05 .0000E+00 1.9070E-02 7.7807E-03 1.0307E-01 2.9809E-02 2.4563E-03	5.9826E-09 3.5428E-05 1.2004E-05 9.5741E-07 .0000E+00 2.1627E-03 1.0213E-03 6.4252E-03 1.9523E-03 3.7041E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2495 4	3.6293E-02 6.0421E-05	6.3008E-04 4.2954E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	15 37 53 0 2 1580 559 8366 2447 167	1.9161E-04 4.1027E-04 7.5140E-04 .0000E+00 3.2459E-05 2.0221E-02 7.7724E-03 1.0087E-01 2.9835E-02 2.2706E-03	4.0018E-08 2.5557E-05 8.2266E-06 .0000E+00 2.0698E-08 2.1851E-03 1.3021E-03 6.1660E-03 1.9786E-03 2.8236E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
53	54	1001.50C 8016.50C	6.6667E-01 3.3333E-01	742 33	6.3160E-03 3.1435E-04	3.3261E-05 8.2041E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68183 4996	7.9641E-01 6.7958E-02	2.8030E-03 3.3147E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	6000.50C 7014.50C	1.3966E-03 3.9931E-03	7 43	9.1872E-05 4.8349E-04	1.6013E-08 3.3263E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00

		14000.50C	1.4932E-02	60	8.3230E-04	1.1622E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.7202E-05	1.9489E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.7538E-05	2.5910E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1577	2.0402E-02	2.1609E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	479	6.7635E-03	1.1029E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8473	1.0147E-01	6.4154E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2541	3.0577E-02	2.0404E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	159	2.1394E-03	3.2906E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2561	3.6501E-02	7.1279E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	2	3.0922E-05	4.6800E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	10	1.3029E-04	2.1865E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	4.5255E-04	2.5419E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	7.3832E-04	1.0696E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	7.8320E-05	7.0072E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1528	1.9515E-02	2.2044E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	480	6.6575E-03	1.1037E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8526	1.0073E-01	6.4836E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2537	3.0163E-02	2.1242E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	152	2.1665E-03	2.5932E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1162	1.1263E-02	5.9685E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	68	7.3778E-04	1.9064E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	91641	1.1298E+00	3.2725E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7662	1.0798E-01	6.2164E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	8	9.6714E-05	9.3988E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	60	7.1328E-04	2.7352E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	97	1.4448E-03	1.0190E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1077E-04	4.1671E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.6890E-05	1.5358E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2259	3.0713E-02	2.2028E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	884	1.2684E-02	1.3016E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11714	1.4866E-01	6.5264E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3464	4.4358E-02	2.0020E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	264	3.7267E-03	4.8011E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	958	9.1826E-03	5.1446E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	47	4.7259E-04	1.4052E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	89417	1.0999E+00	3.2280E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7485	1.0515E-01	6.0736E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	8	1.1781E-04	1.5868E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	52	6.6631E-04	2.4849E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	101	1.4921E-03	1.1252E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.3458E-05	1.2485E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.9372E-05	7.3758E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2183	2.9869E-02	2.1554E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	779	1.1236E-02	1.1567E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11551	1.4641E-01	6.5650E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3536	4.5670E-02	2.1039E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	275	3.9341E-03	4.6832E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	943	9.1925E-03	4.7323E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	46	4.7940E-04	1.6465E-08	.0000E+00	.0000E+00

65	66	1001.50C	6.6667E-01	418763	3.8619E+00	2.0612E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20379	2.0879E-01	9.0419E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	5	4.5232E-05	1.2179E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	44	4.4088E-04	3.4997E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	6.3519E-04	1.3085E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.2705E-05	1.1410E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	2.8580E-05	4.8741E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1666	1.8231E-02	3.0002E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	393	4.9557E-03	1.4457E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9873	1.0330E-01	8.5341E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2955	3.1028E-02	2.7772E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	163	2.0260E-03	2.9629E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	12	1.5751E-04	2.3952E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	4.5679E-04	4.0624E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	6.1937E-04	1.2891E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	6.7041E-05	1.4641E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	2.6393E-05	3.5896E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1704	1.8650E-02	3.0504E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	443	5.4991E-03	1.4984E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10060	1.0314E-01	8.9137E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2882	3.0303E-02	2.7247E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	160	1.7882E-03	3.4302E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	10	1.3237E-04	9.6797E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	36	4.6210E-04	1.3685E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	8.8527E-04	4.6830E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.6595E-05	2.0512E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1361	1.8517E-02	1.1042E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	538	7.8588E-03	5.5611E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7186	9.1357E-02	3.1648E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2235	2.8602E-02	1.0500E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	156	2.1579E-03	2.1908E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6340	9.4997E-02	7.4645E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	13	1.5568E-04	1.2058E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	34	4.4621E-04	3.0309E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	205	2.6837E-03	6.7009E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	325	4.6832E-03	2.2594E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	18	2.6122E-04	9.8840E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	11	1.6825E-04	5.4476E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7190	9.9387E-02	4.0870E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2357	3.4044E-02	2.2150E-03	.0000E+00	.0000E+00
		26000.5						

72	74	13027.50C	9.9949E-01	6343	9.4823E-02	8.3040E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	12	1.6352E-04	1.2511E-05	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	48	6.6606E-04	3.0890E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	186	2.2946E-03	7.3365E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	301	4.3145E-03	2.2615E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	23	3.1692E-04	2.1315E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	8.7518E-05	5.0204E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7336	1.0068E-01	4.2955E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2501	3.5918E-02	2.1852E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36444	4.5775E-01	1.2439E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11101	1.4206E-01	3.9442E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	872	1.2045E-02	1.2119E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2227	1.9216E-02	1.0643E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	107	1.0483E-03	8.0678E-07	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2144	1.7841E-02	9.8404E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	102	9.4907E-04	2.6335E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4	2.8178E-05	1.0152E-05	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	23	1.4862E-04	1.7936E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	8	4.2555E-05	6.2891E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1	4.6744E-06	9.8598E-07	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	9	9.4006E-05	2.4348E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	3.7215E-04	1.7139E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	6.0969E-04	6.4783E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.5079E-05	1.9588E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.8151E-05	7.2198E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1176	1.3721E-02	1.5432E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	345	4.5194E-03	7.7574E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6383	6.8706E-02	4.2240E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2083	2.2570E-02	1.4572E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	120	1.6328E-03	1.6371E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	10947	1.2029E-01	4.1899E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	754	9.7256E-03	2.0215E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	378	3.1939E-03	1.7460E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	15	1.3182E-04	2.2423E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1	9.9584E-06	2.8359E-06	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	3	2.4251E-05	3.2227E-06	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	11	1.1873E-04	5.8697E-06	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

81	85	6000.50C	2.3404E-03	6	7.2402E-05	5.6216E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	2	1.9842E-05	5.2349E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	10	1.4095E-04	3.7365E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	31	3.8614E-04	3.5989E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	604	7.7969E-03	4.3289E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	93	1.2780E-03	7.7274E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1124	1.3351E-02	4.6280E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2634	3.2008E-02	1.1673E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	91	1.1603E-03	6.2791E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	79	1.0990E-03	7.5937E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	29	3.0997E-04	9.2236E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	1.9524E-05	2.1812E-10	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	43	5.5627E-04	1.6211E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	23	3.1804E-04	1.1418E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	2	1.7859E-05	1.9410E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.5902E-05	1.0350E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	166	2.2277E-03	8.1443E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7112	8.3547E-02	1.7062E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	52184	4.3598E-01	2.4209E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2344	2.1539E-02	6.5465E-07	.0000E+00	.0000E+00
TOTAL				3721308	4.5826E+01	6.9174E-01	3.2258E-01	1.1535E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2839376	3.3623E+01	1.2211E-01	.0000E+00	.0000E+00
2004.50C	15	2.4802E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	236	3.1191E-03	2.6724E-07	.0000E+00	.0000E+00
7014.50C	888	1.0773E-02	4.3648E-04	.0000E+00	.0000E+00
8016.50C	315726	4.3987E+00	3.0986E-03	.0000E+00	.0000E+00
13027.50C	17741	2.6263E-01	2.9202E-03	.0000E+00	.0000E+00
14000.50C	1354	1.9100E-02	1.6028E-04	.0000E+00	.0000E+00
15031.50C	85	1.1536E-03	8.0858E-06	.0000E+00	.0000E+00
16032.50C	39	5.4660E-04	2.8503E-05	.0000E+00	.0000E+00
22000.50C	31	3.8614E-04	3.5989E-05	.0000E+00	.0000E+00
24000.50C	33196	4.3784E-01	3.1877E-02	.0000E+00	.0000E+00
25055.50C	11067	1.5644E-01	1.6420E-02	.0000E+00	.0000E+00
26000.55C	177638	2.1555E+00	9.3236E-02	.0000E+00	1.6432E-05
28000.50C	53951	6.6497E-01	3.0242E-02	.0000E+00	.0000E+00
29000.50C	122	1.5709E-03	9.6335E-05	.0000E+00	.0000E+00
40000.50C	60118	8.9024E-01	8.3534E-03	.0000E+00	1.4225E-04
42000.50C	3797	5.1986E-02	5.9514E-03	.0000E+00	.0000E+00
45103.50C	991	1.2672E-02	1.1170E-02	.0000E+00	.0000E+00

47109.50C	166	2.2343E-03	1.8487E-03	.0000E+00	.0000E+00
50000.35C	558	8.1534E-03	2.2957E-04	.0000E+00	.0000E+00
62149.50C	1372	1.4677E-02	1.4546E-02	.0000E+00	.0000E+00
63151.55C	747	8.2727E-03	8.1831E-03	.0000E+00	.0000E+00
63153.55C	305	3.8576E-03	3.3949E-03	.0000E+00	.0000E+00
64155.50C	3292	3.4126E-02	3.4054E-02	.0000E+00	.0000E+00
92233.50C	102	2.2708E-03	1.0466E-04	9.7328E-04	.0000E+00
92234.50C	231	2.9393E-03	2.0772E-03	4.5493E-05	.0000E+00
92235.50C	33887	6.6607E-01	5.6540E-02	2.8784E-01	1.0962E-05
92236.50C	1906	2.7962E-02	8.7594E-03	4.2414E-04	.0000E+00
92238.50C	158438	2.3018E+00	2.0622E-01	2.0667E-02	9.8390E-04
93237.55C	2034	2.5595E-02	2.0878E-02	1.6939E-04	.0000E+00
94239.55C	1625	3.3163E-02	6.1457E-03	1.2430E-02	.0000E+00
94240.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	274	3.8960E-03	2.6112E-03	3.0523E-05	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59270 CTM = 121.45

8 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 121.57 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 13:48:53

PROBID = 02/24/95 11:44:07

1MCNP VERSION 4A-B LD=10/04/91 02/24/95 13:48:54

PROBID = 02/24/95 13:48:54

INP=mpc12x OUTP=mpc12x.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1000000 year (mpc12x)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1967-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7000 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923
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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.


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297-      C      34.57 22.19 10.   38.90  4.87 10.   38.90  9.20 10.
298-      C      38.90 17.86 10.   38.90 22.19 10.   43.23  4.87 10.
299-      C      43.23  9.20 10.   43.23 13.53 10.   43.23 17.86 10.
300-      C      43.23 22.19 10.   47.55  4.87 10.   47.55  9.20 10.
301-      C      47.55 13.53 10.   47.55 17.86 10.   47.55 22.19 10.
302-      C      30.24  4.87 75.   30.24  9.20 75.   30.24 13.53 75.
303-      C      30.24 17.86 75.   30.24 22.19 75.   34.57  4.87 75.
304-      C      34.57  9.20 75.   34.57 13.53 75.   34.57 17.86 75.
305-      C      34.57 22.19 75.   38.90  4.87 75.   38.90  9.20 75.
306-      C      38.90 17.86 75.   38.90 22.19 75.   43.23  4.87 75.
307-      C      43.23  9.20 75.   43.23 13.53 75.   43.23 17.86 75.
308-      C      43.23 22.19 75.   47.55  4.87 75.   47.55  9.20 75.
309-      C      47.55 13.53 75.   47.55 17.86 75.   47.55 22.19 75.
310-      C      30.24  4.87 150.  30.24  9.20 150.  30.24 13.53 150.
311-      C      30.24 17.86 150.  30.24 22.19 150.  34.57  4.87 150.
312-      C      34.57  9.20 150.  34.57 13.53 150.  34.57 17.86 150.
313-      C      34.57 22.19 150.  38.90  4.87 150.  38.90  9.20 150.
314-      C      38.90 17.86 150.  38.90 22.19 150.  43.23  4.87 150.
315-      C      43.23  9.20 150.  43.23 13.53 150.  43.23 17.86 150.
316-      C      43.23 22.19 150.  47.55  4.87 150.  47.55  9.20 150.
317-      C      47.55 13.53 150.  47.55 17.86 150.  47.55 22.19 150.
318-      C      30.24  4.87 200.  30.24  9.20 200.  30.24 13.53 200.
319-      C      30.24 17.86 200.  30.24 22.19 200.  34.57  4.87 200.
320-      C      34.57  9.20 200.  34.57 13.53 200.  34.57 17.86 200.
321-      C      34.57 22.19 200.  38.90  4.87 200.  38.90  9.20 200.
322-      C      38.90 17.86 200.  38.90 22.19 200.  43.23  4.87 200.
323-      C      43.23  9.20 200.  43.23 13.53 200.  43.23 17.86 200.
324-      C      43.23 22.19 200.  47.55  4.87 200.  47.55  9.20 200.
325-      C      47.55 13.53 200.  47.55 17.86 200.  47.55 22.19 200.
326-      C      MATERIAL SPECIFICATIONS
327-      C      WATER AT 300 K
328-      M1      1001.50C  6.6878-2      8016.50C  3.3439-2
329-      MT1     LWTR.01T
330-      C      PWR: 3.75% U-235 - 37 Gwd/MTU - 1000000 YEAR DECAY
331-      M2      8016.50C  4.8586E-02
332-      45103.50C  2.7132E-05
333-      47109.50C  4.1721E-06
334-      62149.50C  1.5465E-07
335-      63151.55C  6.6178E-07
336-      63153.55C  5.0516E-06
337-      64155.50C  5.7483E-07
338-      92233.50C  2.7413E-06
339-      92234.50C  1.7678E-06
340-      92235.50C  3.7962E-04
341-      92236.50C  1.6501E-04
342-      92238.50C  2.2757E-02
343-      93237.55C  3.4883E-05
344-      94239.55C  5.0639E-14
345-      94240.50C  5.2332E-14
346-      94241.50C  2.0325E-46
347-      94242.50C  1.8799E-06
348-      95241.50C  6.4261E-45
349-      95243.50C  1.5505E-14
350-      96245.35C  1.1976E-43
351-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
352-      M3      2004.50C  1.0
353-      C      ZIRCALOY-4
354-      M4      8016.50C -0.0012  24000.50C -0.0010  26000.55C -0.0020
355-      40000.50C -0.9818  50000.35C -0.0140
356-      C      ALLOY 825

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357-      M5      6000.50C -0.0005  13027.50C -0.0020  14000.50C -0.0050
358-      16032.50C -0.0003  22000.50C -0.0090  24000.50C -0.2150
359-      25055.50C -0.0100  26000.55C -0.2857  28000.50C -0.4200
360-      29000.50C -0.0250  42000.50C -0.0300
361-      C      1100 ALUMINUM ALLOY
362-      M6      13027.50C -0.99880  29000.50C -0.00120
363-      C      A516 CARBON STEEL
364-      M7      6000.50C -0.0022  14000.50C -0.00275  15031.50C -0.00035
365-      16032.50C -0.00035  25055.50C -0.0090
366-      26000.55C -0.98535
367-      C      SS316L
368-      M8      6000.50C -0.00030  7014.50C -0.00100  14000.50C -0.00750
369-      15031.50C -0.00045  16032.50C -0.00030  24000.50C -0.17000
370-      25055.50C -0.02000  26000.55C -0.64545  28000.50C -0.12000
371-      42000.50C -0.02500
372-      C      TALLIES
373-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.
SURFACES 24050 AND 29050 OF CELL      9 ARE THE SAME.      29050 WILL BE DELETED.
SURFACES 24051 AND 25051 OF CELL      9 ARE THE SAME.      25051 WILL BE DELETED.
SURFACES 24051 AND 28051 OF CELL      9 ARE THE SAME.      28051 WILL BE DELETED.

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SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 3052
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 3052
 POINTS AFTER EXPANSION OR CONTRACTION 3004
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.196665E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER

COMPONENT NUCLIDE, ATOM FRACTION

1	2	3	4	5	6	7
1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:		LWTR.01T				
8016,	.67512	45103,	.00038	47109,	.00006	62149,
63151,	.00001	63153,	.00007	64155,	.00001	92233,
92234,	.00002	92235,	.00527	92236,	.00229	92238,
93237,	.00048	94239,	.00000	94240,	.00000	94241,
94242,	.00003	95241,	.00000	95243,	.00000	96245,
2004,	1.00000					
8016,	.00681	24000,	.00175	26000,	.00325	40000,
50000,	.01071					.97748
6000,	.00234	13027,	.00417	14000,	.01001	16032,
22000,	.01057	24000,	.23247	25055,	.01023	.00053
28000,	.40235	29000,	.02212	42000,	.01758	.28763
13027,	.99949	29000,	.00051			
6000,	.01011	14000,	.00541	15031,	.00062	16032,
						.00060

8	25055,	.00905	26000,	.97421				
	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				
1	1001,	.11191	8016,	.88809				
2	8016,	.12264	45103,	.00044	47109,	.00007	62149,	.00000
	63151,	.00002	63153,	.00012	64155,	.00001	92233,	.00010
	92234,	.00007	92235,	.01408	92236,	.00615	92238,	.85492
	93237,	.00130	94239,	.00000	94240,	.00000	94241,	.00000
	94242,	.00007	95241,	.00000	95243,	.00000	96245,	.00000
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

PRINT TABLE 40

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM	GRAM	INPUT	CALCULATED	MASS	PIECES	REASON VOLUME
	DENSITY	DENSITY	VOLUME	VOLUME			NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.19670E-02	1.05225E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC

57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE
108	24049	.00000E+00	.00000E+00	INFINITE
109	24050	.00000E+00	.00000E+00	INFINITE
110	24051	.00000E+00	.00000E+00	INFINITE
111	25048	.00000E+00	.00000E+00	INFINITE
112	25049	.00000E+00	.00000E+00	INFINITE
113	26048	.00000E+00	.00000E+00	INFINITE
114	26049	.00000E+00	.00000E+00	INFINITE
115	26050	.00000E+00	.00000E+00	INFINITE
116	26051	.00000E+00	.00000E+00	INFINITE

```

117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

	CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.19670E-02	1.05225E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00

48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2250000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01
11	11		CZ 6.4525000E+01
12	12		CZ 6.6525000E+01
13	13		PX 7.2135000E-01
14	14		PX -7.2135000E-01

15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			
66	71	PZ	2.4635000E+02			
67	72	PZ	2.7135000E+02			
68	73	PZ	2.8235000E+02			
69	74	PX	-1.1856720E+01			
70	75	PY	-1.1856720E+01			
71	80	PZ	3.1235000E+02			
72	81	CZ	1.0652500E+02			
73	2040	1001 PX	2.5991819E+01			
74	2042	1001 PX	2.1437590E+00			

75	2039	1001	PY	2.5991819E+01
76	2041	1001	PY	2.1437590E+00
77	3027	1002	PX	2.9032230E+01
78	3028	1002	PX	3.4137700E+00
79	3029	1002	PY	7.9232790E+01
80	3030	1002	PY	5.3614330E+01
81	4027	1003	PX	5.3515300E+01
82	4028	1003	PX	2.7896840E+01
83	4029	1003	PY	5.3515300E+01
84	4030	1003	PY	2.7896840E+01
85	5027	1004	PX	7.9232790E+01
86	5028	1004	PX	5.3614330E+01
87	5029	1004	PY	2.9032230E+01
88	5030	1004	PY	3.4137700E+00
89	16048	1005	PX	2.1641000E+00
90	16049	1005	PX	3.6067000E+00
91	16050	1005	PY	2.1641000E+00
92	16051	1005	PY	3.6067000E+00
93	17048	1006	PX	6.4922000E+00
94	17049	1006	PX	7.9348000E+00
95	18048	1007	PX	5.0495000E+00
96	18049	1007	PX	6.4921000E+00
97	18050	1007	PY	5.0495000E+00
98	18051	1007	PY	6.4921000E+00
99	19050	1008	PY	6.4922000E+00
100	19051	1008	PY	7.9348000E+00
101	20048	1009	PX	-3.6067000E+00
102	20049	1009	PX	-2.1641000E+00
103	21048	1010	PX	-7.9348000E+00
104	21049	1010	PX	-6.4922000E+00
105	22048	1011	PX	-6.4921000E+00
106	22049	1011	PX	-5.0495000E+00
107	24048	1013	PX	-3.6067000E+00
108	24049	1013	PX	-2.1641000E+00
109	24050	1013	PY	-3.6067000E+00
110	24051	1013	PY	-2.1641000E+00
111	25048	1014	PX	-7.9348000E+00
112	25049	1014	PX	-6.4922000E+00
113	26048	1015	PX	-6.4921000E+00
114	26049	1015	PX	-5.0495000E+00
115	26050	1015	PY	-6.4921000E+00
116	26051	1015	PY	-5.0495000E+00
117	27050	1016	PY	-7.9348000E+00
118	27051	1016	PY	-6.4922000E+00
119	28048	1017	PX	2.1641000E+00
120	28049	1017	PX	3.6067000E+00
121	29048	1018	PX	6.4922000E+00
122	29049	1018	PX	7.9348000E+00
123	30048	1019	PX	5.0495000E+00
124	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08

8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08

68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY		
2004.50C	2716	NJOY	(1301)	79/07/31.
6000.50C	16126	NJOY	(1270)	79/06/19.
7014.50C	22772	NJOY	(1306)	79/07/31.
8016.50C	23669	NJOY	(1275)	79/09/08.
13027.50C	22891	NJOY	(1276)	05/14/81
24000.50C	89104	NJOY	(1313)	79/09/08.
26000.55C	84136	NJOY	(1324)	79/06/21.
28000.50C	82267	NJOY	(260)	10/21/82
29000.50C	22473	NJOY	(1328)	79/06/21.
92233.50C	14205	NJOY	(1329)	02/05/80
92235.50C	44188	NJOY	(1393)	79/09/12.
92238.50C	66440	NJOY	(1395)	79/09/12.
94239.55C	67551	NJOY	(1398)	79/09/13.
94240.50C	42744	NJOY	(1399)	02/21/85
			(1380)	79/09/13.
			TOTAL NU	
			TOTAL NU	
			TOTAL NU	
			TOTAL NU	
			TOTAL NU	

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY		
40000.50C	35842	NJOY	(1314)	79/06/21.
			(1340)	79/07/31.
WARNING. NUBAR OF	92234.50C	MAY BE EITHER PROMPT OR TOTAL.		
92234.50C	76999	NJOY		
			(1394)	79/10/17.
WARNING. NUBAR OF	92236.50C	MAY BE EITHER PROMPT OR TOTAL.		
92236.50C	119238	NJOY		
94241.50C	22523	NJOY	(1396)	79/08/30.
94242.50C	43433	NJOY	(1381)	79/08/30.
			(1342)	79/09/06.
			TOTAL NU	
			TOTAL NU	

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
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16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.
62149.50C	11116	NJOY	(1319)	02/12/85
64155.50C	31471	NJOY	(1365)	79/07/28.

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

(1361) 79/08/29.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY	(1310)	11/01/85
47109.50C	10147	NJOY	(1373)	11/01/85
93237.55C	29142	NJOY	(1337)	04/04/85

TOTAL NU

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24 T=OK	(48)	86/02/01
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WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C	33336				06/28/88
63153.55C	30265				06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
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TOTAL 1325785

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	101900
TALLIES	0
BANK	18403
CROSS SECTIONS	1325785

TOTAL 1446088

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

8 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12 PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1000000 year (mpc12x)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
-----	---	---	---	------	------	---	---	---	------	--------	--------

1	-1.815E-01	2.684E-01	9.951E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.987E-01	2.351E-01
2	1.086E-01	-1.052E-01	9.840E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.987E-01	1.517E+00
3	2.236E-01	1.298E-02	1.015E+02	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.987E-01	4.054E+00
4	-3.870E-01	2.298E-01	1.219E+02	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.987E-01	6.436E+00
5	-3.370E-01	1.943E-01	1.344E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.987E-01	9.938E-01
6	-2.370E-01	1.243E-01	7.819E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.987E-01	1.448E+00
7	1.554E-01	2.866E-01	9.951E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.987E-01	4.394E+00
8	1.247E-01	-2.229E-01	5.283E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.987E-01	2.828E+00
9	2.046E-02	-3.519E-01	5.110E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.987E-01	1.595E+00
10	-7.543E-02	2.189E-01	5.431E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.987E-01	1.202E+00
11	3.427E-01	-9.362E-02	6.055E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.987E-01	1.813E+00
12	9.699E-02	-1.530E-02	5.823E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.987E-01	1.287E+00
13	3.430E-01	-6.848E-02	5.025E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.987E-01	5.205E+00
14	-1.648E-01	-4.162E-01	3.102E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.987E-01	2.263E+00
15	-2.548E-01	3.510E-01	2.748E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.987E-01	4.957E-01
16	2.179E-01	3.219E-01	1.862E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.987E-01	1.119E+00
17	2.106E-01	1.374E-01	3.612E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.987E-01	6.246E-01
18	7.335E-02	-3.805E-01	8.491E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.987E-01	4.880E+00
19	-1.668E-01	2.204E-01	8.483E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.987E-01	1.446E+00
20	-4.027E-01	2.593E-02	5.459E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.987E-01	1.302E+00
21	-2.317E-01	6.324E-02	5.430E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.987E-01	2.027E+00
22	3.205E-01	-3.362E-01	7.498E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.987E-01	5.102E+00
23	2.557E-01	-3.267E-01	8.110E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.987E-01	1.990E+00
24	-3.533E-01	2.752E-01	8.276E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.987E-01	9.671E-01
25	2.406E-02	-3.502E-01	7.445E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.987E-01	1.230E+00
26	2.693E-01	-1.651E-01	7.352E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.987E-01	3.145E-01
27	1.093E-02	4.009E-02	5.652E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.987E-01	1.372E+00
28	1.397E-01	3.237E-02	5.267E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.987E-01	4.149E-01
29	-3.613E-01	-2.075E-01	6.121E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.987E-01	9.955E-02
30	-4.036E-01	-2.103E-01	3.034E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.987E-01	6.494E-01
31	2.613E-01	-2.905E-01	4.333E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.987E-01	1.000E-01
32	2.168E-01	-3.644E-01	3.855E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.987E-01	2.458E+00
33	-1.800E-01	3.043E-01	4.239E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.987E-01	5.361E-01
34	2.694E-01	3.674E-01	4.293E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.987E-01	5.685E+00
35	1.591E-01	2.844E-01	4.288E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.987E-01	2.523E+00
36	3.771E-01	2.076E-01	4.206E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.987E-01	8.112E+00
37	-2.396E-02	-3.226E-01	4.166E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.987E-01	4.669E-01
38	-2.567E-01	-1.255E-02	4.012E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.987E-01	5.288E-01
39	2.906E-01	2.711E-01	6.384E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.987E-01	1.228E+00
40	-4.189E-01	2.862E-02	5.947E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.987E-01	4.080E+00
41	-1.704E-01	3.792E-01	4.938E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.987E-01	5.001E-01
42	2.395E-01	-3.031E-01	3.892E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.987E-01	6.092E-01
43	1.841E-01	4.693E-03	4.260E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.987E-01	1.978E+00
44	1.231E-02	-1.277E-01	1.318E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.987E-01	6.177E-01
45	1.006E-01	3.045E-02	1.391E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.987E-01	1.008E+00
46	3.623E-01	-2.954E-01	4.921E+00	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.987E-01	3.192E-01
47	-5.896E-02	-1.421E-01	1.498E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.987E-01	1.930E+00
48	4.046E-02	3.544E-01	1.499E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.987E-01	1.763E+00
49	-2.862E-01	6.638E-02	1.975E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.987E-01	7.045E-01
50	-2.172E-01	-1.064E-01	7.295E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.987E-01	5.518E-01

CYCLE	1	K(COLLISION)	.789336	REMOVAL LIFETIME(ABS)	3.8091E+03	SOURCE POINTS GENERATED	2378
CYCLE	2	K(COLLISION)	.799282	REMOVAL LIFETIME(ABS)	3.8060E+03	SOURCE POINTS GENERATED	3077
CYCLE	3	K(COLLISION)	.784234	REMOVAL LIFETIME(ABS)	3.8290E+03	SOURCE POINTS GENERATED	2953
CYCLE	4	K(COLLISION)	.781805	REMOVAL LIFETIME(ABS)	3.8676E+03	SOURCE POINTS GENERATED	2970

CYCLE 5 K(COLLISION) .806723 REMOVAL LIFETIME(ABS) 3.7800E+03 SOURCE POINTS GENERATED 3125

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .780992 REMOVAL LIFETIME(ABS) 3.7493E+03 SOURCE POINTS GENERATED 2972

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.794666		.787829	.0087	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)		.820266		.800693	.0244	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)		.776487		.778530	.0026	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.5789E+03		3.6394E+03		.0166				
REM LIFE(ABS)	3.6283E+03		3.6888E+03		.0164	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	3102								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.802180		.792613	.0078	K(COL/ABS)	.794972 .0096	.793002 .0111	.3901
K(ABSORPTION)		.790605		.797331	.0148	K(ABS/TK LN)	.788018 .0067	.780404 .0003	-.9901
K(TRK LENGTH)		.779058		.778706	.0015	K(TK LN/COL)	.785659 .0036	.780238 .0022	-.5157
REM LIFE(COL)	3.8474E+03		3.7087E+03		.0209				
REM LIFE(ABS)	3.8487E+03		3.7421E+03		.0170	LIFE(COL/ABS)	3.7254E+03 .0189	3.8531E+03 .0169	.9936
SOURCE POINTS GENERATED	3022								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.814776		.798153	.0089	K(COL/ABS)	.799964 .0092	.798805 .0107	.5825
K(ABSORPTION)		.815108		.801775	.0118	K(ABS/TK LN)	.792155 .0071	.783747 .0071	.2716
K(TRK LENGTH)		.794026		.782536	.0050	K(TK LN/COL)	.790345 .0064	.780233 .0080	.6970
REM LIFE(COL)	3.8178E+03		3.7360E+03		.0164	K(COL/ABS/TK LN)	.794155 .0072	.780918 .0166	
REM LIFE(ABS)	3.7609E+03		3.7468E+03		.0121	LIFE(COL/ABS)	3.7414E+03 .0140	3.7559E+03 .0132	.9312
SOURCE POINTS GENERATED	2969								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.815013		.801525	.0080	K(COL/ABS)	.801051 .0072	.801163 .0083	.4046
K(ABSORPTION)		.795781		.800576	.0093	K(ABS/TK LN)	.795754 .0071	.796590 .0081	-.0608
K(TRK LENGTH)		.824519		.790933	.0113	K(TK LN/COL)	.796229 .0089	.801159 .0099	.6951
REM LIFE(COL)	3.8601E+03		3.7608E+03		.0142	K(COL/ABS/TK LN)	.797678 .0071	.797912 .0134	
REM LIFE(ABS)	3.8291E+03		3.7633E+03		.0103	LIFE(COL/ABS)	3.7620E+03 .0121	3.7658E+03 .0099	.9439
SOURCE POINTS GENERATED	2963								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.808817		.802741	.0067	K(COL/ABS)	.802018 .0060	.802170 .0067	.4180
K(ABSORPTION)		.804887		.801295	.0076	K(ABS/TK LN)	.797448 .0061	.798346 .0067	-.0162
K(TRK LENGTH)		.806945		.793601	.0098	K(TK LN/COL)	.798171 .0076	.802992 .0078	.7135
REM LIFE(COL)	3.7905E+03		3.7657E+03		.0117	K(COL/ABS/TK LN)	.799212 .0061	.800013 .0101	
REM LIFE(ABS)	3.7851E+03		3.7669E+03		.0085	LIFE(COL/ABS)	3.7663E+03 .0099	3.7681E+03 .0078	.9446
SOURCE POINTS GENERATED	2954								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.784400		.800121	.0066	K(COL/ABS)	.799898 .0058	.799910 .0063	.4952

K(ABSORPTION) .789954 .799675 .0068
 K(TRK LENGTH) .779849 .791637 .0087
 REM LIFE(COL) 3.7712E+03 3.7665E+03 .0099
 REM LIFE(ABS) 3.8057E+03 3.7725E+03 .0073
 SOURCE POINTS GENERATED 2859

K(ABS/TK LN) .795656 .0057 .796662 .0061 .0712
 K(TK LN/COL) .795879 .0071 .799674 .0075 .7355
 K(COL/ABS/TK LN) .797144 .0058 .797015 .0088
 LIFE(COL/ABS) 3.7695E+03 .0084 3.7773E+03 .0071 .9293

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .760852 .795212 .0084
 K(ABSORPTION) .784538 .797782 .0063
 K(TRK LENGTH) .757979 .787430 .0092
 REM LIFE(COL) 3.6295E+03 3.7494E+03 .0097
 REM LIFE(ABS) 3.6595E+03 3.7583E+03 .0074
 SOURCE POINTS GENERATED 2912

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .796497 .0066 .797309 .0067 .5871
 K(ABS/TK LN) .792606 .0063 .795034 .0064 .2708
 K(TK LN/COL) .791321 .0084 .793208 .0093 .8321
 K(COL/ABS/TK LN) .793475 .0068 .793171 .0081
 LIFE(COL/ABS) 3.7539E+03 .0084 3.7673E+03 .0069 .9452

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
 K(COLLISION) .800786 .795831 .0075
 K(ABSORPTION) .792176 .797160 .0056
 K(TRK LENGTH) .814512 .790439 .0090
 REM LIFE(COL) 3.8397E+03 3.7594E+03 .0090
 REM LIFE(ABS) 3.7848E+03 3.7613E+03 .0065
 SOURCE POINTS GENERATED 3207

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .796495 .0058 .796889 .0059 .5638
 K(ABS/TK LN) .793799 .0057 .795517 .0055 .1839
 K(TK LN/COL) .793135 .0078 .795294 .0080 .7935
 K(COL/ABS/TK LN) .794477 .0061 .794564 .0063
 LIFE(COL/ABS) 3.7604E+03 .0076 3.7629E+03 .0061 .9315

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
 K(COLLISION) .800837 .796332 .0067
 K(ABSORPTION) .822940 .799738 .0060
 K(TRK LENGTH) .817708 .793166 .0087
 REM LIFE(COL) 3.7639E+03 3.7599E+03 .0080
 REM LIFE(ABS) 3.8104E+03 3.7662E+03 .0060
 SOURCE POINTS GENERATED 2974

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .798035 .0055 .798424 .0058 .5231
 K(ABS/TK LN) .796452 .0061 .798186 .0060 .3556
 K(TK LN/COL) .794749 .0072 .796272 .0071 .7628
 K(COL/ABS/TK LN) .796412 .0060 .798254 .0065
 LIFE(COL/ABS) 3.7630E+03 .0068 3.7702E+03 .0059 .9122

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
 K(COLLISION) .799246 .796597 .0061
 K(ABSORPTION) .787539 .798629 .0056
 K(TRK LENGTH) .800039 .793791 .0079
 REM LIFE(COL) 3.6199E+03 3.7472E+03 .0080
 REM LIFE(ABS) 3.6379E+03 3.7545E+03 .0063
 SOURCE POINTS GENERATED 2924

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .797613 .0050 .797772 .0053 .4923
 K(ABS/TK LN) .796210 .0055 .797345 .0055 .3179
 K(TK LN/COL) .795194 .0066 .796561 .0064 .7633
 K(COL/ABS/TK LN) .796339 .0054 .797595 .0058
 LIFE(COL/ABS) 3.7508E+03 .0070 3.7598E+03 .0061 .9274

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR CYCLE 17 AVE OF 12 CYCLES
 K(COLLISION) .790231 .796066 .0056
 K(ABSORPTION) .779370 .797024 .0055
 K(TRK LENGTH) .795749 .793954 .0072
 REM LIFE(COL) 3.8569E+03 3.7563E+03 .0077
 REM LIFE(ABS) 3.8641E+03 3.7637E+03 .0062
 SOURCE POINTS GENERATED 3005

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .796545 .0048 .796559 .0050 .4985
 K(ABS/TK LN) .795489 .0051 .796045 .0052 .2852
 K(TK LN/COL) .795010 .0060 .795985 .0059 .7541
 K(COL/ABS/TK LN) .795681 .0050 .796332 .0053
 LIFE(COL/ABS) 3.7600E+03 .0068 3.7689E+03 .0061 .9334

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR CYCLE 18 AVE OF 13 CYCLES
 K(COLLISION) .795056 .795989 .0051

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .796434 .0044 .796447 .0046 .4988

K(ABSORPTION)	.795141	.796879	.0051	K(ABS/TK LN)	.796378	.0048	.796589	.0048	.2554
K(TRK LENGTH)	.818965	.795878	.0070	K(TK LN/COL)	.795933	.0056	.795984	.0054	.7017
REM LIFE(COL)	3.6938E+03	3.7515E+03	.0072	K(COL/ABS/TK LN)	.796248	.0047	.796445	.0048	
REM LIFE(ABS)	3.7196E+03	3.7603E+03	.0058	LIFE(COL/ABS)	3.7559E+03	.0064	3.7668E+03	.0056	.9350
SOURCE POINTS GENERATED	2953								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.810724		.797041		.0049	K(COL/ABS)	.796939	.0041	.4774
K(ABSORPTION)	.796283		.796836		.0047	K(ABS/TK LN)	.797310	.0046	.2358
K(TRK LENGTH)	.822566		.797784		.0069	K(TK LN/COL)	.797413	.0055	.7270
REM LIFE(COL)	3.8833E+03		3.7609E+03		.0071	K(COL/ABS/TK LN)	.797221	.0045	
REM LIFE(ABS)	3.8937E+03		3.7698E+03		.0059	LIFE(COL/ABS)	3.7653E+03	.0064	.9415
SOURCE POINTS GENERATED	3057								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.776478		.795670		.0049	K(COL/ABS)	.795647	.0042	.5378
K(ABSORPTION)	.778654		.795624		.0046	K(ABS/TK LN)	.795390	.0049	.3482
K(TRK LENGTH)	.758352		.795155		.0073	K(TK LN/COL)	.795413	.0057	.7659
REM LIFE(COL)	3.5986E+03		3.7501E+03		.0072	K(COL/ABS/TK LN)	.795483	.0047	
REM LIFE(ABS)	3.6584E+03		3.7624E+03		.0058	LIFE(COL/ABS)	3.7562E+03	.0065	.9474
SOURCE POINTS GENERATED	2799								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.75%/37 GWD/1000000 year (mpc12x)

PROBID = 02/24/95 16:12:29
02/24/95 13:48:54

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59380	1.0104E+00	2.0370E+00	ESCAPE	1	1.3159E-05	5.0905E-05
WEIGHT WINDOW	0	0.	0.	ENERGY CUTOFF	0	0.	0.
CELL IMPORTANCE	0	0.	0.	TIME CUTOFF	0	0.	0.
WEIGHT CUTOFF	0	7.3910E-02	4.4040E-07	WEIGHT WINDOW	0	0.	0.
ENERGY IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	WEIGHT CUTOFF	59451	7.4731E-02	3.9748E-07
FORCED COLLISIONS	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
EXP. TRANSFORM	0	0.	0.	DXTRAN	0	0.	0.
UPSCATTERING	0	0.	1.4644E-07	FORCED COLLISIONS	0	0.	0.
(N,XN)	144	1.9459E-03	1.4333E-03	EXP. TRANSFORM	0	0.	0.
FISSION	0	0.	0.	DOWNSCATTERING	0	0.	1.9320E+00
TOTAL	59524	1.0863E+00	2.0385E+00	CAPTURE	0	6.8414E-01	3.1895E-02
				LOSS TO (N,XN)	72	9.7294E-04	8.0280E-03
				LOSS TO FISSION	0	3.2644E-01	6.6479E-02
				TOTAL	59524	1.0863E+00	2.0385E+00

NUMBER OF NEUTRONS BANKED 72
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0024E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.3145E+01
 TOTAL NEUTRON COLLISIONS 3749564
 NET MULTIPLICATION 1.0010E+00 .0003

AVERAGE LIFETIME, SHAKES
 ESCAPE 1.5578E+00
 CAPTURE 3.7758E+03
 CAPTURE OR ESCAPE 3.7758E+03
 ANY TERMINATION 4.1357E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 125.73 MINUTES
 COMPUTER TIME IN MCRUN 125.62 MINUTES

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0

SOURCE PARTICLES PER MINUTE 4.7271E+02
RANDOM NUMBERS GENERATED 44632668
FIELD LENGTH MOST RANDOM NUMBERS USED WAS 8564 IN HISTORY 21951

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3545E-01 TO 1.2616E+00
THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

CELL	IMPORTANCE	NEIGHBOR	IMPORTANCE	RATIO	MINIMUM	NEIGHBOR	IMPORTANCE	RATIO
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84	NO DATA AVAILABLE YET FOR THIS CELL.
86	NO DATA AVAILABLE YET FOR THIS CELL.
87	NO DATA AVAILABLE YET FOR THIS CELL.
89	NO DATA AVAILABLE YET FOR THIS CELL.

PRINT TABLE 126

CELL	TRACKS	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER	WEIGHTED	FLUX	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
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1	0	0	0	0	0.000E+00	0	0.000E+00	0.000E+00	0.000E+00
2	26625	9762	321746	3.3775E+00	1.1102E-04	3.6023E-01	7.0228E-01	0.000E+00	1.0728E+00
3	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
6	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
7	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
8	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
9	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
10	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
11	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
12	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
13	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
14	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
15	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
16	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
17	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
18	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
19	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
20	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
21	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
22	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
23	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
24	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
25	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
26	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
27	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
28	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
29	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
30	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
31	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
32	0	0	0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
33	769352	59452	314249	4.3731E+00	5.4904E-04	6.9728E-01	8.65229E-01	0.000E+00	2.4844E+00
34	2401	108	461	4.5890E-03	4.9740E-05	2.3593E-01	5.9431E-01	0.000E+00	4.2884E+00
35	153	14	454	3.5283E-03	9.4548E-06	3.2774E-02	5.0098E-01	0.000E+00	4.3684E-01
36	13833328	59452	10	1.6577E-04	4.8544E-04	6.6126E-01	8.6228E-01	0.000E+00	3.5580E+03
37	274	14	19	1.4052E-04	1.0413E-05	4.4284E-02	4.6958E-01	0.000E+00	4.4104E-01
38	1499622	59452	53138	7.8425E-01	4.6968E-05	6.5147E-01	8.6151E-01	0.000E+00	4.1210E+00
39	303	14	112	8.6914E-04	2.9735E-05	1.3183E-01	5.1062E-01	0.000E+00	6.4380E-01
40	2395416	59452	1657353	2.1275E+01	4.1104E-04	6.2040E-01	8.5868E-01	0.000E+00	1.5615E+00
41	60595	31955	102795	1.3296E+00	3.1563E-04	5.7670E-01	8.5757E-01	0.000E+00	1.4775E+00

41	42	17	5	64	4.4345E-04	3.3097E-08	4.0004E-08	3.8898E-01	3.0068E-01
42	43	128044	33587	3891	5.7220E-02	3.3038E-04	5.8155E-01	8.5815E-01	4.1473E+00
43	44	143208	35835	34154	4.3931E-01	3.3430E-04	5.8683E-01	8.5834E-01	1.4970E+00
44	45	156389	36781	3339	4.9217E-02	3.4091E-04	5.8692E-01	8.5894E-01	4.1403E+00
45	46	191123	41921	81990	1.0600E+00	3.4180E-04	5.9033E-01	8.5902E-01	1.5037E+00
46	47	7499	3397	8381	1.0961E-01	3.1902E-04	5.6419E-01	8.6420E-01	1.4686E+00
47	48	10028	3708	317	4.6496E-03	3.3422E-04	5.9175E-01	8.5922E-01	4.1743E+00
48	49	13126	5152	7284	9.4893E-02	3.4396E-04	5.9672E-01	8.6393E-01	1.5197E+00
49	50	36209	15610	75370	8.8146E-01	2.9486E-04	5.3935E-01	8.1043E-01	1.4239E+00
50	51	35776	14887	13578	1.6679E-01	3.5322E-04	5.5581E-01	7.9621E-01	2.0529E+00
51	52	35319	14563	2515	3.6256E-02	3.5835E-04	5.5884E-01	7.9532E-01	9.2534E+00
52	53	35502	14606	13358	1.6208E-01	3.3705E-04	5.4039E-01	7.8931E-01	2.0388E+00
53	54	122	28	856	7.6086E-03	3.1048E-05	1.2687E-01	5.8687E-01	6.6722E-01
54	55	35142	15055	73403	8.5660E-01	2.9628E-04	5.5290E-01	8.0934E-01	1.4370E+00
55	56	34582	14251	13292	1.6261E-01	3.5606E-04	5.6697E-01	7.9522E-01	2.0669E+00
56	57	34058	13917	2386	3.4353E-02	3.5270E-04	5.6517E-01	7.9134E-01	9.1593E+00
57	58	34006	13933	12837	1.5553E-01	3.4195E-04	5.5767E-01	7.8891E-01	2.0731E+00
58	59	144	37	1030	9.1068E-03	4.8147E-05	3.8996E-01	5.7812E-01	8.9886E-01
59	60	54233	19176	100337	1.2314E+00	3.9611E-04	5.2664E-01	8.3433E-01	1.4420E+00
60	61	53281	18271	18839	2.4197E-01	5.8514E-04	5.6231E-01	8.2882E-01	2.2048E+00
61	62	128	34	524	4.7372E-03	2.2202E-05	1.0313E-01	5.7901E-01	5.8328E-01
62	63	54565	19128	100833	1.2397E+00	4.0937E-04	5.3871E-01	8.3562E-01	1.4626E+00
63	64	53686	18133	18573	2.3889E-01	5.8200E-04	5.6298E-01	8.2871E-01	2.2432E+00
64	65	189	34	829	6.9915E-03	6.1281E-05	3.3869E-01	5.6617E-01	9.4012E-01
65	66	10108	5080	446438	4.1252E+00	5.1155E-05	2.4622E-01	6.1598E-01	8.2460E-01
66	67	9934	3894	14920	1.5693E-01	1.6355E-04	4.1043E-01	6.9117E-01	1.7852E+00
67	68	10340	4032	15330	1.6214E-01	1.6000E-04	3.9019E-01	6.9153E-01	1.7767E+00
68	70	35451	9399	12081	1.5511E-01	8.4550E-04	5.7311E-01	8.3133E-01	2.3540E+00
69	71	35364	9050	6270	9.3722E-02	9.2871E-04	5.6725E-01	8.3294E-01	8.9422E+00
70	72	19023	8855	59562	7.6530E-01	1.1945E-03	5.7266E-01	8.3237E-01	2.4691E+00
71	73	33372	8843	11201	1.4353E-01	7.9361E-04	5.4945E-01	8.2979E-01	2.3184E+00
72	74	33362	8491	5992	8.9064E-02	8.7351E-04	5.5427E-01	8.2994E-01	9.0112E+00
73	75	17988	8298	57126	7.2956E-01	1.1251E-03	5.5612E-01	8.3011E-01	2.4537E+00
74	76	55	19	784	7.3105E-03	8.1177E-05	3.1905E-01	6.2881E-01	1.0175E+00
75	77	50	25	973	8.9561E-03	2.3808E-05	8.6748E-02	5.8749E-01	5.8948E-01
76	80	12	5	46	5.6823E-04	1.4829E-04	9.3444E-02	7.6761E-01	1.9265E+00
77	81	3443	1519	10443	1.1543E-01	3.6360E-04	5.2874E-01	7.3591E-01	2.1421E+00
78	82	2153	875	12178	1.3125E-01	2.5900E-04	4.4035E-01	7.5741E-01	1.2983E+00
79	83	4	2	350	3.2291E-03	3.3446E-06	4.7243E-03	5.6379E-01	4.0884E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1553	652	4505	5.5738E-02	1.0283E-03	5.8735E-01	8.0388E-01	2.2045E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	975	430	7975	9.3343E-02	2.2668E-03	5.9560E-01	8.0380E-01	4.9727E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	397	209	45073	3.8861E-01	3.3268E-05	1.5171E-01	5.6583E-01	6.7252E-01

TOTAL 7498029 701402 3749564 4.5625E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.4401E-01	-5.4401E-01
2	2	3.3379E-01	.0000E+00	.0000E+00	-9.2357E-01	-5.8978E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.7456E-02	-1.7456E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-5.3838E-02	-5.3838E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5038E-02	-1.5038E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.5330E-01	-1.5330E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.7499E+00	-1.7499E+00

8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1047E+00	-2.1047E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2661E-01	-2.2661E-01
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1713E-01	-2.1713E-01
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8773E-01	-3.8773E-01
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9455E-01	-3.9455E-01
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1221E-02	-8.1221E-02
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3509E-02	-8.3509E-02
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3053E-02	-9.3053E-02
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.8792E-02	-7.8792E-02
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2834E-02	-7.2834E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7460E-02	-7.7460E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0704E-01	-1.0704E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0708E-01	-1.0708E-01
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5650E-02	-9.5650E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0738E-02	-9.0738E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1942E-01	-1.1942E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2054E-01	-1.2054E-01
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2097E-01	-1.2097E-01
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1676E-01	-1.1676E-01
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0323E-01	-1.0323E-01
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8404E-02	-8.8404E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.6407E-02	-9.6407E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0637E-01	-1.0637E-01
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0004E+01	-2.0004E+01
32	33	1.0272E+01	1.0104E+00	.0000E+00	.0000E+00	-1.0065E+01	1.2165E+00
33	34	2.3926E-02	.0000E+00	.0000E+00	.0000E+00	-2.2821E-02	1.1052E-03
34	35	1.2240E-03	.0000E+00	.0000E+00	.0000E+00	-1.1068E-03	1.1722E-04
35	36	2.0095E+01	.0000E+00	.0000E+00	.0000E+00	-2.0083E+01	1.2557E-02
36	37	2.2104E-03	.0000E+00	.0000E+00	.0000E+00	-2.2095E-03	8.7871E-07
37	38	2.1778E+01	.0000E+00	.0000E+00	.0000E+00	-2.1699E+01	7.9586E-02
38	39	2.4627E-03	.0000E+00	.0000E+00	.0000E+00	-2.4374E-03	2.5373E-05
39	40	3.4716E+01	.0000E+00	.0000E+00	.0000E+00	-1.1399E+01	2.3317E+01
40	41	8.7741E-01	.0000E+00	.0000E+00	.0000E+00	-8.7298E-01	4.4314E-03
41	42	1.1153E-04	.0000E+00	.0000E+00	.0000E+00	-1.1304E-04	-1.5141E-06
42	43	1.8507E+00	.0000E+00	.0000E+00	.0000E+00	-1.8501E+00	6.5677E-04
43	44	2.0714E+00	.0000E+00	.0000E+00	.0000E+00	-2.0699E+00	1.4629E-03
44	45	2.2627E+00	.0000E+00	.0000E+00	.0000E+00	-2.2622E+00	4.9501E-04
45	46	2.7687E+00	.0000E+00	.0000E+00	.0000E+00	-1.1705E+00	1.5982E+00
46	47	1.0903E-01	.0000E+00	.0000E+00	.0000E+00	-6.5934E-02	4.3097E-02
47	48	1.4533E-01	.0000E+00	.0000E+00	.0000E+00	-1.3997E-01	5.3531E-03
48	49	1.9109E-01	.0000E+00	.0000E+00	.0000E+00	-7.4098E-02	1.1700E-01
49	50	4.9752E-01	.0000E+00	.0000E+00	.0000E+00	-2.7779E-01	2.1973E-01
50	51	4.8511E-01	.0000E+00	.0000E+00	.0000E+00	-4.6845E-01	1.6664E-02
51	52	4.7528E-01	.0000E+00	.0000E+00	.0000E+00	-4.6896E-01	6.3249E-03
52	53	4.7788E-01	.0000E+00	.0000E+00	.0000E+00	-2.0200E-01	2.7588E-01
53	54	1.2399E-03	.0000E+00	.0000E+00	.0000E+00	-3.7404E-05	1.2025E-03
54	55	4.8142E-01	.0000E+00	.0000E+00	.0000E+00	-2.7075E-01	2.1067E-01
55	56	4.6749E-01	.0000E+00	.0000E+00	.0000E+00	-4.5067E-01	1.6818E-02
56	57	4.5711E-01	.0000E+00	.0000E+00	.0000E+00	-4.5178E-01	5.3332E-03
57	58	4.5651E-01	.0000E+00	.0000E+00	.0000E+00	-1.9080E-01	2.6571E-01
58	59	1.4641E-03	.0000E+00	.0000E+00	.0000E+00	-5.8720E-05	1.4054E-03
59	60	7.6516E-01	.0000E+00	.0000E+00	.0000E+00	-3.8326E-01	3.8190E-01
60	61	7.4910E-01	.0000E+00	.0000E+00	.0000E+00	-3.5321E-01	3.9589E-01
61	62	1.3114E-03	.0000E+00	.0000E+00	.0000E+00	-3.0579E-05	1.2809E-03
62	63	7.7180E-01	.0000E+00	.0000E+00	.0000E+00	-3.8490E-01	3.8690E-01
63	64	7.5503E-01	.0000E+00	.0000E+00	.0000E+00	-3.5553E-01	3.9950E-01
64	65	1.8466E-03	.0000E+00	.0000E+00	.0000E+00	-3.7965E-05	1.8086E-03
65	66	1.2237E-01	.0000E+00	.0000E+00	.0000E+00	-7.5601E-02	4.6765E-02
66	67	1.1802E-01	.0000E+00	.0000E+00	.0000E+00	-5.9520E-02	5.8496E-02
67	68	1.2291E-01	.0000E+00	.0000E+00	.0000E+00	-6.0850E-02	6.2058E-02

68	70	4.9944E-01	.0000E+00	.0000E+00	.0000E+00	-4.9328E-01	6.1611E-03
69	71	4.9719E-01	.0000E+00	.0000E+00	.0000E+00	-4.9636E-01	8.3467E-04
70	72	2.6882E-01	.0000E+00	.0000E+00	.0000E+00	-2.4468E-01	2.4146E-02
71	73	4.6955E-01	.0000E+00	.0000E+00	.0000E+00	-4.6385E-01	5.7044E-03
72	74	4.6803E-01	.0000E+00	.0000E+00	.0000E+00	-4.6726E-01	7.6890E-04
73	75	2.5356E-01	.0000E+00	.0000E+00	.0000E+00	-2.3003E-01	2.3525E-02
74	76	5.7725E-04	.0000E+00	.0000E+00	.0000E+00	-5.3633E-04	4.0912E-05
75	77	5.1233E-04	.0000E+00	.0000E+00	.0000E+00	-4.5879E-04	5.3535E-05
76	80	1.1155E-04	.0000E+00	.0000E+00	.0000E+00	-7.8349E-05	3.3205E-05
77	81	4.2236E-02	.0000E+00	.0000E+00	.0000E+00	-3.4010E-02	8.2253E-03
78	82	2.7940E-02	.0000E+00	.0000E+00	.0000E+00	-2.7511E-02	4.2914E-04
79	83	4.8330E-05	.0000E+00	.0000E+00	.0000E+00	-3.5935E-05	1.2395E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.1087E-02	.0000E+00	.0000E+00	.0000E+00	-1.8881E-02	2.2055E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.2759E-02	.0000E+00	.0000E+00	.0000E+00	-1.0928E-02	1.8308E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	5.1243E-03	.0000E+00	.0000E+00	.0000E+00	-3.0345E-03	2.0898E-03

TOTAL	1.0728E+02	1.0104E+00	.0000E+00	.0000E+00	-1.0728E+02	1.0104E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-2.0639E-05	.0000E+00	.0000E+00	.0000E+00	-2.0639E-05
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-4.7408E-04	.0000E+00	.0000E+00	.0000E+00	-4.7408E-04
33	34	.0000E+00	.0000E+00	1.4553E-05	.0000E+00	.0000E+00	.0000E+00	1.4553E-05
34	35	.0000E+00	.0000E+00	-8.3942E-06	.0000E+00	.0000E+00	.0000E+00	-8.3942E-06

35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	4.8277E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8277E-06
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	5.3481E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3481E-05
40	41	.0000E+00	.0000E+00	-7.2236E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2236E-06
41	42	.0000E+00	.0000E+00	4.2186E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2186E-06
42	43	.0000E+00	.0000E+00	5.6004E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6004E-06
43	44	.0000E+00	.0000E+00	-7.9802E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9802E-06
44	45	.0000E+00	.0000E+00	4.4843E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4843E-07
45	46	.0000E+00	.0000E+00	5.0053E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0053E-06
46	47	.0000E+00	.0000E+00	1.0338E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0338E-07
47	48	.0000E+00	.0000E+00	1.6477E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6477E-06
48	49	.0000E+00	.0000E+00	-4.1718E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1718E-06
49	50	.0000E+00	.0000E+00	-2.3407E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.3407E-05
50	51	.0000E+00	.0000E+00	1.2655E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2655E-04
51	52	.0000E+00	.0000E+00	-1.8563E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.8563E-05
52	53	.0000E+00	.0000E+00	1.7367E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7367E-05
53	54	.0000E+00	.0000E+00	4.2471E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2471E-06
54	55	.0000E+00	.0000E+00	-2.1012E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1012E-06
55	56	.0000E+00	.0000E+00	-2.0647E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0647E-05
56	57	.0000E+00	.0000E+00	2.6019E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6019E-05
57	58	.0000E+00	.0000E+00	-2.9691E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.9691E-05
58	59	.0000E+00	.0000E+00	6.5740E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5740E-08
59	60	.0000E+00	.0000E+00	-4.8537E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.8537E-05
60	61	.0000E+00	.0000E+00	-5.0267E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.0267E-05
61	62	.0000E+00	.0000E+00	-4.1809E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1809E-06
62	63	.0000E+00	.0000E+00	-8.6028E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.6028E-05
63	64	.0000E+00	.0000E+00	-4.6422E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6422E-05
64	65	.0000E+00	.0000E+00	8.4934E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4934E-06
65	66	.0000E+00	.0000E+00	-8.8394E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8394E-05
66	67	.0000E+00	.0000E+00	6.7171E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.7171E-05
67	68	.0000E+00	.0000E+00	-5.0625E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.0625E-05
68	70	.0000E+00	.0000E+00	1.6558E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6558E-05
69	71	.0000E+00	.0000E+00	-7.6623E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6623E-05
70	72	.0000E+00	.0000E+00	-1.2484E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2484E-04
71	73	.0000E+00	.0000E+00	7.7796E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.7796E-05
72	74	.0000E+00	.0000E+00	-2.7996E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7996E-05
73	75	.0000E+00	.0000E+00	1.7997E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7997E-04
74	76	.0000E+00	.0000E+00	-4.1647E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1647E-06
75	77	.0000E+00	.0000E+00	-8.3614E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3614E-06
76	80	.0000E+00	.0000E+00	3.3870E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3870E-06
77	81	.0000E+00	.0000E+00	-1.4997E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4997E-04
78	82	.0000E+00	.0000E+00	-3.6012E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6012E-06
79	83	.0000E+00	.0000E+00	4.2151E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2151E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-8.0123E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0123E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	9.2627E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.2627E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-6.8390E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.8390E-05
TOTAL		.0000E+00	.0000E+00	-8.2107E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2107E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --				PHYSICAL EVENTS					PRINT TABLE 130
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			

2	2	.0000E+00	.0000E+00	-1.4779E-02	.0000E+00	.0000E+00	-1.4779E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.8937E-03	.0000E+00	-3.7097E-01	-9.4687E-04	-3.2644E-01	-6.9646E-01
33	34	.0000E+00	.0000E+00	-9.3244E-05	.0000E+00	.0000E+00	-9.3244E-05
34	35	.0000E+00	.0000E+00	-2.0280E-05	.0000E+00	.0000E+00	-2.0280E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-8.7871E-07	.0000E+00	.0000E+00	-8.7871E-07
37	38	2.8641E-05	.0000E+00	-7.5242E-03	-1.4321E-05	.0000E+00	-7.5099E-03
38	39	.0000E+00	.0000E+00	-5.0691E-06	.0000E+00	.0000E+00	-5.0691E-06
39	40	.0000E+00	.0000E+00	-6.3710E-02	.0000E+00	.0000E+00	-6.3710E-02
40	41	.0000E+00	.0000E+00	-4.4242E-03	.0000E+00	.0000E+00	-4.4242E-03
41	42	.0000E+00	.0000E+00	-2.7046E-06	.0000E+00	.0000E+00	-2.7046E-06
42	43	.0000E+00	.0000E+00	-6.6237E-04	.0000E+00	.0000E+00	-6.6237E-04
43	44	.0000E+00	.0000E+00	-1.4549E-03	.0000E+00	.0000E+00	-1.4549E-03
44	45	.0000E+00	.0000E+00	-4.9545E-04	.0000E+00	.0000E+00	-4.9545E-04
45	46	.0000E+00	.0000E+00	-3.4526E-03	.0000E+00	.0000E+00	-3.4526E-03
46	47	.0000E+00	.0000E+00	-3.5416E-04	.0000E+00	.0000E+00	-3.5416E-04
47	48	.0000E+00	.0000E+00	-5.4694E-05	.0000E+00	.0000E+00	-5.4694E-05
48	49	.0000E+00	.0000E+00	-3.0549E-04	.0000E+00	.0000E+00	-3.0549E-04
49	50	.0000E+00	.0000E+00	-2.9155E-03	.0000E+00	.0000E+00	-2.9155E-03
50	51	.0000E+00	.0000E+00	-1.1911E-02	.0000E+00	.0000E+00	-1.1911E-02
51	52	.0000E+00	.0000E+00	-6.9602E-04	.0000E+00	.0000E+00	-6.9602E-04
52	53	.0000E+00	.0000E+00	-1.2003E-02	.0000E+00	.0000E+00	-1.2003E-02
53	54	.0000E+00	.0000E+00	-3.8937E-05	.0000E+00	.0000E+00	-3.8937E-05
54	55	.0000E+00	.0000E+00	-2.8755E-03	.0000E+00	.0000E+00	-2.8755E-03
55	56	.0000E+00	.0000E+00	-1.1797E-02	.0000E+00	.0000E+00	-1.1797E-02
56	57	.0000E+00	.0000E+00	-6.4490E-04	.0000E+00	.0000E+00	-6.4490E-04
57	58	.0000E+00	.0000E+00	-1.1791E-02	.0000E+00	.0000E+00	-1.1791E-02
58	59	.0000E+00	.0000E+00	-5.1163E-05	.0000E+00	.0000E+00	-5.1163E-05
59	60	.0000E+00	.0000E+00	-3.3977E-03	.0000E+00	.0000E+00	-3.3977E-03
60	61	.0000E+00	.0000E+00	-1.2397E-02	.0000E+00	.0000E+00	-1.2397E-02
61	62	.0000E+00	.0000E+00	-2.3529E-05	.0000E+00	.0000E+00	-2.3529E-05

62	63	.0000E+00	.0000E+00	-3.4243E-03	.0000E+00	.0000E+00	-3.4243E-03
63	64	.0000E+00	.0000E+00	-1.2455E-02	.0000E+00	.0000E+00	-1.2455E-02
64	65	.0000E+00	.0000E+00	-3.7521E-05	.0000E+00	.0000E+00	-3.7521E-05
65	66	.0000E+00	.0000E+00	-2.1084E-02	.0000E+00	.0000E+00	-2.1084E-02
66	67	.0000E+00	.0000E+00	-1.6103E-02	.0000E+00	.0000E+00	-1.6103E-02
67	68	.0000E+00	.0000E+00	-1.6285E-02	.0000E+00	.0000E+00	-1.6285E-02
68	70	.0000E+00	.0000E+00	-6.1776E-03	.0000E+00	.0000E+00	-6.1776E-03
69	71	.0000E+00	.0000E+00	-7.5805E-04	.0000E+00	.0000E+00	-7.5805E-04
70	72	.0000E+00	.0000E+00	-2.4021E-02	.0000E+00	.0000E+00	-2.4021E-02
71	73	2.3494E-05	.0000E+00	-5.7940E-03	-1.1747E-05	.0000E+00	-5.7822E-03
72	74	.0000E+00	.0000E+00	-7.4090E-04	.0000E+00	.0000E+00	-7.4090E-04
73	75	.0000E+00	.0000E+00	-2.3705E-02	.0000E+00	.0000E+00	-2.3705E-02
74	76	.0000E+00	.0000E+00	-3.6748E-05	.0000E+00	.0000E+00	-3.6748E-05
75	77	.0000E+00	.0000E+00	-4.5174E-05	.0000E+00	.0000E+00	-4.5174E-05
76	80	.0000E+00	.0000E+00	-3.6592E-05	.0000E+00	.0000E+00	-3.6592E-05
77	81	.0000E+00	.0000E+00	-8.0754E-03	.0000E+00	.0000E+00	-8.0754E-03
78	82	.0000E+00	.0000E+00	-4.2554E-04	.0000E+00	.0000E+00	-4.2554E-04
79	83	.0000E+00	.0000E+00	-1.6610E-05	.0000E+00	.0000E+00	-1.6610E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1254E-03	.0000E+00	.0000E+00	-2.1254E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9234E-03	.0000E+00	.0000E+00	-1.9234E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.0214E-03	.0000E+00	.0000E+00	-2.0214E-03

TOTAL 1.9459E-03 .0000E+00 -6.8414E-01 -9.7294E-04 -3.2644E-01 -1.0096E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	304548 17198	3.1717E+00 2.0579E-01	1.4695E-02 8.4149E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7512E-01	108119	1.5588E+00	1.1962E-03	.0000E+00	.0000E+00
		45103.50C	3.7701E-04	1074	1.3734E-02	1.2012E-02	.0000E+00	.0000E+00
		47109.50C	5.7973E-05	146	1.9558E-03	1.6145E-03	.0000E+00	.0000E+00
		62149.50C	2.1489E-06	1472	1.5856E-02	1.5740E-02	.0000E+00	.0000E+00
		63151.55C	9.1956E-06	760	8.4169E-03	8.3402E-03	.0000E+00	.0000E+00
		63153.55C	7.0194E-05	320	3.9015E-03	3.5793E-03	.0000E+00	.0000E+00
		64155.50C	7.9874E-06	3339	3.4846E-02	3.4750E-02	.0000E+00	.0000E+00
		92233.50C	3.8091E-05	235	5.0731E-03	2.2809E-04	2.2445E-03	.0000E+00
		92234.50C	2.4564E-05	56	6.9107E-04	4.7500E-04	1.3407E-05	.0000E+00
		92235.50C	5.2749E-03	35792	7.0015E-01	5.9263E-02	3.0325E-01	2.1362E-05
		92236.50C	2.2929E-03	1933	2.7854E-02	9.3233E-03	3.6853E-04	.0000E+00
		92238.50C	3.1622E-01	159438	2.3083E+00	2.0853E-01	2.0396E-02	9.2551E-04
		93237.55C	4.8471E-04	1507	1.8983E-02	1.5308E-02	1.6407E-04	.0000E+00
		94239.55C	7.0365E-13	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94240.50C	7.2717E-13	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94241.50C	2.8242E-45	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		94242.50C	2.6122E-05	58	8.3895E-04	6.0919E-04	3.9180E-07	.0000E+00
		95241.50C	8.9293E-44	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		95243.50C	2.1545E-13	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		96245.35C	1.6641E-42	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	3	3.3818E-05	7.8640E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	5.4266E-06	2.4024E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	1	9.0243E-06	1.0521E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	455	4.5359E-03	8.9382E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	1	4.8209E-06	4.0674E-07	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	433	3.3711E-03	2.0273E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	21	1.5720E-04	7.4062E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	10	1.6577E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	19	1.4052E-04	8.7871E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	233	3.2965E-03	2.7590E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	84	1.2114E-03	1.2466E-04	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	247	3.2979E-03	1.8389E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	52075	7.6912E-01	7.0166E-03	.0000E+00	1.4321E-05
		50000.35C	1.0711E-02	499	7.3262E-03	1.9630E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	111	8.6174E-04	5.0689E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	7.3964E-06	2.2646E-10	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1531301	1.9471E+01	6.2446E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	126052	1.8043E+00	1.2633E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	95557	1.2256E+00	4.3713E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7238	1.0395E-01	5.2842E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	63	4.3776E-04	2.7043E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	5.6900E-06	2.1402E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	25	3.6231E-04	2.2361E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	6	8.0573E-05	1.1732E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	28	3.8793E-04	1.9786E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3802	5.5951E-02	6.1608E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	30	4.3776E-04	1.4768E-05	.0000E+00	.0000E+00

43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	31715 2439	4.0417E-01 3.5141E-02	1.4303E-03 2.4654E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	18 4 17 3272 28	2.7342E-04 5.7727E-05 2.1311E-04 4.8236E-02 4.3677E-04	3.0039E-09 7.9959E-06 1.0508E-05 4.6462E-04 1.2330E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	76024 5966	9.7497E-01 8.5028E-02	3.3809E-03 7.1720E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	7756 625	1.0061E-01 8.9952E-03	3.5164E-04 2.5269E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 3 1 310 2	1.6336E-05 2.4082E-05 1.7042E-05 4.5687E-03 2.3463E-05	5.2001E-14 8.4834E-06 1.5516E-07 4.5866E-05 1.8941E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6799 485	8.7991E-02 6.9024E-03	3.0296E-04 2.5260E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	70418 4952	8.1455E-01 6.6906E-02	2.8719E-03 4.3596E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	7 52 76 2 0 1535 507 8645 2588 166	1.1261E-04 6.0527E-04 1.1039E-03 3.3099E-05 .0000E+00 2.0037E-02 7.3158E-03 1.0394E-01 3.1357E-02 2.2865E-03	7.3563E-09 3.4183E-05 1.1566E-05 1.0792E-07 .0000E+00 2.0945E-03 9.1961E-04 6.4203E-03 2.1096E-03 3.2092E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2512 3	3.6213E-02 4.2565E-05	6.8745E-04 8.5696E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	11 30 59 4 3 1610 514 8431 2538 158	1.4494E-04 3.4181E-04 7.9215E-04 4.6404E-05 3.1434E-05 2.0787E-02 7.1906E-03 1.0001E-01 3.0523E-02 2.2102E-03	2.7914E-08 1.5173E-05 1.1393E-05 5.6676E-07 4.1236E-06 2.2036E-03 1.0626E-03 6.3183E-03 2.0763E-03 3.1133E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
53	54	1001.50C 8016.50C	6.6667E-01 3.3333E-01	816 40	7.2290E-03 3.7964E-04	3.8926E-05 1.1158E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	68431 4972	7.9048E-01 6.6124E-02	2.8346E-03 4.0959E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	6000.50C	1.3966E-03	8	1.0918E-04	9.4739E-09	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	43	5.1487E-04	3.6180E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.0367E-04	9.4470E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.5155E-05	4.0538E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6823E-05	3.3812E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1526	1.9786E-02	2.1626E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	504	7.2401E-03	9.3191E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8480	1.0148E-01	6.2737E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2509	3.0514E-02	2.0506E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	165	2.1851E-03	3.3192E-04	.0000E+00	.0000E+00
56	57	13027.50C	9.9949E-01	2377	3.4237E-02	6.3670E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	9	1.1614E-04	8.2005E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	3	5.1401E-05	6.4823E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	37	4.2391E-04	2.4878E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	8.4572E-04	1.0683E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.9082E-05	4.1437E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6718E-05	2.1358E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1505	1.9128E-02	2.1774E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	518	7.1078E-03	1.1466E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8132	9.6332E-02	6.2454E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2413	2.9335E-02	1.9120E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	164	2.2458E-03	2.7111E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	985	8.7094E-03	4.9846E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	45	3.9739E-04	1.3175E-06	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	92787	1.1272E+00	3.3394E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7550	1.0427E-01	5.8291E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	14	2.0619E-04	2.3368E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	66	8.5770E-04	4.0638E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	104	1.4371E-03	1.5115E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.2564E-05	4.0581E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.7016E-05	3.2277E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2334	3.1556E-02	2.3351E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	862	1.2532E-02	1.1472E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11678	1.4696E-01	6.3795E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3541	4.5056E-02	2.0548E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	235	3.2928E-03	4.2426E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	498	4.4651E-03	2.3521E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	26	2.7206E-04	7.6936E-09	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	93154	1.1330E+00	3.3719E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7679	1.0669E-01	5.2354E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	10	1.2243E-04	1.5665E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	50	7.0154E-04	2.5654E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	84	1.2258E-03	7.9557E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.6310E-05	9.3880E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2351	3.2091E-02	2.3317E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	760	1.1028E-02	1.0403E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	11512	1.4528E-01	6.4400E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3524	4.4488E-02	2.1466E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	275	3.8724E-03	4.6171E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	790	6.6811E-03	3.7509E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	39	3.1048E-04	1.2547E-08	.0000E+00	.0000E+00

65	66	1001.50C	6.6667E-01	426100	3.9170E+00	2.1005E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20338	2.0815E-01	7.9739E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	10	1.1241E-04	3.2952E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	51	4.9957E-04	4.0189E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	50	5.7708E-04	1.4082E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.3493E-05	4.1466E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1609	1.7829E-02	2.9525E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	468	5.8210E-03	1.5175E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9731	1.0070E-01	8.4949E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2832	2.9378E-02	2.6878E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	165	1.9552E-03	3.9521E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	6	5.8366E-05	1.6118E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	4.9699E-04	3.4094E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	62	7.3863E-04	1.6137E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.8401E-05	5.9690E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1594	1.7807E-02	2.8805E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	475	6.1488E-03	1.4564E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	10012	1.0375E-01	8.7636E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2964	3.1139E-02	2.7833E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	166	1.9561E-03	3.5060E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	9	1.3703E-04	1.2917E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	45	5.5994E-04	2.4182E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	58	8.3418E-04	5.6132E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	8.3078E-05	7.6743E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6671E-05	2.3030E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1418	1.9222E-02	1.0921E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	513	7.2915E-03	5.8801E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7543	9.5143E-02	3.2002E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2337	2.9786E-02	1.0696E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	150	2.0402E-03	1.9712E-04	.0000E+00	.0000E+00
69	71	13027.50C	9.9949E-01	6256	9.3525E-02	7.3669E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	14	1.9771E-04	2.1355E-05	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	38	5.0258E-04	3.7495E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	198	2.5587E-03	6.1829E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	338	4.8954E-03	2.1693E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	21	2.9795E-04	1.9891E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.3099E-04	2.0905E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7579	1.0440E-01	4.1913E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2472	3.5291E-02	2.2600E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	36635	4.5957E-01	1.2270E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11361	1.4482E-01	4.0027E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	912	1.2844E-02	1.2094E-03	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	8	1.2657E-04	2.4761E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	5.2439E-04	1.0843E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	40	5.5702E-04	5.7886E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.2498E-05	3.7748E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6687E-05	4.6776E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1367	1.8648E-02	9.9634E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	549	7.9576E-03	5.2926E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6946	8.6918E-02	3.0219E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2096	2.6611E-02	1.0129E-03	.0000E+00	1.1747E-05

		42000.50C	1.4572E-02	151	2.1180E-03	2.1649E-04	.0000E+00	.0000E+00
72	74	13027.50C	9.9949E-01	5982	8.8929E-02	7.3729E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	10	1.3429E-04	3.6147E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	57	8.4839E-04	4.8188E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	170	2.1468E-03	6.5493E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	305	4.3921E-03	2.1438E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	23	3.0488E-04	2.4273E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	8.7032E-05	2.2524E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	7200	9.8258E-02	4.2109E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2355	3.3812E-02	2.2764E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	35100	4.3784E-01	1.2006E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	11095	1.4040E-01	3.9852E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	815	1.1475E-02	1.1372E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	742	6.8976E-03	3.6737E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	42	4.1288E-04	1.0496E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	928	8.5487E-03	4.5162E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	45	4.0739E-04	1.2404E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6	8.6675E-05	5.6976E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	3	3.2538E-05	1.1840E-05	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	27	3.0368E-04	1.5948E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	9	1.2893E-04	2.7005E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1	1.6406E-05	4.0545E-07	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	4	4.6093E-05	5.3919E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	3.2784E-04	1.7346E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	41	5.1357E-04	5.6229E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.5498E-05	1.9865E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5054E-05	1.2534E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1126	1.3400E-02	1.3489E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	341	4.5201E-03	6.9490E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6662	7.1896E-02	4.2945E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2114	2.3180E-02	1.5213E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	119	1.4923E-03	1.9129E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11414	1.2170E-01	4.2014E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	764	9.5458E-03	5.3947E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	341	3.1316E-03	1.6608E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9	9.7563E-05	2.2070E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	2	2.8691E-05	4.8133E-11	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	6.0933E-05	1.9956E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	10	1.1835E-04	6.8750E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	5.1643E-06	1.1298E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	37	4.9834E-04	4.3818E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	654	8.5797E-03	4.2600E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	89	1.2607E-03	5.6165E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1039	1.2478E-02	3.8660E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2517	3.0648E-02	1.0650E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	88	1.1725E-03	5.8151E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	64	8.8721E-04	8.7588E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	47	6.0265E-04	2.7904E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	14	2.0207E-04	1.8354E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	3	4.0692E-05	7.9793E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.6645E-05	2.9759E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	171	2.3963E-03	5.9629E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7739	9.0085E-02	1.8634E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	43085	3.6960E-01	2.0182E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1988	1.9019E-02	3.2415E-06	.0000E+00	.0000E+00
TOTAL				3749564	4.5952E+01	6.8414E-01	3.2644E-01	9.7294E-04

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2864815	3.3760E+01	1.2312E-01	.0000E+00	.0000E+00
2004.50C	10	1.6577E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	234	3.2095E-03	2.7152E-07	.0000E+00	.0000E+00
7014.50C	860	1.0559E-02	4.3068E-04	.0000E+00	.0000E+00
8016.50C	316914	4.3960E+00	2.9857E-03	.0000E+00	.0000E+00
13027.50C	17131	2.5296E-01	2.7983E-03	.0000E+00	.0000E+00
14000.50C	1354	1.8937E-02	1.5741E-04	.0000E+00	.0000E+00
15031.50C	93	1.2291E-03	9.6904E-06	.0000E+00	.0000E+00
16032.50C	25	3.7023E-04	1.1094E-05	.0000E+00	.0000E+00
22000.50C	37	4.9834E-04	4.3818E-05	.0000E+00	.0000E+00
24000.50C	33512	4.4299E-01	3.1564E-02	.0000E+00	.0000E+00
25055.50C	11101	1.5695E-01	1.5698E-02	.0000E+00	.0000E+00
26000.55C	178606	2.1566E+00	9.2610E-02	.0000E+00	.0000E+00
28000.50C	54438	6.6736E-01	3.0480E-02	.0000E+00	1.1747E-05
29000.50C	124	1.6632E-03	9.9891E-05	.0000E+00	.0000E+00
40000.50C	59914	8.8241E-01	8.2325E-03	.0000E+00	1.4321E-05
42000.50C	3706	5.0877E-02	5.9065E-03	.0000E+00	.0000E+00

45103.50C	1074	1.3734E-02	1.2012E-02	.0000E+00	.0000E+00
47109.50C	146	1.9558E-03	1.6145E-03	.0000E+00	.0000E+00
50000.35C	560	8.2291E-03	2.2399E-04	.0000E+00	.0000E+00
62149.50C	1472	1.5856E-02	1.5740E-02	.0000E+00	.0000E+00
63151.55C	760	8.4169E-03	8.3402E-03	.0000E+00	.0000E+00
63153.55C	320	3.9015E-03	3.5793E-03	.0000E+00	.0000E+00
64155.50C	3339	3.4846E-02	3.4750E-02	.0000E+00	.0000E+00
92233.50C	235	5.0731E-03	2.2809E-04	2.2445E-03	.0000E+00
92234.50C	56	6.9107E-04	4.7500E-04	1.3407E-05	.0000E+00
92235.50C	35792	7.0015E-01	5.9263E-02	3.0325E-01	2.1362E-05
92236.50C	1933	2.7854E-02	9.3233E-03	3.6853E-04	.0000E+00
92238.50C	159438	2.3083E+00	2.0853E-01	2.0396E-02	9.2551E-04
93237.55C	1507	1.8983E-02	1.5308E-02	1.6407E-04	.0000E+00
94239.55C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94240.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
94242.50C	58	8.3895E-04	6.0919E-04	3.9180E-07	.0000E+00
95241.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
95243.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59380 CTM = 125.62

8 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 125.73 MINUTES

MCNP VERSION 4A-B 10/04/91

02/24/95 16:12:30

PROBID = 02/24/95 13:48:54

1MCNP VERSION 4A-B LD=10/04/91

02/20/95 15:56:16

INP=mpc12bb1 OUTP=m12bb1.o

PROBID = 02/20/95 15:56:16

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb1)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - 1WT% B IN AL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL -ASSEMBLY TOP
78- 52 6 -2.719 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7190 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.71900 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7190 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117-      77      1 -1.0000      -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118-      C      SS316L MPC LID
119-      80      8 -8.2380      1 2 -9 6 -7 IMP:N=1
120-      C      SS316L MPC LINER
121-      81      8 -8.2380      9 -10 1 2 3 -7 IMP:N=1
122-      C      GAP SS316L/INNER 825 BARRIER
123-      82      1 -1.0000      10 -11 1 2 3 -71 IMP:N=1
124-      C      GAP BETWEEN MPC LID AND INNER BARRIER LID
125-      83      1 -1.0000      -10 1 2 7 -71 IMP:N=1
126-      C      INNER BARRIER LID - ALLOY 825
127-      84      5 -8.1400      1 2 -11 71 -8 IMP:N=1
128-      C      INNER BARRIER - ALLOY 825
129-      85      5 -8.1400      11 -12 1 2 3 -8 IMP:N=1
130-      C      GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131-      86      1 -1.0000      8 -72 -12 1 2 IMP:N=1
132-      C      OUTER BARRIER LID A516 CARBON STEEL
133-      87      7 -7.832      -12 72 -73 1 2 IMP:N=1
134-      C      OUTER BARRIER - A516 CARBON STEEL
135-      88      7 -7.832      1 2 3 -73 12 -70 IMP:N=1
136-      C      WATER, ENDS
137-      89      1 -1.0000      1 2 73 -80 -81 IMP:N=1
138-      C      WATER, SIDE
139-      90      1 -1.0000      1 2 3 70 -73 -81 IMP:N=1
140-      C      OUTSIDE WORLD
141-      91      0 -1:-2:-3:80:81 IMP:N=0
142-
143-      C      SURFACE SPECIFICATIONS
144-      1*      PX      0.0
145-      2*      PY      0.00
146-      3*      PZ      0.00
147-      4      PZ 203.2000      $ TOP ACTIVE FUEL
148-      5      PZ 222.2500      $ TOP FUEL HARDWARE
149-      6      PZ 229.2500      $ TOP FUEL REGION
150-      7      PZ 231.7500      $ TOP ALLOY 825 LID
151-      8      PZ 248.8500      $ TOP INNER BARRIER ALLOY 825 LID
152-      9      CZ 60.7949      $ ID OF WASTE CONTAINER
153-      10     CZ 63.0174      $ OD OF ALLOY 825 CONTAINER
154-      11     CZ 64.5250      $ ID OF INNER BARRIER ALLOY 825
155-      12     CZ 66.5250      $ OD OF INNER BARRIER ALLOY 825
156-      C      PIN LATTICE BOUNDS
157-      13     PX 0.72135
158-      14     PX -0.72135
159-      15     PY 0.72135
160-      16     PY -0.72135
161-      C      FUEL ROD
162-      17     CZ 0.468122
163-      18     CZ 0.478790
164-      19     CZ 0.546100
165-      C      CONTROL ROD/GUIDE TUBE
166-      20     CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167-      21     CZ 0.50292
168-      22     CZ 0.56007
169-      23     CZ 0.63246
170-      24     CZ 0.67310
171-      C      INSTRUMENTATION TUBE
172-      25     CZ 0.56007
173-      26     CZ 0.62611
174-      C      CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175-      27     PX 12.80923
176-      28     PX -12.80923

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177-    29 PY    12.80923
178-    30 PY   -12.80923
179-    C    ASSEMBLY LATTICE BOUNDS
180-    31 PY   10.82024 $ ACTUAL 10.82025
181-    32 PX   10.82024 $ ACTUAL 10.82025
182-    33 PY  -10.82024 $ ACTUAL -10.82025
183-    34 PX  -10.82024 $ ACTUAL -10.82025
184-    35 PY   11.4300
185-    36 PX   11.4300
186-    37 PY  -11.4300
187-    38 PX  -11.4300
188-    39 PY   12.17930
189-    40 PX   12.17930
190-    41 PY  -11.66876
191-    42 PX  -11.66876
192-    43 PX   11.66876
193-    44 PY   11.66876
194-    45 PX   11.94054
195-    46 PY   11.94054
196-    C    BLANK PIN CELL
197-    48 PX   -0.7213
198-    49 PX    0.7213
199-    50 PY   -0.7213
200-    51 PY    0.7213
201-    52 PY    0.0001
202-    53 PY   -0.0001
203-    54 PY    0.0
204-    55 P    1. -1. 0. 0.
205-    56 P    1. 1. 0. 0. $ 24.35
206-    C    EXTRA CARDS
207-    57 PX   2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208-    58 PY   2.14376
209-    59 PX   1.9050
210-    60 PY   1.9050
211-    61 PX   1.270
212-    62 PY   1.270050
213-    64 PX   -.0000005
214-    65 PY   -.0000005
215-    66 PX    95.
216-    67 PY    95.
217-    C    OUTER BARRIER
218-    70 CZ   76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219-    71 PZ  246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220-    72 PZ  271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221-    73 PZ  282.3500 $TOP OF OUTER BARRIER
222-    74 PX  -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223-    75 PY  -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224-    80 PZ  312.3500 $ WET TUFF OVERPACK, END
225-    81 CZ   106.5250 $ WET TUFF OVERPACK, SIDE
226-
227-    MODE N
228-    C    VOL    88J
229-    KCODE 3000 1. 5 20
230-    C    KSRC    4.87 4.87 10.    4.87 9.20 10.    4.87 13.53 10.
231-    C    4.87 17.86 10.    4.87 22.19 10.    9.20 4.87 10.
232-    C    9.20 9.20 10.    9.20 13.53 10.    9.20 17.86 10.
233-    C    9.20 22.19 10.    13.53 4.87 10.    13.53 9.20 10.
234-    C    13.53 17.86 10.    13.53 22.19 10.    17.86 4.87 10.
235-    C    17.86 9.20 10.    17.86 13.53 10.    17.86 17.86 10.
236-    C    17.86 22.19 10.    22.19 4.87 10.    22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.75%/0 GWD/0 YEAR -- U02								
331-	C	M2	8016.50C	4.6973E-02						
332-	C	92235.50C	8.9111E-04							
333-	C	92238.50C	2.2583E-02							
334-	C	3.00%/20 GWD/5 YEAR -- U02								
335-	M2	8016.50C	4.7767E-02							
336-		45103.50C	1.7033E-05							
337-		47109.50C	2.0436E-06							
338-		62149.50C	1.3260E-07							
339-		63151.55C	1.6963E-08							
340-		63153.55C	2.1975E-06							
341-		64155.50C	1.0128E-07							
342-		92233.50C	3.2712E-11							
343-		92234.50C	4.9053E-06							
344-		92235.50C	3.1513E-04							
345-		92236.50C	7.0520E-05							
346-		92238.50C	2.2844E-02							
347-		93237.55C	5.4646E-06							
348-		94238.50C	9.9680E-07							
349-		94239.55C	1.0790E-04							
350-		94240.50C	3.0974E-05							
351-		94241.50C	1.4571E-05							
352-		94242.50C	3.7204E-06							
353-		95241.50C	4.3471E-06							
354-		95242.50C	1.3739E-08							
355-		95243.50C	4.1755E-07							
356-		96245.35C	1.4221E-09							

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357-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
358-      M3      2004.50C 1.0
359-      C      ZIRCALOY-4
360-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
361-      40000.50C -0.9818 50000.35C -0.0140
362-      C      ALLOY 825
363-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
364-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
365-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
366-      29000.50C -0.0250 42000.50C -0.0300
367-      C      1100 ALUMINUM ALLOY - 1wt% natural boron
368-      M6      5010.50C -0.00180 5011.56C -0.00820 13027.50C -0.98880
369-      29000.50C -0.00120
370-      C      A516 CARBON STEEL
371-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
372-      16032.50C -0.00035 25055.50C -0.0090
373-      26000.55C -0.98535
374-      C      SS316L
375-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
376-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
377-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
378-      42000.50C -0.02500
379-      C      TALLIES
380-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3083
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3083
POINTS AFTER EXPANSION OR CONTRACTION	3008
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T				
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,
	63151,	.00000	63153,	.00003	64155,	.00000	92233,
	92234,	.00007	92235,	.00443	92236,	.00099	92238,
	93237,	.00008	94238,	.00001	94239,	.00152	94240,
	94241,	.00020	94242,	.00005	95241,	.00006	95242,
	95243,	.00001	96245,	.00000			.00000

3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	5010,	.00478	5011,	.01981	13027,	.97490	29000,	.00050
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	5010,	.00180	5011,	.00820	13027,	.98880	29000,	.00120
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE
17	17	.00000E+00	INFINITE
18	18	.00000E+00	INFINITE
19	19	.00000E+00	INFINITE
20	21	.00000E+00	INFINITE
21	22	.00000E+00	INFINITE
22	23	.00000E+00	INFINITE
23	24	.00000E+00	INFINITE
24	25	.00000E+00	INFINITE
25	26	.00000E+00	INFINITE
26	27	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	INFINITE
31	32	.00000E+00	INFINITE
32	33	.00000E+00	INFINITE
33	34	.00000E+00	INFINITE
34	35	.00000E+00	INFINITE
35	36	.00000E+00	INFINITE
36	37	.00000E+00	INFINITE
37	38	.00000E+00	INFINITE
38	39	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	INFINITE
43	44	.00000E+00	INFINITE
44	45	.00000E+00	INFINITE
45	46	.00000E+00	INFINITE
46	48	.00000E+00	INFINITE
47	49	.00000E+00	INFINITE

48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE

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108 24049 .00000E+00 .00000E+00 INFINITE
109 24050 .00000E+00 .00000E+00 INFINITE
110 24051 .00000E+00 .00000E+00 INFINITE
111 25048 .00000E+00 .00000E+00 INFINITE
112 25049 .00000E+00 .00000E+00 INFINITE
113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.15509E-02	2.71900E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
--	---------	-------	------	----------------------

1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02

6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			

66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08

59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
5010.50C	9587	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1305)	79/09/10.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE NEWXS2

5011.56C	28379
63151.55C	33336
63153.55C	30265

06/28/88
06/28/88
06/28/88

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.
WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.				
92234.50C	76999	NJOY	(1394)	79/10/17.
WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.				
92236.50C	119238	NJOY	(1396)	79/08/30.
WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.				
94238.50C	16458	NJOY	(1338)	79/09/12.
94241.50C	22523	NJOY	(1381)	79/08/30.
94242.50C	43433	NJOY	(1342)	79/09/06.
			TOTAL NU	
			TOTAL NU	

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.
62149.50C	11116	NJOY	(1319)	02/12/85
64155.50C	31471	NJOY	(1365)	79/07/28.
WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.				
95241.50C	29300	NJOY	(1361)	79/08/29.
WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.				
95242.50C	5248	NJOY	(1369)	79/09/24.
WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.				
95243.50C	51474	NJOY	(1363)	79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY	(1310)	11/01/85
47109.50C	10147	NJOY	(1373)	11/01/85
93237.55C	29142	NJOY	(1337)	04/04/85
			TOTAL NU	

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24 T=OK	(48)	86/02/01
WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.					
96245.35C	15310	ZA=96245 ENDL-85	85/04/24 T=OK	(93)	86/04/23

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN		1001	0	010/22/85
TOTAL	1385457					

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102760
TALLIES	0
BANK	18403

CROSS SECTIONS 1385457

TOTAL 1506620

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb1)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.118E-01	-4.498E-01	2.729E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.973E-01	8.304E-01
2	-4.323E-01	-1.458E-01	2.838E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.973E-01	9.795E-01
3	-1.635E-01	-3.909E-01	4.122E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.973E-01	6.569E-01
4	2.154E-01	-2.208E-01	4.058E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.973E-01	2.712E+00
5	-2.904E-01	3.187E-01	4.491E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.973E-01	6.701E+00
6	2.141E-02	4.421E-01	7.190E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.973E-01	1.465E-01
7	-8.593E-02	1.762E-01	4.743E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.973E-01	3.709E-01
8	5.423E-02	4.581E-01	4.784E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.973E-01	2.316E+00
9	2.023E-01	2.237E-02	5.385E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.973E-01	8.608E-01
10	-1.403E-01	-2.308E-01	4.176E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.973E-01	2.006E+00
11	1.176E-01	2.476E-01	3.881E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.973E-01	3.726E+00
12	1.176E-01	2.476E-01	3.881E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.973E-01	9.881E-02
13	3.090E-02	-8.002E-02	5.264E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.973E-01	1.033E+00
14	1.990E-01	-1.643E-01	4.344E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.973E-01	3.916E+00
15	3.708E-01	-9.729E-02	5.419E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.973E-01	5.316E+00
16	4.951E-02	3.722E-01	5.314E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.973E-01	2.171E+00
17	-2.980E-01	-3.603E-01	5.332E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.973E-01	4.080E+00
18	-3.225E-01	-1.716E-01	6.134E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.973E-01	2.964E+00
19	-8.256E-02	-4.054E-01	5.906E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.973E-01	1.423E+00
20	-2.497E-01	-3.352E-01	5.876E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.973E-01	1.462E-01
21	-1.572E-02	2.332E-01	6.995E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.973E-01	2.210E+00
22	4.003E-01	2.294E-01	3.609E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.973E-01	2.215E+00
23	2.785E-01	1.149E-01	3.775E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.973E-01	3.148E+00
24	3.900E-01	-3.152E-02	3.918E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.973E-01	8.848E-01
25	9.368E-02	3.838E-02	4.607E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.973E-01	4.779E-01
26	-3.659E-01	-1.226E-01	4.514E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.973E-01	2.500E+00
27	-1.937E-02	1.136E-01	3.336E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.973E-01	4.244E-01
28	-3.733E-01	2.548E-01	3.438E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.973E-01	3.914E+00
29	8.965E-02	3.429E-01	3.232E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.973E-01	2.330E-01
30	1.210E-01	3.161E-01	2.963E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.973E-01	1.865E+00
31	-3.545E-02	-2.748E-01	7.173E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.973E-01	1.787E+00
32	-2.453E-02	1.419E-01	6.481E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.973E-01	4.399E+00
33	-1.908E-02	1.683E-01	6.480E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.973E-01	6.041E-01
34	5.309E-02	3.183E-01	8.906E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.973E-01	2.968E+00
35	-1.259E-01	3.345E-01	8.570E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.973E-01	5.896E-01
36	8.450E-02	8.597E-02	4.411E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.973E-01	1.401E+00
37	-4.135E-01	-1.923E-01	8.536E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.973E-01	1.521E-01
38	-1.285E-01	-2.469E-01	9.328E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.973E-01	8.974E-01
39	5.759E-02	4.226E-01	8.571E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.973E-01	1.843E+00
40	-1.526E-01	-3.375E-01	7.845E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.973E-01	9.194E-01
41	-1.848E-01	3.875E-01	7.847E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.973E-01	8.404E-01
42	-1.063E-01	2.847E-01	7.317E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.973E-01	1.882E+00

43	3.238E-01	-2.560E-01	5.693E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.973E-01	3.709E+00
44	4.016E-02	-4.327E-01	6.947E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.973E-01	8.925E-01
45	-3.741E-01	-8.386E-02	5.319E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.973E-01	1.050E+00
46	-3.875E-01	-7.884E-02	5.379E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.973E-01	4.060E-01
47	4.138E-01	1.895E-01	6.432E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.973E-01	2.228E+00
48	-4.121E-01	-1.606E-01	1.543E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.973E-01	1.707E+00
49	-3.366E-01	1.155E-01	1.523E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.973E-01	3.065E-01
50	-3.421E-02	6.361E-02	1.506E+02	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.973E-01	4.358E-01

CYCLE 1 K(COLLISION) .900677 REMOVAL LIFETIME(ABS) 2.8957E+03 SOURCE POINTS GENERATED 2727

CYCLE 2 K(COLLISION) .886110 REMOVAL LIFETIME(ABS) 2.8934E+03 SOURCE POINTS GENERATED 2995

CYCLE 3 K(COLLISION) .884016 REMOVAL LIFETIME(ABS) 2.9162E+03 SOURCE POINTS GENERATED 2998

CYCLE 4 K(COLLISION) .882149 REMOVAL LIFETIME(ABS) 2.8173E+03 SOURCE POINTS GENERATED 3043

CYCLE 5 K(COLLISION) .886971 REMOVAL LIFETIME(ABS) 2.9555E+03 SOURCE POINTS GENERATED 3003

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .896159 REMOVAL LIFETIME(ABS) 2.8830E+03 SOURCE POINTS GENERATED 3031

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.852232		.874196	.0251	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)		.893744		.892757	.0011	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)		.851327		.874007	.0259	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	2.8711E+03		2.8752E+03		.0014				
REM LIFE(ABS)	2.8921E+03		2.8876E+03		.0016	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED		2849							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.896310		.881567	.0166	K(COL/ABS)	.887981 .0085	.894507 .0029	.1905
K(ABSORPTION)		.897668		.894394	.0019	K(ABS/TK LN)	.889313 .0097	.894639 .0028	.3223
K(TRK LENGTH)		.904683		.884232	.0188	K(TK LN/COL)	.882900 .0177	.873145 .0199	.9907
REM LIFE(COL)	3.0118E+03		2.9207E+03		.0156				
REM LIFE(ABS)	2.9760E+03		2.9171E+03		.0101	LIFE(COL/ABS)	2.9189E+03 .0128	2.9111E+03 .0055	.9901
SOURCE POINTS GENERATED		3207							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.917300		.890500	.0154	K(COL/ABS)	.894673 .0096	.900247 .0059	.6675
K(ABSORPTION)		.912200		.898846	.0051	K(ABS/TK LN)	.895845 .0100	.899727 .0059	.6390
K(TRK LENGTH)		.918681		.892844	.0163	K(TK LN/COL)	.891672 .0158	.884849 .0186	.9912
REM LIFE(COL)	2.7992E+03		2.8903E+03		.0153	K(COL/ABS/TK LN)	.894064 .0117	.900923 .0115	
REM LIFE(ABS)	2.7869E+03		2.8845E+03		.0134	LIFE(COL/ABS)	2.8874E+03 .0142	2.8782E+03 .0156	.9665
SOURCE POINTS GENERATED		3031							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.884079		.889216	.0120	K(COL/ABS)	.891695 .0082	.893984 .0076	.4983
K(ABSORPTION)		.875488		.894174	.0066	K(ABS/TK LN)	.892966 .0084	.894085 .0076	.4628
K(TRK LENGTH)		.887411		.891758	.0127	K(TK LN/COL)	.890487 .0123	.883429 .0139	.9910
REM LIFE(COL)	2.8445E+03		2.8812E+03		.0123	K(COL/ABS/TK LN)	.891716 .0095	.894266 .0133	

REM LIFE(ABS) 2.8359E+03 2.8748E+03 .0110 LIFE(COL/ABS) 2.8780E+03 .0115 2.8683E+03 .0122 .9679
 SOURCE POINTS GENERATED 2892

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR			
K(COLLISION)		.892659		.889790	.0098	K(COL/ABS)	.890782	.0067	.891494	.0066	.4155
K(ABSORPTION)		.879772		.891774	.0060	K(ABS/TK LN)	.892635	.0069	.892027	.0065	.3243
K(TRK LENGTH)		.902188		.893496	.0105	K(TK LN/COL)	.891643	.0101	.884257	.0113	.9840
REM LIFE(COL)	2.8365E+03		2.8737E+03	.0104	K(COL/ABS/TK LN)	.891687	.0077	.895104	.0114		
REM LIFE(ABS)	2.8323E+03		2.8677E+03	.0093	LIFE(COL/ABS)	2.8707E+03	.0098	2.8613E+03	.0100	.9699	
SOURCE POINTS GENERATED		3051									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR			
K(COLLISION)		.903497		.891748	.0086	K(COL/ABS)	.892364	.0060	.892831	.0057	.4539
K(ABSORPTION)		.900215		.892980	.0053	K(ABS/TK LN)	.893501	.0059	.893146	.0056	.3297
K(TRK LENGTH)		.897179		.894022	.0089	K(TK LN/COL)	.892885	.0087	.891488	.0095	.9660
REM LIFE(COL)	2.7900E+03		2.8618E+03	.0098	K(COL/ABS/TK LN)	.892917	.0067	.894945	.0066		
REM LIFE(ABS)	2.8073E+03		2.8591E+03	.0084	LIFE(COL/ABS)	2.8604E+03	.0090	2.8554E+03	.0084	.9717	
SOURCE POINTS GENERATED		2971									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR			
K(COLLISION)		.906035		.893534	.0077	K(COL/ABS)	.894022	.0055	.894404	.0052	.5019
K(ABSORPTION)		.905228		.894511	.0049	K(ABS/TK LN)	.896116	.0059	.894763	.0052	.4384
K(TRK LENGTH)		.923613		.897721	.0087	K(TK LN/COL)	.895628	.0081	.891223	.0083	.9452
REM LIFE(COL)	2.9228E+03		2.8694E+03	.0089	K(COL/ABS/TK LN)	.895255	.0063	.894143	.0067		
REM LIFE(ABS)	2.9204E+03		2.8668E+03	.0078	LIFE(COL/ABS)	2.8681E+03	.0083	2.8631E+03	.0077	.9736	
SOURCE POINTS GENERATED		3045									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR			
K(COLLISION)		.898510		.894087	.0068	K(COL/ABS)	.894943	.0049	.895559	.0047	.5028
K(ABSORPTION)		.906107		.895799	.0045	K(ABS/TK LN)	.897829	.0055	.896001	.0048	.4911
K(TRK LENGTH)		.916960		.899859	.0080	K(TK LN/COL)	.896973	.0073	.891276	.0073	.9261
REM LIFE(COL)	2.9522E+03		2.8786E+03	.0084	K(COL/ABS/TK LN)	.896582	.0058	.893827	.0063		
REM LIFE(ABS)	2.9618E+03		2.8773E+03	.0077	LIFE(COL/ABS)	2.8780E+03	.0080	2.8762E+03	.0081	.9731	
SOURCE POINTS GENERATED		2969									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR			
K(COLLISION)		.871693		.891847	.0066	K(COL/ABS)	.894142	.0045	.895692	.0042	.3917
K(ABSORPTION)		.902164		.896436	.0041	K(ABS/TK LN)	.896124	.0053	.896383	.0043	.3182
K(TRK LENGTH)		.859399		.895813	.0085	K(TK LN/COL)	.893830	.0074	.888895	.0065	.9281
REM LIFE(COL)	2.7459E+03		2.8653E+03	.0089	K(COL/ABS/TK LN)	.894699	.0056	.894753	.0053		
REM LIFE(ABS)	2.7263E+03		2.8622E+03	.0087	LIFE(COL/ABS)	2.8638E+03	.0088	2.8627E+03	.0093	.9769	
SOURCE POINTS GENERATED		2892									

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR			
K(COLLISION)		.880627		.890827	.0061	K(COL/ABS)	.892794	.0044	.893966	.0042	.4284
K(ABSORPTION)		.878004		.894760	.0042	K(ABS/TK LN)	.894661	.0051	.894740	.0043	.3598
K(TRK LENGTH)		.882056		.894562	.0078	K(TK LN/COL)	.892695	.0068	.887954	.0059	.9304
REM LIFE(COL)	2.8730E+03		2.8660E+03	.0080	K(COL/ABS/TK LN)	.893383	.0053	.892739	.0051		

REM LIFE(ABS) 2.8767E+03 2.8635E+03 .0079 LIFE(COL/ABS) 2.8648E+03 .0079 2.8640E+03 .0083 .9765
SOURCE POINTS GENERATED 3125

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.908222	.892277	.0058	K(COL/ABS)	.893364	.0040	.894020	.0038	.3838
K(ABSORPTION)	.891053	.894451	.0038	K(ABS/TK LN)	.895411	.0047	.894654	.0039	.3202
K(TRK LENGTH)	.916269	.896371	.0074	K(TK LN/COL)	.894324	.0065	.888868	.0056	.9357
REM LIFE(COL)	2.8677E+03	2.8662E+03	.0073	K(COL/ABS/TK LN)	.894366	.0049	.892792	.0046	
REM LIFE(ABS)	2.8675E+03	2.8639E+03	.0072	LIFE(COL/ABS)	2.8650E+03	.0072	2.8643E+03	.0076	.9765
SOURCE POINTS GENERATED	3105								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.901289	.892970	.0054	K(COL/ABS)	.893531	.0037	.893861	.0035	.3608
K(ABSORPTION)	.889779	.894092	.0035	K(ABS/TK LN)	.894927	.0043	.894263	.0036	.3279
K(TRK LENGTH)	.888458	.895762	.0069	K(TK LN/COL)	.894366	.0060	.891525	.0054	.9070
REM LIFE(COL)	2.8672E+03	2.8662E+03	.0067	K(COL/ABS/TK LN)	.894275	.0045	.893224	.0038	
REM LIFE(ABS)	2.8755E+03	2.8648E+03	.0067	LIFE(COL/ABS)	2.8655E+03	.0067	2.8651E+03	.0069	.9756
SOURCE POINTS GENERATED	2949								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.890146	.892768	.0050	K(COL/ABS)	.893345	.0034	.893685	.0032	.3625
K(ABSORPTION)	.891721	.893922	.0033	K(ABS/TK LN)	.894925	.0040	.894131	.0033	.3255
K(TRK LENGTH)	.898062	.895927	.0064	K(TK LN/COL)	.894348	.0055	.891205	.0050	.9043
REM LIFE(COL)	2.9966E+03	2.8755E+03	.0070	K(COL/ABS/TK LN)	.894206	.0042	.893019	.0036	
REM LIFE(ABS)	3.0146E+03	2.8755E+03	.0072	LIFE(COL/ABS)	2.8755E+03	.0071	2.8756E+03	.0073	.9794
SOURCE POINTS GENERATED	3044								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.897408	.893078	.0046	K(COL/ABS)	.893440	.0032	.893652	.0030	.3578
K(ABSORPTION)	.892108	.893801	.0031	K(ABS/TK LN)	.895418	.0038	.894137	.0031	.3093
K(TRK LENGTH)	.912541	.897034	.0060	K(TK LN/COL)	.895056	.0052	.891162	.0046	.8980
REM LIFE(COL)	2.9723E+03	2.8820E+03	.0069	K(COL/ABS/TK LN)	.894638	.0039	.892927	.0034	
REM LIFE(ABS)	2.9306E+03	2.8791E+03	.0068	LIFE(COL/ABS)	2.8806E+03	.0068	2.8799E+03	.0070	.9708
SOURCE POINTS GENERATED	2987								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb1)

02/20/95 17:49:03
PROBID = 02/20/95 15:56:16

0

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59935	1.0011E+00	2.0623E+00	ESCAPE	1	1.6763E-05	1.2076E-05
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	4.5827E-02	5.5738E-07	WEIGHT CUTOFF	60028	4.6243E-02	7.2974E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.1428E-07
(N,XN)	188	2.4778E-03	1.8907E-03
FISSION	0	0.	0.
TOTAL	60123	1.0494E+00	2.0642E+00

NUMBER OF NEUTRONS BANKED	94
NEUTRON TRACKS PER SOURCE PARTICLE	1.0031E+00
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.3234E+01
TOTAL NEUTRON COLLISIONS	3190560
NET MULTIPLICATION	1.0012E+00 .0002

COMPUTER TIME SO FAR IN THIS RUN	112.35 MINUTES
COMPUTER TIME IN MCRUN	112.22 MINUTES
SOURCE PARTICLES PER MINUTE	5.3410E+02
RANDOM NUMBERS GENERATED	39376939

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
DOWNSCATTERING	0	0.	1.9516E+00
CAPTURE	0	6.6327E-01	3.2426E-02
LOSS TO (N,XN)	94	1.2389E-03	1.0640E-02
LOSS TO FISSION	0	3.3862E-01	6.9561E-02
TOTAL	60123	1.0494E+00	2.0642E+00

AVERAGE LIFETIME, SHAKES

ESCAPE	4.4744E+00
CAPTURE	2.8809E+03
CAPTURE OR ESCAPE	2.8809E+03
ANY TERMINATION	3.1221E+03

CUTOFFS

TCO	1.0000E+34
ECO	.0000E+00
WC1	-5.0000E-01
WC2	-2.5000E-01

MAXIMUM NUMBER EVER IN BANK	1
BANK OVERFLOWS TO BACKUP FILE	0
FIELD LENGTH	0
MOST RANDOM NUMBERS USED WAS	7879 IN HISTORY 56250

RANGE OF SAMPLED SOURCE WEIGHTS = 9.3545E-01 TO 1.1001E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						
1NEUTRON	ACTIVITY IN EACH CELL						

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	21193	8798	2.6806E+00	1.4443E-04	4.1202E-01	7.6622E-01	1.1748E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	718044	60029	290878	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	5457	301	1157	4.1044E+00	7.5145E-04	7.4934E-01	8.8268E-01	2.5214E+00
34	35	257	25	651	1.2117E-02	5.8667E-05	2.5125E-01	6.1568E-01	4.2659E+00
35	36	1289531	60029	11	5.3930E-03	3.2361E-05	2.1161E-01	5.3137E-01	7.2449E-01
36	37	427	24	42	1.8221E-04	6.4472E-04	7.0885E-01	8.7851E-01	3.4912E+03
37	38	1397310	60029	50195	3.3268E-04	3.1237E-05	1.7033E-01	5.1223E-01	6.8982E-01
38	39	461	24	191	7.4473E-01	6.2201E-04	6.9681E-01	8.7799E-01	4.1093E+00
39	40	2232748	60029	1399113	1.4803E-03	2.4090E-05	1.3926E-01	5.0852E-01	6.2494E-01
40	41	56989	31257	88923	1.8530E+01	5.4345E-04	6.6552E-01	8.7617E-01	1.6443E+00
41	42	14	7	25	1.1705E+00	3.9825E-04	6.2223E-01	8.7004E-01	1.5566E+00
42	43	120257	32969	3717	2.1013E-04	3.3357E-04	1.3715E+00	6.5125E-01	2.1947E+00
43	44	134764	35326	29601	5.5096E-02	4.2333E-04	6.3259E-01	8.7166E-01	4.1346E+00
44	45	147552	36320	3119	3.8905E-01	4.1800E-04	6.2886E-01	8.7061E-01	1.5719E+00
45	46	179995	41483	71015	4.6173E-02	4.2164E-04	6.3452E-01	8.7039E-01	4.1319E+00
46	47	7324	3361	7853	9.3446E-01	4.3206E-04	6.4013E-01	8.7146E-01	1.5881E+00
47	48	9832	3659	370	1.0301E-01	3.6101E-04	5.7463E-01	8.6848E-01	1.5048E+00
48	49	12693	5038	6614	5.5008E-03	3.8780E-04	5.9196E-01	8.7194E-01	4.1290E+00
49	50	28623	14382	49234	8.7065E-02	4.1543E-04	6.1058E-01	8.7444E-01	1.5600E+00
50	51	27174	13594	9333	6.3899E-01	4.7104E-04	6.0722E-01	8.6576E-01	1.5601E+00
51	52	27792	13395	4350	1.2613E-01	6.7039E-04	6.3759E-01	8.6293E-01	2.2444E+00
52	53	26813	13096	9281	5.4035E-02	7.9593E-04	6.5289E-01	8.7227E-01	6.2351E+00
53	54	275	90	2003	1.2538E-01	6.5093E-04	6.1979E-01	8.5987E-01	2.2378E+00
54	55	29436	14693	51707	1.8628E-02	7.6214E-05	3.8961E-01	6.2767E-01	1.0185E+00
55	56	28124	14018	9620	6.7051E-01	4.5741E-04	5.9526E-01	8.6478E-01	1.5370E+00
56	57	28679	13823	4384	1.3074E-01	6.3973E-04	6.2542E-01	8.6233E-01	2.2066E+00
57	58	27672	13570	9387	5.4937E-02	7.7196E-04	6.4988E-01	8.7372E-01	6.1999E+00
58	59	325	84	2175	1.2622E-01	6.3018E-04	6.1449E-01	8.5975E-01	2.2006E+00
59	60	49494	18881	79383	1.9205E-02	4.3945E-05	2.3849E-01	5.9592E-01	7.9419E-01
60	61	47821	17888	15371	1.0541E+00	5.9842E-04	5.7308E-01	8.7338E-01	1.5388E+00
61	62	554	103	2537	2.1238E-01	9.7035E-04	6.1141E-01	8.7357E-01	2.3538E+00
62	63	47735	18560	77268	2.1564E-02	5.9470E-05	2.9016E-01	5.8921E-01	8.9587E-01
63	64	46235	17643	15113	1.0307E+00	5.8339E-04	5.7020E-01	8.7562E-01	1.5354E+00
64	65	509	119	2263	2.0896E-01	9.5235E-04	6.1184E-01	8.7446E-01	2.3389E+00
65	66	9385	4635	409110	1.9655E-02	4.9048E-05	2.4147E-01	5.7760E-01	8.3578E-01
66	67	9155	3565	13262	3.7597E+00	5.8474E-05	2.7689E-01	6.2107E-01	8.7162E-01
67	68	8960	3573	13554	1.4243E-01	1.9551E-04	4.6895E-01	7.0823E-01	1.8191E+00
68	70	29516	8793	9433	1.4568E-01	1.8625E-04	4.3436E-01	7.0714E-01	1.7972E+00
69	71	30075	8475	8015	1.3140E-01	1.4663E-03	5.9741E-01	8.7633E-01	2.4633E+00
70	72	15196	7754	46299	1.1301E-01	2.3789E-03	6.0930E-01	8.8944E-01	6.9014E+00
71	73	31569	9424	9620	6.3998E-01	2.6766E-03	6.0855E-01	8.7555E-01	2.5857E+00
72	74	32131	9089	8435	1.3331E-01	1.5491E-03	6.1676E-01	8.8007E-01	2.4884E+00
73	75	16129	8309	48276	1.1890E-01	2.5421E-03	6.3109E-01	8.9039E-01	6.9129E+00
74	76	211	67	3556	6.6477E-01	2.9364E-03	6.2011E-01	8.7678E-01	2.6148E+00
75	77	224	53	4451	3.1875E-02	5.9647E-05	2.4596E-01	6.1089E-01	8.9643E-01
76	80	11	7	35	3.9856E-02	3.6564E-05	1.9616E-01	5.8873E-01	7.4069E-01
77	81	3429	1422	10170	3.5164E-04	3.1320E-04	9.0889E-01	7.2410E-01	2.2538E+00
78	82	2254	872	12403	1.1069E-01	3.8009E-04	5.4977E-01	7.3511E-01	2.1563E+00
79	83	4	4	721	1.3099E-01	2.5687E-04	4.4311E-01	7.4781E-01	1.2943E+00
80	84	0	0	0	6.0361E-03	7.6409E-05	4.7046E-01	5.8836E-01	1.0629E+00
81	85	1644	666	4614	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
82	86	0	0	0	5.5964E-02	9.2761E-04	6.0795E-01	7.9785E-01	2.2170E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

84	88	940	440	7932	9.2889E-02	2.4793E-03	5.5701E-01	8.1050E-01	4.5962E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	343	204	44324	3.7612E-01	2.7353E-05	1.0015E-01	5.6041E-01	6.0983E-01

TOTAL 6943285 689999 3190560 4.0077E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.1948E-01	-5.1948E-01
2	2	2.8126E-01	.0000E+00	.0000E+00	-7.9073E-01	-5.0947E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.4150E-02	-1.4150E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-4.9696E-02	-4.9696E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.5128E-02	-1.5128E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.3847E-01	-1.3847E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6086E+00	-1.6086E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0131E+00	-2.0131E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-1.8351E-01	-1.8351E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.8962E-01	-1.8962E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.6994E-01	-3.6994E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.5606E-01	-3.5606E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.8783E-02	-7.8783E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.9117E-02	-7.9117E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.9530E-02	-8.9530E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.2384E-02	-7.2384E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-6.7297E-02	-6.7297E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.3712E-02	-7.3712E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-1.0013E-01	-1.0013E-01
20	21	.0000E+00	.0000E+00	.0000E+00	-9.7494E-02	-9.7494E-02
21	22	.0000E+00	.0000E+00	.0000E+00	-8.8955E-02	-8.8955E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.0113E-02	-8.0113E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1141E-01	-1.1141E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1531E-01	-1.1531E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1625E-01	-1.1625E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1447E-01	-1.1447E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0158E-01	-1.0158E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.4014E-02	-8.4014E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.2464E-02	-9.2464E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0195E-01	-1.0195E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8862E+01	-1.8862E+01
32	33	9.6369E+00	1.0011E+00	.0000E+00	-9.4485E+00	1.1894E+00
33	34	5.6283E-02	.0000E+00	.0000E+00	-5.3572E-02	2.7110E-03
34	35	2.1483E-03	.0000E+00	.0000E+00	-1.9270E-03	2.2131E-04
35	36	1.8911E+01	.0000E+00	.0000E+00	-1.8900E+01	1.0794E-02
36	37	3.6745E-03	.0000E+00	.0000E+00	-3.6767E-03	-2.2123E-06
37	38	2.0487E+01	.0000E+00	.0000E+00	-2.0410E+01	7.6957E-02
38	39	3.9659E-03	.0000E+00	.0000E+00	-3.9414E-03	2.4514E-05
39	40	3.2667E+01	.0000E+00	.0000E+00	-1.0712E+01	2.1955E+01
40	41	8.2918E-01	.0000E+00	.0000E+00	-8.2556E-01	3.6162E-03
41	42	1.3032E-04	.0000E+00	.0000E+00	-1.2373E-04	6.5940E-06
42	43	1.7471E+00	.0000E+00	.0000E+00	-1.7466E+00	5.3021E-04
43	44	1.9583E+00	.0000E+00	.0000E+00	-1.9572E+00	1.1623E-03
44	45	2.1435E+00	.0000E+00	.0000E+00	-2.1430E+00	4.6380E-04
45	46	2.6175E+00	.0000E+00	.0000E+00	-1.1077E+00	1.5098E+00
46	47	1.0651E-01	.0000E+00	.0000E+00	-6.5049E-02	4.1459E-02
47	48	1.4297E-01	.0000E+00	.0000E+00	-1.3799E-01	4.9730E-03
48	49	1.8509E-01	.0000E+00	.0000E+00	-7.3002E-02	1.1209E-01
49	50	4.1522E-01	.0000E+00	.0000E+00	-2.3847E-01	1.7675E-01
50	51	3.9443E-01	.0000E+00	.0000E+00	-3.8382E-01	1.0608E-02

TOTAL	1.0057E+02	1.0011E+00	.0000E+00	.0000E+00	-1.0057E+02	1.0011E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

[illegible]

18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-7.2117E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.2117E-04
33	34	.0000E+00	.0000E+00	5.6089E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6089E-06
34	35	.0000E+00	.0000E+00	4.3820E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3820E-08
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	4.1934E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1934E-06
37	38	.0000E+00	.0000E+00	5.0830E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.0830E-06
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	8.9436E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.9436E-05
40	41	.0000E+00	.0000E+00	-6.1943E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1943E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	7.5329E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.5329E-08
43	44	.0000E+00	.0000E+00	1.1318E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1318E-07
44	45	.0000E+00	.0000E+00	-1.9546E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9546E-06
45	46	.0000E+00	.0000E+00	-1.2029E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2029E-05
46	47	.0000E+00	.0000E+00	4.1927E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1927E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	-4.1245E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1245E-06
49	50	.0000E+00	.0000E+00	1.7290E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7290E-05
50	51	.0000E+00	.0000E+00	-2.1023E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1023E-05
51	52	.0000E+00	.0000E+00	3.4041E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4041E-05
52	53	.0000E+00	.0000E+00	-6.9185E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.9185E-05
53	54	.0000E+00	.0000E+00	-2.0776E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0776E-05
54	55	.0000E+00	.0000E+00	4.6362E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6362E-07
55	56	.0000E+00	.0000E+00	5.8279E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.8279E-05
56	57	.0000E+00	.0000E+00	-1.4240E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4240E-05
57	58	.0000E+00	.0000E+00	-1.5423E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5423E-04
58	59	.0000E+00	.0000E+00	8.4674E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4674E-06
59	60	.0000E+00	.0000E+00	-3.6498E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6498E-06
60	61	.0000E+00	.0000E+00	-9.0587E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.0587E-05
61	62	.0000E+00	.0000E+00	-4.0027E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0027E-06
62	63	.0000E+00	.0000E+00	-3.6998E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6998E-06
63	64	.0000E+00	.0000E+00	-6.1646E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1646E-07
64	65	.0000E+00	.0000E+00	8.0846E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.0846E-08
65	66	.0000E+00	.0000E+00	2.1838E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1838E-06
66	67	.0000E+00	.0000E+00	2.4435E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4435E-04
67	68	.0000E+00	.0000E+00	2.1214E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1214E-04
68	70	.0000E+00	.0000E+00	-2.7421E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7421E-05
69	71	.0000E+00	.0000E+00	-7.5410E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.5410E-06
70	72	.0000E+00	.0000E+00	5.1766E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.1766E-05
71	73	.0000E+00	.0000E+00	-4.6983E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6983E-05
72	74	.0000E+00	.0000E+00	-1.9937E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.9937E-06
73	75	.0000E+00	.0000E+00	1.5619E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5619E-05
74	76	.0000E+00	.0000E+00	4.3405E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3405E-06
75	77	.0000E+00	.0000E+00	2.1215E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1215E-05
76	80	.0000E+00	.0000E+00	1.6255E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6255E-06
77	81	.0000E+00	.0000E+00	-1.1949E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1949E-04

78	82	.0000E+00	.0000E+00	3.3909E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.3909E-05
79	83	.0000E+00	.0000E+00	-8.2966E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2966E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	8.9462E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.9462E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.2503E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2503E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-9.7972E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.7972E-06
TOTAL		.0000E+00	.0000E+00	-4.1668E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1668E-04
1 NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS							

PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
3	3	.0000E+00	.0000E+00	-1.1022E-02	.0000E+00	-1.1022E-02
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	33	2.3017E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00
34	34	.0000E+00	.0000E+00	-3.5797E-01	-1.1508E-03	-6.9544E-01
35	35	.0000E+00	.0000E+00	-2.2461E-04	.0000E+00	-2.2461E-04
36	36	.0000E+00	.0000E+00	-2.9460E-05	.0000E+00	-2.9460E-05
37	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
38	38	.0000E+00	.0000E+00	-1.9811E-06	.0000E+00	-1.9811E-06
39	39	1.5183E-04	.0000E+00	-6.4159E-03	-7.5915E-05	-6.3400E-03
40	40	.0000E+00	.0000E+00	-8.6079E-06	.0000E+00	-8.6079E-06
41	41	.0000E+00	.0000E+00	-4.8828E-02	.0000E+00	-4.8828E-02
42	42	.0000E+00	.0000E+00	-3.5543E-03	.0000E+00	-3.5543E-03
43	43	.0000E+00	.0000E+00	-8.2757E-07	.0000E+00	-8.2757E-07
44	44	.0000E+00	.0000E+00	-5.3029E-04	.0000E+00	-5.3029E-04
45	45	.0000E+00	.0000E+00	-1.1624E-03	.0000E+00	-1.1624E-03
46	46	.0000E+00	.0000E+00	-4.6184E-04	.0000E+00	-4.6184E-04

45	46	.0000E+00	.0000E+00	-2.7466E-03	.0000E+00	.0000E+00	-2.7466E-03
46	47	.0000E+00	.0000E+00	-3.1865E-04	.0000E+00	.0000E+00	-3.1865E-04
47	48	.0000E+00	.0000E+00	-4.0769E-05	.0000E+00	.0000E+00	-4.0769E-05
48	49	.0000E+00	.0000E+00	-2.6250E-04	.0000E+00	.0000E+00	-2.6250E-04
49	50	.0000E+00	.0000E+00	-1.7195E-03	.0000E+00	.0000E+00	-1.7195E-03
50	51	.0000E+00	.0000E+00	-6.4067E-03	.0000E+00	.0000E+00	-6.4067E-03
51	52	.0000E+00	.0000E+00	-2.2992E-02	.0000E+00	.0000E+00	-2.2992E-02
52	53	.0000E+00	.0000E+00	-6.1499E-03	.0000E+00	.0000E+00	-6.1499E-03
53	54	.0000E+00	.0000E+00	-9.5461E-05	.0000E+00	.0000E+00	-9.5461E-05
54	55	.0000E+00	.0000E+00	-1.8036E-03	.0000E+00	.0000E+00	-1.8036E-03
55	56	.0000E+00	.0000E+00	-6.6454E-03	.0000E+00	.0000E+00	-6.6454E-03
56	57	.0000E+00	.0000E+00	-2.3640E-02	.0000E+00	.0000E+00	-2.3640E-02
57	58	.0000E+00	.0000E+00	-6.6206E-03	.0000E+00	.0000E+00	-6.6206E-03
58	59	.0000E+00	.0000E+00	-1.0173E-04	.0000E+00	.0000E+00	-1.0173E-04
59	60	.0000E+00	.0000E+00	-2.3596E-03	.0000E+00	.0000E+00	-2.3596E-03
60	61	.0000E+00	.0000E+00	-7.8098E-03	.0000E+00	.0000E+00	-7.8098E-03
61	62	.0000E+00	.0000E+00	-1.1456E-04	.0000E+00	.0000E+00	-1.1456E-04
62	63	.0000E+00	.0000E+00	-2.3331E-03	.0000E+00	.0000E+00	-2.3331E-03
63	64	.0000E+00	.0000E+00	-7.6085E-03	.0000E+00	.0000E+00	-7.6085E-03
64	65	.0000E+00	.0000E+00	-9.9246E-05	.0000E+00	.0000E+00	-9.9246E-05
65	66	.0000E+00	.0000E+00	-1.9061E-02	.0000E+00	.0000E+00	-1.9061E-02
66	67	.0000E+00	.0000E+00	-1.3522E-02	.0000E+00	.0000E+00	-1.3522E-02
67	68	.0000E+00	.0000E+00	-1.3864E-02	.0000E+00	.0000E+00	-1.3864E-02
68	70	.0000E+00	.0000E+00	-3.6456E-03	.0000E+00	.0000E+00	-3.6456E-03
69	71	2.4245E-05	.0000E+00	-2.0698E-02	-1.2122E-05	.0000E+00	-2.0686E-02
70	72	.0000E+00	.0000E+00	-1.1277E-02	.0000E+00	.0000E+00	-1.1277E-02
71	73	.0000E+00	.0000E+00	-3.6173E-03	.0000E+00	.0000E+00	-3.6173E-03
72	74	.0000E+00	.0000E+00	-2.1349E-02	.0000E+00	.0000E+00	-2.1349E-02
73	75	.0000E+00	.0000E+00	-1.1587E-02	.0000E+00	.0000E+00	-1.1587E-02
74	76	.0000E+00	.0000E+00	-1.6101E-04	.0000E+00	.0000E+00	-1.6101E-04
75	77	.0000E+00	.0000E+00	-2.1488E-04	.0000E+00	.0000E+00	-2.1488E-04
76	80	.0000E+00	.0000E+00	-2.7597E-05	.0000E+00	.0000E+00	-2.7597E-05
77	81	.0000E+00	.0000E+00	-7.8575E-03	.0000E+00	.0000E+00	-7.8575E-03
78	82	.0000E+00	.0000E+00	-4.1731E-04	.0000E+00	.0000E+00	-4.1731E-04
79	83	.0000E+00	.0000E+00	-3.2717E-05	.0000E+00	.0000E+00	-3.2717E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.2215E-03	.0000E+00	.0000E+00	-2.2215E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.6890E-03	.0000E+00	.0000E+00	-1.6890E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.9448E-03	.0000E+00	.0000E+00	-1.9448E-03

TOTAL 2.4778E-03 .0000E+00 -6.6327E-01 -1.2389E-03 -3.3862E-01 -1.0007E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	225925 13541	2.5091E+00 1.7151E-01	1.0956E-02 6.5941E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

6	6	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7097E-01	97396	1.4208E+00	1.1891E-03	.0000E+00	.0000E+00
		45103.50C	2.3926E-04	562	7.1016E-03	6.2754E-03	.0000E+00	.0000E+00
		47109.50C	2.8706E-05	84	1.0881E-03	8.9488E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	880	9.7849E-03	9.6705E-03	.0000E+00	.0000E+00
		63151.55C	2.3827E-07	16	1.6352E-04	1.6142E-04	.0000E+00	.0000E+00
		63153.55C	3.0867E-05	119	1.4962E-03	1.3291E-03	.0000E+00	.0000E+00
		64155.50C	1.4226E-06	408	4.3747E-03	4.3640E-03	.0000E+00	.0000E+00
		92233.50C	4.5949E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	6.8903E-05	140	1.9001E-03	1.2630E-03	3.2758E-05	.0000E+00
		92235.50C	4.4265E-03	21464	4.2018E-01	3.7422E-02	1.8434E-01	.0000E+00
		92236.50C	9.9057E-04	859	1.2612E-02	4.5099E-03	1.9294E-04	.0000E+00
		92238.50C	3.2088E-01	147722	2.1605E+00	1.8279E-01	2.0643E-02	1.1409E-03
		93237.55C	7.6759E-05	187	2.4079E-03	1.9287E-03	2.4393E-05	.0000E+00
		94238.50C	1.4002E-05	58	7.0904E-04	5.6006E-04	2.3725E-05	.0000E+00
		94239.55C	1.5156E-03	15060	3.0376E-01	5.6401E-02	1.1501E-01	9.9182E-06
		94240.50C	4.3508E-04	3187	4.2121E-02	3.7269E-02	1.3413E-04	.0000E+00
		94241.50C	2.0467E-04	2236	4.6729E-02	6.5271E-03	1.8046E-02	.0000E+00
		94242.50C	5.2259E-05	102	1.4556E-03	1.0313E-03	2.2412E-05	.0000E+00
		95241.50C	6.1062E-05	376	4.7757E-03	4.2550E-03	6.3518E-05	.0000E+00
		95242.50C	1.9299E-07	11	2.4002E-04	1.7670E-05	8.6588E-05	.0000E+00
		95243.50C	5.8652E-06	11	1.6905E-04	1.0989E-04	3.2811E-06	.0000E+00
		96245.35C	1.9976E-08	0	1.9361E-07	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	11	1.1571E-04	4.9454E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	4.0093E-05	3.1124E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	3	3.2916E-05	2.7348E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	1133	1.1847E-02	2.1446E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	7	8.1473E-05	4.3027E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	622	5.1461E-03	2.9453E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	29	2.4687E-04	7.9301E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	11	1.8221E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	41	3.2786E-04	1.9809E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	4.8144E-06	1.5426E-10	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	197	2.7925E-03	1.3574E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	86	1.2424E-03	9.6411E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	187	2.6069E-03	1.1201E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	49222	7.3065E-01	6.0307E-03	.0000E+00	7.5915E-05

		50000.35C	1.0711E-02	503	7.4374E-03	1.7537E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	184	1.4261E-03	8.6063E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7	5.4210E-05	1.5812E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1283434	1.6856E+01	4.7539E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	115679	1.6743E+00	1.2889E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	82082	1.0719E+00	3.4836E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6841	9.8542E-02	7.0675E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	23	1.8452E-04	8.2755E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	2.5612E-05	1.6414E-11	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	17	2.5601E-04	4.6393E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	5	7.5448E-05	7.2553E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	15	2.1492E-04	1.3475E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3644	5.3999E-02	4.9429E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	36	5.5070E-04	1.5258E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	27297	3.5606E-01	1.1389E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2304	3.2992E-02	2.3498E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	16	2.3657E-04	3.6141E-08	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	5.0513E-05	4.9346E-07	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	7	9.7415E-05	2.5092E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3066	4.5362E-02	4.5037E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	27	4.2668E-04	8.4349E-06	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	65425	8.5397E-01	2.6819E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5590	8.0490E-02	6.4777E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	7292	9.5022E-02	3.1594E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	561	7.9891E-03	2.7150E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	2	3.1578E-05	5.7331E-11	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	1.6379E-05	4.9287E-08	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	5	6.4431E-05	3.1318E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	359	5.3537E-03	3.6866E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	3	3.4766E-05	7.2228E-07	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	6077	7.9381E-02	2.5383E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	537	7.6845E-03	8.6711E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	45292	5.8263E-01	1.6758E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3942	5.6363E-02	4.3711E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	3	4.7351E-05	1.0778E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	28	3.8851E-04	1.1560E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	6.4639E-04	5.6066E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.4275E-05	3.5436E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.5739E-05	1.9900E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1150	1.6091E-02	1.1397E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	457	6.8267E-03	6.1357E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5800	7.7117E-02	3.3571E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1724	2.3135E-02	1.0527E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	124	1.8363E-03	2.2446E-04	.0000E+00	.0000E+00
51	52	5010.50C	4.7822E-03	2284	2.2767E-02	2.2680E-02	.0000E+00	.0000E+00
		5011.56C	1.9814E-02	70	1.0279E-03	1.4978E-07	.0000E+00	.0000E+00

		13027.50C	9.7490E-01	1995	3.0225E-02	3.1061E-04	.0000E+00	.0000E+00
		29000.50C	5.0236E-04	1	1.5149E-05	1.2269E-06	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	7	9.8634E-05	1.6071E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	28	3.9497E-04	1.3718E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	39	5.9238E-04	4.0502E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.8940E-05	6.2137E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1132	1.5988E-02	1.0586E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	426	6.1830E-03	5.8205E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5784	7.6667E-02	3.2203E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1733	2.3508E-02	1.0512E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	130	1.9245E-03	2.1989E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1921	1.7730E-02	9.4886E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	82	8.9805E-04	5.7487E-07	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	47674	6.1264E-01	1.7749E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4033	5.7877E-02	2.8638E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	8	1.0748E-04	8.0432E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	31	4.3479E-04	1.0201E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	49	7.4313E-04	4.8851E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4101E-05	4.2753E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5520E-05	6.6913E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1169	1.6393E-02	1.2658E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	449	6.6697E-03	5.3515E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5986	8.0194E-02	3.4865E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1795	2.4295E-02	1.0858E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	128	1.8301E-03	2.5663E-04	.0000E+00	.0000E+00
56	57	5010.50C	4.7822E-03	2303	2.3452E-02	2.3317E-02	.0000E+00	.0000E+00
		5011.56C	1.9814E-02	66	9.0266E-04	1.3086E-07	.0000E+00	.0000E+00
		13027.50C	9.7490E-01	2013	3.0572E-02	3.1996E-04	.0000E+00	.0000E+00
		29000.50C	5.0236E-04	2	1.0159E-05	2.4280E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	9	1.3148E-04	9.4959E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	27	3.5440E-04	1.3500E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	7.0995E-04	4.9594E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.6836E-05	6.1909E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1070	1.4965E-02	1.1012E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	438	6.3907E-03	7.1595E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5845	7.7534E-02	3.3687E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1819	2.4270E-02	1.1296E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	130	1.8449E-03	2.8604E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	2076	1.8260E-02	1.0170E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	99	9.4546E-04	3.2453E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	72439	9.5335E-01	2.3134E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6944	1.0076E-01	4.6163E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	19	2.6870E-04	1.5966E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	55	6.8526E-04	2.8008E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	85	1.2595E-03	9.6720E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.3859E-05	2.1397E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6605E-05	2.9764E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1931	2.7811E-02	1.4241E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	798	1.1707E-02	7.3616E-04	.0000E+00	.0000E+00

		26000.55C	6.4626E-01	9376	1.2780E-01	3.9683E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2891	3.9686E-02	1.3543E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	212	3.1127E-03	2.8890E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	2441	2.0688E-02	1.1453E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	96	8.7619E-04	3.4643E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	70560	9.3338E-01	2.2626E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6708	9.7285E-02	7.0433E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	13	1.9934E-04	1.7248E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	48	6.6416E-04	2.4512E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	76	1.1132E-03	8.0345E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4705E-05	1.0829E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6397E-05	1.6525E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1949	2.8092E-02	1.3584E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	790	1.1648E-02	6.4193E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	9223	1.2549E-01	3.9693E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2789	3.8446E-02	1.2486E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	220	3.2309E-03	3.5752E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2172	1.8790E-02	9.9217E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	91	8.6495E-04	2.9334E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	390285	3.5673E+00	1.8983E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	18825	1.9241E-01	7.8118E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	11	1.0439E-04	4.9372E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	4.6961E-04	3.4008E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	5.4954E-04	8.5956E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	6.6871E-05	1.1153E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	3.1025E-05	7.8294E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1521	1.7279E-02	2.5257E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	377	4.6761E-03	1.1517E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8592	9.0849E-02	7.2125E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2538	2.6993E-02	2.3423E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	122	1.4090E-03	2.3853E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	9	1.1010E-04	1.6725E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	54	5.7947E-04	4.0003E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	5.5678E-04	7.1854E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.4629E-05	3.2152E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6582E-05	1.8513E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1495	1.6787E-02	2.5807E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	476	6.1309E-03	1.2385E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8782	9.2662E-02	7.4091E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2551	2.7132E-02	2.3052E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	142	1.6786E-03	2.8066E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	4	4.4394E-05	2.0697E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	27	3.7747E-04	6.0363E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	6.4947E-04	2.7042E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4048E-05	1.5533E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2568E-05	3.3260E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1256	1.8133E-02	6.7104E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	521	7.6832E-03	3.9525E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5578	7.6657E-02	1.7790E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1827	2.5235E-02	5.9047E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	171	2.5331E-03	2.0088E-04	.0000E+00	.0000E+00

69	71	5010.50C	4.7822E-03	1998	2.0673E-02	2.0351E-02	.0000E+00	.0000E+00
		5011.56C	1.9814E-02	177	2.6240E-03	1.2302E-07	.0000E+00	.0000E+00
		13027.50C	9.7490E-01	5827	8.9529E-02	3.3878E-04	.0000E+00	1.2122E-05
		29000.50C	5.0236E-04	13	1.7918E-04	7.5432E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	40	5.3310E-04	1.6068E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	162	2.2272E-03	3.1042E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	262	3.7952E-03	1.5607E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	24	3.5672E-04	1.0669E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.0132E-05	4.3068E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6190	8.9477E-02	1.9142E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2254	3.2713E-02	1.0858E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	27709	3.7678E-01	5.4476E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	8871	1.2258E-01	1.8295E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	781	1.1415E-02	9.4749E-04	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	9	1.4474E-04	5.8044E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	5.8501E-04	1.5295E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	55	8.0025E-04	3.9885E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.5357E-05	1.3571E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1226	1.7635E-02	6.7931E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	495	7.3451E-03	3.2066E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5791	7.9075E-02	1.8089E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1850	2.5580E-02	5.9982E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	145	2.1105E-03	1.8920E-04	.0000E+00	.0000E+00
72	74	5010.50C	4.7822E-03	2079	2.1354E-02	2.0993E-02	.0000E+00	.0000E+00
		5011.56C	1.9814E-02	209	3.0730E-03	1.1737E-07	.0000E+00	.0000E+00
		13027.50C	9.7490E-01	6138	9.4336E-02	3.4748E-04	.0000E+00	.0000E+00
		29000.50C	5.0236E-04	9	1.3905E-04	8.3332E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	40	5.9793E-04	1.2824E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	146	1.9299E-03	2.6869E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	305	4.5843E-03	1.5117E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	17	2.3192E-04	1.0441E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	9.4814E-05	1.7943E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6668	9.5978E-02	2.0683E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2238	3.2856E-02	1.0096E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	28690	3.8821E-01	5.5472E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	9338	1.2823E-01	1.8725E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	827	1.2052E-02	1.0447E-03	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3417	3.0482E-02	1.6051E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	139	1.3928E-03	4.9800E-07	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	4255	3.8036E-02	2.1482E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	196	1.8201E-03	6.2732E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5	5.4181E-05	7.3567E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	3	2.8414E-05	8.4687E-07	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	22	2.0931E-04	1.7197E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	5	5.9734E-05	2.1962E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

77	81	6000.50C	1.3966E-03	9	1.2092E-04	1.1193E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	41	3.9112E-04	2.2863E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	5.0452E-04	9.4072E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	4.8512E-05	6.4628E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.1731E-05	4.8907E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1125	1.3083E-02	1.4274E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	292	3.6515E-03	6.7823E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6512	6.9476E-02	4.1675E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2009	2.1689E-02	1.3349E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	130	1.6824E-03	2.1168E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11560	1.2054E-01	4.1340E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	843	1.0448E-02	3.9091E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	694	5.8158E-03	3.2708E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	27	2.2025E-04	8.2970E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	3	3.9394E-05	6.1925E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	5.9342E-05	1.4664E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	11	1.6183E-04	2.2973E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	23	2.9662E-04	2.1586E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	542	7.0069E-03	3.7685E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	88	1.1903E-03	8.9673E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1134	1.3519E-02	4.4214E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2633	3.1346E-02	1.1556E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	101	1.2713E-03	7.5092E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	75	1.0730E-03	5.6770E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	58	7.2095E-04	2.4514E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	15	2.0271E-04	3.7687E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	7	9.0088E-05	1.8312E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	2	2.6726E-05	2.9071E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	164	2.1660E-03	9.3282E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	7686	8.9682E-02	1.5922E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

86	90	1001.50C	6.6667E-01	42357	3.5782E-01	1.9437E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1967	1.8302E-02	1.0881E-06	.0000E+00	.0000E+00
TOTAL				3190560	4.0414E+01	6.6327E-01	3.3862E-01	1.2389E-03
TOTAL OVER ALL CELLS FOR EACH NUCLIDE								
				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
		1001.50C		2395545	2.9106E+01	9.6595E-02	.0000E+00	.0000E+00
		2004.50C		11	1.8221E-04	.0000E+00	.0000E+00	.0000E+00
		5010.50C		8664	8.8247E-02	8.7342E-02	.0000E+00	.0000E+00
		5011.56C		522	7.6276E-03	5.2104E-07	.0000E+00	.0000E+00
		6000.50C		242	3.2689E-03	2.0744E-07	.0000E+00	.0000E+00
		7014.50C		739	9.4819E-03	2.7761E-04	.0000E+00	.0000E+00
		8016.50C		286723	4.0386E+00	2.9889E-03	.0000E+00	.0000E+00
		13027.50C		15977	2.4472E-01	1.3183E-03	.0000E+00	1.2122E-05
		14000.50C		1161	1.6869E-02	1.0249E-04	.0000E+00	.0000E+00
		15031.50C		85	1.1109E-03	6.1347E-06	.0000E+00	.0000E+00
		16032.50C		30	4.0784E-04	2.5656E-05	.0000E+00	.0000E+00
		22000.50C		23	2.9662E-04	2.1586E-05	.0000E+00	.0000E+00
		24000.50C		28527	3.9620E-01	1.9706E-02	.0000E+00	.0000E+00
		25055.50C		10266	1.4787E-01	9.8884E-03	.0000E+00	.0000E+00
		26000.55C		142727	1.8449E+00	5.6927E-02	.0000E+00	.0000E+00
		28000.50C		44373	5.8219E-01	1.8955E-02	.0000E+00	.0000E+00
		29000.50C		126	1.6148E-03	9.4623E-05	.0000E+00	.0000E+00
		40000.50C		57424	8.4722E-01	7.2267E-03	.0000E+00	7.5915E-05
		42000.50C		3337	4.7734E-02	4.8034E-03	.0000E+00	.0000E+00
		45103.50C		562	7.1016E-03	6.2754E-03	.0000E+00	.0000E+00
		47109.50C		84	1.0881E-03	8.9488E-04	.0000E+00	.0000E+00
		50000.35C		576	8.5310E-03	2.0409E-04	.0000E+00	.0000E+00
		62149.50C		880	9.7849E-03	9.6705E-03	.0000E+00	.0000E+00
		63151.55C		16	1.6352E-04	1.6142E-04	.0000E+00	.0000E+00
		63153.55C		119	1.4962E-03	1.3291E-03	.0000E+00	.0000E+00
		64155.50C		408	4.3747E-03	4.3640E-03	.0000E+00	.0000E+00
		92233.50C		0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C		140	1.9001E-03	1.2630E-03	3.2758E-05	.0000E+00
		92235.50C		21464	4.2018E-01	3.7422E-02	1.8434E-01	.0000E+00
		92236.50C		859	1.2612E-02	4.5099E-03	1.9294E-04	.0000E+00
		92238.50C		147722	2.1605E+00	1.8279E-01	2.0643E-02	1.1409E-03
		93237.55C		187	2.4079E-03	1.9287E-03	2.4393E-05	.0000E+00
		94238.50C		58	7.0904E-04	5.6006E-04	2.3725E-05	.0000E+00
		94239.55C		15060	3.0376E-01	5.6401E-02	1.1501E-01	9.9182E-06
		94240.50C		3187	4.2121E-02	3.7269E-02	1.3413E-04	.0000E+00
		94241.50C		2236	4.6729E-02	6.5271E-03	1.8046E-02	.0000E+00
		94242.50C		102	1.4556E-03	1.0313E-03	2.2412E-05	.0000E+00
		95241.50C		376	4.7757E-03	4.2550E-03	6.3518E-05	.0000E+00
		95242.50C		11	2.4002E-04	1.7670E-05	8.6588E-05	.0000E+00
		95243.50C		11	1.6905E-04	1.0989E-04	3.2811E-06	.0000E+00
		96245.35C		0	1.9361E-07	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59935 CTM = 112.22

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 112.35 MINUTES

MCNP VERSION 4A-B 10/04/91

02/20/95 17:49:04

PROBID = 02/20/95 15:56:16

1MCNP VERSION 4A-B LD=10/04/91

02/20/95 17:49:04

PROBID = 02/20/95 17:49:04

INP=mpc12bb2 OUTP=m12bb2.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb2)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - 2WT% B IN AL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP -.00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=( -2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=( -7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=( -5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=( -2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=( -2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=( -7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=( -5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=( -2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192 -2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL -ASSEMBLY TOP
78- 52 6 -2.728 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7280 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.72800 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7280 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 \$ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 \$ TOP ACTIVE FUEL
148- 5 PZ 222.2500 \$ TOP FUEL HARDWARE
149- 6 PZ 229.2500 \$ TOP FUEL REGION
150- 7 PZ 231.7500 \$ TOP ALLOY 825 LID
151- 8 PZ 248.8500 \$ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 \$ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 \$ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 \$ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 \$ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 \$ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

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297- C      34.57 22.19 10. 38.90 4.87 10. 38.90 9.20 10.
298- C      38.90 17.86 10. 38.90 22.19 10. 43.23 4.87 10.
299- C      43.23 9.20 10. 43.23 13.53 10. 43.23 17.86 10.
300- C      43.23 22.19 10. 47.55 4.87 10. 47.55 9.20 10.
301- C      47.55 13.53 10. 47.55 17.86 10. 47.55 22.19 10.
302- C      30.24 4.87 75. 30.24 9.20 75. 30.24 13.53 75.
303- C      30.24 17.86 75. 30.24 22.19 75. 34.57 4.87 75.
304- C      34.57 9.20 75. 34.57 13.53 75. 34.57 17.86 75.
305- C      34.57 22.19 75. 38.90 4.87 75. 38.90 9.20 75.
306- C      38.90 17.86 75. 38.90 22.19 75. 43.23 4.87 75.
307- C      43.23 9.20 75. 43.23 13.53 75. 43.23 17.86 75.
308- C      43.23 22.19 75. 47.55 4.87 75. 47.55 9.20 75.
309- C      47.55 13.53 75. 47.55 17.86 75. 47.55 22.19 75.
310- C      30.24 4.87 150. 30.24 9.20 150. 30.24 13.53 150.
311- C      30.24 17.86 150. 30.24 22.19 150. 34.57 4.87 150.
312- C      34.57 9.20 150. 34.57 13.53 150. 34.57 17.86 150.
313- C      34.57 22.19 150. 38.90 4.87 150. 38.90 9.20 150.
314- C      38.90 17.86 150. 38.90 22.19 150. 43.23 4.87 150.
315- C      43.23 9.20 150. 43.23 13.53 150. 43.23 17.86 150.
316- C      43.23 22.19 150. 47.55 4.87 150. 47.55 9.20 150.
317- C      47.55 13.53 150. 47.55 17.86 150. 47.55 22.19 150.
318- C      30.24 4.87 200. 30.24 9.20 200. 30.24 13.53 200.
319- C      30.24 17.86 200. 30.24 22.19 200. 34.57 4.87 200.
320- C      34.57 9.20 200. 34.57 13.53 200. 34.57 17.86 200.
321- C      34.57 22.19 200. 38.90 4.87 200. 38.90 9.20 200.
322- C      38.90 17.86 200. 38.90 22.19 200. 43.23 4.87 200.
323- C      43.23 9.20 200. 43.23 13.53 200. 43.23 17.86 200.
324- C      43.23 22.19 200. 47.55 4.87 200. 47.55 9.20 200.
325- C      47.55 13.53 200. 47.55 17.86 200. 47.55 22.19 200.
326- C      MATERIAL SPECIFICATIONS
327- C      WATER AT 300 K
328- M1      1001.50C 6.6878-2 8016.50C 3.3439-2
329- MT1     LWTR.01T
330- C      3.75%/O GWD/O YEAR -- UO2
331- C      M2      8016.50C 4.6973E-02
332- C      92235.50C 8.9111E-04
333- C      92238.50C 2.2583E-02
334- C      3.00%/20 GWD/5 YEAR -- UO2
335- M2      8016.50C 4.7767E-02
336-      45103.50C 1.7033E-05
337-      47109.50C 2.0436E-06
338-      62149.50C 1.3260E-07
339-      63151.55C 1.6963E-08
340-      63153.55C 2.1975E-06
341-      64155.50C 1.0128E-07
342-      92233.50C 3.2712E-11
343-      92234.50C 4.9053E-06
344-      92235.50C 3.1513E-04
345-      92236.50C 7.0520E-05
346-      92238.50C 2.2844E-02
347-      93237.55C 5.4646E-06
348-      94238.50C 9.9680E-07
349-      94239.55C 1.0790E-04
350-      94240.50C 3.0974E-05
351-      94241.50C 1.4571E-05
352-      94242.50C 3.7204E-06
353-      95241.50C 4.3471E-06
354-      95242.50C 1.3739E-08
355-      95243.50C 4.1755E-07
356-      96245.35C 1.4221E-09

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357-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
358-      M3      2004.50C 1.0
359-      C      ZIRCALOY-4
360-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
361-      40000.50C -0.9818 50000.35C -0.0140
362-      C      ALLOY 825
363-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
364-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
365-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
366-      29000.50C -0.0250 42000.50C -0.0300
367-      C      1100 ALUMINUM ALLOY - 2wt% natural boron
368-      M6      5010.50C -0.00360 5011.56C -0.01640 13027.50C -0.97880
369-      29000.50C -0.00120
370-      C      A516 CARBON STEEL
371-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
372-      16032.50C -0.00035 25055.50C -0.0090
373-      26000.55C -0.98535
374-      C      SS316L
375-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
376-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
377-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
378-      42000.50C -0.02500
379-      C      TALLIES
380-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2987
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2987
 POINTS AFTER EXPANSION OR CONTRACTION 2994
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000
 CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T				
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,
	63151,	.00000	63153,	.00003	64155,	.00000	92233,
	92234,	.00007	92235,	.00443	92236,	.00099	92238,
	93237,	.00008	94238,	.00001	94239,	.00152	94240,
	94241,	.00020	94242,	.00005	95241,	.00006	95242,
	95243,	.00001	96245,	.00000			.00000

3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	5010,	.00943	5011,	.03905	13027,	.95103	29000,	.00050
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	5010,	.00360	5011,	.01640	13027,	.97880	29000,	.00120
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE

48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE

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108 24049 .00000E+00 .00000E+00 INFINITE
109 24050 .00000E+00 .00000E+00 INFINITE
110 24051 .00000E+00 .00000E+00 INFINITE
111 25048 .00000E+00 .00000E+00 INFINITE
112 25049 .00000E+00 .00000E+00 INFINITE
113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.26647E-02	2.72800E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02

6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			

66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08

59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.

1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
5010.50C	9587	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1305)	79/09/10.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE NEWXS2

5011.56C	28379
63151.55C	33336
63153.55C	30265

06/28/88
06/28/88
06/28/88

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY		
40000.50C	35842	NJOY	(1314)	79/06/21.
			(1340)	79/07/31.
WARNING. NUBAR OF	92234.50C	MAY BE EITHER PROMPT OR TOTAL.		
92234.50C	76999	NJOY	(1394)	79/10/17.
WARNING. NUBAR OF	92236.50C	MAY BE EITHER PROMPT OR TOTAL.		
92236.50C	119238	NJOY	(1396)	79/08/30.
WARNING. NUBAR OF	94238.50C	MAY BE EITHER PROMPT OR TOTAL.		
94238.50C	16458	NJOY	(1338)	79/09/12.
94241.50C	22523	NJOY	(1381)	79/08/30.
94242.50C	43433	NJOY	(1342)	79/09/06.
		TOTAL NU		
		TOTAL NU		

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY		
16032.50C	2684	NJOY	(1315)	79/10/29.
22000.50C	25231	NJOY	(1316)	79/10/29.
25055.50C	60097	NJOY	(1322)	79/06/21.
42000.50C	18467	NJOY	(1325)	79/06/21.
62149.50C	11116	NJOY	(1321)	79/08/01.
64155.50C	31471	NJOY	(1319)	02/12/85
			(1365)	79/07/28.
WARNING. NUBAR OF	95241.50C	MAY BE EITHER PROMPT OR TOTAL.		
95241.50C	29300	NJOY	(1361)	79/08/29.
WARNING. NUBAR OF	95242.50C	MAY BE EITHER PROMPT OR TOTAL.		
95242.50C	5248	NJOY	(1369)	79/09/24.
WARNING. NUBAR OF	95243.50C	MAY BE EITHER PROMPT OR TOTAL.		
95243.50C	51474	NJOY	(1363)	79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY		
47109.50C	10147	NJOY	(1310)	11/01/85
93237.55C	29142	NJOY	(1373)	11/01/85
			(1337)	04/04/85
		TOTAL NU		

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=OK		
					(48)	86/02/01
WARNING. NUBAR OF	96245.35C	MAY BE EITHER PROMPT OR TOTAL.				
96245.35C	15310	ZA=96245 ENDL-85	85/04/24	T=OK	(93)	86/04/23

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
TOTAL	1385457				

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102760
TALLIES	0
BANK	18403

CROSS SECTIONS 1385457

TOTAL 1506620

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

10 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .13 PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb2)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-4.194E-01	-1.825E-01	7.227E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.002E+00	3.277E-01
2	-3.017E-01	-2.313E-01	2.184E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.002E+00	1.774E-01
3	-1.531E-01	3.587E-01	3.419E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.002E+00	2.546E+00
4	5.566E-02	-2.539E-01	3.156E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.002E+00	5.480E+00
5	-3.431E-02	-4.022E-01	6.612E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.002E+00	2.529E+00
6	-2.631E-01	-3.784E-01	6.684E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.002E+00	3.480E+00
7	-4.332E-02	4.327E-01	6.948E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.002E+00	1.580E+00
8	-6.584E-02	2.452E-01	6.888E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.002E+00	2.195E+00
9	-5.936E-02	4.612E-01	6.724E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.002E+00	1.780E+00
10	-2.908E-02	-2.068E-01	5.808E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.002E+00	8.426E-01
11	-3.890E-01	-1.325E-01	5.187E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.002E+00	3.094E+00
12	-3.474E-01	-1.863E-01	4.266E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.002E+00	3.546E-01
13	5.222E-02	-4.327E-01	1.769E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.002E+00	2.168E+00
14	-5.188E-02	-3.387E-01	2.224E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.002E+00	1.429E+00
15	2.265E-01	-7.860E-02	2.313E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.002E+00	5.449E+00
16	-3.916E-01	-5.563E-02	3.830E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.002E+00	1.506E+00
17	-6.029E-02	-7.337E-02	3.775E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.002E+00	1.775E+00
18	-1.658E-01	3.495E-02	3.883E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.002E+00	2.797E-01
19	-3.206E-01	3.645E-02	1.724E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.002E+00	1.597E+00
20	4.394E-01	1.550E-01	1.778E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.002E+00	6.485E+00
21	4.334E-01	-3.564E-02	2.185E+00	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.002E+00	7.594E-01
22	3.896E-01	-1.576E-01	3.646E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.002E+00	1.963E+00
23	-1.326E-01	4.084E-01	6.738E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.002E+00	1.211E+00
24	-2.550E-01	-3.086E-01	1.294E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.002E+00	3.065E+00
25	8.745E-02	1.129E-01	1.737E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.002E+00	2.685E+00
26	-3.381E-01	-2.891E-01	2.053E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.002E+00	3.897E+00
27	-1.520E-01	-2.608E-01	2.064E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.002E+00	8.800E-01
28	-2.253E-02	2.692E-01	2.008E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.002E+00	1.958E+00
29	4.311E-01	9.703E-02	4.810E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.002E+00	3.646E+00
30	-4.607E-02	-3.757E-01	4.580E+00	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.002E+00	1.294E+00
31	1.121E-01	4.225E-01	4.477E+00	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.002E+00	2.758E+00
32	2.385E-01	3.418E-01	2.478E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.002E+00	2.428E+00
33	1.334E-01	1.202E-01	1.152E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.002E+00	4.471E-01
34	3.993E-01	-1.145E-01	1.494E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.002E+00	2.275E+00
35	-1.594E-01	4.691E-02	4.613E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.002E+00	1.478E+00
36	-3.328E-01	3.202E-01	3.983E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.002E+00	6.973E-01
37	-2.566E-01	2.497E-01	3.507E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.002E+00	2.603E-01
38	-1.315E-01	8.381E-02	4.346E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.002E+00	2.715E+00
39	-1.070E-01	4.167E-02	4.329E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.002E+00	6.237E+00
40	-3.516E-01	-2.238E-01	3.836E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.002E+00	3.191E+00
41	2.924E-01	2.674E-01	6.227E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.002E+00	2.227E+00
42	2.616E-02	-4.493E-01	4.901E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.002E+00	1.044E+00

43	-1.978E-01	2.792E-01	4.914E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.002E+00	9.409E-01
44	5.840E-03	3.009E-01	5.028E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.002E+00	1.010E+01
45	3.897E-01	1.599E-01	4.318E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.002E+00	3.212E-01
46	1.852E-01	9.028E-02	4.940E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.002E+00	3.341E+00
47	4.645E-01	-6.766E-03	1.815E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.002E+00	1.290E+00
48	3.852E-01	1.894E-01	1.802E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.002E+00	9.089E+00
49	-4.458E-01	2.067E-04	1.152E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.002E+00	2.504E+00
50	2.314E-01	1.313E-01	2.290E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.002E+00	1.711E+00

CYCLE 1 K(COLLISION) .849539 REMOVAL LIFETIME(ABS) 2.8101E+03 SOURCE POINTS GENERATED 2555

CYCLE 2 K(COLLISION) .879537 REMOVAL LIFETIME(ABS) 2.8060E+03 SOURCE POINTS GENERATED 3077

CYCLE 3 K(COLLISION) .881050 REMOVAL LIFETIME(ABS) 2.8518E+03 SOURCE POINTS GENERATED 2979

CYCLE 4 K(COLLISION) .874424 REMOVAL LIFETIME(ABS) 2.6356E+03 SOURCE POINTS GENERATED 2925

CYCLE 5 K(COLLISION) .879605 REMOVAL LIFETIME(ABS) 2.6546E+03 SOURCE POINTS GENERATED 3010

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .889934 REMOVAL LIFETIME(ABS) 2.8899E+03 SOURCE POINTS GENERATED 3090

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.856015	.872975	.0194	K(COL/ABS)	.000000	.0000	.000000	.0000	.0000
K(ABSORPTION)	.866506	.874645	.0093	K(ABS/TK LN)	.000000	.0000	.000000	.0000	.0000
K(TRK LENGTH)	.861972	.886498	.0277	K(TK LN/COL)	.000000	.0000	.000000	.0000	.0000
REM LIFE(COL)	2.5829E+03	2.7570E+03	.0631	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000	.0000
REM LIFE(ABS)	2.6194E+03	2.7547E+03	.0491						
SOURCE POINTS GENERATED	2918								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.856392	.867447	.0130	K(COL/ABS)	.867943	.0107	.869180	.0111	.9176
K(ABSORPTION)	.856028	.868439	.0090	K(ABS/TK LN)	.867976	.0181	.868892	.0001	1.0000
K(TRK LENGTH)	.829545	.867514	.0273	K(TK LN/COL)	.867480	.0198	.867408	.0124	.9147
REM LIFE(COL)	2.7315E+03	2.7485E+03	.0367	LIFE(COL/ABS)	2.7500E+03	.0325	2.7615E+03	.0078	.9990
REM LIFE(ABS)	2.7453E+03	2.7515E+03	.0284						
SOURCE POINTS GENERATED	2998								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.883428	.871442	.0102	K(COL/ABS)	.873812	.0101	.872850	.0127	.8410
K(ABSORPTION)	.899409	.876181	.0108	K(ABS/TK LN)	.873431	.0142	.877169	.0130	.7208
K(TRK LENGTH)	.880184	.870681	.0196	K(TK LN/COL)	.871062	.0145	.871860	.0098	.8865
REM LIFE(COL)	2.6560E+03	2.7254E+03	.0275	K(COL/ABS/TK LN)	.872768	.0127	.872354	.0156	
REM LIFE(ABS)	2.6794E+03	2.7335E+03	.0213	LIFE(COL/ABS)	2.7295E+03	.0244	2.7605E+03	.0048	.9991
SOURCE POINTS GENERATED	3092								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.875829	.872320	.0080	K(COL/ABS)	.873040	.0079	.872730	.0090	.7531
K(ABSORPTION)	.864080	.873761	.0089	K(ABS/TK LN)	.874857	.0111	.873802	.0102	.5200
K(TRK LENGTH)	.897034	.875952	.0162	K(TK LN/COL)	.874136	.0117	.870634	.0074	.8636
REM LIFE(COL)	2.8501E+03	2.7504E+03	.0230	K(COL/ABS/TK LN)	.874011	.0099	.870455	.0095	

REM LIFE(ABS) 2.8283E+03 2.7525E+03 .0177
SOURCE POINTS GENERATED 2988

LIFE(COL/ABS) 2.7514E+03 .0204 2.7594E+03 .0035 .9992

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR CYCLE 11 AVE OF 6 CYCLES
K(COLLISION) .842315 .867319 .0087
K(ABSORPTION) .884280 .875514 .0075
K(TRK LENGTH) .866291 .874342 .0134
REM LIFE(COL) 2.7860E+03 2.7563E+03 .0189
REM LIFE(ABS) 2.8412E+03 2.7673E+03 .0154
SOURCE POINTS GENERATED 2880

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COL/ABS) .871417 .0067 .872324 .0075 .3678
K(ABS/TK LN) .874928 .0091 .875432 .0083 .4597
K(TK LN/COL) .870830 .0103 .866480 .0098 .7325
K(COL/ABS/TK LN) .872392 .0083 .871088 .0094 .9705
LIFE(COL/ABS) 2.7618E+03 .0170 2.7840E+03 .0146

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
K(COLLISION) .869030 .867563 .0074
K(ABSORPTION) .865785 .874124 .0065
K(TRK LENGTH) .865646 .873099 .0114
REM LIFE(COL) 2.7145E+03 2.7503E+03 .0161
REM LIFE(ABS) 2.7350E+03 2.7626E+03 .0131
SOURCE POINTS GENERATED 3070

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COL/ABS) .870844 .0057 .871403 .0063 .3472
K(ABS/TK LN) .873612 .0078 .874049 .0071 .4727
K(TK LN/COL) .870331 .0088 .866974 .0081 .7215
K(COL/ABS/TK LN) .871596 .0071 .870437 .0073 .9710
LIFE(COL/ABS) 2.7565E+03 .0145 2.7818E+03 .0122

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
K(COLLISION) .857374 .866290 .0066
K(ABSORPTION) .892092 .876370 .0062
K(TRK LENGTH) .859210 .871363 .0101
REM LIFE(COL) 2.5737E+03 2.7282E+03 .0162
REM LIFE(ABS) 2.5961E+03 2.7418E+03 .0137
SOURCE POINTS GENERATED 3004

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COL/ABS) .871330 .0050 .871614 .0055 .2156
K(ABS/TK LN) .873867 .0068 .875482 .0065 .3407
K(TK LN/COL) .868827 .0078 .865671 .0071 .7336
K(COL/ABS/TK LN) .871341 .0062 .870814 .0066 .9770
LIFE(COL/ABS) 2.7350E+03 .0149 2.7656E+03 .0128

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR CYCLE 14 AVE OF 9 CYCLES
K(COLLISION) .872244 .866951 .0058
K(ABSORPTION) .875083 .876227 .0055
K(TRK LENGTH) .869834 .871193 .0089
REM LIFE(COL) 2.7972E+03 2.7359E+03 .0145
REM LIFE(ABS) 2.7767E+03 2.7457E+03 .0122
SOURCE POINTS GENERATED 3085

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COL/ABS) .871589 .0044 .871897 .0048 .2097
K(ABS/TK LN) .873710 .0060 .875335 .0056 .3411
K(TK LN/COL) .869072 .0069 .866526 .0062 .7242
K(COL/ABS/TK LN) .871457 .0054 .871306 .0056 .9746
LIFE(COL/ABS) 2.7408E+03 .0133 2.7619E+03 .0112

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR CYCLE 15 AVE OF 10 CYCLES
K(COLLISION) .869565 .867213 .0052
K(ABSORPTION) .885011 .877106 .0050
K(TRK LENGTH) .861342 .870208 .0081
REM LIFE(COL) 2.7800E+03 2.7403E+03 .0131
REM LIFE(ABS) 2.8101E+03 2.7521E+03 .0111
SOURCE POINTS GENERATED 2956

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COL/ABS) .872159 .0040 .872371 .0043 .2167
K(ABS/TK LN) .873657 .0053 .875742 .0051 .3028
K(TK LN/COL) .868711 .0062 .866971 .0055 .7078
K(COL/ABS/TK LN) .871509 .0049 .872074 .0052 .9714
LIFE(COL/ABS) 2.7462E+03 .0120 2.7691E+03 .0106

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR CYCLE 16 AVE OF 11 CYCLES
K(COLLISION) .891656 .869435 .0054
K(ABSORPTION) .877183 .877113 .0045
K(TRK LENGTH) .860546 .869330 .0074
REM LIFE(COL) 2.6781E+03 2.7347E+03 .0120

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
K(COL/ABS) .873274 .0038 .874036 .0040 .1913
K(ABS/TK LN) .873221 .0049 .875602 .0046 .2997
K(TK LN/COL) .869382 .0056 .869416 .0055 .5510
K(COL/ABS/TK LN) .871959 .0044 .874067 .0046

REM LIFE(ABS) 2.6687E+03 2.7446E+03 .0105 LIFE(COL/ABS) 2.7396E+03 .0112 2.7562E+03 .0103 .9683
SOURCE POINTS GENERATED 3031

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.886455		.870853		.0052	K(COL/ABS)	.874250 .0037	.875130 .0038	.2258
K(ABSORPTION)	.883533		.877648		.0042	K(ABS/TK LN)	.873999 .0045	.876294 .0042	.3172
K(TRK LENGTH)	.881568		.870350		.0068	K(TK LN/COL)	.870601 .0053	.870754 .0053	.5693
REM LIFE(COL)	2.8397E+03		2.7434E+03		.0114	K(COL/ABS/TK LN)	.872950 .0042	.875150 .0043	
REM LIFE(ABS)	2.7993E+03		2.7491E+03		.0097	LIFE(COL/ABS)	2.7463E+03 .0104	2.7557E+03 .0093	.9639
SOURCE POINTS GENERATED	2957								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.869769		.870770		.0047	K(COL/ABS)	.874684 .0034	.875498 .0035	.2118
K(ABSORPTION)	.889999		.878598		.0040	K(ABS/TK LN)	.873746 .0042	.876466 .0039	.2250
K(TRK LENGTH)	.851431		.868894		.0065	K(TK LN/COL)	.869832 .0050	.870440 .0048	.5552
REM LIFE(COL)	2.6787E+03		2.7384E+03		.0107	K(COL/ABS/TK LN)	.872754 .0039	.875368 .0041	
REM LIFE(ABS)	2.6973E+03		2.7451E+03		.0090	LIFE(COL/ABS)	2.7418E+03 .0098	2.7531E+03 .0086	.9648
SOURCE POINTS GENERATED	2966								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.876987		.871214		.0044	K(COL/ABS)	.874090 .0032	.874287 .0034	.1358
K(ABSORPTION)	.855746		.876966		.0041	K(ABS/TK LN)	.873793 .0039	.875113 .0037	.0499
K(TRK LENGTH)	.893052		.870620		.0063	K(TK LN/COL)	.870917 .0048	.871133 .0045	.5599
REM LIFE(COL)	2.8158E+03		2.7440E+03		.0101	K(COL/ABS/TK LN)	.872933 .0036	.874195 .0036	
REM LIFE(ABS)	2.8004E+03		2.7491E+03		.0085	LIFE(COL/ABS)	2.7465E+03 .0092	2.7555E+03 .0080	.9655
SOURCE POINTS GENERATED	3023								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.889243		.872416		.0043	K(COL/ABS)	.874282 .0030	.874448 .0031	.0502
K(ABSORPTION)	.864707		.876148		.0040	K(ABS/TK LN)	.874178 .0036	.874972 .0034	-.0232
K(TRK LENGTH)	.894434		.872208		.0062	K(TK LN/COL)	.872312 .0047	.872393 .0045	.6011
REM LIFE(COL)	2.7814E+03		2.7465E+03		.0094	K(COL/ABS/TK LN)	.873591 .0034	.874419 .0033	
REM LIFE(ABS)	2.7265E+03		2.7476E+03		.0079	LIFE(COL/ABS)	2.7470E+03 .0086	2.7486E+03 .0077	.9520
SOURCE POINTS GENERATED	3066								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1 PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb2)

02/20/95 19:38:52
PROBID = 02/20/95 17:49:04

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER SOURCE PARTICLE)	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY (PER SOURCE PARTICLE)
SOURCE	59598	1.0067E+00	2.0607E+00	ESCAPE	2	2.3558E-05	2.7036E-05
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	4.1706E-02	8.6679E-07	WEIGHT CUTOFF	59691	4.1976E-02	3.4663E-05
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.0896E-07
(N,XN)	189	2.5478E-03	1.8579E-03
FISSION	0	0.	0.
TOTAL	59787	1.0510E+00	2.0625E+00

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
DOWNSCATTERING	0	0.	1.9500E+00
CAPTURE	0	6.7380E-01	3.2300E-02
LOSS TO (N,XN)	94	1.2673E-03	1.0391E-02
LOSS TO FISSION	0	3.3393E-01	6.9789E-02
TOTAL	59787	1.0510E+00	2.0625E+00

NUMBER OF NEUTRONS BANKED	95
NEUTRON TRACKS PER SOURCE PARTICLE	1.0032E+00
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.1585E+01
TOTAL NEUTRON COLLISIONS	3074382
NET MULTIPLICATION	1.0013E+00 .0002

AVERAGE LIFETIME, SHAKES	
ESCAPE	1.7106E+03
CAPTURE	2.7459E+03
CAPTURE OR ESCAPE	2.7458E+03
ANY TERMINATION	2.9647E+03

CUTOFFS	
TCO	1.0000E+34
ECO	.0000E+00
WC1	-5.0000E-01
WC2	-2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN	109.53 MINUTES
COMPUTER TIME IN MCRUN	109.40 MINUTES
SOURCE PARTICLES PER MINUTE	5.4477E+02
RANDOM NUMBERS GENERATED	38243529

MAXIMUM NUMBER EVER IN BANK	2
BANK OVERFLOWS TO BACKUP FILE	0
FIELD LENGTH	0
MOST RANDOM NUMBERS USED WAS	10801 IN HISTORY 47346

RANGE OF SAMPLED SOURCE WEIGHTS = 9.7025E-01 TO 1.1742E+00
 WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						
1NEUTRON	ACTIVITY IN EACH CELL						

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	19747	8393	2.5394E+00	1.4907E-04	4.0691E-01	7.8176E-01	1.1743E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	711778	59693	287725	4.1198E+00	7.7565E-04	7.4976E-01	8.8946E-01	2.5240E+00
33	34	5405	281	1092	1.1532E-02	6.9217E-05	3.1041E-01	6.2053E-01	4.2740E+00
34	35	300	31	839	6.8703E-03	2.1528E-05	2.0285E-01	5.1845E-01	5.9707E-01
35	36	1278567	59693	8	1.1041E-04	6.6529E-04	7.1106E-01	8.8571E-01	3.4857E+03
36	37	532	30	27	2.2387E-04	3.5610E-05	2.5423E-01	5.3184E-01	7.2275E-01
37	38	1385248	59693	50400	7.5723E-01	6.3981E-04	6.9987E-01	8.8510E-01	4.1035E+00
38	39	569	30	229	1.8998E-03	2.3541E-05	1.9645E-01	5.2317E-01	6.1131E-01
39	40	2212114	59693	1370433	1.8452E+01	5.5725E-04	6.6763E-01	8.8330E-01	1.6482E+00
40	41	57477	31267	89657	1.1936E+00	3.9593E-04	6.2045E-01	8.7444E-01	1.5547E+00
41	42	18	7	49	3.7651E-04	3.0112E-08	4.0381E-08	4.6667E-01	2.9388E-01
42	43	121412	33002	3779	5.5954E-02	4.1552E-04	6.2789E-01	8.7447E-01	4.1312E+00
43	44	135968	35330	30001	3.9911E-01	4.2257E-04	6.3286E-01	8.7558E-01	1.5754E+00
44	45	148779	36368	3267	4.8638E-02	4.2939E-04	6.3558E-01	8.7658E-01	4.1308E+00
45	46	180839	41446	70956	9.4821E-01	4.4009E-04	6.3872E-01	8.7725E-01	1.5870E+00
46	47	7180	3358	7366	9.8775E-02	4.3559E-04	6.5587E-01	8.7957E-01	1.5983E+00
47	48	9643	3701	343	5.1001E-03	4.5959E-04	6.3500E-01	8.8092E-01	4.1069E+00
48	49	12634	5081	6302	8.4790E-02	4.7574E-04	6.3910E-01	8.8406E-01	1.5938E+00
49	50	26935	14066	44086	5.9775E-01	5.3830E-04	6.0475E-01	8.8487E-01	1.5673E+00
50	51	25207	13352	7989	1.1384E-01	8.2209E-04	6.2949E-01	8.8945E-01	2.2554E+00
51	52	26094	13250	5059	6.5131E-02	1.0709E-03	6.6048E-01	8.9743E-01	5.7626E+00
52	53	24868	12708	8157	1.1418E-01	8.0774E-04	6.3395E-01	8.8319E-01	2.2866E+00
53	54	307	77	2032	1.7383E-02	4.1323E-05	2.0809E-01	5.7962E-01	7.6410E-01
54	55	27289	14248	45152	6.1327E-01	5.2829E-04	6.1793E-01	8.8486E-01	1.5779E+00
55	56	25421	13494	8386	1.1893E-01	8.4682E-04	6.5723E-01	8.8740E-01	2.2601E+00
56	57	26401	13378	5092	6.5054E-02	1.1081E-03	6.8198E-01	8.9682E-01	5.7259E+00
57	58	25049	12867	8290	1.1628E-01	8.4046E-04	6.6238E-01	8.8182E-01	2.2928E+00
58	59	292	71	1908	1.7800E-02	3.6867E-05	1.4525E-01	6.1938E-01	6.9557E-01
59	60	46686	18327	72553	9.9611E-01	6.5203E-04	5.8203E-01	8.8739E-01	1.5580E+00
60	61	44713	17366	14047	2.0003E-01	1.1152E-03	6.1819E-01	8.9060E-01	2.3961E+00
61	62	353	78	1465	1.3009E-02	5.6063E-05	2.9150E-01	5.9335E-01	8.7509E-01
62	63	46854	18382	72061	9.9025E-01	6.7755E-04	5.9087E-01	8.8837E-01	1.5716E+00
63	64	45141	17504	14465	2.0545E-01	1.1384E-03	6.1873E-01	8.8976E-01	2.3841E+00
64	65	383	85	1632	1.5377E-02	5.2117E-05	1.8764E-01	6.3732E-01	8.0132E-01
65	66	8836	4405	395922	3.6667E+00	5.6863E-05	2.6767E-01	6.2158E-01	8.5910E-01
66	67	8667	3457	12618	1.3915E-01	1.9679E-04	4.2937E-01	7.1999E-01	1.8454E+00
67	68	8413	3396	12406	1.3505E-01	2.1075E-04	4.6604E-01	7.1957E-01	1.8700E+00
68	70	29512	9136	9031	1.2971E-01	1.7055E-03	6.1321E-01	8.9491E-01	2.4959E+00
69	71	30132	8783	8584	1.2269E-01	3.5859E-03	6.3712E-01	9.0785E-01	6.3460E+00
70	72	14857	7786	42771	6.1672E-01	4.4321E-03	6.2916E-01	8.9888E-01	2.6659E+00
71	73	29282	9074	8916	1.2765E-01	1.6977E-03	6.1120E-01	8.9568E-01	2.4928E+00
72	74	29818	8741	8297	1.1800E-01	3.7116E-03	6.3623E-01	9.1018E-01	6.3205E+00
73	75	14675	7741	42904	6.1865E-01	4.4473E-03	6.1902E-01	8.9893E-01	2.6728E+00
74	76	134	45	2795	2.4861E-02	5.1186E-05	2.3705E-01	5.9070E-01	8.4673E-01
75	77	124	39	2495	2.2738E-02	3.0803E-05	1.6856E-01	6.0099E-01	6.6874E-01
76	80	14	5	33	2.0793E-04	3.0525E-05	1.4862E-01	4.1122E-01	1.5603E+00
77	81	3131	1373	9359	1.0160E-01	3.4760E-04	5.2526E-01	7.2528E-01	2.0917E+00
78	82	2003	804	10569	1.1365E-01	2.8109E-04	4.4551E-01	7.5573E-01	1.3194E+00
79	83	4	4	382	3.2205E-03	2.4066E-05	1.1322E-01	5.5743E-01	6.0769E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1546	621	4444	5.4154E-02	8.8366E-04	5.4150E-01	7.9414E-01	2.1839E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

84	88	982	421	8452	9.7142E-02	2.0858E-03	5.1660E-01	7.9897E-01	4.6716E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	365	203	39243	3.4020E-01	3.0394E-05	1.2749E-01	5.7199E-01	6.4234E-01
TOTAL		6862698	682384	3074382	3.9416E+01				

1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-5.1751E-01	-5.1751E-01
2	2	2.6981E-01	.0000E+00	.0000E+00	-7.5249E-01	-4.8269E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.4361E-02	-1.4361E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-4.7921E-02	-4.7921E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.3764E-02	-1.3764E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.3279E-01	-1.3279E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6336E+00	-1.6336E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-2.0040E+00	-2.0040E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-1.7583E-01	-1.7583E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.8021E-01	-1.8021E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.5404E-01	-3.5404E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.5384E-01	-3.5384E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.9803E-02	-7.9803E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-8.0667E-02	-8.0667E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-9.1065E-02	-9.1065E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.5543E-02	-7.5543E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.1871E-02	-7.1871E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.0070E-02	-7.0070E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-1.0569E-01	-1.0569E-01
20	21	.0000E+00	.0000E+00	.0000E+00	-9.9941E-02	-9.9941E-02
21	22	.0000E+00	.0000E+00	.0000E+00	-9.0642E-02	-9.0642E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.5869E-02	-8.5869E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1361E-01	-1.1361E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1316E-01	-1.1316E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1968E-01	-1.1968E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.0964E-01	-1.0964E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0311E-01	-1.0311E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.5063E-02	-8.5063E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.2288E-02	-9.2288E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0289E-01	-1.0289E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8956E+01	-1.8956E+01
32	33	9.6835E+00	1.0067E+00	.0000E+00	-9.5036E+00	1.1866E+00
33	34	5.5834E-02	.0000E+00	.0000E+00	-5.3055E-02	2.7799E-03
34	35	2.6377E-03	.0000E+00	.0000E+00	-2.5014E-03	1.3630E-04
35	36	1.9008E+01	.0000E+00	.0000E+00	-1.8997E+01	1.0755E-02
36	37	4.7003E-03	.0000E+00	.0000E+00	-4.6935E-03	6.8184E-06
37	38	2.0590E+01	.0000E+00	.0000E+00	-2.0512E+01	7.8119E-02
38	39	5.0199E-03	.0000E+00	.0000E+00	-4.9987E-03	2.1215E-05
39	40	3.2817E+01	.0000E+00	.0000E+00	-1.0759E+01	2.2058E+01
40	41	8.4565E-01	.0000E+00	.0000E+00	-8.4202E-01	3.6259E-03
41	42	1.4294E-04	.0000E+00	.0000E+00	-1.4063E-04	2.3160E-06
42	43	1.7829E+00	.0000E+00	.0000E+00	-1.7823E+00	5.9983E-04
43	44	1.9983E+00	.0000E+00	.0000E+00	-1.9971E+00	1.1458E-03
44	45	2.1879E+00	.0000E+00	.0000E+00	-2.1873E+00	5.3791E-04
45	46	2.6644E+00	.0000E+00	.0000E+00	-1.1315E+00	1.5329E+00
46	47	1.0596E-01	.0000E+00	.0000E+00	-6.4214E-02	4.1746E-02
47	48	1.4242E-01	.0000E+00	.0000E+00	-1.3720E-01	5.2164E-03
48	49	1.8713E-01	.0000E+00	.0000E+00	-7.3044E-02	1.1408E-01
49	50	4.0153E-01	.0000E+00	.0000E+00	-2.3237E-01	1.6916E-01
50	51	3.7871E-01	.0000E+00	.0000E+00	-3.6990E-01	8.8060E-03

TOTAL	1.0087E+02	1.0067E+00	.0000E+00	.0000E+00	-1.0087E+02	1.0067E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

[illegible]

18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	-3.6290E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6290E-04
33	34	.0000E+00	.0000E+00	1.5865E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5865E-05
34	35	.0000E+00	.0000E+00	-1.2494E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2494E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	2.2676E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2676E-05
38	39	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
39	40	.0000E+00	.0000E+00	5.3296E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.3296E-06
40	41	.0000E+00	.0000E+00	2.5767E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5767E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-2.0746E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0746E-05
43	44	.0000E+00	.0000E+00	3.8121E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8121E-05
44	45	.0000E+00	.0000E+00	-7.4571E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.4571E-06
45	46	.0000E+00	.0000E+00	4.6876E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6876E-06
46	47	.0000E+00	.0000E+00	8.2864E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.2864E-08
47	48	.0000E+00	.0000E+00	-4.1494E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1494E-06
48	49	.0000E+00	.0000E+00	8.4572E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4572E-06
49	50	.0000E+00	.0000E+00	-2.0670E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0670E-05
50	51	.0000E+00	.0000E+00	-6.2816E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.2816E-05
51	52	.0000E+00	.0000E+00	1.5415E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5415E-05
52	53	.0000E+00	.0000E+00	3.6105E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.6105E-05
53	54	.0000E+00	.0000E+00	8.5675E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5675E-06
54	55	.0000E+00	.0000E+00	-3.9014E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9014E-06
55	56	.0000E+00	.0000E+00	8.6775E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6775E-05
56	57	.0000E+00	.0000E+00	1.8710E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.8710E-05
57	58	.0000E+00	.0000E+00	6.4556E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.4556E-05
58	59	.0000E+00	.0000E+00	8.5368E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5368E-06
59	60	.0000E+00	.0000E+00	-2.0586E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0586E-05
60	61	.0000E+00	.0000E+00	-1.0620E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0620E-05
61	62	.0000E+00	.0000E+00	-8.3205E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3205E-06
62	63	.0000E+00	.0000E+00	-3.8671E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8671E-06
63	64	.0000E+00	.0000E+00	-2.5427E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5427E-05
64	65	.0000E+00	.0000E+00	-4.1451E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1451E-06
65	66	.0000E+00	.0000E+00	5.4586E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.4586E-07
66	67	.0000E+00	.0000E+00	2.5817E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.5817E-04
67	68	.0000E+00	.0000E+00	-2.7386E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7386E-05
68	70	.0000E+00	.0000E+00	-4.3821E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.3821E-06
69	71	.0000E+00	.0000E+00	-2.8628E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8628E-05
70	72	.0000E+00	.0000E+00	-7.6080E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.6080E-05
71	73	.0000E+00	.0000E+00	3.6601E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.6601E-05
72	74	.0000E+00	.0000E+00	-6.0375E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.0375E-05
73	75	.0000E+00	.0000E+00	-6.2630E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.2630E-05
74	76	.0000E+00	.0000E+00	-3.9277E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9277E-06
75	77	.0000E+00	.0000E+00	4.3001E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3001E-06
76	80	.0000E+00	.0000E+00	4.1205E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1205E-06
77	81	.0000E+00	.0000E+00	4.2549E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2549E-05

78	82	.0000E+00	.0000E+00	-4.9933E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.9933E-05
79	83	.0000E+00	.0000E+00	3.7902E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7902E-08
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	8.0596E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.0596E-05
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-3.6745E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.6745E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-3.1001E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.1001E-05
TOTAL		.0000E+00	.0000E+00	-2.7015E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.7015E-04

1NEUTRON WEIGHT BALANCE IN EACH CELL -- PHYSICAL EVENTS PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-1.0261E-02	.0000E+00	-1.0261E-02
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.4576E-03	.0000E+00	-3.5463E-01	-1.2222E-03	-3.3393E-01
33	34	.0000E+00	.0000E+00	-2.2864E-04	.0000E+00	-2.2864E-04
34	35	.0000E+00	.0000E+00	-3.9337E-05	.0000E+00	-3.9337E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-1.2765E-06	.0000E+00	-1.2765E-06
37	38	9.0179E-05	.0000E+00	-6.5869E-03	-4.5089E-05	-6.5418E-03
38	39	.0000E+00	.0000E+00	-1.0395E-05	.0000E+00	-1.0395E-05
39	40	.0000E+00	.0000E+00	-4.7899E-02	.0000E+00	-4.7899E-02
40	41	.0000E+00	.0000E+00	-3.6517E-03	.0000E+00	-3.6517E-03
41	42	.0000E+00	.0000E+00	-2.3160E-06	.0000E+00	-2.3160E-06
42	43	.0000E+00	.0000E+00	-5.7909E-04	.0000E+00	-5.7909E-04
43	44	.0000E+00	.0000E+00	-1.1839E-03	.0000E+00	-1.1839E-03
44	45	.0000E+00	.0000E+00	-5.3045E-04	.0000E+00	-5.3045E-04

45	46	.0000E+00	.0000E+00	-2.7477E-03	.0000E+00	.0000E+00	-2.7477E-03
46	47	.0000E+00	.0000E+00	-2.9228E-04	.0000E+00	.0000E+00	-2.9228E-04
47	48	.0000E+00	.0000E+00	-5.3454E-05	.0000E+00	.0000E+00	-5.3454E-05
48	49	.0000E+00	.0000E+00	-2.3237E-04	.0000E+00	.0000E+00	-2.3237E-04
49	50	.0000E+00	.0000E+00	-1.4707E-03	.0000E+00	.0000E+00	-1.4707E-03
50	51	.0000E+00	.0000E+00	-4.6572E-03	.0000E+00	.0000E+00	-4.6572E-03
51	52	.0000E+00	.0000E+00	-3.2915E-02	.0000E+00	.0000E+00	-3.2915E-02
52	53	.0000E+00	.0000E+00	-4.8832E-03	.0000E+00	.0000E+00	-4.8832E-03
53	54	.0000E+00	.0000E+00	-8.6502E-05	.0000E+00	.0000E+00	-8.6502E-05
54	55	.0000E+00	.0000E+00	-1.5475E-03	.0000E+00	.0000E+00	-1.5475E-03
55	56	.0000E+00	.0000E+00	-4.7553E-03	.0000E+00	.0000E+00	-4.7553E-03
56	57	.0000E+00	.0000E+00	-3.3250E-02	.0000E+00	.0000E+00	-3.3250E-02
57	58	.0000E+00	.0000E+00	-4.9031E-03	.0000E+00	.0000E+00	-4.9031E-03
58	59	.0000E+00	.0000E+00	-9.0673E-05	.0000E+00	.0000E+00	-9.0673E-05
59	60	.0000E+00	.0000E+00	-2.1249E-03	.0000E+00	.0000E+00	-2.1249E-03
60	61	.0000E+00	.0000E+00	-6.6919E-03	.0000E+00	.0000E+00	-6.6919E-03
61	62	.0000E+00	.0000E+00	-6.7574E-05	.0000E+00	.0000E+00	-6.7574E-05
62	63	.0000E+00	.0000E+00	-2.0507E-03	.0000E+00	.0000E+00	-2.0507E-03
63	64	.0000E+00	.0000E+00	-6.8796E-03	.0000E+00	.0000E+00	-6.8796E-03
64	65	.0000E+00	.0000E+00	-7.8813E-05	.0000E+00	.0000E+00	-7.8813E-05
65	66	.0000E+00	.0000E+00	-1.8561E-02	.0000E+00	.0000E+00	-1.8561E-02
66	67	.0000E+00	.0000E+00	-1.2794E-02	.0000E+00	.0000E+00	-1.2794E-02
67	68	.0000E+00	.0000E+00	-1.2853E-02	.0000E+00	.0000E+00	-1.2853E-02
68	70	.0000E+00	.0000E+00	-3.2494E-03	.0000E+00	.0000E+00	-3.2494E-03
69	71	.0000E+00	.0000E+00	-2.8698E-02	.0000E+00	.0000E+00	-2.8698E-02
70	72	.0000E+00	.0000E+00	-8.3376E-03	.0000E+00	.0000E+00	-8.3376E-03
71	73	.0000E+00	.0000E+00	-3.4468E-03	.0000E+00	.0000E+00	-3.4468E-03
72	74	.0000E+00	.0000E+00	-2.8554E-02	.0000E+00	.0000E+00	-2.8554E-02
73	75	.0000E+00	.0000E+00	-8.0903E-03	.0000E+00	.0000E+00	-8.0903E-03
74	76	.0000E+00	.0000E+00	-1.2931E-04	.0000E+00	.0000E+00	-1.2931E-04
75	77	.0000E+00	.0000E+00	-1.1542E-04	.0000E+00	.0000E+00	-1.1542E-04
76	80	.0000E+00	.0000E+00	-3.4761E-05	.0000E+00	.0000E+00	-3.4761E-05
77	81	.0000E+00	.0000E+00	-7.3709E-03	.0000E+00	.0000E+00	-7.3709E-03
78	82	.0000E+00	.0000E+00	-3.5220E-04	.0000E+00	.0000E+00	-3.5220E-04
79	83	.0000E+00	.0000E+00	-1.7547E-05	.0000E+00	.0000E+00	-1.7547E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1096E-03	.0000E+00	.0000E+00	-2.1096E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.9623E-03	.0000E+00	.0000E+00	-1.9623E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7415E-03	.0000E+00	.0000E+00	-1.7415E-03

TOTAL 2.5478E-03 .0000E+00 -6.7380E-01 -1.2673E-03 -3.3393E-01 -1.0065E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	207390 12924	2.3715E+00 1.6787E-01	1.0192E-02 6.8453E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7097E-01 2.3926E-04 2.8706E-05 1.8626E-06 2.3827E-07 3.0867E-05 1.4226E-06 4.5949E-10 6.8903E-05 4.4265E-03 9.9057E-04 3.2088E-01 7.6759E-05 1.4002E-05 1.5156E-03 4.3508E-04 2.0467E-04 5.2259E-05 6.1062E-05 1.9299E-07 5.8652E-06 1.9976E-08	96396 544 61 861 11 131 377 0 128 20873 820 147033 193 49 14460 3031 2265 100 364 8 20 0	1.4263E+00 7.2398E-03 8.5125E-04 9.6740E-03 1.3412E-04 1.7402E-03 4.1562E-03 .0000E+00 1.7538E-03 4.1622E-01 1.2077E-02 2.1790E+00 2.4334E-03 5.8405E-04 2.9583E-01 4.0494E-02 4.7215E-02 1.4465E-03 4.6432E-03 2.3516E-04 2.6919E-04 2.8891E-06	1.2014E-03 6.1229E-03 7.1813E-04 9.5736E-03 1.2748E-04 1.5407E-03 4.1503E-03 .0000E+00 1.1685E-03 3.7243E-02 4.3117E-03 1.8324E-01 1.9947E-03 4.7367E-04 5.4800E-02 3.5726E-02 6.7979E-03 9.8231E-04 4.1830E-03 1.8550E-05 2.5809E-04 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2619E-05 1.8222E-01 1.8523E-04 2.0980E-02 2.2174E-05 1.6768E-05 1.1149E-01 1.2159E-04 1.8717E-02 1.1207E-05 5.4294E-05 9.0793E-05 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.3281E-05 1.2102E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.1875E-05 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	1 3 1 1080 7	1.6576E-05 2.5316E-05 7.5529E-06 1.1419E-02 6.3504E-05	2.1996E-11 8.3479E-06 1.3049E-06 2.1477E-04 4.2215E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	796 43	6.4506E-03 4.1971E-04	3.7375E-05 1.9618E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	8	1.1041E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26 1	2.1872E-04 5.1442E-06	1.2763E-06 1.9728E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C 26000.55C 40000.50C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01	204 85 202 49441	2.9925E-03 1.2223E-03 2.7671E-03 7.4328E-01	2.8553E-06 1.0710E-04 1.3568E-04 6.1670E-03	.0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 4.5089E-05

		50000.35C	1.0711E-02	468	6.9621E-03	1.7424E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	221	1.8327E-03	1.0392E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	8	6.7179E-05	2.1100E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1255567	1.6766E+01	4.6653E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	114866	1.6862E+00	1.2458E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	82763	1.0932E+00	3.5811E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6894	1.0040E-01	7.0557E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	47	3.5652E-04	2.3151E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	1.9985E-05	8.7675E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	13	1.8563E-04	1.6191E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	4.0555E-05	9.8356E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	17	2.2941E-04	1.6257E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3714	5.5022E-02	5.3854E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	32	4.7640E-04	1.4450E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	27692	3.6564E-01	1.1639E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2309	3.3464E-02	2.0047E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	12	1.7821E-04	1.9229E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	5	6.9487E-05	9.6421E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	14	1.9802E-04	1.1886E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3205	4.7722E-02	4.9383E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	31	4.7015E-04	1.5090E-05	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	65487	8.6851E-01	2.6883E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5469	7.9701E-02	5.9431E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	6756	8.9831E-02	2.8571E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	610	8.9441E-03	6.5611E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	1	1.6895E-05	1.0860E-13	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	1.1983E-05	2.1065E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	3	3.9339E-05	2.1915E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	335	4.9837E-03	4.6415E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	3	4.8185E-05	2.7411E-06	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	5783	7.7271E-02	2.2643E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	519	7.5191E-03	5.9365E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	40324	5.4227E-01	1.4368E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3762	5.5480E-02	3.3905E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	1	1.6260E-05	2.8619E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	17	2.2381E-04	1.3917E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	7.0870E-04	3.2705E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.9527E-05	6.4175E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	3	4.9504E-05	2.1447E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	987	1.4408E-02	7.8743E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	416	6.2488E-03	4.6115E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4908	6.9195E-02	2.4052E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1505	2.1417E-02	7.7548E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	100	1.5055E-03	2.0855E-04	.0000E+00	.0000E+00
51	52	5010.50C	9.4255E-03	2984	3.2933E-02	3.2635E-02	.0000E+00	.0000E+00
		5011.56C	3.9053E-02	115	1.7371E-03	1.3238E-07	.0000E+00	.0000E+00

		13027.50C	9.5103E-01	1953	3.0351E-02	2.7728E-04	.0000E+00	.0000E+00
		29000.50C	4.9506E-04	7	1.1001E-04	2.4027E-06	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	6	8.0341E-05	1.1979E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	28	3.9391E-04	1.5976E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	6.3136E-04	5.4459E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.7040E-05	7.9092E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6096E-05	3.7758E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1006	1.4526E-02	8.4531E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	396	6.0300E-03	3.8335E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5025	6.9619E-02	2.6256E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1512	2.0863E-02	7.8064E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	135	2.0024E-03	2.2647E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1923	1.6287E-02	8.6469E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	109	1.0963E-03	3.2684E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	41373	5.5756E-01	1.5023E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3779	5.5709E-02	4.5182E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	3	3.2731E-05	1.0688E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	21	3.2577E-04	8.4390E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	7.0633E-04	2.7746E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	9.4219E-05	6.6005E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1304E-05	1.1304E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1010	1.4770E-02	8.2700E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	458	6.9438E-03	4.5131E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5179	7.2547E-02	2.4858E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1547	2.1805E-02	8.1963E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	114	1.6791E-03	1.5849E-04	.0000E+00	.0000E+00
56	57	5010.50C	9.4255E-03	3032	3.3329E-02	3.3007E-02	.0000E+00	.0000E+00
		5011.56C	3.9053E-02	156	2.3419E-03	2.2106E-07	.0000E+00	.0000E+00
		13027.50C	9.5103E-01	1902	2.9355E-02	2.4198E-04	.0000E+00	.0000E+00
		29000.50C	4.9506E-04	2	2.8389E-05	1.3084E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	10	1.5694E-04	8.1922E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	29	4.3332E-04	1.4202E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	6.3213E-04	3.7993E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.3477E-05	8.0314E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6290E-05	2.8515E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1063	1.5400E-02	8.5178E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	388	5.8079E-03	4.9280E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5077	7.0289E-02	2.5003E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1545	2.1509E-02	8.2076E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	131	1.9739E-03	2.1936E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1817	1.6844E-02	9.0648E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	91	9.5597E-04	2.5705E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	65924	8.9816E-01	2.0670E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6629	9.7951E-02	5.7868E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	15	2.3622E-04	7.7299E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	34	4.7737E-04	1.9249E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	84	1.3375E-03	7.0521E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.6067E-05	3.2353E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.2087E-05	1.8702E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1755	2.5947E-02	1.0923E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	781	1.1762E-02	6.7980E-04	.0000E+00	.0000E+00

		26000.55C	6.4626E-01	8500	1.1918E-01	3.3888E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2624	3.7299E-02	1.1355E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	251	3.7546E-03	3.6727E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1397	1.2317E-02	6.5916E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	68	6.9190E-04	1.6588E-06	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	65536	8.9335E-01	1.9950E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6525	9.6891E-02	5.5619E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	14	1.8089E-04	2.1526E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	6.2434E-04	2.5413E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	100	1.4790E-03	5.5149E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	9.1931E-05	9.2754E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.8010E-05	3.8496E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1848	2.7225E-02	1.2088E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	833	1.2413E-02	5.8967E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8582	1.2034E-01	3.3890E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2768	3.9066E-02	1.2522E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	265	3.9850E-03	4.0795E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1564	1.4639E-02	7.8796E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	68	7.3759E-04	1.7031E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	377504	3.4771E+00	1.8493E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	18418	1.8961E-01	6.8194E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	12	1.4123E-04	3.1380E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	44	4.1208E-04	3.7936E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	40	5.6374E-04	7.0291E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	4.9244E-05	1.1803E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6971E-05	3.4943E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1404	1.6290E-02	2.4542E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	433	5.6984E-03	1.1433E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8235	8.9256E-02	6.7406E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2311	2.5029E-02	2.1461E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	134	1.6898E-03	2.6349E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	4	3.7153E-05	1.6574E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	54	5.9340E-04	4.4665E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	41	4.9438E-04	1.0227E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.8566E-05	5.4467E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1388	1.5807E-02	2.3438E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	395	5.0322E-03	1.2160E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7968	8.5295E-02	6.7914E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2408	2.6057E-02	2.1493E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	146	1.7180E-03	2.9743E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	9	1.3505E-04	1.0426E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	29	4.2483E-04	7.9044E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	57	8.8570E-04	2.7482E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.2557E-05	7.2712E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	4.8684E-05	1.8889E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1221	1.8080E-02	5.5794E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	517	7.6227E-03	3.5374E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5352	7.6186E-02	1.5829E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1672	2.3771E-02	5.0145E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	167	2.5082E-03	2.4077E-04	.0000E+00	.0000E+00

69	71	5010.50C	9.4255E-03	2594	2.9264E-02	2.8419E-02	.0000E+00	.0000E+00
		5011.56C	3.9053E-02	371	5.5640E-03	1.6115E-07	.0000E+00	.0000E+00
		13027.50C	9.5103E-01	5613	8.7770E-02	2.7140E-04	.0000E+00	.0000E+00
		29000.50C	4.9506E-04	6	9.5520E-05	6.8144E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	31	4.8244E-04	4.4880E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	130	1.8808E-03	3.3694E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	274	4.2179E-03	5.3048E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	2.9958E-04	9.7868E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.0637E-04	2.8822E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5940	8.8988E-02	1.4071E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2252	3.3333E-02	8.3891E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	25216	3.5932E-01	3.7539E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	8163	1.1713E-01	1.3096E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	738	1.0952E-02	9.8520E-04	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	10	1.5084E-04	5.6483E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	20	2.7663E-04	3.5253E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	7.0329E-04	1.7214E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.5512E-05	2.6560E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1240	1.8389E-02	6.0627E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	500	7.4954E-03	3.5999E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5244	7.3978E-02	1.6663E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1695	2.4257E-02	5.5270E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	159	2.3790E-03	2.5604E-04	.0000E+00	.0000E+00
72	74	5010.50C	9.4255E-03	2593	2.8948E-02	2.8317E-02	.0000E+00	.0000E+00
		5011.56C	3.9053E-02	296	4.4562E-03	1.6865E-07	.0000E+00	.0000E+00
		13027.50C	9.5103E-01	5398	8.4439E-02	2.3573E-04	.0000E+00	.0000E+00
		29000.50C	4.9506E-04	10	1.5880E-04	1.8199E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	26	3.9773E-04	2.6128E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	148	2.0964E-03	2.4778E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	279	4.2487E-03	1.5017E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	18	2.7996E-04	4.5468E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.9709E-05	1.0629E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6080	9.0420E-02	1.3454E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2349	3.4657E-02	8.8464E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	25187	3.5954E-01	3.6471E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	8048	1.1551E-01	1.2723E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	767	1.1462E-02	8.9951E-04	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	2647	2.3417E-02	1.2927E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	148	1.4440E-03	3.9614E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2393	2.1752E-02	1.1444E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	102	9.8672E-04	9.8095E-07	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2	1.5458E-05	5.8241E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	24	1.4789E-04	2.0896E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	7	4.4577E-05	8.0404E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

77	81	6000.50C	1.3966E-03	2	1.3578E-05	5.7409E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	3.9894E-04	1.9541E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	47	5.5436E-04	9.5902E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.0997E-05	3.4997E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3380E-05	6.2095E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	983	1.1400E-02	1.2716E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	313	4.1323E-03	6.6090E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6015	6.3926E-02	3.8533E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1828	1.9462E-02	1.3529E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	132	1.6556E-03	2.0270E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	9827	1.0441E-01	3.5092E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	742	9.2378E-03	1.2749E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	362	3.0293E-03	1.7539E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	20	1.9117E-04	8.3745E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	5.6335E-05	9.9295E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	5	8.0863E-05	3.8054E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	12	1.6506E-04	9.3232E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	8.3895E-06	2.1274E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	41	5.0133E-04	4.5971E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	601	7.8191E-03	3.9586E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	68	8.8538E-04	7.4027E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1096	1.3023E-02	4.2502E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2472	2.9785E-02	1.0361E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	68	8.4471E-04	5.6522E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	74	9.8364E-04	7.2662E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	45	5.4263E-04	2.3715E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	24	3.2349E-04	7.1563E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	4	4.6078E-05	5.2114E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	9.0399E-06	7.7614E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	190	2.5595E-03	1.0340E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8188	9.3661E-02	1.8568E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

86	90	1001.50C	6.6667E-01	37416	3.2256E-01	1.7389E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1827	1.7641E-02	2.5591E-06	.0000E+00	.0000E+00
TOTAL				3074382	3.9748E+01	6.7380E-01	3.3393E-01	1.2805E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2302535	2.8545E+01	9.3010E-02	.0000E+00	.0000E+00
2004.50C	8	1.1041E-04	.0000E+00	.0000E+00	.0000E+00
5010.50C	11203	1.2447E-01	1.2238E-01	.0000E+00	.0000E+00
5011.56C	938	1.4099E-02	6.8323E-07	.0000E+00	.0000E+00
6000.50C	194	2.6604E-03	1.5645E-07	.0000E+00	.0000E+00
7014.50C	636	8.5616E-03	2.6924E-04	.0000E+00	.0000E+00
8016.50C	282560	4.0430E+00	2.9504E-03	.0000E+00	.0000E+00
13027.50C	14871	2.3200E-01	1.0268E-03	.0000E+00	.0000E+00
14000.50C	1185	1.7652E-02	8.1143E-05	.0000E+00	.0000E+00
15031.50C	79	1.1348E-03	6.2113E-06	.0000E+00	.0000E+00
16032.50C	29	4.2583E-04	1.4393E-05	.0000E+00	.0000E+00
22000.50C	41	5.0133E-04	4.5971E-05	.0000E+00	.0000E+00
24000.50C	26625	3.8085E-01	1.6138E-02	.0000E+00	.0000E+00
25055.50C	10289	1.5062E-01	8.6929E-03	.0000E+00	.0000E+00
26000.55C	130033	1.7388E+00	4.7300E-02	.0000E+00	.0000E+00
28000.50C	40105	5.4301E-01	1.5913E-02	.0000E+00	.0000E+00
29000.50C	93	1.2374E-03	6.8868E-05	.0000E+00	.0000E+00
40000.50C	57775	8.6243E-01	7.4606E-03	.0000E+00	4.5089E-05
42000.50C	3313	4.8249E-02	4.8059E-03	.0000E+00	.0000E+00
45103.50C	544	7.2398E-03	6.1229E-03	.0000E+00	.0000E+00
47109.50C	61	8.5125E-04	7.1813E-04	.0000E+00	.0000E+00
50000.35C	541	8.0204E-03	2.1074E-04	.0000E+00	.0000E+00
62149.50C	861	9.6740E-03	9.5736E-03	.0000E+00	.0000E+00
63151.55C	11	1.3412E-04	1.2748E-04	.0000E+00	.0000E+00
63153.55C	131	1.7402E-03	1.5407E-03	.0000E+00	.0000E+00
64155.50C	377	4.1562E-03	4.1503E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	128	1.7538E-03	1.1685E-03	1.2619E-05	.0000E+00
92235.50C	20873	4.1622E-01	3.7243E-02	1.8222E-01	.0000E+00
92236.50C	820	1.2077E-02	4.3117E-03	1.8523E-04	1.3281E-05
92238.50C	147033	2.1790E+00	1.8324E-01	2.0980E-02	1.2102E-03
93237.55C	193	2.4334E-03	1.9947E-03	2.2174E-05	.0000E+00
94238.50C	49	5.8405E-04	4.7367E-04	1.6768E-05	.0000E+00
94239.55C	14460	2.9583E-01	5.4800E-02	1.1149E-01	.0000E+00
94240.50C	3031	4.0494E-02	3.5726E-02	1.2159E-04	.0000E+00
94241.50C	2265	4.7215E-02	6.7979E-03	1.8717E-02	1.1875E-05
94242.50C	100	1.4465E-03	9.8231E-04	1.1207E-05	.0000E+00
95241.50C	364	4.6432E-03	4.1830E-03	5.4294E-05	.0000E+00
95242.50C	8	2.3516E-04	1.8550E-05	9.0793E-05	.0000E+00
95243.50C	20	2.6919E-04	2.5809E-04	.0000E+00	.0000E+00
96245.35C	0	2.8891E-06	.0000E+00	.0000E+00	.0000E+00

DUMP NO. 2 ON FILE RUNTPE NPS = 59598 CTM = 109.40

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

Feb 20 19:38 1995 File Name: /users/davis/mcnp/MPC12/m12bb2.o

ATTACHMENT XXXI BBABA0000-01717-0200-00001 - Page 39

COMPUTER TIME = 109.55 MINUTES

MCNP VERSION 4A-B 10/04/91

02/20/95 19:38:52

PROBID = 02/20/95 17:49:04

1MCNP VERSION 4A-B LD=10/04/91 02/20/95 19:38:52

PROBID = 02/20/95 19:38:52

INP=mpc12bb3 OUTP=m12bb3.o

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb3)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - 3WT% B IN AL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57-      36      3 -1.785-3  17 -18 -5 IMP:N=1 U=2
58-      37      1 -1.0000  17 -18  5 IMP:N=1 U=2
59-      38      4 -6.6000  18 -19 -5 IMP:N=1 U=2
60-      39      1 -1.0000  18 -19  5 IMP:N=1 U=2
61-      40      1 -1.0000  19      IMP:N=1 U=2
62-      C      CONTROL ROD/GUIDE TUBE
63-      41      1 -1.0000 -21  -5 IMP:N=1 U=3
64-      42      1 -1.0000 -21   5 IMP:N=1 U=3
65-      43      4 -6.6000  21 -22 IMP:N=1 U=3
66-      44      1 -1.0000  22 -23 IMP:N=1 U=3
67-      45      4 -6.6000  23 -24 IMP:N=1 U=3
68-      46      1 -1.0000  24      IMP:N=1 U=3
69-      C      INSTRUMENTATION TUBE
70-      47      1 -1.0000 -25      IMP:N=1 U=4
71-      48      4 -6.6000  25 -26 IMP:N=1 U=4
72-      49      1 -1.0000  26      IMP:N=1 U=4
73-      C      WATER GAP - ASSEMBLY TOP
74-      50      1 -1.0000 -35  -4 IMP:N=1 U=5
75-      C      SS TUBE WALL - ASSEMBLY TOP
76-      51      8 -8.2380  35 -44  -4 IMP:N=1 U=5
77-      C      AL-B WALL - ASSEMBLY TOP
78-      52      6 -2.738  44 -46  -4 IMP:N=1 U=5
79-      C      SS WALL - ASSEMBLY TOP
80-      53      8 -8.2380  46  -4 IMP:N=1 U=5
81-      C      WATER ABOVE BASKET
82-      54      1 -1.000  4 IMP:N=1 U=5
83-      C      WATER GAP - ASSEMBLY RIGHT
84-      55      1 -1.0000 -36  -4 IMP:N=1 U=6
85-      C      SS TUBE WALL - ASSEMBLY RIGHT
86-      56      8 -8.2380  36 -43  -4 IMP:N=1 U=6
87-      C      AL-B WALL - ASSEMBLY RIGHT
88-      57      6 -2.7380  43 -45  -4 IMP:N=1 U=6
89-      C      SS WALL - ASSEMBLY RIGHT
90-      58      8 -8.2380  45 -4 IMP:N=1 U=6
91-      C      WATER ABOVE BASKET
92-      59      1 -1.000  4 IMP:N=1 U=6
93-      C      WATER GAP - ASSEMBLY BOTTOM
94-      60      1 -1.0000  37  -4 IMP:N=1 U=7
95-      C      SS TUBE WALL - ASSEMBLY BOTTOM
96-      61      8 -8.2380 -37  -4 IMP:N=1 U=7
97-      C      WATER ABOVE BASKET
98-      62      1 -1.000  4 IMP:N=1 U=7
99-      C      WATER GAP - ASSEMBLY LEFT
100-     63      1 -1.0000  38  -4 IMP:N=1 U=8
101-     C      LOWER ST COMB - ASSEMBLY LEFT
102-     64      8 -8.2380 -38  -4 IMP:N=1 U=8
103-     C      WATER ABOVE BASKET
104-     65      1 -1.000  4 IMP:N=1 U=8
105-     C      SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106-     66      1 -1.0000  74  75 IMP:N=1 U=10
107-     67      8 -8.2380 -75  55 IMP:N=1 U=10 $ BOTTOM
108-     68      8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109-     C      AXIS MATERIALS
110-     70      8 -8.2380 -57  59 -55 -9 3 -4 IMP:N=1 $ LEFT
111-     71      6 -2.73800 -59  61 -55 -9 3 -4 IMP:N=1
112-     72      8 -8.2380 -61  1 -55 -9 3 -4 IMP:N=1
113-     73      8 -8.2380 -58  60  55 -9 3 -4 IMP:N=1 $ BOTTOM
114-     74      6 -2.7380 -60  62  55 -9 3 -4 IMP:N=1
115-     75      8 -8.2380 -62  2  55 -9 3 -4 IMP:N=1
116-     76      1 -1.0000 -57  1 -55  4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.75%/O GWD/O YEAR -- UO2								
331-	C	M2	8016.50C	4.6973E-02						
332-	C	92235.50C	8.9111E-04							
333-	C	92238.50C	2.2583E-02							
334-	C	3.00%/20 GWD/5 YEAR -- UO2								
335-	M2	8016.50C	4.7767E-02							
336-		45103.50C	1.7033E-05							
337-		47109.50C	2.0436E-06							
338-		62149.50C	1.3260E-07							
339-		63151.55C	1.6963E-08							
340-		63153.55C	2.1975E-06							
341-		64155.50C	1.0128E-07							
342-		92233.50C	3.2712E-11							
343-		92234.50C	4.9053E-06							
344-		92235.50C	3.1513E-04							
345-		92236.50C	7.0520E-05							
346-		92238.50C	2.2844E-02							
347-		93237.55C	5.4646E-06							
348-		94238.50C	9.9680E-07							
349-		94239.55C	1.0790E-04							
350-		94240.50C	3.0974E-05							
351-		94241.50C	1.4571E-05							
352-		94242.50C	3.7204E-06							
353-		95241.50C	4.3471E-06							
354-		95242.50C	1.3739E-08							
355-		95243.50C	4.1755E-07							
356-		96245.35C	1.4221E-09							

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357-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
358-      M3      2004.50C 1.0
359-      C      ZIRCALOY-4
360-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
361-      40000.50C -0.9818 50000.35C -0.0140
362-      C      ALLOY 825
363-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
364-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
365-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
366-      29000.50C -0.0250 42000.50C -0.0300
367-      C      1100 ALUMINUM ALLOY - 3wt% natural boron
368-      M6      5010.50C -0.00540 5011.56C -0.02460 13027.50C -0.96880
369-      29000.50C -0.00120
370-      C      A516 CARBON STEEL
371-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
372-      16032.50C -0.00035 25055.50C -0.0090
373-      26000.55C -0.98535
374-      C      SS316L
375-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
376-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
377-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
378-      42000.50C -0.02500
379-      C      TALLIES
380-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3066
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3066
POINTS AFTER EXPANSION OR CONTRACTION	3008
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T					
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00000	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00007	92235,	.00443	92236,	.00099	92238,	.32088
	93237,	.00008	94238,	.00001	94239,	.00152	94240,	.00044
	94241,	.00020	94242,	.00005	95241,	.00006	95242,	.00000
	95243,	.00001	96245,	.00000				

3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	5010,	.01394	5011,	.05774	13027,	.92784	29000,	.00049
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	5010,	.00540	5011,	.02460	13027,	.96880	29000,	.00120
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	71	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE

48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE

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108 24049 .00000E+00 .00000E+00 INFINITE
109 24050 .00000E+00 .00000E+00 INFINITE
110 24051 .00000E+00 .00000E+00 INFINITE
111 25048 .00000E+00 .00000E+00 INFINITE
112 25049 .00000E+00 .00000E+00 INFINITE
113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.38078E-02	2.73800E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02

6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			

66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08

59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
5010.50C	9587	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1305)	79/09/10.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE NEWXS2

5011.56C	28379
63151.55C	33336
63153.55C	30265

06/28/88
06/28/88
06/28/88

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY		(1314)	79/06/21.
40000.50C	35842	NJOY		(1340)	79/07/31.
WARNING. NUBAR OF	92234.50C	76999	92234.50C MAY BE EITHER PROMPT OR TOTAL.		
			NJOY	(1394)	79/10/17.
WARNING. NUBAR OF	92236.50C	119238	92236.50C MAY BE EITHER PROMPT OR TOTAL.		
			NJOY	(1396)	79/08/30.
WARNING. NUBAR OF	94238.50C	16458	94238.50C MAY BE EITHER PROMPT OR TOTAL.		
			NJOY	(1338)	79/09/12.
	94241.50C	22523	NJOY	(1381)	79/08/30.
	94242.50C	43433	NJOY	(1342)	79/09/06.
			TOTAL NU		
			TOTAL NU		

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY		(1315)	79/10/29.
16032.50C	2684	NJOY		(1316)	79/10/29.
22000.50C	25231	NJOY		(1322)	79/06/21.
25055.50C	60097	NJOY		(1325)	79/06/21.
42000.50C	18467	NJOY		(1321)	79/08/01.
62149.50C	11116	NJOY		(1319)	02/12/85
64155.50C	31471	NJOY		(1365)	79/07/28.
WARNING. NUBAR OF	95241.50C	29300	95241.50C MAY BE EITHER PROMPT OR TOTAL.		
			NJOY	(1361)	79/08/29.
WARNING. NUBAR OF	95242.50C	5248	95242.50C MAY BE EITHER PROMPT OR TOTAL.		
			NJOY	(1369)	79/09/24.
WARNING. NUBAR OF	95243.50C	51474	95243.50C MAY BE EITHER PROMPT OR TOTAL.		
			NJOY	(1363)	79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY		(1310)	11/01/85
47109.50C	10147	NJOY		(1373)	11/01/85
93237.55C	29142	NJOY		(1337)	04/04/85
			TOTAL NU		

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24 T=OK	(48)	86/02/01
WARNING. NUBAR OF	96245.35C	15310	96245.35C MAY BE EITHER PROMPT OR TOTAL.		
			ZA=96245 ENDL-85 85/04/24 T=OK	(93)	86/04/23

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN	1001	0	010/22/85
TOTAL	1385457				

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102760
TALLIES	0
BANK	18403

CROSS SECTIONS 1385457

TOTAL 1506620

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

10 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12 PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb3)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-3.397E-01	1.641E-01	1.784E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.973E-01	3.757E+00
2	3.186E-01	3.384E-01	1.874E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.973E-01	6.017E-02
3	3.832E-02	-2.029E-01	2.003E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.973E-01	3.005E+00
4	1.133E-01	-3.459E-01	1.981E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.973E-01	2.894E-01
5	9.133E-02	-2.600E-01	7.660E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.973E-01	1.519E+00
6	-3.607E-01	-1.368E-02	4.629E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.973E-01	2.937E-01
7	-4.158E-01	-1.646E-01	4.623E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.973E-01	4.780E-01
8	-3.670E-01	1.713E-01	4.415E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.973E-01	2.933E+00
9	2.011E-01	1.033E-01	6.383E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.973E-01	1.527E+00
10	-4.462E-01	-7.576E-02	6.584E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.973E-01	1.329E+00
11	-3.204E-01	1.369E-01	7.137E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.973E-01	2.691E+00
12	3.353E-01	9.139E-02	4.651E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.973E-01	1.204E+00
13	7.637E-02	-3.312E-01	4.359E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.973E-01	9.411E+00
14	2.442E-01	2.038E-01	3.876E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.973E-01	2.255E+00
15	-3.187E-01	-2.314E-01	2.087E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.973E-01	2.672E+00
16	1.009E-01	-3.618E-01	3.447E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.973E-01	9.940E-02
17	-2.203E-01	-8.042E-02	2.466E+01	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.973E-01	3.455E-01
18	-2.018E-02	-8.602E-02	3.246E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.973E-01	1.160E+00
19	-3.557E-01	4.523E-03	4.391E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.973E-01	2.546E+00
20	3.925E-01	-2.508E-01	4.213E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.973E-01	5.462E-01
21	-1.890E-02	-3.986E-01	4.274E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.973E-01	4.161E+00
22	-2.353E-01	2.616E-01	4.566E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.973E-01	4.004E+00
23	-2.498E-01	-8.322E-02	4.213E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.973E-01	4.797E+00
24	-3.395E-01	-1.813E-01	4.133E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.973E-01	1.582E-01
25	2.118E-01	-3.790E-02	6.186E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.973E-01	7.268E-01
26	-3.288E-01	2.462E-01	6.244E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.973E-01	5.253E+00
27	1.090E-01	3.725E-01	6.343E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.973E-01	3.528E+00
28	-4.079E-01	-2.013E-01	2.229E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.973E-01	7.542E-01
29	-1.523E-01	1.214E-01	5.844E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.973E-01	3.723E+00
30	3.722E-01	-2.484E-01	4.350E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.973E-01	1.482E+00
31	4.299E-01	-6.021E-02	4.560E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.973E-01	2.254E+00
32	-1.691E-01	3.500E-01	4.068E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.973E-01	4.818E-01
33	6.591E-02	5.923E-02	5.585E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.973E-01	2.174E+00
34	1.556E-01	3.671E-01	7.140E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.973E-01	8.158E-01
35	3.159E-01	1.469E-01	6.331E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.973E-01	2.641E+00
36	3.476E-01	-9.672E-02	6.347E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.973E-01	3.930E+00
37	3.268E-01	-1.609E-01	6.347E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.973E-01	9.588E-01
38	1.311E-01	-2.844E-01	2.471E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.973E-01	3.283E+00
39	4.282E-01	7.913E-02	3.477E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.973E-01	7.976E-01
40	-2.262E-01	-2.232E-01	3.567E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.973E-01	5.160E+00
41	1.923E-01	-1.354E-01	3.578E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.973E-01	1.658E+00
42	2.967E-01	-4.874E-02	3.525E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.973E-01	3.889E+00

43	-2.478E-01	-3.342E-01	2.704E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.973E-01	9.251E-01
44	1.082E-01	-1.632E-01	3.776E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.973E-01	2.786E+00
45	1.357E-01	-1.480E-01	3.778E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.973E-01	3.423E-01
46	-2.403E-01	-3.025E-01	1.999E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.973E-01	2.168E+00
47	7.078E-03	-3.857E-01	1.571E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.973E-01	1.441E+00
48	2.346E-01	-3.070E-02	1.738E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.973E-01	6.692E-01
49	3.288E-01	-2.835E-01	1.293E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.973E-01	5.514E-01
50	-1.351E-01	-4.085E-01	8.334E+00	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.973E-01	1.001E+00

CYCLE 1 K(COLLISION) .856155 REMOVAL LIFETIME(ABS) 2.5686E+03 SOURCE POINTS GENERATED 2592

CYCLE 2 K(COLLISION) .840170 REMOVAL LIFETIME(ABS) 2.7806E+03 SOURCE POINTS GENERATED 3012

CYCLE 3 K(COLLISION) .872815 REMOVAL LIFETIME(ABS) 2.5850E+03 SOURCE POINTS GENERATED 3091

CYCLE 4 K(COLLISION) .880605 REMOVAL LIFETIME(ABS) 2.7803E+03 SOURCE POINTS GENERATED 3086

CYCLE 5 K(COLLISION) .884076 REMOVAL LIFETIME(ABS) 2.5907E+03 SOURCE POINTS GENERATED 3008

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .857659 REMOVAL LIFETIME(ABS) 2.6834E+03 SOURCE POINTS GENERATED 2928

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.880749		.869204	.0133	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)		.882041		.865807	.0187	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)		.871782		.865289	.0075	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	2.6105E+03		2.6684E+03	.0217					
REM LIFE(ABS)	2.6177E+03		2.6505E+03	.0124	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000	
SOURCE POINTS GENERATED	3107								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.875320		.871243	.0080	K(COL/ABS)	.873058 .0112	.869171 .0091	.8907
K(ABSORPTION)		.893004		.874873	.0149	K(ABS/TK LN)	.872957 .0113	.867432 .0051	.9749
K(TRK LENGTH)		.882548		.871042	.0079	K(TK LN/COL)	.871142 .0075	.871136 .0106	.7671
REM LIFE(COL)	2.6350E+03		2.6572E+03	.0133					
REM LIFE(ABS)	2.6764E+03		2.6591E+03	.0078	LIFE(COL/ABS)	2.6582E+03 .0099	2.6595E+03 .0108	.7334	
SOURCE POINTS GENERATED	3002								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.885940		.874917	.0070	K(COL/ABS)	.875976 .0085	.874182 .0082	.8317
K(ABSORPTION)		.883523		.877035	.0108	K(ABS/TK LN)	.875418 .0085	.871047 .0056	.9381
K(TRK LENGTH)		.882075		.873800	.0064	K(TK LN/COL)	.874359 .0064	.874051 .0078	.8300
REM LIFE(COL)	2.8293E+03		2.7003E+03	.0184	K(COL/ABS/TK LN)	.875251 .0077	.871345 .0081		
REM LIFE(ABS)	2.8173E+03		2.6987E+03	.0156	LIFE(COL/ABS)	2.6995E+03 .0168	2.6977E+03 .0185	.9393	
SOURCE POINTS GENERATED	3070								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR	
K(COLLISION)		.860976		.872129	.0063	K(COL/ABS)	.873980 .0070	.871781 .0074	.7901
K(ABSORPTION)		.871011		.875831	.0085	K(ABS/TK LN)	.874398 .0067	.870485 .0042	.9396
K(TRK LENGTH)		.869626		.872965	.0050	K(TK LN/COL)	.872547 .0054	.872967 .0058	.7990
REM LIFE(COL)	2.5765E+03		2.6755E+03	.0171	K(COL/ABS/TK LN)	.873642 .0063	.870332 .0054		

REM LIFE(ABS) 2.6155E+03 2.6821E+03 .0137 LIFE(COL/ABS) 2.6788E+03 .0152 2.6885E+03 .0143 .9495
 SOURCE POINTS GENERATED 2877

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.872875	.872253	.0052	K(COL/ABS)	.873787	.0057	.871990	.0058	.7847
K(ABSORPTION)	.872772	.875321	.0070	K(ABS/TK LN)	.872918	.0057	.869431	.0057	.8210
K(TRK LENGTH)	.858270	.870516	.0050	K(TK LN/COL)	.871385	.0046	.871299	.0052	.6447
REM LIFE(COL)	2.7227E+03	2.6834E+03	.0142	K(COL/ABS/TK LN)	.872697	.0052	.869017	.0063	
REM LIFE(ABS)	2.6604E+03	2.6785E+03	.0113	LIFE(COL/ABS)	2.6809E+03	.0124	2.6764E+03	.0123	.8979
SOURCE POINTS GENERATED	3078								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.872564	.872298	.0044	K(COL/ABS)	.872688	.0050	.872258	.0048	.7147
K(ABSORPTION)	.859622	.873078	.0064	K(ABS/TK LN)	.872349	.0049	.871741	.0048	.6061
K(TRK LENGTH)	.878243	.871620	.0044	K(TK LN/COL)	.871959	.0039	.871966	.0043	.6208
REM LIFE(COL)	2.8261E+03	2.7038E+03	.0141	K(COL/ABS/TK LN)	.872332	.0045	.871808	.0048	
REM LIFE(ABS)	2.7979E+03	2.6955E+03	.0114	LIFE(COL/ABS)	2.6996E+03	.0125	2.6902E+03	.0119	.9280
SOURCE POINTS GENERATED	2970								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.877824	.872988	.0039	K(COL/ABS)	.874075	.0046	.872740	.0042	.7237
K(ABSORPTION)	.889750	.875162	.0060	K(ABS/TK LN)	.873737	.0045	.872361	.0042	.6257
K(TRK LENGTH)	.877157	.872312	.0039	K(TK LN/COL)	.872650	.0035	.872657	.0038	.6366
REM LIFE(COL)	2.5832E+03	2.6887E+03	.0135	K(COL/ABS/TK LN)	.873488	.0041	.872155	.0042	
REM LIFE(ABS)	2.6070E+03	2.6845E+03	.0107	LIFE(COL/ABS)	2.6866E+03	.0119	2.6809E+03	.0107	.9389
SOURCE POINTS GENERATED	3063								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.870773	.872742	.0034	K(COL/ABS)	.871538	.0050	.872920	.0036	.5606
K(ABSORPTION)	.831706	.870333	.0077	K(ABS/TK LN)	.871647	.0047	.872731	.0037	.2729
K(TRK LENGTH)	.878145	.872960	.0035	K(TK LN/COL)	.872851	.0031	.872844	.0033	.6026
REM LIFE(COL)	2.8030E+03	2.7014E+03	.0128	K(COL/ABS/TK LN)	.872012	.0040	.872942	.0036	
REM LIFE(ABS)	2.7542E+03	2.6922E+03	.0099	LIFE(COL/ABS)	2.6968E+03	.0112	2.6836E+03	.0094	.9424
SOURCE POINTS GENERATED	2902								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.846415	.870109	.0043	K(COL/ABS)	.869246	.0052	.870114	.0046	.5965
K(ABSORPTION)	.850824	.868382	.0073	K(ABS/TK LN)	.870130	.0045	.871672	.0036	.3549
K(TRK LENGTH)	.862134	.871878	.0034	K(TK LN/COL)	.870994	.0035	.871570	.0035	.6570
REM LIFE(COL)	2.6259E+03	2.6938E+03	.0118	K(COL/ABS/TK LN)	.870123	.0042	.871538	.0039	
REM LIFE(ABS)	2.6421E+03	2.6872E+03	.0090	LIFE(COL/ABS)	2.6905E+03	.0103	2.6807E+03	.0084	.9448
SOURCE POINTS GENERATED	2941								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.881952	.871186	.0041	K(COL/ABS)	.869208	.0047	.870829	.0043	.4974
K(ABSORPTION)	.855698	.867229	.0067	K(ABS/TK LN)	.870206	.0041	.872347	.0035	.2254
K(TRK LENGTH)	.886241	.873183	.0034	K(TK LN/COL)	.872185	.0034	.872751	.0035	.6955
REM LIFE(COL)	2.8114E+03	2.7045E+03	.0113	K(COL/ABS/TK LN)	.870533	.0038	.872299	.0038	

REM LIFE(ABS) 2.7809E+03 2.6957E+03 .0087 LIFE(COL/ABS) 2.7001E+03 .0099 2.6860E+03 .0080 .9516
SOURCE POINTS GENERATED 3123

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.850550	.869466	.0042	K(COL/ABS)	.868158	.0045	.868991	.0043	.4718
K(ABSORPTION)	.862660	.866849	.0062	K(ABS/TK LN)	.869688	.0038	.871696	.0032	.2353
K(TRK LENGTH)	.865306	.872527	.0032	K(TK LN/COL)	.870997	.0034	.872290	.0034	.7075
REM LIFE(COL)	2.5797E+03	2.6941E+03	.0111	K(COL/ABS/TK LN)	.869614	.0036	.871829	.0036	
REM LIFE(ABS)	2.5916E+03	2.6870E+03	.0086	LIFE(COL/ABS)	2.6906E+03	.0097	2.6784E+03	.0077	.9576
SOURCE POINTS GENERATED	2913								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.836858	.866958	.0049	K(COL/ABS)	.866683	.0045	.866757	.0046	.4308
K(ABSORPTION)	.861112	.866407	.0057	K(ABS/TK LN)	.868406	.0038	.869361	.0037	.2377
K(TRK LENGTH)	.844925	.870404	.0038	K(TK LN/COL)	.868681	.0041	.870622	.0040	.8177
REM LIFE(COL)	2.7178E+03	2.6959E+03	.0102	K(COL/ABS/TK LN)	.867923	.0039	.870224	.0040	
REM LIFE(ABS)	2.7488E+03	2.6918E+03	.0081	LIFE(COL/ABS)	2.6939E+03	.0090	2.6878E+03	.0077	.9470
SOURCE POINTS GENERATED	2960								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.863365	.866701	.0045	K(COL/ABS)	.866292	.0042	.866407	.0043	.4345
K(ABSORPTION)	.859067	.865883	.0053	K(ABS/TK LN)	.867621	.0036	.868383	.0035	.2603
K(TRK LENGTH)	.855776	.869359	.0037	K(TK LN/COL)	.868030	.0039	.869123	.0039	.7938
REM LIFE(COL)	2.7688E+03	2.7012E+03	.0096	K(COL/ABS/TK LN)	.867314	.0037	.868688	.0039	
REM LIFE(ABS)	2.7791E+03	2.6980E+03	.0078	LIFE(COL/ABS)	2.6996E+03	.0086	2.6953E+03	.0076	.9457
SOURCE POINTS GENERATED	3109								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.863011	.866455	.0042	K(COL/ABS)	.866413	.0039	.866425	.0040	.4231
K(ABSORPTION)	.873195	.866370	.0050	K(ABS/TK LN)	.867053	.0034	.867234	.0035	.1744
K(TRK LENGTH)	.845002	.867735	.0040	K(TK LN/COL)	.867095	.0038	.867232	.0039	.7300
REM LIFE(COL)	2.6971E+03	2.7009E+03	.0090	K(COL/ABS/TK LN)	.866854	.0034	.867197	.0036	
REM LIFE(ABS)	2.6993E+03	2.6981E+03	.0073	LIFE(COL/ABS)	2.6995E+03	.0080	2.6957E+03	.0070	.9455
SOURCE POINTS GENERATED	2954								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb3)

02/20/95 21:28:11
PROBID = 02/20/95 19:38:52

0

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59840	1.0027E+00	2.0602E+00	ESCAPE	2	2.1125E-05	9.7228E-06
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	4.1440E-02	1.4117E-06	WEIGHT CUTOFF	59929	4.0619E-02	1.2294E-06
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.0646E-07
(N,XN)	182	2.4470E-03	1.7771E-03
FISSION	0	0.	0.
TOTAL	60022	1.0466E+00	2.0620E+00

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
DOWNSCATTERING	0	0.	1.9487E+00
CAPTURE	0	6.7638E-01	3.3393E-02
LOSS TO (N,XN)	91	1.2235E-03	1.0084E-02
LOSS TO FISSION	0	3.2832E-01	6.9830E-02
TOTAL	60022	1.0466E+00	2.0620E+00

NUMBER OF NEUTRONS BANKED	91
NEUTRON TRACKS PER SOURCE PARTICLE	1.0030E+00
NEUTRON COLLISIONS PER SOURCE PARTICLE	5.0765E+01
TOTAL NEUTRON COLLISIONS	3037791
NET MULTIPLICATION	1.0012E+00 .0002

AVERAGE LIFETIME, SHAKES	
ESCAPE	1.7086E+03
CAPTURE	2.6834E+03
CAPTURE OR ESCAPE	2.6834E+03
ANY TERMINATION	2.8938E+03

CUTOFFS	
TCO	1.0000E+34
ECO	.0000E+00
WC1	-5.0000E-01
WC2	-2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN	109.10 MINUTES
COMPUTER TIME IN MCRUN	108.98 MINUTES
SOURCE PARTICLES PER MINUTE	5.4907E+02
RANDOM NUMBERS GENERATED	37917405

MAXIMUM NUMBER EVER IN BANK	1
BANK OVERFLOWS TO BACKUP FILE	0
FIELD LENGTH	0
MOST RANDOM NUMBERS USED WAS	11229 IN HISTORY 56583

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6061E-01 TO 1.1574E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						
1NEUTRON	ACTIVITY IN EACH CELL						

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	19038	8366	2.4741E+00	1.6009E-04	4.3497E-01	7.8842E-01	1.2113E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	712978	59931	288002	4.0925E+00	7.8790E-04	7.5751E-01	8.8672E-01	2.5267E+00
33	34	4762	258	1010	1.0338E-02	5.3155E-05	2.4513E-01	6.0298E-01	4.2913E+00
34	35	302	30	766	5.9673E-03	3.4688E-05	2.0979E-01	5.0408E-01	7.3833E-01
35	36	1278757	59931	17	2.5239E-04	6.8018E-04	7.1847E-01	8.8303E-01	3.4783E+03
36	37	550	29	41	3.1943E-04	2.2467E-05	1.2944E-01	5.0264E-01	6.0899E-01
37	38	1386510	59931	50314	7.5140E-01	6.5082E-04	7.0617E-01	8.8277E-01	4.1022E+00
38	39	591	30	237	1.8029E-03	3.3143E-05	1.8981E-01	5.1641E-01	7.2379E-01
39	40	2217534	59931	1365922	1.8284E+01	5.6511E-04	6.7272E-01	8.8077E-01	1.6548E+00
40	41	57018	31453	88991	1.1748E+00	3.9969E-04	6.1691E-01	8.7196E-01	1.5482E+00
41	42	24	9	83	7.1582E-04	6.4083E-05	3.3499E-01	5.5778E-01	9.6401E-01
42	43	120754	33329	3758	5.5329E-02	4.2717E-04	6.2769E-01	8.7229E-01	4.1237E+00
43	44	135533	35720	29682	3.9250E-01	4.2765E-04	6.2405E-01	8.7323E-01	1.5666E+00
44	45	148206	36758	3176	4.7096E-02	4.3366E-04	6.2396E-01	8.7284E-01	4.1219E+00
45	46	180776	41998	71401	9.4613E-01	4.3994E-04	6.3295E-01	8.7451E-01	1.5788E+00
46	47	7330	3429	7410	9.8147E-02	4.5132E-04	6.4739E-01	8.7953E-01	1.5950E+00
47	48	9903	3781	331	4.9415E-03	4.5790E-04	6.8119E-01	8.7980E-01	4.1249E+00
48	49	13074	5185	6597	8.7486E-02	4.5013E-04	6.6419E-01	8.7759E-01	1.6237E+00
49	50	26409	14012	42082	5.7719E-01	5.9466E-04	6.3256E-01	8.9154E-01	1.6075E+00
50	51	24506	13339	7927	1.1392E-01	9.9083E-04	6.7605E-01	8.9734E-01	2.3132E+00
51	52	25584	13273	5399	6.9641E-02	1.3761E-03	7.1264E-01	9.0642E-01	5.3793E+00
52	53	24128	12652	7607	1.0809E-01	9.7491E-04	6.8015E-01	8.8951E-01	2.3309E+00
53	54	252	69	1906	1.7018E-02	7.4085E-05	3.4698E-01	6.1515E-01	9.5777E-01
54	55	26883	14229	42338	5.8132E-01	6.1110E-04	6.4819E-01	8.9176E-01	1.6184E+00
55	56	24748	13518	7907	1.1356E-01	9.9827E-04	6.9403E-01	8.9709E-01	2.3083E+00
56	57	25848	13445	5506	7.1017E-02	1.4325E-03	7.2658E-01	9.0845E-01	5.3930E+00
57	58	24373	12834	7899	1.1251E-01	9.9599E-04	6.9161E-01	8.9188E-01	2.3323E+00
58	59	237	67	1616	1.3602E-02	4.8171E-05	2.4866E-01	5.6593E-01	8.1439E-01
59	60	44992	18065	68376	9.3829E-01	7.0420E-04	6.0489E-01	8.8880E-01	1.5910E+00
60	61	43099	17150	13421	1.9121E-01	1.2407E-03	6.4603E-01	8.9220E-01	2.4124E+00
61	62	430	95	1935	1.8433E-02	5.3447E-05	2.3537E-01	6.4055E-01	8.2770E-01
62	63	44774	18006	67398	9.2928E-01	7.2581E-04	6.0676E-01	8.9102E-01	1.5945E+00
63	64	42853	17054	13481	1.9279E-01	1.2503E-03	6.4850E-01	8.9317E-01	2.4299E+00
64	65	523	107	2470	2.0995E-02	4.0051E-05	1.6786E-01	5.6850E-01	7.0795E-01
65	66	8949	4436	379654	3.5278E+00	5.9054E-05	2.7182E-01	6.2806E-01	8.7087E-01
66	67	8513	3398	12567	1.3806E-01	2.0522E-04	4.4640E-01	7.2261E-01	1.8776E+00
67	68	8442	3432	12298	1.3233E-01	2.0205E-04	4.8042E-01	7.1714E-01	1.8388E+00
68	70	27417	8780	8133	1.1660E-01	2.0308E-03	6.5679E-01	8.9748E-01	2.5814E+00
69	71	27791	8476	8326	1.1898E-01	4.9699E-03	6.8417E-01	9.1075E-01	5.8969E+00
70	72	13432	7343	38169	5.5070E-01	6.3106E-03	6.6689E-01	9.0113E-01	2.7639E+00
71	73	27735	8902	8139	1.1587E-01	1.9164E-03	6.4486E-01	8.9614E-01	2.5386E+00
72	74	28125	8551	8494	1.2136E-01	4.8148E-03	6.7897E-01	9.1128E-01	5.8549E+00
73	75	13595	7324	39105	5.6355E-01	6.3359E-03	6.6197E-01	9.0121E-01	2.7236E+00
74	76	250	69	4695	4.1159E-02	4.2147E-05	2.1813E-01	5.8415E-01	7.6121E-01
75	77	149	48	3263	3.0801E-02	4.4010E-05	1.5849E-01	6.4036E-01	7.2233E-01
76	80	18	9	61	5.6119E-04	2.4461E-04	3.6944E-01	6.7136E-01	2.1020E+00
77	81	3488	1438	10212	1.0945E-01	3.2589E-04	5.0866E-01	7.2126E-01	2.0570E+00
78	82	2179	897	12392	1.3041E-01	2.6021E-04	4.6152E-01	7.4544E-01	1.3156E+00
79	83	5	4	162	2.0994E-03	2.9731E-04	5.6585E-01	8.7473E-01	1.5383E+00
80	84	1	1	3	2.2134E-05	6.2408E-09	6.2914E-09	4.0063E-01	5.7819E-01
81	85	1641	671	5056	6.1141E-02	9.9233E-04	5.6873E-01	7.8992E-01	2.1385E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

84	88	1068	454	9827	1.1403E-01	2.3141E-03	5.2408E-01	7.9470E-01	4.3912E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	406	226	49064	4.1234E-01	2.7938E-05	1.1609E-01	5.5231E-01	6.2070E-01

TOTAL 6846483 682473 3037791 3.8784E+01
1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-4.9277E-01	-4.9277E-01
2	2	2.6104E-01	.0000E+00	.0000E+00	-7.3516E-01	-4.7412E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.3901E-02	-1.3901E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-4.5969E-02	-4.5969E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.4885E-02	-1.4885E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.3132E-01	-1.3132E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6295E+00	-1.6295E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9866E+00	-1.9866E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-1.7322E-01	-1.7322E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.7712E-01	-1.7712E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.3674E-01	-3.3674E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.3723E-01	-3.3723E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-8.2677E-02	-8.2677E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-8.1652E-02	-8.1652E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.9569E-02	-8.9569E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.3240E-02	-7.3240E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.1494E-02	-7.1494E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.3515E-02	-7.3515E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-1.0380E-01	-1.0380E-01
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0144E-01	-1.0144E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9468E-02	-8.9468E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.1044E-02	-8.1044E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1929E-01	-1.1929E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1366E-01	-1.1366E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1358E-01	-1.1358E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1308E-01	-1.1308E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0335E-01	-1.0335E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.3261E-02	-8.3261E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-8.8953E-02	-8.8953E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0369E-01	-1.0369E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8896E+01	-1.8896E+01
32	33	9.6315E+00	1.0027E+00	.0000E+00	-9.4497E+00	1.1845E+00
33	34	4.7829E-02	.0000E+00	.0000E+00	-4.5330E-02	2.4989E-03
34	35	2.5890E-03	.0000E+00	.0000E+00	-2.4802E-03	1.0879E-04
35	36	1.8880E+01	.0000E+00	.0000E+00	-1.8868E+01	1.1434E-02
36	37	4.6586E-03	.0000E+00	.0000E+00	-4.6567E-03	1.9387E-06
37	38	2.0467E+01	.0000E+00	.0000E+00	-2.0389E+01	7.7674E-02
38	39	4.9974E-03	.0000E+00	.0000E+00	-4.9683E-03	2.9042E-05
39	40	3.2665E+01	.0000E+00	.0000E+00	-1.0698E+01	2.1968E+01
40	41	8.3333E-01	.0000E+00	.0000E+00	-8.2972E-01	3.6035E-03
41	42	2.1961E-04	.0000E+00	.0000E+00	-1.7941E-04	4.0206E-05
42	43	1.7614E+00	.0000E+00	.0000E+00	-1.7608E+00	5.6769E-04
43	44	1.9779E+00	.0000E+00	.0000E+00	-1.9767E+00	1.1391E-03
44	45	2.1631E+00	.0000E+00	.0000E+00	-2.1627E+00	4.4947E-04
45	46	2.6430E+00	.0000E+00	.0000E+00	-1.1178E+00	1.5252E+00
46	47	1.0783E-01	.0000E+00	.0000E+00	-6.5410E-02	4.2419E-02
47	48	1.4558E-01	.0000E+00	.0000E+00	-1.4020E-01	5.3780E-03
48	49	1.9198E-01	.0000E+00	.0000E+00	-7.4841E-02	1.1714E-01
49	50	3.9521E-01	.0000E+00	.0000E+00	-2.2842E-01	1.6679E-01
50	51	3.6988E-01	.0000E+00	.0000E+00	-3.6153E-01	8.3488E-03

TOTAL	9.9985E+01	1.0027E+00	.0000E+00	.0000E+00	-9.9985E+01	1.0027E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

[illegible]

18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	.0000E+00	.0000E+00	1.2471E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2471E-05
34	35	.0000E+00	.0000E+00	-8.8727E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8727E-06
35	36	.0000E+00	.0000E+00	1.6760E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6760E-05
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
38	39	.0000E+00	.0000E+00	3.7892E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.7892E-05
39	40	.0000E+00	.0000E+00	-4.1149E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1149E-06
40	41	.0000E+00	.0000E+00	-3.3626E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.3626E-06
41	42	.0000E+00	.0000E+00	-5.7897E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.7897E-05
42	43	.0000E+00	.0000E+00	4.1842E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1842E-06
43	44	.0000E+00	.0000E+00	8.7144E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7144E-06
44	45	.0000E+00	.0000E+00	-8.1003E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1003E-06
45	46	.0000E+00	.0000E+00	-3.4363E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4363E-06
46	47	.0000E+00	.0000E+00	-7.9753E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9753E-06
47	48	.0000E+00	.0000E+00	-4.1305E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1305E-06
48	49	.0000E+00	.0000E+00	-4.0756E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0756E-06
49	50	.0000E+00	.0000E+00	-8.3091E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3091E-06
50	51	.0000E+00	.0000E+00	-8.1053E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1053E-06
51	52	.0000E+00	.0000E+00	3.8804E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.8804E-05
52	53	.0000E+00	.0000E+00	2.4639E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4639E-05
53	54	.0000E+00	.0000E+00	-6.7746E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.7746E-05
54	55	.0000E+00	.0000E+00	4.2641E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2641E-06
55	56	.0000E+00	.0000E+00	-3.9391E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9391E-06
56	57	.0000E+00	.0000E+00	7.2653E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.2653E-05
57	58	.0000E+00	.0000E+00	1.9338E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9338E-05
58	59	.0000E+00	.0000E+00	5.9865E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.9865E-06
59	60	.0000E+00	.0000E+00	1.2736E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2736E-05
60	61	.0000E+00	.0000E+00	-4.9708E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.9708E-05
61	62	.0000E+00	.0000E+00	-1.1995E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1995E-06
62	63	.0000E+00	.0000E+00	-2.0786E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0786E-05
63	64	.0000E+00	.0000E+00	1.7165E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7165E-05
64	65	.0000E+00	.0000E+00	-1.3355E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.3355E-04
65	66	.0000E+00	.0000E+00	-2.0750E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0750E-05
66	67	.0000E+00	.0000E+00	2.6725E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6725E-04
67	68	.0000E+00	.0000E+00	-1.2805E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2805E-05
68	70	.0000E+00	.0000E+00	-7.9982E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9982E-05
69	71	.0000E+00	.0000E+00	4.8441E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.8441E-05
70	72	.0000E+00	.0000E+00	-2.1267E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.1267E-05
71	73	.0000E+00	.0000E+00	1.4997E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4997E-06
72	74	.0000E+00	.0000E+00	8.2239E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.2239E-05
73	75	.0000E+00	.0000E+00	6.5592E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5592E-05
74	76	.0000E+00	.0000E+00	3.6395E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.6395E-05
75	77	.0000E+00	.0000E+00	1.2863E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2863E-05
76	80	.0000E+00	.0000E+00	-3.9643E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.9643E-06
77	81	.0000E+00	.0000E+00	-2.4087E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4087E-06
				3.4368E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.4368E-04

78	82	.0000E+00	.0000E+00	2.9787E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9787E-05
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	5.6307E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	5.6210E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6307E-07
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6210E-05
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	89	.0000E+00	.0000E+00	6.6281E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7332E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6281E-05
TOTAL		.0000E+00	.0000E+00	8.2119E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
1 NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS							8.2119E-04

PRINT TABLE 130

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
3	3	.0000E+00	.0000E+00	-9.9478E-03	.0000E+00	-9.9478E-03
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	7	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	33	2.3174E-03	.0000E+00	-3.5067E-01	.0000E+00	.0000E+00
34	34	.0000E+00	.0000E+00	-2.4723E-04	.0000E+00	-2.4723E-04
35	35	.0000E+00	.0000E+00	-3.2988E-05	.0000E+00	-3.2988E-05
36	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	37	.0000E+00	.0000E+00	-1.9387E-06	.0000E+00	-1.9387E-06
38	38	1.2956E-04	.0000E+00	-6.4566E-03	.0000E+00	-6.3918E-03
39	39	.0000E+00	.0000E+00	-9.8782E-06	.0000E+00	-9.8782E-06
40	40	.0000E+00	.0000E+00	-4.7217E-02	.0000E+00	-4.7217E-02
41	41	.0000E+00	.0000E+00	-3.5456E-03	.0000E+00	-3.5456E-03
42	42	.0000E+00	.0000E+00	-3.1701E-06	.0000E+00	-3.1701E-06
43	43	.0000E+00	.0000E+00	-5.7640E-04	.0000E+00	-5.7640E-04
44	44	.0000E+00	.0000E+00	-1.1310E-03	.0000E+00	-1.1310E-03
45	45	.0000E+00	.0000E+00	-4.4603E-04	.0000E+00	-4.4603E-04

45	46	.0000E+00	.0000E+00	-2.7433E-03	.0000E+00	.0000E+00	-2.7433E-03
46	47	.0000E+00	.0000E+00	-2.8530E-04	.0000E+00	.0000E+00	-2.8530E-04
47	48	.0000E+00	.0000E+00	-4.4563E-05	.0000E+00	.0000E+00	-4.4563E-05
48	49	.0000E+00	.0000E+00	-2.6199E-04	.0000E+00	.0000E+00	-2.6199E-04
49	50	.0000E+00	.0000E+00	-1.3852E-03	.0000E+00	.0000E+00	-1.3852E-03
50	51	.0000E+00	.0000E+00	-4.3393E-03	.0000E+00	.0000E+00	-4.3393E-03
51	52	.0000E+00	.0000E+00	-3.8685E-02	.0000E+00	.0000E+00	-3.8685E-02
52	53	.0000E+00	.0000E+00	-3.9779E-03	.0000E+00	.0000E+00	-3.9779E-03
53	54	.0000E+00	.0000E+00	-8.8156E-05	.0000E+00	.0000E+00	-8.8156E-05
54	55	.0000E+00	.0000E+00	-1.3603E-03	.0000E+00	.0000E+00	-1.3603E-03
55	56	.0000E+00	.0000E+00	-4.3328E-03	.0000E+00	.0000E+00	-4.3328E-03
56	57	.0000E+00	.0000E+00	-3.8238E-02	.0000E+00	.0000E+00	-3.8238E-02
57	58	.0000E+00	.0000E+00	-4.2995E-03	.0000E+00	.0000E+00	-4.2995E-03
58	59	.0000E+00	.0000E+00	-7.2748E-05	.0000E+00	.0000E+00	-7.2748E-05
59	60	.0000E+00	.0000E+00	-1.9426E-03	.0000E+00	.0000E+00	-1.9426E-03
60	61	.0000E+00	.0000E+00	-6.0931E-03	.0000E+00	.0000E+00	-6.0931E-03
61	62	.0000E+00	.0000E+00	-9.4506E-05	.0000E+00	.0000E+00	-9.4506E-05
62	63	.0000E+00	.0000E+00	-1.8690E-03	.0000E+00	.0000E+00	-1.8690E-03
63	64	.0000E+00	.0000E+00	-6.3203E-03	.0000E+00	.0000E+00	-6.3203E-03
64	65	.0000E+00	.0000E+00	-1.0714E-04	.0000E+00	.0000E+00	-1.0714E-04
65	66	.0000E+00	.0000E+00	-1.7729E-02	.0000E+00	.0000E+00	-1.7729E-02
66	67	.0000E+00	.0000E+00	-1.2558E-02	.0000E+00	.0000E+00	-1.2558E-02
67	68	.0000E+00	.0000E+00	-1.2891E-02	.0000E+00	.0000E+00	-1.2891E-02
68	70	.0000E+00	.0000E+00	-2.6415E-03	.0000E+00	.0000E+00	-2.6415E-03
69	71	.0000E+00	.0000E+00	-3.1130E-02	.0000E+00	.0000E+00	-3.1130E-02
70	72	.0000E+00	.0000E+00	-5.9676E-03	.0000E+00	.0000E+00	-5.9676E-03
71	73	.0000E+00	.0000E+00	-2.8619E-03	.0000E+00	.0000E+00	-2.8619E-03
72	74	.0000E+00	.0000E+00	-3.2231E-02	.0000E+00	.0000E+00	-3.2231E-02
73	75	.0000E+00	.0000E+00	-6.1241E-03	.0000E+00	.0000E+00	-6.1241E-03
74	76	.0000E+00	.0000E+00	-2.1476E-04	.0000E+00	.0000E+00	-2.1476E-04
75	77	.0000E+00	.0000E+00	-1.5919E-04	.0000E+00	.0000E+00	-1.5919E-04
76	80	.0000E+00	.0000E+00	-4.7187E-05	.0000E+00	.0000E+00	-4.7187E-05
77	81	.0000E+00	.0000E+00	-8.1316E-03	.0000E+00	.0000E+00	-8.1316E-03
78	82	.0000E+00	.0000E+00	-4.2396E-04	.0000E+00	.0000E+00	-4.2396E-04
79	83	.0000E+00	.0000E+00	-8.8713E-06	.0000E+00	.0000E+00	-8.8713E-06
80	84	.0000E+00	.0000E+00	-8.7901E-06	.0000E+00	.0000E+00	-8.7901E-06
81	85	.0000E+00	.0000E+00	-2.2376E-03	.0000E+00	.0000E+00	-2.2376E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-2.0468E-03	.0000E+00	.0000E+00	-2.0468E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-2.1425E-03	.0000E+00	.0000E+00	-2.1425E-03

TOTAL 2.4470E-03 .0000E+00 -6.7638E-01 -1.2235E-03 -3.2832E-01 -1.0035E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	200641 12524	2.3113E+00 1.6287E-01	9.8814E-03 6.6386E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7097E-01	96800	1.4209E+00	1.2487E-03	.0000E+00	.0000E+00
		45103.50C	2.3926E-04	515	6.5470E-03	5.6320E-03	.0000E+00	.0000E+00
		47109.50C	2.8706E-05	66	8.8159E-04	7.0326E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	785	8.8894E-03	8.8168E-03	.0000E+00	.0000E+00
		63151.55C	2.3827E-07	18	2.4930E-04	2.4394E-04	.0000E+00	.0000E+00
		63153.55C	3.0867E-05	104	1.3318E-03	1.2055E-03	.0000E+00	.0000E+00
		64155.50C	1.4226E-06	401	4.3137E-03	4.3075E-03	.0000E+00	.0000E+00
		92233.50C	4.5949E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	6.8903E-05	121	1.6078E-03	1.0649E-03	1.6505E-05	.0000E+00
		92235.50C	4.4265E-03	20704	4.0966E-01	3.6515E-02	1.7890E-01	.0000E+00
		92236.50C	9.9057E-04	839	1.2321E-02	4.3651E-03	1.9908E-04	.0000E+00
		92238.50C	3.2088E-01	147417	2.1671E+00	1.8384E-01	2.0628E-02	1.1587E-03
		93237.55C	7.6759E-05	186	2.4866E-03	2.0313E-03	1.4271E-05	.0000E+00
		94238.50C	1.4002E-05	44	5.7591E-04	3.9656E-04	2.5813E-05	.0000E+00
		94239.55C	1.5156E-03	14348	2.9315E-01	5.4214E-02	1.1003E-01	.0000E+00
		94240.50C	4.3508E-04	2929	3.8786E-02	3.4148E-02	1.3979E-04	.0000E+00
		94241.50C	2.0467E-04	2227	4.5949E-02	6.6078E-03	1.8234E-02	.0000E+00
		94242.50C	5.2259E-05	104	1.4853E-03	9.8098E-04	1.9495E-05	.0000E+00
		95241.50C	6.1062E-05	368	4.5776E-03	4.1479E-03	4.0287E-05	.0000E+00
		95242.50C	1.9299E-07	7	1.9717E-04	1.1250E-05	6.4673E-05	.0000E+00
		95243.50C	5.8652E-06	19	2.6707E-04	1.8684E-04	4.0352E-06	.0000E+00
		96245.35C	1.9976E-08	0	6.0040E-06	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	4	4.1091E-05	7.7150E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	2	1.6100E-05	6.6545E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	9	7.5182E-05	1.2478E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	985	1.0087E-02	2.1970E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	10	1.1854E-04	8.3948E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	730	5.7038E-03	3.2979E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	36	2.6351E-04	8.8377E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	17	2.5239E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	39	3.0493E-04	1.9382E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	1.4502E-05	4.9409E-10	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	195	2.8373E-03	1.4731E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	71	1.0197E-03	7.1201E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	199	2.8019E-03	1.4068E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	49391	7.3808E-01	6.0779E-03	.0000E+00	6.4782E-05

		50000.35C	1.0711E-02	458	6.6683E-03	1.6534E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	228	1.7173E-03	9.8751E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9	8.5663E-05	3.1179E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1250243	1.6594E+01	4.5879E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	115679	1.6901E+00	1.3379E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	82118	1.0754E+00	3.4699E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6873	9.9333E-02	7.5699E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	80	6.9558E-04	3.1693E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3	2.0236E-05	7.8497E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	17	2.5553E-04	2.4112E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	3	3.7163E-05	9.1475E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	14	2.0708E-04	9.3858E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3684	5.4233E-02	5.4266E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	40	5.9660E-04	1.5210E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	27330	3.5853E-01	1.1103E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2352	3.3977E-02	2.0740E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	12	1.6747E-04	1.3681E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	6	9.6342E-05	3.7354E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	21	2.7778E-04	1.8796E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3114	4.6221E-02	4.1141E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	23	3.3331E-04	1.2086E-05	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	65955	8.6740E-01	2.6855E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5446	7.8723E-02	5.7863E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	6840	8.9861E-02	2.7727E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	570	8.2850E-03	8.0364E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	4	5.1165E-05	1.2615E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	1	1.5471E-05	1.3279E-08	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	325	4.8589E-03	4.4429E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	1	1.5914E-05	1.1904E-07	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	6063	7.9751E-02	2.5635E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	534	7.7348E-03	5.6429E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	38460	5.2368E-01	1.3365E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3622	5.3508E-02	4.8750E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	3	4.6140E-05	3.5651E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	18	2.4660E-04	5.8106E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	6.6349E-04	2.8837E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.4147E-05	1.3506E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.7242E-05	9.1502E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	967	1.4303E-02	7.2901E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	366	5.4486E-03	4.5169E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4895	6.9582E-02	2.2056E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1503	2.1710E-02	7.0452E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	126	1.8450E-03	2.3880E-04	.0000E+00	.0000E+00
51	52	5010.50C	1.3936E-02	3413	3.8838E-02	3.8487E-02	.0000E+00	.0000E+00
		5011.56C	5.7740E-02	180	2.6990E-03	2.2020E-07	.0000E+00	.0000E+00

		13027.50C	9.2784E-01	1806	2.8104E-02	1.9806E-04	.0000E+00	.0000E+00
		29000.50C	4.8798E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	12	1.9256E-04	1.8886E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	33	4.6455E-04	1.3030E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	44	6.8691E-04	7.1430E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.1658E-05	4.4322E-09	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6161E-05	9.6809E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	959	1.4084E-02	7.0426E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	365	5.5907E-03	3.2149E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4730	6.6359E-02	2.1733E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1360	1.9127E-02	6.2147E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	102	1.5597E-03	1.3625E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1817	1.6096E-02	8.7432E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	89	9.2211E-04	7.2363E-07	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	38570	5.2549E-01	1.3038E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3768	5.5826E-02	5.6490E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	10	1.4066E-04	1.3696E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	22	3.2929E-04	9.7047E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	7.1970E-04	4.5927E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.4077E-05	3.3841E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4847E-05	1.1505E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	967	1.4298E-02	7.2444E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	450	6.8275E-03	4.8423E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4835	6.8600E-02	2.1577E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1448	2.0703E-02	7.4180E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	127	1.9132E-03	2.0909E-04	.0000E+00	.0000E+00
56	57	5010.50C	1.3936E-02	3407	3.8490E-02	3.8039E-02	.0000E+00	.0000E+00
		5011.56C	5.7740E-02	185	2.7764E-03	1.9557E-07	.0000E+00	.0000E+00
		13027.50C	9.2784E-01	1912	2.9731E-02	1.9791E-04	.0000E+00	.0000E+00
		29000.50C	4.8798E-04	2	1.9349E-05	8.2341E-07	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	4	4.7584E-05	2.5491E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	20	2.7748E-04	1.3428E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	7.0644E-04	2.8727E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.6140E-05	1.1869E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1010	1.4728E-02	7.9664E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	409	6.1910E-03	4.0454E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4874	6.8799E-02	2.1561E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1420	2.0020E-02	7.2566E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	113	1.6852E-03	2.0014E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1547	1.2997E-02	7.2730E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	69	6.0474E-04	1.7716E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	62231	8.4763E-01	1.8788E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6145	9.0659E-02	6.3883E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	9	1.3149E-04	6.6612E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	6.6613E-04	2.1890E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	81	1.2281E-03	9.3904E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.1925E-04	6.3144E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.5516E-05	1.6330E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1701	2.5147E-02	1.0325E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	757	1.1180E-02	6.2596E-04	.0000E+00	.0000E+00

		26000.55C	6.4626E-01	8140	1.1466E-01	3.0720E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2463	3.4883E-02	9.6673E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	209	3.1315E-03	3.6228E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1848	1.7645E-02	9.4484E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	87	7.8722E-04	2.2613E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	61215	8.3750E-01	1.8067E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6183	9.1782E-02	6.2254E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	11	1.5018E-04	6.5451E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	5.8979E-04	2.0696E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	61	9.5123E-04	3.3504E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	7	1.0796E-04	4.0057E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5701E-05	6.6747E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1746	2.5799E-02	1.0816E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	694	1.0400E-02	6.8921E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8151	1.1528E-01	3.0950E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2541	3.6201E-02	1.0683E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	226	3.2936E-03	3.6095E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	2361	1.9905E-02	1.0711E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	109	1.0898E-03	2.8959E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	361918	3.3448E+00	1.7668E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	17736	1.8297E-01	6.0065E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	6	6.7548E-05	1.0068E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	4.5568E-04	2.9718E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	5.3484E-04	1.0721E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.5118E-05	9.7239E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1373	1.5987E-02	2.2500E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	431	5.5287E-03	1.2123E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8213	8.8333E-02	6.6987E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2315	2.5383E-02	2.0670E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	140	1.7035E-03	2.8931E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	6	5.3967E-05	1.6412E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	43	4.6573E-04	3.2396E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	5.8882E-04	1.3170E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	5.8620E-05	1.1260E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	4.2012E-06	7.9628E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1383	1.5454E-02	2.4414E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	382	4.7495E-03	1.0722E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7973	8.5127E-02	6.8162E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2330	2.4356E-02	2.2586E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	127	1.4768E-03	2.5536E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	5	6.2052E-05	8.5789E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	22	3.0653E-04	8.5597E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	7.6170E-04	3.1800E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	6.3019E-05	6.6711E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.0460E-05	2.2611E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1090	1.6131E-02	4.2077E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	421	6.2764E-03	2.0696E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4902	6.9482E-02	1.4029E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1508	2.1574E-02	4.3967E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	130	1.9180E-03	1.5871E-04	.0000E+00	.0000E+00

69	71	5010.50C	1.3936E-02	2724	3.1856E-02	3.0942E-02	.0000E+00	.0000E+00
		5011.56C	5.7740E-02	436	6.5864E-03	2.3982E-07	.0000E+00	.0000E+00
		13027.50C	9.2784E-01	5159	8.0434E-02	1.8678E-04	.0000E+00	.0000E+00
		29000.50C	4.8798E-04	7	9.8388E-05	1.0738E-06	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	34	4.8014E-04	7.9111E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	115	1.6534E-03	2.4869E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	228	3.5183E-03	7.8925E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	19	2.8645E-04	2.1418E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	8	1.1723E-04	6.4890E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5688	8.5207E-02	9.8556E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1976	2.9072E-02	5.8055E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	22340	3.1834E-01	2.6886E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	7111	1.0238E-01	9.1566E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	650	9.6422E-03	7.5589E-04	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	3	4.9096E-05	7.6523E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	21	2.7616E-04	7.8687E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	7.0646E-04	1.8817E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.5397E-05	1.1506E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6777E-05	2.9648E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1092	1.6035E-02	5.4680E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	490	7.1590E-03	2.6956E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4814	6.7752E-02	1.3539E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1530	2.1773E-02	4.5314E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	136	2.0158E-03	2.2761E-04	.0000E+00	.0000E+00
72	74	5010.50C	1.3936E-02	2826	3.3127E-02	3.2035E-02	.0000E+00	.0000E+00
		5011.56C	5.7740E-02	441	6.5710E-03	1.8951E-07	.0000E+00	.0000E+00
		13027.50C	9.2784E-01	5219	8.1534E-02	1.9492E-04	.0000E+00	.0000E+00
		29000.50C	4.8798E-04	8	1.2659E-04	8.8137E-07	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	28	4.1932E-04	8.2974E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	135	1.9639E-03	2.6515E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	238	3.5899E-03	6.6041E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	20	3.0606E-04	8.4555E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	9	1.4186E-04	1.4377E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5680	8.4602E-02	9.8147E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2294	3.3578E-02	6.3892E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	22826	3.2579E-01	2.7059E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	7199	1.0315E-01	9.5421E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	676	1.0011E-02	8.0816E-04	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	4488	3.9201E-02	2.1470E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	207	1.9582E-03	5.9612E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	3123	2.9302E-02	1.5914E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	140	1.4988E-03	4.4707E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	2.6972E-05	8.6531E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2	2.1293E-05	6.1363E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	43	4.0140E-04	2.3648E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	13	1.1152E-04	8.7496E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

77	81	6000.50C	1.3966E-03	6	6.1987E-05	1.2752E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	4.9768E-04	2.4490E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	42	5.6910E-04	5.1043E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	6.7431E-05	9.3809E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	1.2624E-05	2.6440E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1121	1.2719E-02	1.5115E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	289	3.5096E-03	7.5056E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6590	6.8927E-02	4.3149E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1991	2.1562E-02	1.3586E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	119	1.5253E-03	1.6287E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11585	1.2034E-01	4.2004E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	807	1.0073E-02	3.9163E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	156	2.0130E-03	8.8702E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6	8.6447E-05	1.0693E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2	1.3907E-05	4.6951E-06	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	1	8.2270E-06	4.0950E-06	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	7.6538E-05	6.5016E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	3	4.5614E-05	3.2087E-08	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	15	1.8544E-04	3.2928E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	5.2711E-06	1.6161E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	50	6.9347E-04	2.7831E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	725	9.0727E-03	4.7997E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	105	1.3851E-03	7.0761E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1150	1.3543E-02	3.9861E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2826	3.3867E-02	1.1012E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	91	1.1629E-03	4.2776E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	84	1.1036E-03	1.1151E-04	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	65	8.4611E-04	2.8840E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	15	1.8791E-04	2.7256E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	2	2.3813E-05	4.0081E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	5.4080E-05	1.6735E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	245	3.2364E-03	1.1946E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	9497	1.0968E-01	1.9269E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

86	90	1001.50C	6.6667E-01	46857	3.9216E-01	2.1382E-03	.0000E+00	.0000E+00	
		8016.50C	3.3333E-01	2207	2.0181E-02	4.2446E-06	.0000E+00	.0000E+00	
TOTAL				3037791	3.9113E+01	6.7638E-01	3.2832E-01	1.2235E-03	
TOTAL OVER ALL CELLS FOR EACH NUCLIDE									
				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)	
		1001.50C		2276443	2.8114E+01	9.0905E-02	.0000E+00	.0000E+00	
		2004.50C		17	2.5239E-04	.0000E+00	.0000E+00	.0000E+00	
		5010.50C		12370	1.4231E-01	1.3950E-01	.0000E+00	.0000E+00	
		5011.56C		1242	1.8633E-02	8.4509E-07	.0000E+00	.0000E+00	
		6000.50C		208	2.8254E-03	1.2904E-07	.0000E+00	.0000E+00	
		7014.50C		610	8.1929E-03	2.3897E-04	.0000E+00	.0000E+00	
		8016.50C		282235	4.0177E+00	3.1229E-03	.0000E+00	.0000E+00	
		13027.50C		14099	2.1985E-01	7.7771E-04	.0000E+00	.0000E+00	
		14000.50C		1042	1.5598E-02	8.2352E-05	.0000E+00	.0000E+00	
		15031.50C		92	1.3191E-03	8.3305E-06	.0000E+00	.0000E+00	
		16032.50C		36	5.2197E-04	1.8537E-05	.0000E+00	.0000E+00	
		22000.50C		50	6.9347E-04	2.7831E-05	.0000E+00	.0000E+00	
		24000.50C		25587	3.6476E-01	1.4785E-02	.0000E+00	.0000E+00	
		25055.50C		9676	1.4015E-01	7.9045E-03	.0000E+00	.0000E+00	
		26000.55C		124217	1.6540E+00	4.3371E-02	.0000E+00	.0000E+00	
		28000.50C		37560	5.0681E-01	1.4390E-02	.0000E+00	.0000E+00	
		29000.50C		108	1.4073E-03	4.5554E-05	.0000E+00	.0000E+00	
		40000.50C		57499	8.5348E-01	7.2961E-03	.0000E+00	6.4782E-05	
		42000.50C		2966	4.2832E-02	4.2810E-03	.0000E+00	.0000E+00	
		45103.50C		515	6.5470E-03	5.6320E-03	.0000E+00	.0000E+00	
		47109.50C		66	8.8159E-04	7.0326E-04	.0000E+00	.0000E+00	
		50000.35C		532	7.7326E-03	2.0115E-04	.0000E+00	.0000E+00	
		62149.50C		785	8.8894E-03	8.8168E-03	.0000E+00	.0000E+00	
		63151.55C		18	2.4930E-04	2.4394E-04	.0000E+00	.0000E+00	
		63153.55C		104	1.3318E-03	1.2055E-03	.0000E+00	.0000E+00	
		64155.50C		401	4.3137E-03	4.3075E-03	.0000E+00	.0000E+00	
		92233.50C		0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	
		92234.50C		121	1.6078E-03	1.0649E-03	1.6505E-05	.0000E+00	
		92235.50C		20704	4.0966E-01	3.6515E-02	1.7890E-01	.0000E+00	
		92236.50C		839	1.2321E-02	4.3651E-03	1.9908E-04	.0000E+00	
		92238.50C		147417	2.1671E+00	1.8384E-01	2.0628E-02	1.1587E-03	
		93237.55C		186	2.4866E-03	2.0313E-03	1.4271E-05	.0000E+00	
		94238.50C		44	5.7591E-04	3.9656E-04	2.5813E-05	.0000E+00	
		94239.55C		14348	2.9315E-01	5.4214E-02	1.1003E-01	.0000E+00	
		94240.50C		2929	3.8786E-02	3.4148E-02	1.3979E-04	.0000E+00	
		94241.50C		2227	4.5949E-02	6.6078E-03	1.8234E-02	.0000E+00	
		94242.50C		104	1.4853E-03	9.8098E-04	1.9495E-05	.0000E+00	
		95241.50C		368	4.5776E-03	4.1479E-03	4.0287E-05	.0000E+00	
		95242.50C		7	1.9717E-04	1.1250E-05	6.4673E-05	.0000E+00	
		95243.50C		19	2.6707E-04	1.8684E-04	4.0352E-06	.0000E+00	
		96245.35C		0	6.0040E-06	.0000E+00	.0000E+00	.0000E+00	

DUMP NO. 2 ON FILE RUNTPE NPS = 59840 CTM = 108.98

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

Feb 20 21:28 1995 File Name: /users/davis/mcnp/MPC12/m12bb3.o

ATTACHMENT XXX11 BBABA0000-01717-0200-00001 - Page 39

COMPUTER TIME = 109.10 MINUTES

MCNP VERSION 4A-B 10/04/91

02/20/95 21:28:11

PROBID = 02/20/95 19:38:52

1MCNP VERSION 4A-B LD=10/04/91

02/20/95 21:28:12

INP=mpc12bb4 OUTP=m12bb4.o

PROBID = 02/20/95 21:28:12

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb4)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - 4WT% B IN AL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
58- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
59- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
60- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
61- 40 1 -1.0000 19 IMP:N=1 U=2
62- C CONTROL ROD/GUIDE TUBE
63- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
64- 42 1 -1.0000 -21 5 IMP:N=1 U=3
65- 43 4 -6.6000 21 -22 IMP:N=1 U=3
66- 44 1 -1.0000 22 -23 IMP:N=1 U=3
67- 45 4 -6.6000 23 -24 IMP:N=1 U=3
68- 46 1 -1.0000 24 IMP:N=1 U=3
69- C INSTRUMENTATION TUBE
70- 47 1 -1.0000 -25 IMP:N=1 U=4
71- 48 4 -6.6000 25 -26 IMP:N=1 U=4
72- 49 1 -1.0000 26 IMP:N=1 U=4
73- C WATER GAP - ASSEMBLY TOP
74- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
75- C SS TUBE WALL - ASSEMBLY TOP
76- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
77- C AL-B WALL - ASSEMBLY TOP
78- 52 6 -2.747 44 -46 -4 IMP:N=1 U=5
79- C SS WALL - ASSEMBLY TOP
80- 53 8 -8.2380 46 -4 IMP:N=1 U=5
81- C WATER ABOVE BASKET
82- 54 1 -1.000 4 IMP:N=1 U=5
83- C WATER GAP - ASSEMBLY RIGHT
84- 55 1 -1.0000 -36 -4 IMP:N=1 U=6
85- C SS TUBE WALL - ASSEMBLY RIGHT
86- 56 8 -8.2380 36 -43 -4 IMP:N=1 U=6
87- C AL-B WALL - ASSEMBLY RIGHT
88- 57 6 -2.7470 43 -45 -4 IMP:N=1 U=6
89- C SS WALL - ASSEMBLY RIGHT
90- 58 8 -8.2380 45 -4 IMP:N=1 U=6
91- C WATER ABOVE BASKET
92- 59 1 -1.000 4 IMP:N=1 U=6
93- C WATER GAP - ASSEMBLY BOTTOM
94- 60 1 -1.0000 37 -4 IMP:N=1 U=7
95- C SS TUBE WALL - ASSEMBLY BOTTOM
96- 61 8 -8.2380 -37 -4 IMP:N=1 U=7
97- C WATER ABOVE BASKET
98- 62 1 -1.000 4 IMP:N=1 U=7
99- C WATER GAP - ASSEMBLY LEFT
100- 63 1 -1.0000 38 -4 IMP:N=1 U=8
101- C LOWER ST COMB - ASSEMBLY LEFT
102- 64 8 -8.2380 -38 -4 IMP:N=1 U=8
103- C WATER ABOVE BASKET
104- 65 1 -1.000 4 IMP:N=1 U=8
105- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106- 66 1 -1.0000 74 75 IMP:N=1 U=10
107- 67 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108- 68 8 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109- C AXIS MATERIALS
110- 70 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111- 71 6 -2.74700 -59 61 -55 -9 3 -4 IMP:N=1
112- 72 8 -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113- 73 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114- 74 6 -2.7470 -60 62 55 -9 3 -4 IMP:N=1
115- 75 8 -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116- 76 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177-    29 PY 12.80923
178-    30 PY -12.80923
179-    C ASSEMBLY LATTICE BOUNDS
180-    31 PY 10.82024 $ ACTUAL 10.82025
181-    32 PX 10.82024 $ ACTUAL 10.82025
182-    33 PY -10.82024 $ ACTUAL -10.82025
183-    34 PX -10.82024 $ ACTUAL -10.82025
184-    35 PY 11.4300
185-    36 PX 11.4300
186-    37 PY -11.4300
187-    38 PX -11.4300
188-    39 PY 12.17930
189-    40 PX 12.17930
190-    41 PY -11.66876
191-    42 PX -11.66876
192-    43 PX 11.66876
193-    44 PY 11.66876
194-    45 PX 11.94054
195-    46 PY 11.94054
196-    C BLANK PIN CELL
197-    48 PX -0.7213
198-    49 PX 0.7213
199-    50 PY -0.7213
200-    51 PY 0.7213
201-    52 PY 0.0001
202-    53 PY -0.0001
203-    54 PY 0.0
204-    55 P 1. -1. 0. 0.
205-    56 P 1. 1. 0. 0. $ 24.35
206-    C EXTRA CARDS
207-    57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208-    58 PY 2.14376
209-    59 PX 1.9050
210-    60 PY 1.9050
211-    61 PX 1.270
212-    62 PY 1.270050
213-    64 PX -.0000005
214-    65 PY -.0000005
215-    66 PX 95.
216-    67 PY 95.
217-    C OUTER BARRIER
218-    70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219-    71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220-    72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221-    73 PZ 282.3500 $TOP OF OUTER BARRIER
222-    74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223-    75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224-    80 PZ 312.3500 $ WET TUFF OVERPACK, END
225-    81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227-    MODE N
228-    C VOL 88J
229-    KCODE 3000 1. 5 20
230-    C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231-    C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232-    C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233-    C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234-    C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235-    C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236-    C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.75%/0 GWD/0 YEAR -- U02								
331-	C	M2	8016.50C	4.6973E-02						
332-	C	92235.50C	8.9111E-04							
333-	C	92238.50C	2.2583E-02							
334-	C	3.00%/20 GWD/5 YEAR -- U02								
335-	M2	8016.50C	4.7767E-02							
336-		45103.50C	1.7033E-05							
337-		47109.50C	2.0436E-06							
338-		62149.50C	1.3260E-07							
339-		63151.55C	1.6963E-08							
340-		63153.55C	2.1975E-06							
341-		64155.50C	1.0128E-07							
342-		92233.50C	3.2712E-11							
343-		92234.50C	4.9053E-06							
344-		92235.50C	3.1513E-04							
345-		92236.50C	7.0520E-05							
346-		92238.50C	2.2844E-02							
347-		93237.55C	5.4646E-06							
348-		94238.50C	9.9680E-07							
349-		94239.55C	1.0790E-04							
350-		94240.50C	3.0974E-05							
351-		94241.50C	1.4571E-05							
352-		94242.50C	3.7204E-06							
353-		95241.50C	4.3471E-06							
354-		95242.50C	1.3739E-08							
355-		95243.50C	4.1755E-07							
356-		96245.35C	1.4221E-09							

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357- C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
358- M3    2004.50C 1.0
359- C      ZIRCALOY-4
360- M4    8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
361-      40000.50C -0.9818 50000.35C -0.0140
362- C      ALLOY 825
363- M5    6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
364-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
365-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
366-      29000.50C -0.0250 42000.50C -0.0300
367- C      1100 ALUMINUM ALLOY - 4wt% natural boron
368- M6    5010.50C -0.00720 5011.56C -0.03280 13027.50C -0.95880
369-      29000.50C -0.00120
370- C      A516 CARBON STEEL
371- M7    6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
372-      16032.50C -0.00035 25055.50C -0.0090
373-      26000.55C -0.98535
374- C      SS316L
375- M8    6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
376-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
377-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
378-      42000.50C -0.02500
379- C      TALLIES
380- PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	2954
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	2954
POINTS AFTER EXPANSION OR CONTRACTION	2999
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01

THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02

THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00

THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T				
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,
	63151,	.00000	63153,	.00003	64155,	.00000	92233,
	92234,	.00007	92235,	.00443	92236,	.00099	92238,
	93237,	.00008	94238,	.00001	94239,	.00152	94240,
	94241,	.00020	94242,	.00005	95241,	.00006	95242,
	95243,	.00001	96245,	.00000			.00000

3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	5010,	.01832	5011,	.07590	13027,	.90530	29000,	.00048
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	5010,	.00720	5011,	.03280	13027,	.95880	29000,	.00120
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

	SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00	ASYMMETRIC
2	2	.00000E+00	.00000E+00	ASYMMETRIC
3	3	.00000E+00	.00000E+00	ASYMMETRIC
4	4	.00000E+00	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00	
6	6	.00000E+00	.00000E+00	ASYMMETRIC
7	7	.00000E+00	.00000E+00	ASYMMETRIC
8	8	.00000E+00	.00000E+00	ASYMMETRIC
9	9	.00000E+00	.00000E+00	ASYMMETRIC
10	10	.00000E+00	.00000E+00	ASYMMETRIC
11	11	.00000E+00	.00000E+00	ASYMMETRIC
12	12	.00000E+00	.00000E+00	ASYMMETRIC
13	13	.00000E+00	.00000E+00	INFINITE
14	14	.00000E+00	.00000E+00	INFINITE
15	15	.00000E+00	.00000E+00	INFINITE
16	16	.00000E+00	.00000E+00	INFINITE
17	17	.00000E+00	.00000E+00	INFINITE
18	18	.00000E+00	.00000E+00	INFINITE
19	19	.00000E+00	.00000E+00	INFINITE
20	21	.00000E+00	.00000E+00	INFINITE
21	22	.00000E+00	.00000E+00	INFINITE
22	23	.00000E+00	.00000E+00	INFINITE
23	24	.00000E+00	.00000E+00	INFINITE
24	25	.00000E+00	.00000E+00	INFINITE
25	26	.00000E+00	.00000E+00	INFINITE
26	27	.00000E+00	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	.00000E+00	INFINITE
31	32	.00000E+00	.00000E+00	INFINITE
32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE

48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE

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108 24049 .00000E+00 .00000E+00 INFINITE
109 24050 .00000E+00 .00000E+00 INFINITE
110 24051 .00000E+00 .00000E+00 INFINITE
111 25048 .00000E+00 .00000E+00 INFINITE
112 25049 .00000E+00 .00000E+00 INFINITE
113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL 1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02

6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700500E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			

66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08

59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY	(1301)	79/07/31.
2004.50C	2716	NJOY	(1270)	79/06/19.
5010.50C	9587	NJOY	(1305)	79/09/10.
6000.50C	16126	NJOY	(1306)	79/07/31.
7014.50C	22772	NJOY	(1275)	79/09/08.
8016.50C	23669	NJOY	(1276)	05/14/81
13027.50C	22891	NJOY	(1313)	79/09/08.
24000.50C	89104	NJOY	(1324)	79/06/21.
26000.55C	84136	NJOY	(260)	10/21/82
28000.50C	82267	NJOY	(1328)	79/06/21.
29000.50C	22473	NJOY	(1329)	02/05/80
92233.50C	14205	NJOY	(1393)	79/09/12.
92235.50C	44188	NJOY	(1395)	79/09/12.
92238.50C	66440	NJOY	(1398)	79/09/13.
94239.55C	67551	NJOY	(1399)	02/21/85
94240.50C	42744	NJOY	(1380)	79/09/13.
		TOTAL NU		
		TOTAL NU		
		TOTAL NU		
		TOTAL NU		
		TOTAL NU		

TABLES FROM FILE NEWXS2

5011.56C	28379			06/28/88
63151.55C	33336			06/28/88
63153.55C	30265			06/28/88

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY			
40000.50C	35842	NJOY	(1314)	79/06/21.	
			(1340)	79/07/31.	
WARNING. NUBAR OF	92234.50C	MAY BE EITHER PROMPT OR TOTAL.			
92234.50C	76999	NJOY			
			(1394)	79/10/17.	
WARNING. NUBAR OF	92236.50C	MAY BE EITHER PROMPT OR TOTAL.			
92236.50C	119238	NJOY			
			(1396)	79/08/30.	
WARNING. NUBAR OF	94238.50C	MAY BE EITHER PROMPT OR TOTAL.			
94238.50C	16458	NJOY	(1338)	79/09/12.	
94241.50C	22523	NJOY	(1381)	79/08/30.	
94242.50C	43433	NJOY	(1342)	79/09/06.	
			TOTAL NU		
			TOTAL NU		

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY			
16032.50C	2684	NJOY	(1315)	79/10/29.	
22000.50C	25231	NJOY	(1316)	79/10/29.	
25055.50C	60097	NJOY	(1322)	79/06/21.	
42000.50C	18467	NJOY	(1325)	79/06/21.	
62149.50C	11116	NJOY	(1321)	79/08/01.	
64155.50C	31471	NJOY	(1319)	02/12/85	
			(1365)	79/07/28.	
WARNING. NUBAR OF	95241.50C	MAY BE EITHER PROMPT OR TOTAL.			
95241.50C	29300	NJOY			
			(1361)	79/08/29.	
WARNING. NUBAR OF	95242.50C	MAY BE EITHER PROMPT OR TOTAL.			
95242.50C	5248	NJOY			
			(1369)	79/09/24.	
WARNING. NUBAR OF	95243.50C	MAY BE EITHER PROMPT OR TOTAL.			
95243.50C	51474	NJOY			
			(1363)	79/08/30.	

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY			
47109.50C	10147	NJOY	(1310)	11/01/85	
93237.55C	29142	NJOY	(1373)	11/01/85	
			(1337)	04/04/85	
			TOTAL NU		

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=OK	
					(48) 86/02/01
WARNING. NUBAR OF	96245.35C	MAY BE EITHER PROMPT OR TOTAL.			
96245.35C	15310	ZA=96245 ENDL-85	85/04/24	T=OK	
					(93) 86/04/23

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN			
TOTAL	1385457		1001	0	010/22/85

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102760
TALLIES	0
BANK	18403

CROSS SECTIONS 1385457

TOTAL 1506620

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

10 WARNING MESSAGES SO FAR.
1 STARTING MCRUN. FIELD LENGTH = 0 CP0 = .12

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb4)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	1.756E-01	-1.406E-01	5.125E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.000E+00	4.688E-01
2	-2.898E-01	-2.528E-01	3.868E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.000E+00	6.703E-01
3	3.993E-01	3.001E-02	1.680E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.000E+00	1.876E-01
4	6.265E-02	4.350E-01	4.683E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.000E+00	1.324E+00
5	3.775E-01	-1.619E-01	4.068E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.000E+00	1.630E+00
6	1.520E-01	2.907E-01	3.781E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.000E+00	4.380E+00
7	4.573E-01	-6.123E-04	3.880E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.000E+00	1.617E+00
8	-9.955E-02	1.612E-01	4.467E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.000E+00	1.536E+00
9	2.286E-01	1.888E-01	4.464E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.000E+00	9.867E-01
10	1.524E-02	-4.943E-03	4.476E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.000E+00	6.591E+00
11	-2.515E-01	-2.715E-01	5.297E-01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.000E+00	1.004E+00
12	-3.195E-01	-1.634E-01	1.367E+02	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.000E+00	8.981E-01
13	-2.753E-01	1.675E-01	1.088E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.000E+00	1.760E+00
14	-1.325E-01	7.188E-02	1.060E+02	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.000E+00	1.373E+00
15	1.812E-01	1.999E-02	1.209E+02	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.000E+00	4.991E+00
16	1.359E-01	-1.421E-01	1.271E+02	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.000E+00	2.227E+00
17	-3.837E-01	-1.625E-01	4.809E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.000E+00	4.530E+00
18	-1.633E-01	-1.624E-01	1.802E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.000E+00	4.085E+00
19	2.022E-01	-4.956E-03	7.736E+00	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.000E+00	2.705E+00
20	1.310E-01	-1.337E-01	7.977E-01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.000E+00	7.811E-01
21	2.310E-02	-4.569E-01	6.570E+00	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.000E+00	7.768E-01
22	7.478E-02	1.501E-01	4.293E+00	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.000E+00	6.007E+00
23	2.019E-01	3.180E-02	4.580E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.000E+00	2.635E+00
24	-3.622E-01	3.483E-02	5.165E+00	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.000E+00	1.666E+00
25	-6.067E-02	5.940E-02	3.384E+00	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.000E+00	3.088E+00
26	-3.557E-02	4.023E-02	3.357E+00	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.000E+00	1.767E+00
27	2.905E-01	-2.577E-01	2.771E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.000E+00	1.735E+00
28	1.599E-01	-3.799E-02	8.501E+00	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.000E+00	4.625E-01
29	-3.057E-01	1.498E-01	8.414E+00	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.000E+00	5.538E+00
30	-2.577E-01	-1.523E-01	6.748E+00	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.000E+00	4.334E+00
31	-3.983E-01	-1.138E-01	7.001E+00	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.000E+00	3.305E+00
32	-1.831E-01	-3.465E-01	7.002E+00	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.000E+00	3.417E+00
33	2.565E-01	-3.772E-01	6.824E+00	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.000E+00	5.917E+00
34	2.000E-01	3.411E-01	5.848E+00	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.000E+00	7.228E-01
35	-1.254E-01	-2.028E-01	1.593E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.000E+00	1.825E-01
36	3.386E-01	-2.317E-01	7.636E+00	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.000E+00	2.443E-01
37	3.740E-01	-3.114E-02	7.409E+00	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.000E+00	1.802E-01
38	1.054E-01	2.358E-01	1.811E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.000E+00	1.779E+00
39	3.346E-01	1.136E-01	1.777E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.000E+00	5.399E-01
40	-1.815E-01	-3.199E-01	1.803E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.000E+00	5.880E-01
41	-3.326E-01	-1.756E-01	3.064E+00	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.000E+00	2.161E+00
42	-7.635E-02	-4.345E-01	1.016E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.000E+00	6.547E+00

43	3.776E-02	-2.248E-01	9.253E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.000E+00	2.951E+00
44	1.314E-01	3.661E-02	8.360E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.000E+00	3.606E-01
45	2.157E-03	4.380E-01	8.695E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.000E+00	1.613E+00
46	4.525E-01	-8.527E-02	8.639E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.000E+00	1.779E+00
47	-6.075E-02	1.370E-01	9.922E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.000E+00	4.638E+00
48	5.163E-03	3.396E-01	8.532E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.000E+00	2.029E-01
49	-3.381E-02	-4.287E-01	8.337E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.000E+00	1.756E+00
50	3.937E-01	1.922E-01	8.359E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.000E+00	1.469E+00

CYCLE 1 K(COLLISION) .862181 REMOVAL LIFETIME(ABS) 2.8119E+03 SOURCE POINTS GENERATED 2661

CYCLE 2 K(COLLISION) .845716 REMOVAL LIFETIME(ABS) 2.6678E+03 SOURCE POINTS GENERATED 2917

CYCLE 3 K(COLLISION) .871472 REMOVAL LIFETIME(ABS) 2.6084E+03 SOURCE POINTS GENERATED 3081

CYCLE 4 K(COLLISION) .851372 REMOVAL LIFETIME(ABS) 2.5659E+03 SOURCE POINTS GENERATED 2943

CYCLE 5 K(COLLISION) .867801 REMOVAL LIFETIME(ABS) 2.7253E+03 SOURCE POINTS GENERATED 3073

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .849700 REMOVAL LIFETIME(ABS) 2.5558E+03 SOURCE POINTS GENERATED 2961

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.862576		.856138	.0075	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)		.878471		.872777	.0065	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)		.860078		.849533	.0124	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	2.5939E+03		2.5716E+03		.0087				
REM LIFE(ABS)	2.6167E+03		2.5863E+03		.0118	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000
SOURCE POINTS GENERATED	3078								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.859897		.857391	.0046	K(COL/ABS)	.863764 .0041	.862772 .0097	.5388
K(ABSORPTION)		.864858		.870138	.0048	K(ABS/TK LN)	.863354 .0060	.867954 .0072	.0365
K(TRK LENGTH)		.870648		.856571	.0109	K(TK LN/COL)	.856981 .0075	.857728 .0049	.8615
REM LIFE(COL)	2.6184E+03		2.5872E+03		.0078				
REM LIFE(ABS)	2.6224E+03		2.5983E+03		.0082	LIFE(COL/ABS)	2.5928E+03 .0079	2.5856E+03 .0140	.9611
SOURCE POINTS GENERATED	2998								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.861995		.858542	.0035	K(COL/ABS)	.865828 .0038	.860046 .0069	.6230
K(ABSORPTION)		.882046		.873115	.0048	K(ABS/TK LN)	.862804 .0043	.867130 .0050	-.3504
K(TRK LENGTH)		.840256		.852492	.0091	K(TK LN/COL)	.855517 .0056	.858801 .0044	.4744
REM LIFE(COL)	2.5943E+03		2.5890E+03		.0056				
REM LIFE(ABS)	2.6343E+03		2.6073E+03		.0067	K(COL/ABS/TK LN)	.861383 .0039	.860798 .0364	
SOURCE POINTS GENERATED	3081					LIFE(COL/ABS)	2.5981E+03 .0060	2.5849E+03 .0080	.8819

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.846079		.856049	.0040	K(COL/ABS)	.863723 .0038	.861615 .0071	.7167
K(ABSORPTION)		.864524		.871397	.0042	K(ABS/TK LN)	.860475 .0043	.865951 .0049	-.0734
K(TRK LENGTH)		.837801		.849554	.0079	K(TK LN/COL)	.852802 .0054	.856581 .0047	.6123
REM LIFE(COL)	2.6239E+03		2.5960E+03		.0051	K(COL/ABS/TK LN)	.859000 .0041	.873642 .0295	

REM LIFE(ABS) 2.6173E+03 2.6093E+03 .0053 LIFE(COL/ABS) 2.6026E+03 .0049 2.6011E+03 .0060 .8169
SOURCE POINTS GENERATED 2957

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.855585	.855972	.0033	K(COL/ABS)	.860602	.0048	.856253	.0037
K(ABSORPTION)	.834406	.865231	.0079	K(ABS/TK LN)	.857853	.0047	.856521	.0053
K(TRK LENGTH)	.855072	.850474	.0065	K(TK LN/COL)	.853223	.0044	.856378	.0037
REM LIFE(COL)	2.6073E+03	2.5979E+03	.0042	K(COL/ABS/TK LN)	.857226	.0039	.856407	.0051
REM LIFE(ABS)	2.5978E+03	2.6074E+03	.0044	LIFE(COL/ABS)	2.6026E+03	.0040	2.6018E+03	.0046
SOURCE POINTS GENERATED	3012							.7638

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.863229	.857009	.0030	K(COL/ABS)	.861229	.0041	.857494	.0033
K(ABSORPTION)	.866750	.865448	.0067	K(ABS/TK LN)	.857666	.0039	.856311	.0044
K(TRK LENGTH)	.846349	.849884	.0055	K(TK LN/COL)	.853447	.0037	.856739	.0034
REM LIFE(COL)	2.7025E+03	2.6128E+03	.0067	K(COL/ABS/TK LN)	.857447	.0033	.857113	.0046
REM LIFE(ABS)	2.6861E+03	2.6186E+03	.0057	LIFE(COL/ABS)	2.6157E+03	.0060	2.6204E+03	.0062
SOURCE POINTS GENERATED	2956							.9074

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.864863	.857991	.0028	K(COL/ABS)	.860256	.0037	.858602	.0029
K(ABSORPTION)	.842036	.862522	.0067	K(ABS/TK LN)	.856822	.0036	.855487	.0037
K(TRK LENGTH)	.859784	.851122	.0050	K(TK LN/COL)	.854556	.0035	.857868	.0032
REM LIFE(COL)	2.7277E+03	2.6272E+03	.0080	K(COL/ABS/TK LN)	.857211	.0029	.857905	.0038
REM LIFE(ABS)	2.7047E+03	2.6294E+03	.0064	LIFE(COL/ABS)	2.6283E+03	.0071	2.6315E+03	.0063
SOURCE POINTS GENERATED	3013							.9468

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.889955	.861542	.0048	K(COL/ABS)	.862440	.0041	.862205	.0043
K(ABSORPTION)	.869864	.863338	.0060	K(ABS/TK LN)	.859621	.0045	.860173	.0048
K(TRK LENGTH)	.894169	.855905	.0071	K(TK LN/COL)	.858724	.0057	.863618	.0050
REM LIFE(COL)	2.7107E+03	2.6364E+03	.0078	K(COL/ABS/TK LN)	.860262	.0044	.862595	.0055
REM LIFE(ABS)	2.6857E+03	2.6357E+03	.0061	LIFE(COL/ABS)	2.6360E+03	.0069	2.6347E+03	.0056
SOURCE POINTS GENERATED	3097							.9541

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.860943	.861482	.0043	K(COL/ABS)	.860793	.0042	.861109	.0041
K(ABSORPTION)	.831008	.860105	.0066	K(ABS/TK LN)	.858197	.0044	.858132	.0046
K(TRK LENGTH)	.859741	.856289	.0064	K(TK LN/COL)	.858885	.0051	.863340	.0044
REM LIFE(COL)	2.5953E+03	2.6323E+03	.0072	K(COL/ABS/TK LN)	.859292	.0041	.861777	.0052
REM LIFE(ABS)	2.5656E+03	2.6286E+03	.0061	LIFE(COL/ABS)	2.6305E+03	.0065	2.6267E+03	.0063
SOURCE POINTS GENERATED	2925							.9321

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.846407	.860112	.0042	K(COL/ABS)	.859669	.0040	.859856	.0040
K(ABSORPTION)	.850450	.859227	.0060	K(ABS/TK LN)	.857432	.0041	.857360	.0043
K(TRK LENGTH)	.849116	.855637	.0058	K(TK LN/COL)	.857874	.0048	.861069	.0044
REM LIFE(COL)	2.7899E+03	2.6467E+03	.0084	K(COL/ABS/TK LN)	.858325	.0039	.859645	.0048

REM LIFE(ABS) 2.8467E+03 2.6485E+03 .0093 LIFE(COL/ABS) 2.6476E+03 .0087 2.6462E+03 .0089 .9395
SOURCE POINTS GENERATED 2944

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.845945	.858931	.0041			K(COL/ABS)	.858653 .0038	.858763 .0038	.2390
K(ABSORPTION)	.848998	.858375	.0056			K(ABS/TK LN)	.856845 .0038	.856763 .0040	-.0504
K(TRK LENGTH)	.851782	.855315	.0053			K(TK LN/COL)	.857123 .0045	.859141 .0043	.7990
REM LIFE(COL)	2.6028E+03	2.6430E+03	.0078			K(COL/ABS/TK LN)	.857540 .0036	.858030 .0044	
REM LIFE(ABS)	2.5947E+03	2.6440E+03	.0086			LIFE(COL/ABS)	2.6435E+03 .0081	2.6427E+03 .0082	.9414
SOURCE POINTS GENERATED	3032								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.869745	.859763	.0039			K(COL/ABS)	.858375 .0036	.858888 .0035	.1465
K(ABSORPTION)	.840337	.856987	.0054			K(ABS/TK LN)	.857076 .0035	.857077 .0036	-.1647
K(TRK LENGTH)	.879365	.857165	.0053			K(TK LN/COL)	.858464 .0044	.860190 .0040	.8085
REM LIFE(COL)	2.6997E+03	2.6474E+03	.0074			K(COL/ABS/TK LN)	.857972 .0034	.858316 .0040	
REM LIFE(ABS)	2.6816E+03	2.6469E+03	.0080			LIFE(COL/ABS)	2.6471E+03 .0076	2.6474E+03 .0077	.9395
SOURCE POINTS GENERATED	3007								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.864189	.860079	.0036			K(COL/ABS)	.859137 .0034	.859526 .0033	.1678
K(ABSORPTION)	.873893	.858195	.0052			K(ABS/TK LN)	.857187 .0032	.857166 .0034	-.2157
K(TRK LENGTH)	.843352	.856179	.0051			K(TK LN/COL)	.858129 .0041	.860385 .0038	.7603
REM LIFE(COL)	2.6127E+03	2.6449E+03	.0069			K(COL/ABS/TK LN)	.858151 .0031	.858435 .0038	
REM LIFE(ABS)	2.6662E+03	2.6483E+03	.0074			LIFE(COL/ABS)	2.6466E+03 .0070	2.6451E+03 .0072	.9191
SOURCE POINTS GENERATED	2997								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.846406	.859168	.0035			K(COL/ABS)	.858143 .0034	.858581 .0033	.2303
K(ABSORPTION)	.842049	.857118	.0050			K(ABS/TK LN)	.856333 .0032	.856302 .0033	-.1678
K(TRK LENGTH)	.846718	.855548	.0048			K(TK LN/COL)	.857358 .0039	.859317 .0037	.7627
REM LIFE(COL)	2.6194E+03	2.6432E+03	.0065			K(COL/ABS/TK LN)	.857278 .0031	.857377 .0037	
REM LIFE(ABS)	2.6156E+03	2.6461E+03	.0070			LIFE(COL/ABS)	2.6446E+03 .0066	2.6433E+03 .0067	.9199
SOURCE POINTS GENERATED	2973								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1 PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb4)

02/20/95 23:16:29
PROBID = 02/20/95 21:28:12

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59732	1.0045E+00	2.0555E+00	ESCAPE	1	1.6301E-05	2.1877E-05
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	4.1014E-02	1.4773E-06	WEIGHT CUTOFF	59828	3.9374E-02	4.3463E-05
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.

DXTRAN 0 0. 0.
 FORCED COLLISIONS 0 0. 0.
 EXP. TRANSFORM 0 0. 0.
 UPSCATTERING 0 0. 1.0538E-07

(N,XN) 194 2.6175E-03 2.0732E-03
 FISSION 0 0. 0.
 TOTAL 59926 1.0481E+00 2.0576E+00

NUMBER OF NEUTRONS BANKED 97
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0032E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 5.0352E+01
 TOTAL NEUTRON COLLISIONS 3007651
 NET MULTIPLICATION 1.0013E+00 .0002

COMPUTER TIME SO FAR IN THIS RUN 108.07 MINUTES
 COMPUTER TIME IN MCRUN 107.95 MINUTES
 SOURCE PARTICLES PER MINUTE 5.5333E+02
 RANDOM NUMBERS GENERATED 37551988

DXTRAN 0 0. 0.
 FORCED COLLISIONS 0 0. 0.
 EXP. TRANSFORM 0 0. 0.
 DOWNSCATTERING 0 0. 1.9449E+00
 CAPTURE 0 6.8079E-01 3.2278E-02
 LOSS TO (N,XN) 97 1.3087E-03 1.1097E-02
 LOSS TO FISSION 0 3.2663E-01 6.9299E-02
 TOTAL 59926 1.0481E+00 2.0576E+00

AVERAGE LIFETIME, SHAKES
 ESCAPE 2.9561E+00
 CAPTURE 2.6458E+03
 CAPTURE OR ESCAPE 2.6458E+03
 ANY TERMINATION 2.8571E+03
 CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 9644 IN HISTORY 45116

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6868E-01 TO 1.1274E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
80	NO DATA AVAILABLE YET FOR THIS CELL.						
83	NO DATA AVAILABLE YET FOR THIS CELL.						
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	18338	8199	2.3683E+00	1.7016E-04	4.4356E-01	7.9040E-01	1.2362E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

22	23	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	707891	59828	286078	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	4586	242	953	4.0860E+00	7.9242E-04	7.5667E-01	8.8910E-01	2.5316E+00
34	35	184	21	550	1.0352E-02	5.2858E-05	2.0556E-01	6.3061E-01	4.2186E+00
35	36	1269008	59828	15	3.5789E-03	3.6082E-06	1.3679E-02	3.9097E-01	3.6058E-01
36	37	320	20	17	2.3023E-04	6.8300E-04	7.1908E-01	8.8545E-01	3.4765E+03
37	38	1375156	59828	49498	1.1109E-04	3.3901E-06	1.5154E-02	3.8585E-01	3.5253E-01
38	39	358	21	151	7.4444E-01	6.5603E-04	7.0663E-01	8.8527E-01	4.1045E+00
39	40	2201728	59828	1352535	1.0601E-03	5.8408E-06	1.8867E-02	4.1197E-01	3.9223E-01
40	41	57513	31497	88667	1.8214E+01	5.7191E-04	6.7382E-01	8.8382E-01	1.6610E+00
41	42	9	6	16	1.1799E+00	4.1158E-04	6.2872E-01	8.7520E-01	1.5669E+00
42	43	121430	33261	3722	9.4638E-05	3.6139E-05	7.9945E-02	4.2301E-01	6.3725E-01
43	44	136007	35619	29527	5.5495E-02	4.3638E-04	6.4158E-01	8.7719E-01	4.1357E+00
44	45	148890	36626	3224	3.9290E-01	4.4517E-04	6.4315E-01	8.7759E-01	1.5963E+00
45	46	181488	41825	71182	4.8124E-02	4.5223E-04	6.4540E-01	8.7674E-01	4.1326E+00
46	47	7496	3467	7860	9.4691E-01	4.5073E-04	6.3789E-01	8.7683E-01	1.5929E+00
47	48	10032	3812	352	1.0448E-01	4.1090E-04	6.0930E-01	8.7510E-01	1.5480E+00
48	49	13172	5225	6628	5.2355E-03	4.4588E-04	6.4143E-01	8.7383E-01	4.1334E+00
49	50	25578	13895	39787	8.6949E-02	4.4106E-04	6.3802E-01	8.7414E-01	1.5829E+00
50	51	23503	13194	7429	5.5194E-01	6.3661E-04	6.3978E-01	8.9543E-01	1.6233E+00
51	52	24616	13121	5520	1.0785E-01	1.1411E-03	6.8575E-01	9.0436E-01	2.3371E+00
52	53	23152	12413	7325	7.2343E-02	1.7131E-03	7.1062E-01	9.1435E-01	5.1560E+00
53	54	206	63	1222	1.0587E-01	1.1348E-03	6.8497E-01	8.9800E-01	2.3482E+00
54	55	26073	14068	40367	1.1516E-02	5.2886E-05	1.9862E-01	6.3815E-01	8.0172E-01
55	56	24042	13340	7555	5.5781E-01	6.4670E-04	6.5252E-01	8.9624E-01	1.6418E+00
56	57	25221	13317	5727	1.1026E-01	1.1323E-03	6.8584E-01	9.0425E-01	2.3434E+00
57	58	23575	12563	7235	7.4395E-02	1.6757E-03	7.2016E-01	9.1359E-01	5.1128E+00
58	59	235	57	1512	1.0351E-01	1.0902E-03	6.9087E-01	8.9600E-01	2.3528E+00
59	60	44696	18009	67162	1.3823E-02	4.7602E-05	2.3503E-01	6.0633E-01	8.0479E-01
60	61	42863	17059	13173	9.2978E-01	7.5990E-04	6.1876E-01	8.9427E-01	1.6146E+00
61	62	336	78	1668	1.8975E-01	1.3477E-03	6.5715E-01	8.9894E-01	2.4343E+00
62	63	43938	17804	66077	1.3303E-02	4.8925E-05	2.5901E-01	5.4259E-01	7.9760E-01
63	64	42110	16895	13014	9.1600E-01	7.4541E-04	6.1997E-01	8.9283E-01	1.6163E+00
64	65	404	91	1902	1.8771E-01	1.3444E-03	6.5771E-01	8.9781E-01	2.4386E+00
65	66	8771	4382	395912	1.7157E-02	4.7914E-05	2.3334E-01	6.0095E-01	8.1637E-01
66	67	8298	3372	12138	3.6830E+00	5.8530E-05	2.7115E-01	6.2635E-01	8.6864E-01
67	68	8129	3330	11673	1.3108E-01	2.0498E-04	4.4927E-01	7.2122E-01	1.8482E+00
68	70	27125	8765	7912	1.2760E-01	2.2946E-04	4.7689E-01	7.2543E-01	1.8990E+00
69	71	27592	8413	8684	1.1442E-01	2.0386E-03	6.6447E-01	9.0086E-01	2.5521E+00
70	72	13318	7194	36636	1.2489E-01	6.1225E-03	7.0451E-01	9.1742E-01	5.6118E+00
71	73	28206	9052	8452	5.3786E-01	8.3574E-03	6.9905E-01	9.1039E-01	2.7537E+00
72	74	28635	8729	8839	1.2261E-01	2.1519E-03	6.7245E-01	9.0476E-01	2.5703E+00
73	75	13836	7451	38269	1.2700E-01	6.1530E-03	6.9570E-01	9.1723E-01	5.6435E+00
74	76	178	48	4096	5.6040E-01	7.6999E-03	6.8094E-01	9.0948E-01	2.7513E+00
75	77	132	47	2600	3.6334E-02	4.2847E-05	2.5645E-01	5.8338E-01	8.0392E-01
76	80	5	5	10	2.2530E-02	2.1839E-05	1.0234E-01	5.6988E-01	5.9181E-01
77	81	3328	1422	9858	5.3300E-05	3.0918E-08	3.4998E-08	3.3454E-01	8.3286E-01
78	82	2185	865	12302	1.0834E-01	3.6806E-04	5.1844E-01	7.3662E-01	2.1486E+00
79	83	0	0	0	1.3090E-01	2.7770E-04	4.6389E-01	7.5618E-01	1.3338E+00
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1699	682	4691	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
					5.6220E-02	8.8750E-04	5.7040E-01	7.9334E-01	2.1913E+00

82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1083	463	9255	1.0992E-01	2.0285E-03	5.0180E-01	8.0048E-01	4.4200E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	412	220	44736	3.7247E-01	2.9117E-05	1.1176E-01	5.4893E-01	6.3123E-01

TOTAL 6797086 679560 3007651 3.8577E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-4.9754E-01	-4.9754E-01
2	2	2.5411E-01	.0000E+00	.0000E+00	-7.1320E-01	-4.5909E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.4391E-02	-1.4391E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-4.3706E-02	-4.3706E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.4211E-02	-1.4211E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.2776E-01	-1.2776E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6207E+00	-1.6207E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9959E+00	-1.9959E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-1.6788E-01	-1.6788E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.7104E-01	-1.7104E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.3624E-01	-3.3624E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.3125E-01	-3.3125E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-8.1927E-02	-8.1927E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-8.2694E-02	-8.2694E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-9.1354E-02	-9.1354E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.4759E-02	-7.4759E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.2861E-02	-7.2861E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.3890E-02	-7.3890E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-1.0302E-01	-1.0302E-01
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0058E-01	-1.0058E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-8.9214E-02	-8.9214E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.3247E-02	-8.3247E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1766E-01	-1.1766E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1157E-01	-1.1157E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1799E-01	-1.1799E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1599E-01	-1.1599E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0394E-01	-1.0394E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.4763E-02	-8.4763E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-9.2637E-02	-9.2637E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-1.0171E-01	-1.0171E-01
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8872E+01	-1.8872E+01
32	33	9.6010E+00	1.0045E+00	.0000E+00	-9.4267E+00	1.1788E+00
33	34	4.8380E-02	.0000E+00	.0000E+00	-4.5656E-02	2.7235E-03
34	35	1.2229E-03	.0000E+00	.0000E+00	-1.1418E-03	8.1079E-05
35	36	1.8825E+01	.0000E+00	.0000E+00	-1.8814E+01	1.1856E-02
36	37	2.0819E-03	.0000E+00	.0000E+00	-2.0811E-03	7.4305E-07
37	38	2.0398E+01	.0000E+00	.0000E+00	-2.0322E+01	7.6143E-02
38	39	2.4401E-03	.0000E+00	.0000E+00	-2.4018E-03	3.8266E-05
39	40	3.2602E+01	.0000E+00	.0000E+00	-1.0656E+01	2.1946E+01
40	41	8.4504E-01	.0000E+00	.0000E+00	-8.4152E-01	3.5237E-03
41	42	6.5083E-05	.0000E+00	.0000E+00	-6.4508E-05	5.7479E-07
42	43	1.7815E+00	.0000E+00	.0000E+00	-1.7810E+00	5.3914E-04
43	44	1.9968E+00	.0000E+00	.0000E+00	-1.9957E+00	1.1361E-03
44	45	2.1861E+00	.0000E+00	.0000E+00	-2.1857E+00	4.0817E-04
45	46	2.6683E+00	.0000E+00	.0000E+00	-1.1303E+00	1.5379E+00
46	47	1.0975E-01	.0000E+00	.0000E+00	-6.6952E-02	4.2797E-02
47	48	1.4693E-01	.0000E+00	.0000E+00	-1.4217E-01	4.7526E-03
48	49	1.9299E-01	.0000E+00	.0000E+00	-7.5291E-02	1.1770E-01

TOTAL	9.9784E+01	1.0045E+00	.0000E+00	.0000E+00	-9.9784E+01	1.0045E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	1.0587E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0587E-03
33	34	.0000E+00	.0000E+00	-4.8000E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.8000E-05
34	35	.0000E+00	.0000E+00	1.2589E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2589E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	-5.8471E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.8471E-06
38	39	.0000E+00	.0000E+00	-8.3375E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3375E-06
39	40	.0000E+00	.0000E+00	7.2004E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.2004E-05
40	41	.0000E+00	.0000E+00	-2.4555E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4555E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-3.4688E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4688E-06
43	44	.0000E+00	.0000E+00	1.6889E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6889E-05
44	45	.0000E+00	.0000E+00	8.7676E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7676E-06
45	46	.0000E+00	.0000E+00	-7.9333E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9333E-06
46	47	.0000E+00	.0000E+00	-1.2495E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2495E-05
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	-4.1215E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1215E-06
49	50	.0000E+00	.0000E+00	4.4228E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4228E-06
50	51	.0000E+00	.0000E+00	-3.4003E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4003E-05
51	52	.0000E+00	.0000E+00	-4.1676E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1676E-05
52	53	.0000E+00	.0000E+00	6.8710E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8710E-07
53	54	.0000E+00	.0000E+00	8.4711E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4711E-06
54	55	.0000E+00	.0000E+00	1.2748E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2748E-05
55	56	.0000E+00	.0000E+00	1.2758E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2758E-05
56	57	.0000E+00	.0000E+00	2.4522E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4522E-05
57	58	.0000E+00	.0000E+00	-5.9629E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.9629E-05
58	59	.0000E+00	.0000E+00	1.0265E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0265E-07
59	60	.0000E+00	.0000E+00	8.6109E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.6109E-06
60	61	.0000E+00	.0000E+00	1.2457E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2457E-05
61	62	.0000E+00	.0000E+00	-4.0996E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0996E-06
62	63	.0000E+00	.0000E+00	-1.6406E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6406E-05
63	64	.0000E+00	.0000E+00	4.1258E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1258E-05
64	65	.0000E+00	.0000E+00	8.4883E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.4883E-06
65	66	.0000E+00	.0000E+00	1.0893E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0893E-04
66	67	.0000E+00	.0000E+00	2.0045E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.0045E-04
67	68	.0000E+00	.0000E+00	1.4062E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4062E-04
68	70	.0000E+00	.0000E+00	1.0424E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0424E-05
69	71	.0000E+00	.0000E+00	2.4989E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.4989E-08
70	72	.0000E+00	.0000E+00	-1.1832E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1832E-05
71	73	.0000E+00	.0000E+00	-7.9833E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9833E-06
72	74	.0000E+00	.0000E+00	-6.0066E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.0066E-05
73	75	.0000E+00	.0000E+00	5.5252E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.5252E-05
74	76	.0000E+00	.0000E+00	1.7799E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7799E-07
75	77	.0000E+00	.0000E+00	-4.0093E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.0093E-06

76	80	.0000E+00	.0000E+00	-1.5143E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.5143E-05
77	81	.0000E+00	.0000E+00	8.7910E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7910E-05
78	82	.0000E+00	.0000E+00	1.3134E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3134E-05
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	3.1018E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.1018E-06
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.4149E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4149E-05
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	9.9617E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.9617E-05
TOTAL		.0000E+00	.0000E+00	1.6403E-03	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6403E-03
1NEUTRON WEIGHT BALANCE IN EACH CELL --		PHYSICAL EVENTS			PRINT TABLE 130				

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-9.3693E-03	.0000E+00	-9.3693E-03
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.4142E-03	.0000E+00	-3.5010E-01	-1.2071E-03	-3.2663E-01
33	34	.0000E+00	.0000E+00	-2.2450E-04	.0000E+00	-2.2450E-04
34	35	.0000E+00	.0000E+00	-2.0802E-05	.0000E+00	-2.0802E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-7.4305E-07	.0000E+00	-7.4305E-07
37	38	1.5513E-04	.0000E+00	-6.1919E-03	-7.7567E-05	-6.1143E-03
38	39	.0000E+00	.0000E+00	-6.4757E-06	.0000E+00	-6.4757E-06
39	40	.0000E+00	.0000E+00	-4.6731E-02	.0000E+00	-4.6731E-02
40	41	.0000E+00	.0000E+00	-3.4992E-03	.0000E+00	-3.4992E-03
41	42	.0000E+00	.0000E+00	-5.7479E-07	.0000E+00	-5.7479E-07
42	43	1.9725E-05	.0000E+00	-5.4554E-04	-9.8623E-06	-5.3568E-04

43	44	.0000E+00	.0000E+00	-1.1530E-03	.0000E+00	.0000E+00	-1.1530E-03
44	45	.0000E+00	.0000E+00	-4.1694E-04	.0000E+00	.0000E+00	-4.1694E-04
45	46	.0000E+00	.0000E+00	-2.7489E-03	.0000E+00	.0000E+00	-2.7489E-03
46	47	.0000E+00	.0000E+00	-3.0547E-04	.0000E+00	.0000E+00	-3.0547E-04
47	48	.0000E+00	.0000E+00	-5.4835E-05	.0000E+00	.0000E+00	-5.4835E-05
48	49	.0000E+00	.0000E+00	-2.5646E-04	.0000E+00	.0000E+00	-2.5646E-04
49	50	.0000E+00	.0000E+00	-1.2496E-03	.0000E+00	.0000E+00	-1.2496E-03
50	51	.0000E+00	.0000E+00	-3.7358E-03	.0000E+00	.0000E+00	-3.7358E-03
51	52	.0000E+00	.0000E+00	-4.1023E-02	.0000E+00	.0000E+00	-4.1023E-02
52	53	.0000E+00	.0000E+00	-3.8584E-03	.0000E+00	.0000E+00	-3.8584E-03
53	54	.0000E+00	.0000E+00	-5.5402E-05	.0000E+00	.0000E+00	-5.5402E-05
54	55	.0000E+00	.0000E+00	-1.2876E-03	.0000E+00	.0000E+00	-1.2876E-03
55	56	.0000E+00	.0000E+00	-3.9036E-03	.0000E+00	.0000E+00	-3.9036E-03
56	57	.0000E+00	.0000E+00	-4.2956E-02	.0000E+00	.0000E+00	-4.2956E-02
57	58	.0000E+00	.0000E+00	-3.6294E-03	.0000E+00	.0000E+00	-3.6294E-03
58	59	.0000E+00	.0000E+00	-6.9408E-05	.0000E+00	.0000E+00	-6.9408E-05
59	60	.0000E+00	.0000E+00	-1.8296E-03	.0000E+00	.0000E+00	-1.8296E-03
60	61	.0000E+00	.0000E+00	-5.8650E-03	.0000E+00	.0000E+00	-5.8650E-03
61	62	.0000E+00	.0000E+00	-6.7693E-05	.0000E+00	.0000E+00	-6.7693E-05
62	63	.0000E+00	.0000E+00	-1.8379E-03	.0000E+00	.0000E+00	-1.8379E-03
63	64	.0000E+00	.0000E+00	-5.6850E-03	.0000E+00	.0000E+00	-5.6850E-03
64	65	.0000E+00	.0000E+00	-8.6548E-05	.0000E+00	.0000E+00	-8.6548E-05
65	66	.0000E+00	.0000E+00	-1.8582E-02	.0000E+00	.0000E+00	-1.8582E-02
66	67	.0000E+00	.0000E+00	-1.2427E-02	.0000E+00	.0000E+00	-1.2427E-02
67	68	.0000E+00	.0000E+00	-1.1660E-02	.0000E+00	.0000E+00	-1.1660E-02
68	70	.0000E+00	.0000E+00	-2.7224E-03	.0000E+00	.0000E+00	-2.7224E-03
69	71	.0000E+00	.0000E+00	-3.4015E-02	.0000E+00	.0000E+00	-3.4015E-02
70	72	.0000E+00	.0000E+00	-4.9231E-03	.0000E+00	.0000E+00	-4.9231E-03
71	73	.0000E+00	.0000E+00	-2.7646E-03	.0000E+00	.0000E+00	-2.7646E-03
72	74	.0000E+00	.0000E+00	-3.4852E-02	.0000E+00	.0000E+00	-3.4852E-02
73	75	.0000E+00	.0000E+00	-5.4646E-03	.0000E+00	.0000E+00	-5.4646E-03
74	76	.0000E+00	.0000E+00	-1.9588E-04	.0000E+00	.0000E+00	-1.9588E-04
75	77	.0000E+00	.0000E+00	-1.1864E-04	.0000E+00	.0000E+00	-1.1864E-04
76	80	.0000E+00	.0000E+00	-1.3657E-05	.0000E+00	.0000E+00	-1.3657E-05
77	81	.0000E+00	.0000E+00	-7.6390E-03	.0000E+00	.0000E+00	-7.6390E-03
78	82	.0000E+00	.0000E+00	-4.1896E-04	.0000E+00	.0000E+00	-4.1896E-04
79	83	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.2919E-03	.0000E+00	.0000E+00	-2.2919E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	2.8372E-05	.0000E+00	-1.9970E-03	-1.4186E-05	.0000E+00	-1.9828E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.9399E-03	.0000E+00	.0000E+00	-1.9399E-03

TOTAL 2.6175E-03 .0000E+00 -6.8079E-01 -1.3087E-03 -3.2663E-01 -1.0061E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	191777 12161	2.2095E+00 1.5880E-01	9.2907E-03 7.8519E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
11	12	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
12	13	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
13	14	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
14	15	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
15	16	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
16	17	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
17	18	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
18	19	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
19	20	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
20	21	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
21	22	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
22	23	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
23	24	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
24	25	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

25	26	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
26	27	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
27	28	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
28	29	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
29	30	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
30	31	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
31	32	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
32	33	8016.50C 45103.50C 47109.50C 62149.50C 63151.55C 63153.55C 64155.50C 92233.50C 92234.50C 92235.50C 92236.50C 92238.50C 93237.55C 94238.50C 94239.55C 94240.50C 94241.50C 94242.50C 95241.50C 95242.50C 95243.50C 96245.35C	6.7097E-01 2.3926E-04 2.8706E-05 1.8626E-06 2.3827E-07 3.0867E-05 1.4226E-06 4.5949E-10 6.8903E-05 4.4265E-03 9.9057E-04 3.2088E-01 7.6759E-05 1.4002E-05 1.5156E-03 4.3508E-04 2.0467E-04 5.2259E-05 6.1062E-05 1.9299E-07 5.8652E-06 1.9976E-08	96260 512 62 881 8 134 389 0 120 20428 869 146357 168 46 14115 2994 2185 116 406 8 20 0	1.4203E+00 6.6724E-03 8.6220E-04 1.0080E-02 1.0851E-04 1.7654E-03 4.2683E-03 .0000E+00 1.5294E-03 4.0672E-01 1.2727E-02 2.1610E+00 2.2404E-03 5.8687E-04 2.9063E-01 4.0069E-02 4.5698E-02 1.6940E-03 5.2285E-03 2.2554E-04 2.7656E-04 .0000E+00	1.1932E-03 5.6732E-03 7.0586E-04 1.0012E-02 1.0783E-04 1.5333E-03 4.2575E-03 .0000E+00 1.0111E-03 3.5950E-02 4.7270E-03 1.8078E-01 1.6737E-03 4.5012E-04 5.3983E-02 3.5385E-02 6.5625E-03 1.1432E-03 4.6875E-03 1.6683E-05 2.4809E-04 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.0927E-05 1.7817E-01 2.0216E-04 2.0696E-02 3.3006E-05 2.0826E-05 1.0913E-01 1.2005E-04 1.8086E-02 1.7205E-05 6.6043E-05 8.1521E-05 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 1.2019E-05 .0000E+00 1.1951E-03 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
33	34	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	4 2 3 933 11	4.5141E-05 3.3608E-05 1.7658E-05 1.0163E-02 9.2688E-05	1.8275E-09 8.9503E-06 1.9636E-06 2.0494E-04 8.6418E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
34	35	1001.50C 8016.50C	6.6667E-01 3.3333E-01	523 27	3.4003E-03 1.7863E-04	2.0794E-05 7.7766E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
35	36	2004.50C	1.0000E+00	15	2.3023E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C 8016.50C	6.6667E-01 3.3333E-01	17 0	1.1109E-04 .0000E+00	7.4305E-07 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
37	38	8016.50C 24000.50C	6.8138E-03 1.7467E-03	185 95	2.7161E-03 1.4045E-03	2.7230E-06 6.9826E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00

		26000.55C	3.2526E-03	204	2.8830E-03	1.2193E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	48539	7.3030E-01	5.8357E-03	.0000E+00	7.7567E-05
		50000.35C	1.0711E-02	475	7.1305E-03	1.6164E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	147	1.0300E-03	6.4746E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4	3.0115E-05	1.1275E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1238227	1.6538E+01	4.5495E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	114308	1.6769E+00	1.2359E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	81832	1.0806E+00	3.4402E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6835	9.9333E-02	5.8996E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	15	8.9994E-05	5.7455E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	4.6440E-06	2.3769E-10	.0000E+00	.0000E+00
42	43	8016.50C	6.8138E-03	11	1.5882E-04	4.9164E-07	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	5	7.2031E-05	1.5296E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	13	1.7710E-04	1.1831E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3660	5.4586E-02	5.0267E-04	.0000E+00	9.8623E-06
		50000.35C	1.0711E-02	33	5.0115E-04	1.5250E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	27272	3.6006E-01	1.1197E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2255	3.2839E-02	3.3304E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	19	3.0029E-04	1.4762E-08	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	4	6.2158E-05	1.1364E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	17	2.2870E-04	1.3611E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3151	4.7040E-02	3.8882E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	33	4.9270E-04	1.3354E-05	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	65477	8.6431E-01	2.6855E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5705	8.2605E-02	6.3406E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	7256	9.5766E-02	3.0296E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	604	8.7133E-03	2.5085E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	1	8.0607E-06	2.8376E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	2	3.3869E-05	5.8818E-08	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	347	5.1581E-03	5.4400E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	2	3.5544E-05	3.7539E-07	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	6113	7.9424E-02	2.5032E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	515	7.5252E-03	6.1374E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	36295	4.9984E-01	1.2198E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3492	5.2104E-02	2.9779E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	6	9.9017E-05	3.0357E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	26	3.4344E-04	1.3551E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	31	4.5603E-04	2.3430E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	908	1.3493E-02	5.9690E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	407	6.1419E-03	3.3058E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4566	6.5915E-02	1.9507E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1389	1.9980E-02	6.7307E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	96	1.4194E-03	1.6861E-04	.0000E+00	.0000E+00

51	52	5010.50C	1.8319E-02	3533	4.1257E-02	4.0878E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	218	3.3149E-03	2.6852E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	1766	2.7736E-02	1.4427E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	3	3.5582E-05	3.3493E-07	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	5	7.6402E-05	1.0071E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	31	4.4485E-04	1.4477E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	39	5.6207E-04	3.3328E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.3827E-05	3.4674E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.8569E-05	9.9329E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	908	1.3598E-02	6.7413E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	396	6.0201E-03	4.0205E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4464	6.3857E-02	1.8847E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1345	1.9289E-02	6.8140E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	134	1.9816E-03	1.9728E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1166	1.0921E-02	5.4709E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	56	5.9475E-04	6.9293E-07	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	36773	5.0444E-01	1.2471E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3594	5.3367E-02	4.0497E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	6	9.2823E-05	5.5481E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	25	3.7405E-04	1.3682E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	37	5.7987E-04	1.6591E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.0970E-05	7.1483E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5873E-05	3.0654E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	992	1.4950E-02	6.4949E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	424	6.4418E-03	4.6954E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4540	6.5636E-02	1.9038E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1399	2.0208E-02	6.5547E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	129	1.9343E-03	2.0983E-04	.0000E+00	.0000E+00
56	57	5010.50C	1.8319E-02	3734	4.3351E-02	4.2800E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	227	3.4221E-03	3.0543E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	1762	2.7559E-02	1.5401E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	4	6.2754E-05	1.8001E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	3	4.3288E-05	1.4992E-11	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	23	3.4911E-04	8.8264E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	36	5.3252E-04	6.5610E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.8656E-05	8.3736E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5857E-05	1.7190E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	907	1.3249E-02	6.1841E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	364	5.5372E-03	2.8346E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4408	6.2277E-02	1.9165E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1360	1.9501E-02	6.4610E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	131	1.9748E-03	1.4942E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1450	1.3186E-02	6.9384E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	62	6.3666E-04	2.4739E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	60956	8.3747E-01	1.7808E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6206	9.2315E-02	4.8713E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	7	1.0516E-04	3.9991E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	47	6.6712E-04	1.0523E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	77	1.2156E-03	3.5103E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	6.0615E-05	1.0742E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.7740E-05	4.4496E-08	.0000E+00	.0000E+00

		24000.50C	1.8282E-01	1782	2.6528E-02	1.0315E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	754	1.1240E-02	6.5335E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7859	1.1176E-01	2.9011E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2433	3.5045E-02	9.9070E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	208	3.0987E-03	2.7417E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1595	1.2610E-02	6.5993E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	73	6.9259E-04	1.6995E-06	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	59981	8.2519E-01	1.7878E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6096	9.0809E-02	5.0134E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	8	1.2534E-04	9.1918E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	29	3.9080E-04	1.2524E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	69	1.0392E-03	6.9766E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.6765E-05	3.2537E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6363E-05	3.0614E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1698	2.5265E-02	1.0527E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	786	1.1814E-02	6.0633E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7825	1.1144E-01	2.8506E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2401	3.4660E-02	8.9862E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	193	2.9028E-03	2.5688E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1810	1.6225E-02	8.6503E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	92	9.3184E-04	4.4737E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	377359	3.4923E+00	1.8521E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	18553	1.9069E-01	6.0370E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	6	6.1946E-05	1.9012E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	46	4.4813E-04	3.4758E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	43	5.1753E-04	8.4424E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	1.9691E-05	1.8565E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	7.1625E-06	1.5549E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1310	1.4862E-02	2.2085E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	397	5.1517E-03	1.1159E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7846	8.2949E-02	6.6249E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2359	2.5524E-02	2.2006E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	128	1.5367E-03	2.3257E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	5	6.3475E-05	1.6009E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	3.6509E-04	2.2637E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	46	4.8726E-04	1.2528E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	5	5.2508E-05	8.5198E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1295	1.4559E-02	2.1549E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	382	4.9807E-03	1.1433E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7522	8.0814E-02	6.1170E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2258	2.4707E-02	1.9961E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	128	1.5758E-03	2.1237E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	6	9.3005E-05	5.0930E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	26	3.6815E-04	1.1343E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	59	9.0685E-04	5.3907E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.1791E-05	5.3576E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1061	1.5798E-02	4.1990E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	478	7.1203E-03	2.8171E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4671	6.7006E-02	1.3324E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1470	2.0983E-02	4.7840E-04	.0000E+00	.0000E+00

		42000.50C	1.4572E-02	139	2.1110E-03	1.9276E-04	.0000E+00	.0000E+00
69	71	5010.50C	1.8319E-02	2945	3.5235E-02	3.3837E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	611	9.2828E-03	2.0630E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	5121	8.0260E-02	1.7719E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	7	1.0959E-04	6.4903E-07	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	35	5.2802E-04	4.7796E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	101	1.4289E-03	9.0139E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	271	4.1914E-03	4.8787E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	15	2.3504E-04	4.2303E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	6	9.5701E-05	1.2661E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5225	7.8690E-02	7.9472E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2014	2.9982E-02	4.3777E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	21433	3.1236E-01	2.1078E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6852	1.0014E-01	7.7787E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	684	1.0208E-02	7.9053E-04	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	10	1.4906E-04	2.1361E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	31	4.5409E-04	1.0811E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	52	7.9660E-04	2.8382E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.7122E-05	4.0453E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.8857E-05	4.1252E-09	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1174	1.7454E-02	4.6370E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	470	7.0078E-03	2.6582E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5019	7.2114E-02	1.3743E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1559	2.2613E-02	4.5000E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	133	1.9586E-03	1.9677E-04	.0000E+00	.0000E+00
72	74	5010.50C	1.8319E-02	3002	3.6130E-02	3.4662E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	610	9.2332E-03	2.5505E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	5218	8.1522E-02	1.8547E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	9	1.1770E-04	4.7712E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	26	3.7045E-04	5.4281E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	142	2.0315E-03	3.0085E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	227	3.4567E-03	6.9413E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	11	1.7559E-04	7.2925E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	7.5852E-05	2.0820E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5468	8.2795E-02	8.6335E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2310	3.4190E-02	6.0916E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	22137	3.2125E-01	2.2867E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	7175	1.0448E-01	8.5553E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	768	1.1573E-02	8.1002E-04	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	3936	3.4718E-02	1.9484E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	160	1.6154E-03	1.0376E-06	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2473	2.1376E-02	1.1861E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	127	1.1538E-03	3.6264E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1	5.1122E-06	4.4076E-06	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	5	2.3590E-05	3.9782E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	3	1.7529E-05	3.2315E-06	.0000E+00	.0000E+00

		42000.50C	1.4572E-02	1	7.0690E-06	2.0401E-06	.0000E+00	.0000E+00
77	81	6000.50C	1.3966E-03	8	7.9396E-05	1.3902E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	25	2.4800E-04	1.8521E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	34	4.5243E-04	2.9798E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.3884E-05	2.6330E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.1720E-05	1.9679E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1117	1.2854E-02	1.4614E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	308	3.9172E-03	6.8937E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6358	6.8781E-02	3.9658E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1879	2.0313E-02	1.2988E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	126	1.6597E-03	1.9979E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	11468	1.2066E-01	4.1099E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	834	1.0248E-02	7.9713E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	6	6.7934E-05	5.7456E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	5.5639E-05	6.8318E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	14	1.7991E-04	1.1746E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	31	4.0169E-04	2.9663E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	618	7.9306E-03	4.8915E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	81	1.1076E-03	6.9735E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1139	1.3625E-02	4.2076E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2643	3.0847E-02	1.1731E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	79	9.4957E-04	4.4696E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	76	1.0544E-03	6.2907E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	74	9.9421E-04	2.1823E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	31	4.4071E-04	1.6575E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	4	5.3957E-05	8.6578E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	3	4.7813E-05	3.9875E-07	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	190	2.6290E-03	1.0516E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8953	1.0575E-01	1.8897E-03	.0000E+00	1.4186E-05

85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	1001.50C	6.6667E-01	42778	3.5450E-01	1.9389E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1958	1.7969E-02	1.0530E-06	.0000E+00	.0000E+00
TOTAL				3007651	3.8904E+01	6.8079E-01	3.2663E-01	1.3087E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE

	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2256696	2.7975E+01	9.0110E-02	.0000E+00	.0000E+00
2004.50C	15	2.3023E-04	.0000E+00	.0000E+00	.0000E+00
5010.50C	13214	1.5597E-01	1.5218E-01	.0000E+00	.0000E+00
5011.56C	1666	2.5253E-02	1.0353E-06	.0000E+00	.0000E+00
6000.50C	211	2.9495E-03	1.0854E-07	.0000E+00	.0000E+00
7014.50C	584	7.9132E-03	2.1075E-04	.0000E+00	.0000E+00
8016.50C	280198	4.0036E+00	2.9172E-03	.0000E+00	.0000E+00
13027.50C	13871	2.1713E-01	6.6163E-04	.0000E+00	.0000E+00
14000.50C	1066	1.5815E-02	7.1214E-05	.0000E+00	.0000E+00
15031.50C	56	8.2042E-04	4.1028E-06	.0000E+00	.0000E+00
16032.50C	25	3.7151E-04	7.2230E-06	.0000E+00	.0000E+00
22000.50C	31	4.0169E-04	2.9663E-05	.0000E+00	.0000E+00
24000.50C	24569	3.5360E-01	1.3574E-02	.0000E+00	.0000E+00
25055.50C	9762	1.4329E-01	7.4677E-03	.0000E+00	.0000E+00
26000.55C	118984	1.6089E+00	3.9680E-02	.0000E+00	1.4186E-05
28000.50C	36525	4.9831E-01	1.3779E-02	.0000E+00	.0000E+00
29000.50C	102	1.2752E-03	5.2252E-05	.0000E+00	.0000E+00
40000.50C	56630	8.4725E-01	6.9866E-03	.0000E+00	8.7430E-05
42000.50C	3074	4.4996E-02	3.9559E-03	.0000E+00	.0000E+00
45103.50C	512	6.6724E-03	5.6732E-03	.0000E+00	.0000E+00
47109.50C	62	8.6220E-04	7.0586E-04	.0000E+00	.0000E+00
50000.35C	554	8.2526E-03	1.9926E-04	.0000E+00	.0000E+00
62149.50C	881	1.0080E-02	1.0012E-02	.0000E+00	.0000E+00
63151.55C	8	1.0851E-04	1.0783E-04	.0000E+00	.0000E+00
63153.55C	134	1.7654E-03	1.5333E-03	.0000E+00	.0000E+00
64155.50C	389	4.2683E-03	4.2575E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	120	1.5294E-03	1.0111E-03	1.0927E-05	.0000E+00
92235.50C	20428	4.0672E-01	3.5950E-02	1.7817E-01	1.2019E-05
92236.50C	869	1.2727E-02	4.7270E-03	2.0216E-04	.0000E+00
92238.50C	146357	2.1610E+00	1.8078E-01	2.0696E-02	1.1951E-03
93237.55C	168	2.2404E-03	1.6737E-03	3.3006E-05	.0000E+00
94238.50C	46	5.8687E-04	4.5012E-04	2.0826E-05	.0000E+00
94239.55C	14115	2.9063E-01	5.3983E-02	1.0913E-01	.0000E+00
94240.50C	2994	4.0069E-02	3.5385E-02	1.2005E-04	.0000E+00
94241.50C	2185	4.5698E-02	6.5625E-03	1.8086E-02	.0000E+00
94242.50C	116	1.6940E-03	1.1432E-03	1.7205E-05	.0000E+00
95241.50C	406	5.2285E-03	4.6875E-03	6.6043E-05	.0000E+00
95242.50C	8	2.2554E-04	1.6683E-05	8.1521E-05	.0000E+00
95243.50C	20	2.7656E-04	2.4809E-04	.0000E+00	.0000E+00
96245.35C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

 DUMP NO. 2 ON FILE RUNTPE NPS = 59732 CTM = 107.95

10 WARNING MESSAGES SO FAR.

1MCNP VERSION 4A-B LD=10/04/91

02/20/95 23:16:29

PROBID = 02/20/95 23:16:29

INP=mpc12bb5 OUP=m12bb5.o

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1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb5)
2- C MULTI-PURPOSE CANISTER WITH COLLAPSED FLUX TRAPS - 5WT% B IN AL
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- C 2 1 -1.0000 -40 42 -39 41 TRCL=( 11.668759 11.668759 0.)
7- 2 1 -1.0000 -40 42 -39 41 TRCL=( 13.812519 13.812519 0.) $ SHIFTED EXTRA
8- IMP:N=1 LAT=1 U=1
9- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
10- C SS316L SPACERS WELDED TO MPC SHELL
11- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
12- TRCL=( 16.22300 66.42356 0) $ TOP -.00001 ADDED TO ACTUAL
13- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
14- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
15- C FULL ASSEMBLY LATTICE POSITION
16- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
17- C ASSEMBLY CELL TOP
18- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
19- IMP:N=1 FILL=9 U=11
20- C ASSEMBLY CELL BOTTOM
21- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
22- IMP:N=1 FILL=9 U=11
23- C TOP OF ASSEMBLY OUTSIDE LATTICE
24- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
25- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
26- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
27- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
28- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
29- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
30- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
31- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
32- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
33- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
34- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
35- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
36- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
37- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
38- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
39- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
40- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
41- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
42- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
43- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
44- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
45- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
46- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
47- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
48- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
49- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
50- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
51- C PIN LATTICE DESCRIPTION
52- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
53- C FUEL ROD
54- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
55- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
56- 35 1 -1.0000 -17 5 IMP:N=1 U=2
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57-      36      3  -1.785-3  17 -18  -5 IMP:N=1 U=2
58-      37      1  -1.0000  17 -18   5 IMP:N=1 U=2
59-      38      4  -6.6000  18 -19  -5 IMP:N=1 U=2
60-      39      1  -1.0000  18 -19   5 IMP:N=1 U=2
61-      40      1  -1.0000  19      IMP:N=1 U=2
62-      C      CONTROL ROD/GUIDE TUBE
63-      41      1  -1.0000 -21  -5 IMP:N=1 U=3
64-      42      1  -1.0000 -21   5 IMP:N=1 U=3
65-      43      4  -6.6000  21 -22 IMP:N=1 U=3
66-      44      1  -1.0000  22 -23 IMP:N=1 U=3
67-      45      4  -6.6000  23 -24 IMP:N=1 U=3
68-      46      1  -1.0000  24      IMP:N=1 U=3
69-      C      INSTRUMENTATION TUBE
70-      47      1  -1.0000 -25      IMP:N=1 U=4
71-      48      4  -6.6000  25 -26 IMP:N=1 U=4
72-      49      1  -1.0000  26      IMP:N=1 U=4
73-      C      WATER GAP - ASSEMBLY TOP
74-      50      1  -1.0000 -35  -4 IMP:N=1 U=5
75-      C      SS TUBE WALL - ASSEMBLY TOP
76-      51      8  -8.2380  35 -44  -4 IMP:N=1 U=5
77-      C      AL-B WALL -ASSEMBLY TOP
78-      52      6  -2.757  44 -46  -4 IMP:N=1 U=5
79-      C      SS WALL - ASSEMBLY TOP
80-      53      8  -8.2380  46  -4 IMP:N=1 U=5
81-      C      WATER ABOVE BASKET
82-      54      1  -1.000  4 IMP:N=1 U=5
83-      C      WATER GAP - ASSEMBLY RIGHT
84-      55      1  -1.0000 -36  -4 IMP:N=1 U=6
85-      C      SS TUBE WALL - ASSEMBLY RIGHT
86-      56      8  -8.2380  36 -43  -4 IMP:N=1 U=6
87-      C      AL-B WALL - ASSEMBLY RIGHT
88-      57      6  -2.7570  43 -45  -4 IMP:N=1 U=6
89-      C      SS WALL - ASSEMBLY RIGHT
90-      58      8  -8.2380  45  -4 IMP:N=1 U=6
91-      C      WATER ABOVE BASKET
92-      59      1  -1.000  4 IMP:N=1 U=6
93-      C      WATER GAP - ASSEMBLY BOTTOM
94-      60      1  -1.0000  37  -4 IMP:N=1 U=7
95-      C      SS TUBE WALL - ASSEMBLY BOTTOM
96-      61      8  -8.2380 -37  -4 IMP:N=1 U=7
97-      C      WATER ABOVE BASKET
98-      62      1  -1.000  4 IMP:N=1 U=7
99-      C      WATER GAP - ASSEMBLY LEFT
100-     63      1  -1.0000  38  -4 IMP:N=1 U=8
101-     C      LOWER ST COMB - ASSEMBLY LEFT
102-     64      8  -8.2380 -38  -4 IMP:N=1 U=8
103-     C      WATER ABOVE BASKET
104-     65      1  -1.000  4 IMP:N=1 U=8
105-     C      SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
106-     66      1  -1.0000  74 75 IMP:N=1 U=10
107-     67      8  -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
108-     68      8  -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
109-     C      AXIS MATERIALS
110-     70      8  -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
111-     71      6  -2.75700 -59 61 -55 -9 3 -4 IMP:N=1
112-     72      8  -8.2380 -61 1 -55 -9 3 -4 IMP:N=1
113-     73      8  -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
114-     74      6  -2.7570 -60 62 55 -9 3 -4 IMP:N=1
115-     75      8  -8.2380 -62 2 55 -9 3 -4 IMP:N=1
116-     76      1  -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET

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117- 77 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
118- C SS316L MPC LID
119- 80 8 -8.2380 1 2 -9 6 -7 IMP:N=1
120- C SS316L MPC LINER
121- 81 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
122- C GAP SS316L/INNER 825 BARRIER
123- 82 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
124- C GAP BETWEEN MPC LID AND INNER BARRIER LID
125- 83 1 -1.0000 -10 1 2 7 -71 IMP:N=1
126- C INNER BARRIER LID - ALLOY 825
127- 84 5 -8.1400 1 2 -11 71 -8 IMP:N=1
128- C INNER BARRIER - ALLOY 825
129- 85 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
130- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
131- 86 1 -1.0000 8 -72 -12 1 2 IMP:N=1
132- C OUTER BARRIER LID A516 CARBON STEEL
133- 87 7 -7.832 -12 72 -73 1 2 IMP:N=1
134- C OUTER BARRIER - A516 CARBON STEEL
135- 88 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
136- C WATER, ENDS
137- 89 1 -1.0000 1 2 73 -80 -81 IMP:N=1
138- C WATER, SIDE
139- 90 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
140- C OUTSIDE WORLD
141- 91 0 -1:-2:-3:80:81 IMP:N=0
142-
143- C SURFACE SPECIFICATIONS
144- 1* PX 0.0
145- 2* PY 0.00
146- 3* PZ 0.00
147- 4 PZ 203.2000 $ TOP ACTIVE FUEL
148- 5 PZ 222.2500 $ TOP FUEL HARDWARE
149- 6 PZ 229.2500 $ TOP FUEL REGION
150- 7 PZ 231.7500 $ TOP ALLOY 825 LID
151- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
152- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
153- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
154- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
155- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
156- C PIN LATTICE BOUNDS
157- 13 PX 0.72135
158- 14 PX -0.72135
159- 15 PY 0.72135
160- 16 PY -0.72135
161- C FUEL ROD
162- 17 CZ 0.468122
163- 18 CZ 0.478790
164- 19 CZ 0.546100
165- C CONTROL ROD/GUIDE TUBE
166- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
167- 21 CZ 0.50292
168- 22 CZ 0.56007
169- 23 CZ 0.63246
170- 24 CZ 0.67310
171- C INSTRUMENTATION TUBE
172- 25 CZ 0.56007
173- 26 CZ 0.62611
174- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
175- 27 PX 12.80923
176- 28 PX -12.80923

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177- 29 PY 12.80923
178- 30 PY -12.80923
179- C ASSEMBLY LATTICE BOUNDS
180- 31 PY 10.82024 $ ACTUAL 10.82025
181- 32 PX 10.82024 $ ACTUAL 10.82025
182- 33 PY -10.82024 $ ACTUAL -10.82025
183- 34 PX -10.82024 $ ACTUAL -10.82025
184- 35 PY 11.4300
185- 36 PX 11.4300
186- 37 PY -11.4300
187- 38 PX -11.4300
188- 39 PY 12.17930
189- 40 PX 12.17930
190- 41 PY -11.66876
191- 42 PX -11.66876
192- 43 PX 11.66876
193- 44 PY 11.66876
194- 45 PX 11.94054
195- 46 PY 11.94054
196- C BLANK PIN CELL
197- 48 PX -0.7213
198- 49 PX 0.7213
199- 50 PY -0.7213
200- 51 PY 0.7213
201- 52 PY 0.0001
202- 53 PY -0.0001
203- 54 PY 0.0
204- 55 P 1. -1. 0. 0.
205- 56 P 1. 1. 0. 0. $ 24.35
206- C EXTRA CARDS
207- 57 PX 2.14376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
208- 58 PY 2.14376
209- 59 PX 1.9050
210- 60 PY 1.9050
211- 61 PX 1.270
212- 62 PY 1.270050
213- 64 PX -.0000005
214- 65 PY -.0000005
215- 66 PX 95.
216- 67 PY 95.
217- C OUTER BARRIER
218- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
219- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
220- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
221- 73 PZ 282.3500 $TOP OF OUTER BARRIER
222- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
223- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
224- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
225- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
226-
227- MODE N
228- C VOL 88J
229- KCODE 3000 1. 5 20
230- C KSRC 4.87 4.87 10. 4.87 9.20 10. 4.87 13.53 10.
231- C 4.87 17.86 10. 4.87 22.19 10. 9.20 4.87 10.
232- C 9.20 9.20 10. 9.20 13.53 10. 9.20 17.86 10.
233- C 9.20 22.19 10. 13.53 4.87 10. 13.53 9.20 10.
234- C 13.53 17.86 10. 13.53 22.19 10. 17.86 4.87 10.
235- C 17.86 9.20 10. 17.86 13.53 10. 17.86 17.86 10.
236- C 17.86 22.19 10. 22.19 4.87 10. 22.19 9.20 10.

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237-	C	22.19	13.53	10.	22.19	17.86	10.	22.19	22.19	10.
238-	C	4.87	4.87	75.	4.87	9.20	75.	4.87	13.53	75.
239-	C	4.87	17.86	75.	4.87	22.19	75.	9.20	4.87	75.
240-	C	9.20	9.20	75.	9.20	13.53	75.	9.20	17.86	75.
241-	C	9.20	22.19	75.	13.53	4.87	75.	13.53	9.20	75.
242-	C	13.53	17.86	75.	13.53	22.19	75.	17.86	4.87	75.
243-	C	17.86	9.20	75.	17.86	13.53	75.	17.86	17.86	75.
244-	C	17.86	22.19	75.	22.19	4.87	75.	22.19	9.20	75.
245-	C	22.19	13.53	75.	22.19	17.86	75.	22.19	22.19	75.
246-	C	4.87	4.87	150.	4.87	9.20	150.	4.87	13.53	150.
247-	C	4.87	17.86	150.	4.87	22.19	150.	9.20	4.87	150.
248-	C	9.20	9.20	150.	9.20	13.53	150.	9.20	17.86	150.
249-	C	9.20	22.19	150.	13.53	4.87	150.	13.53	9.20	150.
250-	C	13.53	17.86	150.	13.53	22.19	150.	17.86	4.87	150.
251-	C	17.86	9.20	150.	17.86	13.53	150.	17.86	17.86	150.
252-	C	17.86	22.19	150.	22.19	4.87	150.	22.19	9.20	150.
253-	C	22.19	13.53	150.	22.19	17.86	150.	22.19	22.19	150.
254-	C	4.87	4.87	200.	4.87	9.20	200.	4.87	13.53	200.
255-	C	4.87	17.86	200.	4.87	22.19	200.	9.20	4.87	200.
256-	C	9.20	9.20	200.	9.20	13.53	200.	9.20	17.86	200.
257-	C	9.20	22.19	200.	13.53	4.87	200.	13.53	9.20	200.
258-	C	13.53	17.86	200.	13.53	22.19	200.	17.86	4.87	200.
259-	C	17.86	9.20	200.	17.86	13.53	200.	17.86	17.86	200.
260-	C	17.86	22.19	200.	22.19	4.87	200.	22.19	9.20	200.
261-	C	22.19	13.53	200.	22.19	17.86	200.	22.19	22.19	200.
262-	C	4.87	30.24	10.	4.87	34.57	10.	4.87	38.90	10.
263-	C	4.87	43.23	10.	4.87	47.55	10.	9.20	30.24	10.
264-	C	9.20	34.57	10.	9.20	38.90	10.	9.20	43.23	10.
265-	C	9.20	47.55	10.	13.53	30.24	10.	13.53	34.57	10.
266-	C	13.53	38.90	10.	13.53	43.23	10.	17.86	30.24	10.
267-	C	17.86	34.57	10.	17.86	38.90	10.	17.86	43.23	10.
268-	C	17.86	47.55	10.	22.19	30.24	10.	22.19	34.57	10.
269-	C	22.19	38.90	10.	22.19	43.23	10.	22.19	47.55	10.
270-	C	4.87	30.24	75.	4.87	34.57	75.	4.87	38.90	75.
271-	C	4.87	43.23	75.	4.87	47.55	75.	9.20	30.24	75.
272-	C	9.20	34.57	75.	9.20	38.90	75.	9.20	43.23	75.
273-	C	9.20	47.55	75.	13.53	30.24	75.	13.53	34.57	75.
274-	C	13.53	38.90	75.	13.53	43.23	75.	17.86	30.24	75.
275-	C	17.86	34.57	75.	17.86	38.90	75.	17.86	43.23	75.
276-	C	17.86	47.55	75.	22.19	30.24	75.	22.19	34.57	75.
277-	C	22.19	38.90	75.	22.19	43.23	75.	22.19	47.55	75.
278-	C	4.87	30.24	150.	4.87	34.57	150.	4.87	38.90	150.
279-	C	4.87	43.23	150.	4.87	47.55	150.	9.20	30.24	150.
280-	C	9.20	34.57	150.	9.20	38.90	150.	9.20	43.23	150.
281-	C	9.20	47.55	150.	13.53	30.24	150.	13.53	34.57	150.
282-	C	13.53	38.90	150.	13.53	43.23	150.	17.86	30.24	150.
283-	C	17.86	34.57	150.	17.86	38.90	150.	17.86	43.23	150.
284-	C	17.86	47.55	150.	22.19	30.24	150.	22.19	34.57	150.
285-	C	22.19	38.90	150.	22.19	43.23	150.	22.19	47.55	150.
286-	C	4.87	30.24	200.	4.87	34.57	200.	4.87	38.90	200.
287-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
288-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
289-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
290-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
291-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
292-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
293-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
294-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
295-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
296-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.

297-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
298-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
299-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
300-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
301-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
302-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
303-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
304-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
305-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
306-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
307-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
308-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
309-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
310-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
311-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
312-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
313-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
314-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
315-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
316-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
317-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
318-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
319-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
320-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
321-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
322-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
323-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
324-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
325-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
326-	C	MATERIAL SPECIFICATIONS								
327-	C	WATER AT 300 K								
328-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
329-	MT1	LWTR.01T								
330-	C	3.75%/0 GWD/0 YEAR -- U02								
331-	C	M2	8016.50C	4.6973E-02						
332-	C	92235.50C	8.9111E-04							
333-	C	92238.50C	2.2583E-02							
334-	C	3.00%/20 GWD/5 YEAR -- U02								
335-	M2	8016.50C	4.7767E-02							
336-		45103.50C	1.7033E-05							
337-		47109.50C	2.0436E-06							
338-		62149.50C	1.3260E-07							
339-		63151.55C	1.6963E-08							
340-		63153.55C	2.1975E-06							
341-		64155.50C	1.0128E-07							
342-		92233.50C	3.2712E-11							
343-		92234.50C	4.9053E-06							
344-		92235.50C	3.1513E-04							
345-		92236.50C	7.0520E-05							
346-		92238.50C	2.2844E-02							
347-		93237.55C	5.4646E-06							
348-		94238.50C	9.9680E-07							
349-		94239.55C	1.0790E-04							
350-		94240.50C	3.0974E-05							
351-		94241.50C	1.4571E-05							
352-		94242.50C	3.7204E-06							
353-		95241.50C	4.3471E-06							
354-		95242.50C	1.3739E-08							
355-		95243.50C	4.1755E-07							
356-		96245.35C	1.4221E-09							

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357-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
358-      M3      2004.50C 1.0
359-      C      ZIRCALOY-4
360-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
361-      40000.50C -0.9818 50000.35C -0.0140
362-      C      ALLOY 825
363-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
364-      16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
365-      25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
366-      29000.50C -0.0250 42000.50C -0.0300
367-      C      1100 ALUMINUM ALLOY - 5wt% natural boron
368-      M6      5010.50C -0.00900 5011.56C -0.04100 13027.50C -0.94880
369-      29000.50C -0.00120
370-      C      A516 CARBON STEEL
371-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
372-      16032.50C -0.00035 25055.50C -0.0090
373-      26000.55C -0.98535
374-      C      SS316L
375-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
376-      15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
377-      25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
378-      42000.50C -0.02500
379-      C      TALLIES
380-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.
SURFACES 20049 AND 23049 OF CELL      8 ARE THE SAME.      23049 WILL BE DELETED.
SURFACES 24048 AND 27048 OF CELL      9 ARE THE SAME.      27048 WILL BE DELETED.
SURFACES 24049 AND 27049 OF CELL      9 ARE THE SAME.      27049 WILL BE DELETED.
SURFACES 24050 AND 25050 OF CELL      9 ARE THE SAME.      25050 WILL BE DELETED.
SURFACES 24050 AND 28050 OF CELL      9 ARE THE SAME.      28050 WILL BE DELETED.

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SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.

1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS 2973
 POINTS NOT IN ANY CELL 0
 POINTS IN CELLS OF ZERO IMPORTANCE 0
 POINTS IN VOID CELLS 0
 POINTS IN AMBIGUOUS CELLS 0
 TOTAL POINTS REJECTED 0
 POINTS REMAINING 2973
 POINTS AFTER EXPANSION OR CONTRACTION 2997
 NOMINAL SOURCE SIZE 3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.

1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL

NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333			
ASSOCIATED THERMAL S(A,B) DATA SETS:			LWTR.01T				
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,
	63151,	.00000	63153,	.00003	64155,	.00000	92233,
	92234,	.00007	92235,	.00443	92236,	.00099	92238,
	93237,	.00008	94238,	.00001	94239,	.00152	94240,
	94241,	.00020	94242,	.00005	95241,	.00006	95242,
	95243,	.00001	96245,	.00000			.00000

3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	5010,	.02258	5011,	.09356	13027,	.88339	29000,	.00047
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	5010,	.00900	5011,	.04100	13027,	.94880	29000,	.00120
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	70	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
69	71	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
70	72	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	74	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	76	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	77	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	80	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	82	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

80	84	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	86	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	87	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	89	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	91	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE
17	17	.00000E+00	INFINITE
18	18	.00000E+00	INFINITE
19	19	.00000E+00	INFINITE
20	21	.00000E+00	INFINITE
21	22	.00000E+00	INFINITE
22	23	.00000E+00	INFINITE
23	24	.00000E+00	INFINITE
24	25	.00000E+00	INFINITE
25	26	.00000E+00	INFINITE
26	27	.00000E+00	NOT A BOUNDARY
27	28	.00000E+00	NOT A BOUNDARY
28	29	.00000E+00	NOT A BOUNDARY
29	30	.00000E+00	NOT A BOUNDARY
30	31	.00000E+00	INFINITE
31	32	.00000E+00	INFINITE
32	33	.00000E+00	INFINITE
33	34	.00000E+00	INFINITE
34	35	.00000E+00	INFINITE
35	36	.00000E+00	INFINITE
36	37	.00000E+00	INFINITE
37	38	.00000E+00	INFINITE
38	39	.00000E+00	NOT A BOUNDARY
39	40	.00000E+00	NOT A BOUNDARY
40	41	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	INFINITE
43	44	.00000E+00	INFINITE
44	45	.00000E+00	INFINITE
45	46	.00000E+00	INFINITE
46	48	.00000E+00	INFINITE
47	49	.00000E+00	INFINITE

48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	70	.00000E+00	.00000E+00	ASYMMETRIC
66	71	.00000E+00	.00000E+00	ASYMMETRIC
67	72	.00000E+00	.00000E+00	ASYMMETRIC
68	73	.00000E+00	.00000E+00	ASYMMETRIC
69	74	.00000E+00	.00000E+00	INFINITE
70	75	.00000E+00	.00000E+00	INFINITE
71	80	.00000E+00	.00000E+00	ASYMMETRIC
72	81	.00000E+00	.00000E+00	ASYMMETRIC
73	2040	.00000E+00	.00000E+00	INFINITE
74	2042	.00000E+00	.00000E+00	INFINITE
75	2039	.00000E+00	.00000E+00	INFINITE
76	2041	.00000E+00	.00000E+00	INFINITE
77	3027	.00000E+00	.00000E+00	INFINITE
78	3028	.00000E+00	.00000E+00	INFINITE
79	3029	.00000E+00	.00000E+00	INFINITE
80	3030	.00000E+00	.00000E+00	INFINITE
81	4027	.00000E+00	.00000E+00	INFINITE
82	4028	.00000E+00	.00000E+00	INFINITE
83	4029	.00000E+00	.00000E+00	INFINITE
84	4030	.00000E+00	.00000E+00	INFINITE
85	5027	.00000E+00	.00000E+00	INFINITE
86	5028	.00000E+00	.00000E+00	INFINITE
87	5029	.00000E+00	.00000E+00	INFINITE
88	5030	.00000E+00	.00000E+00	INFINITE
89	16048	.00000E+00	.00000E+00	INFINITE
90	16049	.00000E+00	.00000E+00	INFINITE
91	16050	.00000E+00	.00000E+00	INFINITE
92	16051	.00000E+00	.00000E+00	INFINITE
93	17048	.00000E+00	.00000E+00	INFINITE
94	17049	.00000E+00	.00000E+00	INFINITE
95	18048	.00000E+00	.00000E+00	INFINITE
96	18049	.00000E+00	.00000E+00	INFINITE
97	18050	.00000E+00	.00000E+00	INFINITE
98	18051	.00000E+00	.00000E+00	INFINITE
99	19050	.00000E+00	.00000E+00	INFINITE
100	19051	.00000E+00	.00000E+00	INFINITE
101	20048	.00000E+00	.00000E+00	INFINITE
102	20049	.00000E+00	.00000E+00	INFINITE
103	21048	.00000E+00	.00000E+00	INFINITE
104	21049	.00000E+00	.00000E+00	INFINITE
105	22048	.00000E+00	.00000E+00	INFINITE
106	22049	.00000E+00	.00000E+00	INFINITE
107	24048	.00000E+00	.00000E+00	INFINITE


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108 24049 .00000E+00 .00000E+00 INFINITE
109 24050 .00000E+00 .00000E+00 INFINITE
110 24051 .00000E+00 .00000E+00 INFINITE
111 25048 .00000E+00 .00000E+00 INFINITE
112 25049 .00000E+00 .00000E+00 INFINITE
113 26048 .00000E+00 .00000E+00 INFINITE
114 26049 .00000E+00 .00000E+00 INFINITE
115 26050 .00000E+00 .00000E+00 INFINITE
116 26051 .00000E+00 .00000E+00 INFINITE
117 27050 .00000E+00 .00000E+00 INFINITE
118 27051 .00000E+00 .00000E+00 INFINITE
119 28048 .00000E+00 .00000E+00 INFINITE
120 28049 .00000E+00 .00000E+00 INFINITE
121 29048 .00000E+00 .00000E+00 INFINITE
122 29049 .00000E+00 .00000E+00 INFINITE
123 30048 .00000E+00 .00000E+00 INFINITE
124 30049 .00000E+00 .00000E+00 INFINITE
1CELLS

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PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2 7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4 4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3 2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4 4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	6	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	70	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	71	6	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	72	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	74	6	6.60900E-02	2.75700E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	76	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	77	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	80	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	82	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	84	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	86	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	87	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	89	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	91	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02

6	6	PZ	2.2925000E+02			
7	7	PZ	2.3175000E+02			
8	8	PZ	2.4885000E+02			
9	9	CZ	6.0794900E+01			
10	10	CZ	6.3017400E+01			
11	11	CZ	6.4525000E+01			
12	12	CZ	6.6525000E+01			
13	13	PX	7.2135000E-01			
14	14	PX	-7.2135000E-01			
15	15	PY	7.2135000E-01			
16	16	PY	-7.2135000E-01			
17	17	CZ	4.6812200E-01			
18	18	CZ	4.7879000E-01			
19	19	CZ	5.4610000E-01			
20	21	CZ	5.0292000E-01			
21	22	CZ	5.6007000E-01			
22	23	CZ	6.3246000E-01			
23	24	CZ	6.7310000E-01			
24	25	CZ	5.6007000E-01			
25	26	CZ	6.2611000E-01			
26	27	PX	1.2809230E+01			
27	28	PX	-1.2809230E+01			
28	29	PY	1.2809230E+01			
29	30	PY	-1.2809230E+01			
30	31	PY	1.0820240E+01			
31	32	PX	1.0820240E+01			
32	33	PY	-1.0820240E+01			
33	34	PX	-1.0820240E+01			
34	35	PY	1.1430000E+01			
35	36	PX	1.1430000E+01			
36	37	PY	-1.1430000E+01			
37	38	PX	-1.1430000E+01			
38	39	PY	1.2179300E+01			
39	40	PX	1.2179300E+01			
40	41	PY	-1.1668760E+01			
41	42	PX	-1.1668760E+01			
42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	2.1437600E+00			
56	58	PY	2.1437600E+00			
57	59	PX	1.9050000E+00			
58	60	PY	1.9050000E+00			
59	61	PX	1.2700000E+00			
60	62	PY	1.2700000E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	70	CZ	7.6525000E+01			

66	71	PZ	2.4635000E+02
67	72	PZ	2.7135000E+02
68	73	PZ	2.8235000E+02
69	74	PX	-1.1856720E+01
70	75	PY	-1.1856720E+01
71	80	PZ	3.1235000E+02
72	81	CZ	1.0652500E+02
73	2040	1001 PX	2.5991819E+01
74	2042	1001 PX	2.1437590E+00
75	2039	1001 PY	2.5991819E+01
76	2041	1001 PY	2.1437590E+00
77	3027	1002 PX	2.9032230E+01
78	3028	1002 PX	3.4137700E+00
79	3029	1002 PY	7.9232790E+01
80	3030	1002 PY	5.3614330E+01
81	4027	1003 PX	5.3515300E+01
82	4028	1003 PX	2.7896840E+01
83	4029	1003 PY	5.3515300E+01
84	4030	1003 PY	2.7896840E+01
85	5027	1004 PX	7.9232790E+01
86	5028	1004 PX	5.3614330E+01
87	5029	1004 PY	2.9032230E+01
88	5030	1004 PY	3.4137700E+00
89	16048	1005 PX	2.1641000E+00
90	16049	1005 PX	3.6067000E+00
91	16050	1005 PY	2.1641000E+00
92	16051	1005 PY	3.6067000E+00
93	17048	1006 PX	6.4922000E+00
94	17049	1006 PX	7.9348000E+00
95	18048	1007 PX	5.0495000E+00
96	18049	1007 PX	6.4921000E+00
97	18050	1007 PY	5.0495000E+00
98	18051	1007 PY	6.4921000E+00
99	19050	1008 PY	6.4922000E+00
100	19051	1008 PY	7.9348000E+00
101	20048	1009 PX	-3.6067000E+00
102	20049	1009 PX	-2.1641000E+00
103	21048	1010 PX	-7.9348000E+00
104	21049	1010 PX	-6.4922000E+00
105	22048	1011 PX	-6.4921000E+00
106	22049	1011 PX	-5.0495000E+00
107	24048	1013 PX	-3.6067000E+00
108	24049	1013 PX	-2.1641000E+00
109	24050	1013 PY	-3.6067000E+00
110	24051	1013 PY	-2.1641000E+00
111	25048	1014 PX	-7.9348000E+00
112	25049	1014 PX	-6.4922000E+00
113	26048	1015 PX	-6.4921000E+00
114	26049	1015 PX	-5.0495000E+00
115	26050	1015 PY	-6.4921000E+00
116	26051	1015 PY	-5.0495000E+00
117	27050	1016 PY	-7.9348000E+00
118	27051	1016 PY	-6.4922000E+00
119	28048	1017 PX	2.1641000E+00
120	28049	1017 PX	3.6067000E+00
121	29048	1018 PX	6.4922000E+00
122	29049	1018 PX	7.9348000E+00
123	30048	1019 PX	5.0495000E+00
124	30049	1019 PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08

59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

2 WARNING MESSAGES SO FAR.

1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
5010.50C	9587	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

(1301)	79/07/31.
(1270)	79/06/19.
(1305)	79/09/10.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

TABLES FROM FILE NEWXS2

5011.56C	28379
63151.55C	33336
63153.55C	30265

06/28/88
06/28/88
06/28/88

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY	(1314)	79/06/21.
40000.50C	35842	NJOY	(1340)	79/07/31.
WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.				
92234.50C	76999	NJOY	(1394)	79/10/17.
WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.				
92236.50C	119238	NJOY	(1396)	79/08/30.
WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.				
94238.50C	16458	NJOY	(1338)	79/09/12.
94241.50C	22523	NJOY	(1381)	79/08/30.
94242.50C	43433	NJOY	(1342)	79/09/06.
			TOTAL NU	
			TOTAL NU	

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY	(1315)	79/10/29.
16032.50C	2684	NJOY	(1316)	79/10/29.
22000.50C	25231	NJOY	(1322)	79/06/21.
25055.50C	60097	NJOY	(1325)	79/06/21.
42000.50C	18467	NJOY	(1321)	79/08/01.
62149.50C	11116	NJOY	(1319)	02/12/85
64155.50C	31471	NJOY	(1365)	79/07/28.
WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.				
95241.50C	29300	NJOY	(1361)	79/08/29.
WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.				
95242.50C	5248	NJOY	(1369)	79/09/24.
WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.				
95243.50C	51474	NJOY	(1363)	79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C	13648	NJOY	(1310)	11/01/85
47109.50C	10147	NJOY	(1373)	11/01/85
93237.55C	29142	NJOY	(1337)	04/04/85
			TOTAL NU	

TABLES FROM FILE ENDL852

50000.35C	2380	ZA=50000 ENDL-85	85/04/24	T=0K	(48)	86/02/01
WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.						
96245.35C	15310	ZA=96245 ENDL-85	85/04/24	T=0K	(93)	86/04/23

TABLES FROM FILE TMCCS2

LWTR.01T	10193	HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN			1001	0	010/22/85
TOTAL	1385457						

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL	102760
TALLIES	0
BANK	18403

CROSS SECTIONS 1385457

TOTAL 1506620

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

10 WARNING MESSAGES SO FAR.

1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb5)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-3.516E-01	7.578E-02	8.677E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.001E+00	3.956E+00
2	-1.486E-01	-6.410E-02	8.490E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.001E+00	2.086E+00
3	-9.299E-02	-6.426E-02	1.383E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.001E+00	1.969E+00
4	-1.578E-02	2.583E-01	1.712E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	1.001E+00	2.243E+00
5	-2.563E-03	3.287E-01	1.802E+01	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	1.001E+00	5.391E+00
6	-3.039E-01	2.715E-02	2.788E+00	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.001E+00	2.039E+00
7	-9.045E-02	1.072E-01	1.671E+00	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.001E+00	1.090E+00
8	-1.284E-01	-1.741E-01	7.040E+00	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.001E+00	1.704E+00
9	1.935E-01	1.194E-01	1.388E+01	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.001E+00	2.232E+00
10	2.438E-01	-2.778E-01	1.328E+01	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.001E+00	4.897E+00
11	2.634E-02	4.273E-01	1.218E+01	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.001E+00	2.011E+00
12	2.290E-01	-3.047E-01	3.064E+01	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.001E+00	3.081E+00
13	-6.134E-02	-6.682E-02	5.307E+01	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.001E+00	1.430E-01
14	1.848E-02	2.906E-01	1.176E+01	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.001E+00	2.036E+00
15	-2.923E-01	1.843E-01	1.191E+01	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.001E+00	2.624E+00
16	7.442E-02	1.231E-01	1.142E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.001E+00	5.132E+00
17	-1.374E-03	1.636E-01	5.593E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.001E+00	1.057E+00
18	-6.202E-02	3.744E-01	4.122E+00	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.001E+00	1.039E+00
19	-1.440E-02	-2.287E-01	1.197E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.001E+00	1.907E+00
20	3.079E-03	-2.237E-01	1.360E+00	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.001E+00	8.307E-01
21	3.200E-01	2.088E-01	2.245E-01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.001E+00	2.965E-01
22	-8.736E-02	2.352E-01	1.641E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.001E+00	4.289E+00
23	-1.500E-01	6.489E-02	1.473E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.001E+00	4.483E-01
24	-2.538E-01	-1.799E-01	2.324E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.001E+00	1.576E+00
25	-2.339E-01	1.021E-01	2.442E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.001E+00	1.535E+00
26	-3.421E-01	9.210E-03	2.300E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.001E+00	3.014E-01
27	2.041E-01	-3.802E-01	2.456E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.001E+00	1.553E+00
28	1.149E-01	-1.915E-01	1.819E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.001E+00	2.030E+00
29	-2.086E-01	-2.270E-01	2.151E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.001E+00	3.538E+00
30	1.905E-01	1.748E-01	2.258E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.001E+00	3.416E+00
31	3.600E-01	1.818E-01	7.390E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.001E+00	1.902E+00
32	2.911E-01	2.758E-01	7.347E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.001E+00	1.642E+00
33	-3.338E-01	1.780E-01	7.866E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.001E+00	2.744E-01
34	-2.301E-01	1.663E-01	7.145E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.001E+00	2.412E+00
35	3.510E-01	-1.582E-01	9.967E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.001E+00	3.115E+00
36	2.161E-02	-3.523E-01	7.422E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.001E+00	2.510E+00
37	3.181E-01	2.950E-01	1.096E+02	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.001E+00	2.520E+00
38	1.087E-01	1.035E-01	1.101E+02	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.001E+00	1.918E-01
39	-8.944E-03	-2.830E-02	7.206E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.001E+00	1.196E+00
40	-6.008E-02	-9.693E-02	7.204E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.001E+00	4.648E+00
41	-3.805E-01	2.333E-01	7.068E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.001E+00	3.742E+00
42	-3.645E-01	-1.316E-01	1.020E+02	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.001E+00	2.874E+00

43	-4.229E-01	7.986E-02	1.100E+02	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.001E+00	2.876E-01
44	2.658E-01	-9.835E-02	1.093E+02	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.001E+00	1.009E+00
45	2.540E-01	2.102E-01	1.083E+02	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.001E+00	6.881E+00
46	4.654E-01	3.289E-02	1.154E+02	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.001E+00	6.126E-01
47	-4.207E-02	-3.965E-01	1.073E+02	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.001E+00	1.727E+00
48	-2.617E-01	-3.887E-02	1.073E+02	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.001E+00	2.576E+00
49	-2.683E-01	-3.146E-01	1.109E+02	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.001E+00	4.104E-01
50	1.887E-01	4.466E-02	1.357E+02	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.001E+00	1.223E+00

CYCLE 1 K(COLLISION) .847198 REMOVAL LIFETIME(ABS) 2.4787E+03 SOURCE POINTS GENERATED 2605

CYCLE 2 K(COLLISION) .833804 REMOVAL LIFETIME(ABS) 2.4826E+03 SOURCE POINTS GENERATED 2925

CYCLE 3 K(COLLISION) .829268 REMOVAL LIFETIME(ABS) 2.6531E+03 SOURCE POINTS GENERATED 2987

CYCLE 4 K(COLLISION) .851234 REMOVAL LIFETIME(ABS) 2.7087E+03 SOURCE POINTS GENERATED 3087

CYCLE 5 K(COLLISION) .837803 REMOVAL LIFETIME(ABS) 2.4917E+03 SOURCE POINTS GENERATED 2980

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .848144 REMOVAL LIFETIME(ABS) 2.5198E+03 SOURCE POINTS GENERATED 3069

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.866926	.857535	.0110	K(COL/ABS)	.000000	.0000	.000000	.0000
K(ABSORPTION)	.883361	.863129	.0234	K(ABS/TK LN)	.000000	.0000	.000000	.0000
K(TRK LENGTH)	.852558	.852768	.0002	K(TK LN/COL)	.000000	.0000	.000000	.0000
REM LIFE(COL)	2.4739E+03	2.4912E+03	.0069					
REM LIFE(ABS)	2.4842E+03	2.5020E+03	.0071	LIFE(COL/ABS)	.0000E+00	.0000	.0000E+00	.0000
SOURCE POINTS GENERATED	3117							

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.856076	.857049	.0064	K(COL/ABS)	.856794	.0108	.857294	.0057
K(ABSORPTION)	.843361	.856540	.0157	K(ABS/TK LN)	.854126	.0081	.851588	.0017
K(TRK LENGTH)	.849602	.851713	.0012	K(TK LN/COL)	.854381	.0032	.851932	.0018
REM LIFE(COL)	2.6755E+03	2.5526E+03	.0244					
REM LIFE(ABS)	2.6164E+03	2.5402E+03	.0155	LIFE(COL/ABS)	2.5464E+03	.0199	2.5199E+03	.0062
SOURCE POINTS GENERATED	2961							.9947

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.857916	.857265	.0045	K(COL/ABS)	.856555	.0076	.857929	.0036
K(ABSORPTION)	.853762	.855845	.0111	K(ABS/TK LN)	.854398	.0057	.852956	.0021
K(TRK LENGTH)	.856661	.852950	.0017	K(TK LN/COL)	.855108	.0024	.853444	.0021
REM LIFE(COL)	2.6451E+03	2.5757E+03	.0193	K(COL/ABS/TK LN)	.855354	.0052	.854362	.0032
REM LIFE(ABS)	2.6312E+03	2.5629E+03	.0141	LIFE(COL/ABS)	2.5693E+03	.0166	2.5417E+03	.0116
SOURCE POINTS GENERATED	2987							.9763

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.845051	.854823	.0045	K(COL/ABS)	.856685	.0059	.854943	.0052
K(ABSORPTION)	.869352	.858547	.0091	K(ABS/TK LN)	.856364	.0050	.854047	.0022
K(TRK LENGTH)	.859103	.854181	.0019	K(TK LN/COL)	.854502	.0020	.854336	.0016
REM LIFE(COL)	2.5327E+03	2.5671E+03	.0154	K(COL/ABS/TK LN)	.855850	.0041	.853892	.0016

REM LIFE(ABS) 2.5364E+03 2.5576E+03 .0111 LIFE(COL/ABS) 2.5624E+03 .0132 2.5419E+03 .0084 .9768
 SOURCE POINTS GENERATED 3018

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.866284		.856733		.0043	K(COL/ABS)	.859316 .0057	.856487 .0049	.5726
K(ABSORPTION)	.878663		.861899		.0084	K(ABS/TK LN)	.860141 .0060	.858610 .0058	.5345
K(TRK LENGTH)	.879393		.858383		.0051	K(TK LN/COL)	.857558 .0039	.857323 .0043	.3750
REM LIFE(COL)	2.5745E+03		2.5684E+03		.0126	K(COL/ABS/TK LN)	.859005 .0049	.856613 .0051	
REM LIFE(ABS)	2.5861E+03		2.5624E+03		.0092	LIFE(COL/ABS)	2.5654E+03 .0108	2.5542E+03 .0079	.9638
SOURCE POINTS GENERATED	3129								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.843124		.854789		.0043	K(COL/ABS)	.856399 .0059	.854236 .0046	.6942
K(ABSORPTION)	.834669		.858009		.0084	K(ABS/TK LN)	.856934 .0063	.855731 .0058	.6744
K(TRK LENGTH)	.840714		.855859		.0053	K(TK LN/COL)	.855324 .0042	.855084 .0045	.5602
REM LIFE(COL)	2.6923E+03		2.5861E+03		.0126	K(COL/ABS/TK LN)	.856219 .0053	.854324 .0047	
REM LIFE(ABS)	2.7044E+03		2.5827E+03		.0110	LIFE(COL/ABS)	2.5844E+03 .0117	2.5801E+03 .0117	.9554
SOURCE POINTS GENERATED	2906								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.872099		.856952		.0045	K(COL/ABS)	.857577 .0053	.856978 .0048	.5909
K(ABSORPTION)	.859551		.858202		.0073	K(ABS/TK LN)	.859274 .0061	.859382 .0066	.4655
K(TRK LENGTH)	.891753		.860345		.0069	K(TK LN/COL)	.858649 .0053	.856576 .0048	.7284
REM LIFE(COL)	2.6755E+03		2.5972E+03		.0117	K(COL/ABS/TK LN)	.858500 .0053	.856602 .0055	
REM LIFE(ABS)	2.6590E+03		2.5922E+03		.0102	LIFE(COL/ABS)	2.5947E+03 .0108	2.5876E+03 .0106	.9613
SOURCE POINTS GENERATED	3107								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.838011		.854848		.0047	K(COL/ABS)	.856270 .0049	.855324 .0049	.5483
K(ABSORPTION)	.853615		.857692		.0065	K(ABS/TK LN)	.859235 .0054	.859390 .0057	.4544
K(TRK LENGTH)	.864237		.860778		.0061	K(TK LN/COL)	.857813 .0048	.856028 .0049	.5735
REM LIFE(COL)	2.7256E+03		2.6115E+03		.0116	K(COL/ABS/TK LN)	.857773 .0048	.856200 .0058	
REM LIFE(ABS)	2.7104E+03		2.6053E+03		.0103	LIFE(COL/ABS)	2.6084E+03 .0109	2.5983E+03 .0104	.9700
SOURCE POINTS GENERATED	2946								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.835078		.852871		.0048	K(COL/ABS)	.855251 .0046	.854365 .0048	.4856
K(ABSORPTION)	.857076		.857631		.0058	K(ABS/TK LN)	.857420 .0053	.857477 .0055	.3696
K(TRK LENGTH)	.825094		.857209		.0069	K(TK LN/COL)	.855040 .0054	.852862 .0051	.6925
REM LIFE(COL)	2.4620E+03		2.5965E+03		.0119	K(COL/ABS/TK LN)	.855904 .0048	.854287 .0056	
REM LIFE(ABS)	2.4997E+03		2.5948E+03		.0101	LIFE(COL/ABS)	2.5957E+03 .0109	2.5921E+03 .0094	.9720
SOURCE POINTS GENERATED	3001								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.838542		.851568		.0046	K(COL/ABS)	.854681 .0042	.853909 .0044	.4455
K(ABSORPTION)	.859429		.857794		.0052	K(ABS/TK LN)	.857372 .0048	.857485 .0049	.3671
K(TRK LENGTH)	.854353		.856950		.0062	K(TK LN/COL)	.854259 .0050	.852016 .0049	.6684
REM LIFE(COL)	2.4747E+03		2.5855E+03		.0116	K(COL/ABS/TK LN)	.855437 .0044	.854045 .0053	

REM LIFE(ABS) 2.4995E+03 2.5861E+03 .0097 LIFE(COL/ABS) 2.5858E+03 .0106 2.5872E+03 .0087 .9752
 SOURCE POINTS GENERATED 3059

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.838075		.850444		.0044	K(COL/ABS)	.852932	.0043	.851769
K(ABSORPTION)	.829316		.855421		.0055	K(ABS/TK LN)	.854997	.0052	.855111
K(TRK LENGTH)	.828437		.854574		.0064	K(TK LN/COL)	.852509	.0050	.850360
REM LIFE(COL)	2.6182E+03		2.5882E+03		.0107	K(COL/ABS/TK LN)	.853479	.0046	.851493
REM LIFE(ABS)	2.5827E+03		2.5858E+03		.0089	LIFE(COL/ABS)	2.5870E+03	.0097	2.5824E+03
SOURCE POINTS GENERATED	3052								.9691

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.834367		.849207		.0043	K(COL/ABS)	.852299	.0041	.851260
K(ABSORPTION)	.855036		.855391		.0051	K(ABS/TK LN)	.853659	.0050	.854434
K(TRK LENGTH)	.820163		.851927		.0066	K(TK LN/COL)	.850567	.0051	.848834
REM LIFE(COL)	2.5367E+03		2.5842E+03		.0099	K(COL/ABS/TK LN)	.852175	.0045	.850883
REM LIFE(ABS)	2.5635E+03		2.5841E+03		.0082	LIFE(COL/ABS)	2.5842E+03	.0090	2.5839E+03
SOURCE POINTS GENERATED	3005								.9669

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.829822		.847822		.0043	K(COL/ABS)	.851183	.0040	.850350
K(ABSORPTION)	.843517		.854543		.0048	K(ABS/TK LN)	.852493	.0048	.853517
K(TRK LENGTH)	.831155		.850443		.0064	K(TK LN/COL)	.849133	.0050	.847434
REM LIFE(COL)	2.4905E+03		2.5775E+03		.0096	K(COL/ABS/TK LN)	.850936	.0044	.849962
REM LIFE(ABS)	2.4921E+03		2.5775E+03		.0080	LIFE(COL/ABS)	2.5775E+03	.0087	2.5775E+03
SOURCE POINTS GENERATED	2956								.9686

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.822558		.846138		.0045	K(COL/ABS)	.849817	.0041	.849421
K(ABSORPTION)	.838835		.853496		.0047	K(ABS/TK LN)	.851514	.0047	.852479
K(TRK LENGTH)	.836776		.849532		.0061	K(TK LN/COL)	.847835	.0049	.846049
REM LIFE(COL)	2.5032E+03		2.5726E+03		.0092	K(COL/ABS/TK LN)	.849722	.0044	.849208
REM LIFE(ABS)	2.4935E+03		2.5719E+03		.0078	LIFE(COL/ABS)	2.5723E+03	.0084	2.5711E+03
SOURCE POINTS GENERATED	2956								.9680

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 20

1PROBLEM SUMMARY

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+ MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12bb5)

02/21/95 01:04:51
 PROBID = 02/20/95 23:16:29

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59894	1.0018E+00	2.0614E+00	ESCAPE	2	3.0842E-05	1.0765E-05
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	3.9158E-02	1.4027E-06	WEIGHT CUTOFF	59981	3.9424E-02	1.7602E-06
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.0290E-07
(N,XN)	178	2.3378E-03	1.9767E-03
FISSION	0	0.	0.
TOTAL	60072	1.0433E+00	2.0633E+00

DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.
DOWNSCATTERING	0	0.	1.9494E+00
CAPTURE	0	6.8088E-01	3.3148E-02
LOSS TO (N,XN)	89	1.1689E-03	9.9813E-03
LOSS TO FISSION	0	3.2176E-01	7.0755E-02
TOTAL	60072	1.0433E+00	2.0633E+00

NUMBER OF NEUTRONS BANKED	89
NEUTRON TRACKS PER SOURCE PARTICLE	1.0030E+00
NEUTRON COLLISIONS PER SOURCE PARTICLE	4.9465E+01
TOTAL NEUTRON COLLISIONS	2962632
NET MULTIPLICATION	1.0012E+00 .0002

AVERAGE LIFETIME, SHAKES	
ESCAPE	1.4310E+02
CAPTURE	2.5675E+03
CAPTURE OR ESCAPE	2.5674E+03
ANY TERMINATION	2.7714E+03

CUTOFFS	
TCO	1.0000E+34
ECO	.0000E+00
WC1	-5.0000E-01
WC2	-2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN	108.17 MINUTES
COMPUTER TIME IN MCRUN	108.03 MINUTES
SOURCE PARTICLES PER MINUTE	5.5440E+02
RANDOM NUMBERS GENERATED	37162847

MAXIMUM NUMBER EVER IN BANK	1
BANK OVERFLOWS TO BACKUP FILE	0
FIELD LENGTH	0
MOST RANDOM NUMBERS USED WAS	9290 IN HISTORY 45166

RANGE OF SAMPLED SOURCE WEIGHTS = 9.5877E-01 TO 1.1516E+00
 1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
 THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
86	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
89	NO DATA AVAILABLE YET FOR THIS CELL.						

1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	18711	8273	2.3376E+00	1.7564E-04	4.4231E-01	7.9516E-01	1.2347E+00
3	3	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	706916	59983	284480	4.0534E+00	8.0477E-04	7.6262E-01	8.8794E-01	2.5336E+00
33	34	3236	177	651	7.1035E-03	6.6170E-05	2.4219E-01	6.1457E-01	4.1925E+00
34	35	208	20	598	4.7955E-03	1.5728E-05	5.7731E-02	5.0311E-01	5.1675E-01
35	36	1265643	59983	9	1.4280E-04	6.9725E-04	7.2381E-01	8.8460E-01	3.4700E+03
36	37	379	19	17	1.1433E-04	2.2070E-05	9.0140E-02	4.9206E-01	5.7142E-01
37	38	1371653	59983	49587	7.4109E-01	6.7097E-04	7.0999E-01	8.8435E-01	4.1026E+00
38	39	429	20	183	1.3861E-03	1.5633E-05	6.3364E-02	4.8374E-01	5.0775E-01
39	40	2192704	59983	1335191	1.7942E+01	5.8528E-04	6.8002E-01	8.8273E-01	1.6674E+00
40	41	56735	31507	87576	1.1675E+00	4.0768E-04	6.2088E-01	8.7589E-01	1.5580E+00
41	42	17	7	44	2.6644E-04	5.0339E-08	6.0086E-08	3.6126E-01	3.4076E-01
42	43	120134	33371	3642	5.3943E-02	4.3106E-04	6.3236E-01	8.7624E-01	4.1337E+00
43	44	134818	35712	29273	3.8953E-01	4.3888E-04	6.3648E-01	8.7688E-01	1.5832E+00
44	45	147409	36722	3216	4.7655E-02	4.4831E-04	6.3973E-01	8.7743E-01	4.1279E+00
45	46	179729	41918	70298	9.3694E-01	4.4879E-04	6.4206E-01	8.7738E-01	1.5932E+00
46	47	7371	3465	7479	9.9395E-02	4.4888E-04	6.4410E-01	8.7744E-01	1.5990E+00
47	48	9934	3796	354	5.2710E-03	4.6389E-04	6.7297E-01	8.7077E-01	4.1270E+00
48	49	12870	5172	6380	8.4628E-02	4.5631E-04	6.6053E-01	8.7440E-01	1.6240E+00
49	50	25630	14054	39394	5.4743E-01	6.9969E-04	6.6502E-01	8.9715E-01	1.6593E+00
50	51	23551	13310	7295	1.0681E-01	1.2192E-03	6.9812E-01	9.0704E-01	2.3692E+00
51	52	24822	13381	5884	7.6919E-02	1.9764E-03	7.3540E-01	9.1667E-01	4.9137E+00
52	53	23142	12493	7169	1.0317E-01	1.1709E-03	7.0687E-01	8.9875E-01	2.3878E+00
53	54	179	49	1234	1.2488E-02	3.5656E-05	1.3791E-01	6.5149E-01	6.6982E-01
54	55	26288	14364	40396	5.6061E-01	6.7465E-04	6.5146E-01	8.9700E-01	1.6354E+00
55	56	24038	13627	7506	1.0937E-01	1.1479E-03	6.8959E-01	9.0578E-01	2.3348E+00
56	57	25241	13638	6028	7.8783E-02	2.0105E-03	7.3994E-01	9.1854E-01	4.9713E+00
57	58	23414	12724	7387	1.0660E-01	1.1893E-03	6.8527E-01	9.0192E-01	2.3434E+00
58	59	203	45	1103	9.3483E-03	3.2669E-05	1.4670E-01	5.6643E-01	6.4744E-01
59	60	43505	17830	65061	9.0304E-01	7.7671E-04	6.2247E-01	8.9457E-01	1.6170E+00
60	61	41468	16924	12604	1.8126E-01	1.4181E-03	6.6490E-01	8.9864E-01	2.4624E+00
61	62	257	52	1247	1.0894E-02	2.0245E-05	9.7049E-02	5.7498E-01	5.5828E-01
62	63	43019	17797	63970	8.8621E-01	8.0226E-04	6.2791E-01	8.9295E-01	1.6219E+00
63	64	41079	16929	12414	1.7814E-01	1.4873E-03	6.5741E-01	8.9785E-01	2.4367E+00
64	65	263	51	1094	9.3405E-03	6.0173E-05	2.5331E-01	5.8388E-01	9.0701E-01
65	66	8827	4419	397384	3.6645E+00	5.8806E-05	2.7294E-01	6.2258E-01	8.6637E-01
66	67	8263	3372	12349	1.3405E-01	2.0561E-04	4.5646E-01	7.1572E-01	1.8565E+00
67	68	8436	3400	12378	1.3602E-01	2.0139E-04	4.3981E-01	7.2631E-01	1.8416E+00
68	70	26440	8690	7698	1.1035E-01	2.2412E-03	6.5780E-01	8.9911E-01	2.5758E+00
69	71	26828	8330	8765	1.2566E-01	7.0932E-03	6.8747E-01	9.1548E-01	5.3461E+00
70	72	12881	7068	35392	5.1740E-01	9.1969E-03	6.7690E-01	9.0872E-01	2.7564E+00
71	73	26796	8820	7815	1.1273E-01	2.0357E-03	6.8396E-01	8.9989E-01	2.5909E+00
72	74	27099	8481	9016	1.2957E-01	6.9909E-03	7.1871E-01	9.1751E-01	5.3340E+00
73	75	12874	7059	35779	5.2356E-01	9.3211E-03	6.7827E-01	9.0937E-01	2.7630E+00
74	76	105	27	2069	1.6945E-02	5.2966E-05	2.7110E-01	5.5259E-01	9.1708E-01
75	77	104	25	2145	1.8391E-02	1.5142E-05	8.2534E-02	5.3955E-01	4.9080E-01
76	80	10	7	26	2.0212E-04	1.4348E-04	7.4746E-01	5.7904E-01	1.5593E+00
77	81	3265	1414	9874	1.0719E-01	3.3544E-04	4.8423E-01	7.2675E-01	2.0773E+00
78	82	2026	818	10621	1.1656E-01	2.8710E-04	4.5295E-01	7.6687E-01	1.3106E+00
79	83	2	2	300	3.1896E-03	9.2694E-05	3.0326E-01	7.4344E-01	9.2360E-01
80	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	1527	607	4549	5.5091E-02	8.9737E-04	5.5425E-01	7.9160E-01	2.1200E+00
82	86	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00

84	88	945	403	8243	9.4470E-02	2.2517E-03	5.6675E-01	7.9958E-01	4.4683E+00
85	89	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	337	193	39314	3.3682E-01	3.1952E-05	1.3715E-01	5.6700E-01	6.4854E-01

TOTAL 6761760 680514 2962632 3.7956E+01
 1NEUTRON WEIGHT BALANCE IN EACH CELL -- EXTERNAL EVENTS

PRINT TABLE 130

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-4.7979E-01	-4.7979E-01
2	2	2.5771E-01	.0000E+00	.0000E+00	-7.1304E-01	-4.5534E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-1.4182E-02	-1.4182E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-4.5687E-02	-4.5687E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-1.3592E-02	-1.3592E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-1.3001E-01	-1.3001E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6234E+00	-1.6234E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.9509E+00	-1.9509E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-1.6618E-01	-1.6618E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.7230E-01	-1.7230E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-3.2488E-01	-3.2488E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-3.2220E-01	-3.2220E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-8.0005E-02	-8.0005E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-8.0935E-02	-8.0935E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-9.2312E-02	-9.2312E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.4225E-02	-7.4225E-02
17	18	.0000E+00	.0000E+00	.0000E+00	-7.1817E-02	-7.1817E-02
18	19	.0000E+00	.0000E+00	.0000E+00	-7.4127E-02	-7.4127E-02
19	20	.0000E+00	.0000E+00	.0000E+00	-1.0393E-01	-1.0393E-01
20	21	.0000E+00	.0000E+00	.0000E+00	-1.0147E-01	-1.0147E-01
21	22	.0000E+00	.0000E+00	.0000E+00	-9.1128E-02	-9.1128E-02
22	23	.0000E+00	.0000E+00	.0000E+00	-8.4491E-02	-8.4491E-02
23	24	.0000E+00	.0000E+00	.0000E+00	-1.1512E-01	-1.1512E-01
24	25	.0000E+00	.0000E+00	.0000E+00	-1.1041E-01	-1.1041E-01
25	26	.0000E+00	.0000E+00	.0000E+00	-1.1121E-01	-1.1121E-01
26	27	.0000E+00	.0000E+00	.0000E+00	-1.1309E-01	-1.1309E-01
27	28	.0000E+00	.0000E+00	.0000E+00	-1.0521E-01	-1.0521E-01
28	29	.0000E+00	.0000E+00	.0000E+00	-8.0709E-02	-8.0709E-02
29	30	.0000E+00	.0000E+00	.0000E+00	-8.7473E-02	-8.7473E-02
30	31	.0000E+00	.0000E+00	.0000E+00	-9.9312E-02	-9.9312E-02
31	32	.0000E+00	.0000E+00	.0000E+00	-1.8726E+01	-1.8726E+01
32	33	9.5458E+00	1.0018E+00	.0000E+00	-9.3820E+00	1.1656E+00
33	34	3.3070E-02	.0000E+00	.0000E+00	-3.1345E-02	1.7251E-03
34	35	1.7049E-03	.0000E+00	.0000E+00	-1.6064E-03	9.8516E-05
35	36	1.8706E+01	.0000E+00	.0000E+00	-1.8695E+01	1.0810E-02
36	37	3.1102E-03	.0000E+00	.0000E+00	-3.1095E-03	6.8968E-07
37	38	2.0269E+01	.0000E+00	.0000E+00	-2.0191E+01	7.7157E-02
38	39	3.4918E-03	.0000E+00	.0000E+00	-3.4771E-03	1.4671E-05
39	40	3.2342E+01	.0000E+00	.0000E+00	-1.0579E+01	2.1762E+01
40	41	8.3197E-01	.0000E+00	.0000E+00	-8.2850E-01	3.4687E-03
41	42	1.1068E-04	.0000E+00	.0000E+00	-1.0924E-04	1.4378E-06
42	43	1.7582E+00	.0000E+00	.0000E+00	-1.7576E+00	5.4475E-04
43	44	1.9739E+00	.0000E+00	.0000E+00	-1.9727E+00	1.1523E-03
44	45	2.1587E+00	.0000E+00	.0000E+00	-2.1583E+00	4.5412E-04
45	46	2.6344E+00	.0000E+00	.0000E+00	-1.1156E+00	1.5188E+00
46	47	1.0797E-01	.0000E+00	.0000E+00	-6.5938E-02	4.2030E-02
47	48	1.4528E-01	.0000E+00	.0000E+00	-1.3999E-01	5.2857E-03
48	49	1.8834E-01	.0000E+00	.0000E+00	-7.4150E-02	1.1419E-01
49	50	3.8537E-01	.0000E+00	.0000E+00	-2.2491E-01	1.6046E-01
50	51	3.5848E-01	.0000E+00	.0000E+00	-3.5130E-01	7.1723E-03

51	52	3.7034E-01	.0000E+00	.0000E+00	.0000E+00	-3.2162E-01	4.8714E-02
52	53	3.4982E-01	.0000E+00	.0000E+00	.0000E+00	-1.5039E-01	1.9943E-01
53	54	1.9058E-03	.0000E+00	.0000E+00	.0000E+00	-6.3162E-05	1.8426E-03
54	55	3.9518E-01	.0000E+00	.0000E+00	.0000E+00	-2.2893E-01	1.6625E-01
55	56	3.6556E-01	.0000E+00	.0000E+00	.0000E+00	-3.5819E-01	7.3774E-03
56	57	3.7646E-01	.0000E+00	.0000E+00	.0000E+00	-3.2709E-01	4.9369E-02
57	58	3.5441E-01	.0000E+00	.0000E+00	.0000E+00	-1.5354E-01	2.0087E-01
58	59	2.0087E-03	.0000E+00	.0000E+00	.0000E+00	-3.2103E-05	1.9766E-03
59	60	6.5203E-01	.0000E+00	.0000E+00	.0000E+00	-3.3383E-01	3.1820E-01
60	61	6.2635E-01	.0000E+00	.0000E+00	.0000E+00	-2.8957E-01	3.3679E-01
61	62	2.5619E-03	.0000E+00	.0000E+00	.0000E+00	-7.4239E-05	2.4877E-03
62	63	6.4400E-01	.0000E+00	.0000E+00	.0000E+00	-3.2866E-01	3.1534E-01
63	64	6.2021E-01	.0000E+00	.0000E+00	.0000E+00	-2.8450E-01	3.3572E-01
64	65	2.6512E-03	.0000E+00	.0000E+00	.0000E+00	-3.0882E-05	2.6203E-03
65	66	1.0923E-01	.0000E+00	.0000E+00	.0000E+00	-6.5244E-02	4.3990E-02
66	67	1.0186E-01	.0000E+00	.0000E+00	.0000E+00	-5.2233E-02	4.9628E-02
67	68	1.0439E-01	.0000E+00	.0000E+00	.0000E+00	-5.4059E-02	5.0329E-02
68	70	3.9904E-01	.0000E+00	.0000E+00	.0000E+00	-3.9655E-01	2.4906E-03
69	71	4.0380E-01	.0000E+00	.0000E+00	.0000E+00	-3.6904E-01	3.4766E-02
70	72	1.9889E-01	.0000E+00	.0000E+00	.0000E+00	-1.9420E-01	4.6903E-03
71	73	4.0478E-01	.0000E+00	.0000E+00	.0000E+00	-4.0211E-01	2.6696E-03
72	74	4.0795E-01	.0000E+00	.0000E+00	.0000E+00	-3.7069E-01	3.7253E-02
73	75	1.9910E-01	.0000E+00	.0000E+00	.0000E+00	-1.9441E-01	4.6885E-03
74	76	1.0123E-03	.0000E+00	.0000E+00	.0000E+00	-9.2483E-04	8.7452E-05
75	77	1.0169E-03	.0000E+00	.0000E+00	.0000E+00	-9.2584E-04	9.1076E-05
76	80	1.1171E-04	.0000E+00	.0000E+00	.0000E+00	-6.4001E-05	4.7709E-05
77	81	4.0177E-02	.0000E+00	.0000E+00	.0000E+00	-3.2375E-02	7.8017E-03
78	82	2.6175E-02	.0000E+00	.0000E+00	.0000E+00	-2.5834E-02	3.4077E-04
79	83	3.1435E-05	.0000E+00	.0000E+00	.0000E+00	-1.2866E-05	1.8569E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	2.0338E-02	.0000E+00	.0000E+00	.0000E+00	-1.8197E-02	2.1410E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	1.2145E-02	.0000E+00	.0000E+00	.0000E+00	-1.0432E-02	1.7127E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	4.3566E-03	.0000E+00	.0000E+00	.0000E+00	-2.5680E-03	1.7886E-03

TOTAL	9.8902E+01	1.0018E+00	.0000E+00	.0000E+00	-9.8902E+01	1.0017E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

[illegible]

18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	1.1670E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1670E-04
33	34	.0000E+00	.0000E+00	1.5185E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5185E-05
34	35	.0000E+00	.0000E+00	-8.2865E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2865E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	6.6956E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6956E-06
38	39	.0000E+00	.0000E+00	2.2580E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.2580E-08
39	40	.0000E+00	.0000E+00	-6.6197E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.6197E-05
40	41	.0000E+00	.0000E+00	1.3178E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3178E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	5.6386E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6386E-06
43	44	.0000E+00	.0000E+00	-1.2343E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2343E-05
44	45	.0000E+00	.0000E+00	9.6112E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.6112E-06
45	46	.0000E+00	.0000E+00	-7.7962E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.7962E-06
46	47	.0000E+00	.0000E+00	8.3977E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.3977E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	6.1620E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.1620E-08
49	50	.0000E+00	.0000E+00	8.5236E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5236E-06
50	51	.0000E+00	.0000E+00	-5.7839E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.7839E-05
51	52	.0000E+00	.0000E+00	-4.6402E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.6402E-05
52	53	.0000E+00	.0000E+00	6.1148E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.1148E-06
53	54	.0000E+00	.0000E+00	4.1912E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1912E-06
54	55	.0000E+00	.0000E+00	1.2623E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2623E-05
55	56	.0000E+00	.0000E+00	2.9163E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9163E-05
56	57	.0000E+00	.0000E+00	-4.7354E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.7354E-05
57	58	.0000E+00	.0000E+00	2.6165E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6165E-05
58	59	.0000E+00	.0000E+00	5.2052E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.2052E-08
59	60	.0000E+00	.0000E+00	-2.0406E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0406E-05
60	61	.0000E+00	.0000E+00	9.6303E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	9.6303E-06
61	62	.0000E+00	.0000E+00	-4.1131E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1131E-06
62	63	.0000E+00	.0000E+00	-3.8511E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.8511E-06
63	64	.0000E+00	.0000E+00	-1.4860E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4860E-05
64	65	.0000E+00	.0000E+00	7.8311E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	7.8311E-08
65	66	.0000E+00	.0000E+00	-2.8005E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8005E-04
66	67	.0000E+00	.0000E+00	2.7792E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.7792E-05
67	68	.0000E+00	.0000E+00	5.8627E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.8627E-05
68	70	.0000E+00	.0000E+00	1.2849E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2849E-06
69	71	.0000E+00	.0000E+00	1.5595E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.5595E-05
70	72	.0000E+00	.0000E+00	-3.4196E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4196E-05
71	73	.0000E+00	.0000E+00	1.7031E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7031E-05
72	74	.0000E+00	.0000E+00	-6.1879E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1879E-05
73	75	.0000E+00	.0000E+00	-2.0431E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.0431E-05
74	76	.0000E+00	.0000E+00	4.3816E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3816E-06
75	77	.0000E+00	.0000E+00	1.2657E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2657E-05
76	80	.0000E+00	.0000E+00	-5.2367E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.2367E-06
77	81	.0000E+00	.0000E+00	-1.7298E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7298E-04

78	82	.0000E+00	.0000E+00	1.2915E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.2915E-05
79	83	.0000E+00	.0000E+00	-4.1637E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1637E-06
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	3.5432E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.5432E-08
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	1.4866E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4866E-04
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-5.1740E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.1740E-05

TOTAL	.0000E+00	.0000E+00	-2.6501E-04	.0000E+00	.0000E+00	.0000E+00	-2.6501E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --	PHYSICAL EVENTS			PRINT TABLE 130			

CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSION	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	-9.0743E-03	.0000E+00	-9.0743E-03
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.1610E-03	.0000E+00	-3.4486E-01	-1.0805E-03	-3.2176E-01
33	34	.0000E+00	.0000E+00	-1.3616E-04	.0000E+00	-1.3616E-04
34	35	.0000E+00	.0000E+00	-2.5394E-05	.0000E+00	-2.5394E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-6.8968E-07	.0000E+00	-6.8968E-07
37	38	1.0127E-04	.0000E+00	-6.4608E-03	-5.0636E-05	-6.4102E-03
38	39	.0000E+00	.0000E+00	-7.4705E-06	.0000E+00	-7.4705E-06
39	40	.0000E+00	.0000E+00	-4.5694E-02	.0000E+00	-4.5694E-02
40	41	.0000E+00	.0000E+00	-3.4819E-03	.0000E+00	-3.4819E-03
41	42	.0000E+00	.0000E+00	-1.4378E-06	.0000E+00	-1.4378E-06
42	43	.0000E+00	.0000E+00	-5.5039E-04	.0000E+00	-5.5039E-04
43	44	.0000E+00	.0000E+00	-1.1400E-03	.0000E+00	-1.1400E-03
44	45	.0000E+00	.0000E+00	-4.6373E-04	.0000E+00	-4.6373E-04

45	46	.0000E+00	.0000E+00	-2.6959E-03	.0000E+00	.0000E+00	-2.6959E-03
46	47	.0000E+00	.0000E+00	-2.8570E-04	.0000E+00	.0000E+00	-2.8570E-04
47	48	.0000E+00	.0000E+00	-4.5742E-05	.0000E+00	.0000E+00	-4.5742E-05
48	49	.0000E+00	.0000E+00	-2.4466E-04	.0000E+00	.0000E+00	-2.4466E-04
49	50	.0000E+00	.0000E+00	-1.1946E-03	.0000E+00	.0000E+00	-1.1946E-03
50	51	.0000E+00	.0000E+00	-3.3958E-03	.0000E+00	.0000E+00	-3.3958E-03
51	52	.0000E+00	.0000E+00	-4.5275E-02	.0000E+00	.0000E+00	-4.5275E-02
52	53	.0000E+00	.0000E+00	-3.6466E-03	.0000E+00	.0000E+00	-3.6466E-03
53	54	.0000E+00	.0000E+00	-6.0915E-05	.0000E+00	.0000E+00	-6.0915E-05
54	55	.0000E+00	.0000E+00	-1.2305E-03	.0000E+00	.0000E+00	-1.2305E-03
55	56	.0000E+00	.0000E+00	-3.5772E-03	.0000E+00	.0000E+00	-3.5772E-03
56	57	.0000E+00	.0000E+00	-4.5808E-02	.0000E+00	.0000E+00	-4.5808E-02
57	58	.0000E+00	.0000E+00	-3.5193E-03	.0000E+00	.0000E+00	-3.5193E-03
58	59	.0000E+00	.0000E+00	-4.6931E-05	.0000E+00	.0000E+00	-4.6931E-05
59	60	.0000E+00	.0000E+00	-1.7821E-03	.0000E+00	.0000E+00	-1.7821E-03
60	61	.0000E+00	.0000E+00	-5.5012E-03	.0000E+00	.0000E+00	-5.5012E-03
61	62	.0000E+00	.0000E+00	-5.9969E-05	.0000E+00	.0000E+00	-5.9969E-05
62	63	.0000E+00	.0000E+00	-1.7205E-03	.0000E+00	.0000E+00	-1.7205E-03
63	64	.0000E+00	.0000E+00	-4.9739E-03	.0000E+00	.0000E+00	-4.9739E-03
64	65	.0000E+00	.0000E+00	-4.6377E-05	.0000E+00	.0000E+00	-4.6377E-05
65	66	.0000E+00	.0000E+00	-1.8454E-02	.0000E+00	.0000E+00	-1.8454E-02
66	67	.0000E+00	.0000E+00	-1.2384E-02	.0000E+00	.0000E+00	-1.2384E-02
67	68	.0000E+00	.0000E+00	-1.2550E-02	.0000E+00	.0000E+00	-1.2550E-02
68	70	.0000E+00	.0000E+00	-2.4918E-03	.0000E+00	.0000E+00	-2.4918E-03
69	71	.0000E+00	.0000E+00	-3.4782E-02	.0000E+00	.0000E+00	-3.4782E-02
70	72	.0000E+00	.0000E+00	-4.6561E-03	.0000E+00	.0000E+00	-4.6561E-03
71	73	.0000E+00	.0000E+00	-2.6867E-03	.0000E+00	.0000E+00	-2.6867E-03
72	74	.0000E+00	.0000E+00	-3.7191E-02	.0000E+00	.0000E+00	-3.7191E-02
73	75	7.5504E-05	.0000E+00	-4.7058E-03	-3.7752E-05	.0000E+00	-4.6680E-03
74	76	.0000E+00	.0000E+00	-9.1833E-05	.0000E+00	.0000E+00	-9.1833E-05
75	77	.0000E+00	.0000E+00	-1.0373E-04	.0000E+00	.0000E+00	-1.0373E-04
76	80	.0000E+00	.0000E+00	-4.2472E-05	.0000E+00	.0000E+00	-4.2472E-05
77	81	.0000E+00	.0000E+00	-7.6287E-03	.0000E+00	.0000E+00	-7.6287E-03
78	82	.0000E+00	.0000E+00	-3.5369E-04	.0000E+00	.0000E+00	-3.5369E-04
79	83	.0000E+00	.0000E+00	-1.4405E-05	.0000E+00	.0000E+00	-1.4405E-05
80	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	.0000E+00	.0000E+00	-2.1410E-03	.0000E+00	.0000E+00	-2.1410E-03
82	86	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	.0000E+00	.0000E+00	-1.8613E-03	.0000E+00	.0000E+00	-1.8613E-03
85	89	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
86	90	.0000E+00	.0000E+00	-1.7368E-03	.0000E+00	.0000E+00	-1.7368E-03

TOTAL 2.3378E-03 .0000E+00 -6.8088E-01 -1.1689E-03 -3.2176E-01 -1.0015E+00
 1 NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	188019 12132	2.1788E+00 1.5886E-01	8.9960E-03 7.8288E-05	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00

6	6	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7097E-01	96067	1.4128E+00	1.2295E-03	.0000E+00	.0000E+00
		45103.50C	2.3926E-04	550	7.3357E-03	6.2287E-03	.0000E+00	.0000E+00
		47109.50C	2.8706E-05	56	7.7977E-04	6.4291E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	809	9.2641E-03	9.1933E-03	.0000E+00	.0000E+00
		63151.55C	2.3827E-07	14	1.7647E-04	1.7222E-04	.0000E+00	.0000E+00
		63153.55C	3.0867E-05	102	1.3031E-03	1.1254E-03	.0000E+00	.0000E+00
		64155.50C	1.4226E-06	391	4.2652E-03	4.2579E-03	.0000E+00	.0000E+00
		92233.50C	4.5949E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	6.8903E-05	111	1.5222E-03	1.0222E-03	2.4605E-05	.0000E+00
		92235.50C	4.4265E-03	19947	3.9745E-01	3.5273E-02	1.7341E-01	1.0329E-05
		92236.50C	9.9057E-04	793	1.1604E-02	4.0431E-03	1.8347E-04	.0000E+00
		92238.50C	3.2088E-01	145550	2.1436E+00	1.7803E-01	2.0906E-02	1.0608E-03
		93237.55C	7.6759E-05	209	2.7798E-03	2.1584E-03	2.6802E-05	.0000E+00
		94238.50C	1.4002E-05	42	5.2242E-04	3.4089E-04	2.6219E-05	.0000E+00
		94239.55C	1.5156E-03	14226	2.8889E-01	5.3831E-02	1.0932E-01	.0000E+00
		94240.50C	4.3508E-04	3017	4.0423E-02	3.5625E-02	1.5870E-04	.0000E+00
		94241.50C	2.0467E-04	2111	4.4304E-02	6.3093E-03	1.7597E-02	9.3576E-06
		94242.50C	5.2259E-05	99	1.4142E-03	1.0120E-03	7.1225E-06	.0000E+00
		95241.50C	6.1062E-05	362	4.6063E-03	4.1594E-03	4.6668E-05	.0000E+00
		95242.50C	1.9299E-07	6	2.0797E-04	1.1152E-05	5.5694E-05	.0000E+00
		95243.50C	5.8652E-06	18	2.1764E-04	2.0115E-04	.0000E+00	.0000E+00
		96245.35C	1.9976E-08	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	3	3.7629E-05	7.1048E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	2	1.6884E-05	7.3426E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	8	8.5177E-05	1.1930E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	632	6.8853E-03	1.1399E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	6	7.8420E-05	2.8953E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	571	4.5788E-03	2.5386E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	27	2.1674E-04	7.7827E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	9	1.4280E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	17	1.1433E-04	6.8968E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	184	2.6999E-03	5.6257E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	65	9.4617E-04	6.2258E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	199	2.8327E-03	1.2336E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	48644	7.2725E-01	6.0959E-03	.0000E+00	5.0636E-05

		50000.35C	1.0711E-02	495	7.3631E-03	1.7363E-04	.0000E+00	.0000E+00
38	39	1001.50C 8016.50C	6.6667E-01 3.3333E-01	174 9	1.3133E-03 7.2798E-05	7.4680E-06 2.5038E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
39	40	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1221873 113318	1.6288E+01 1.6545E+00	4.4371E-02 1.3231E-03	.0000E+00 .0000E+00	.0000E+00 .0000E+00
40	41	1001.50C 8016.50C	6.6667E-01 3.3333E-01	80924 6652	1.0715E+00 9.6065E-02	3.4137E-03 6.8223E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
41	42	1001.50C 8016.50C	6.6667E-01 3.3333E-01	42 2	2.5782E-04 8.6177E-06	1.4375E-06 2.1231E-10	.0000E+00 .0000E+00	.0000E+00 .0000E+00
42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	17 5 18 3575 27	2.3989E-04 7.0425E-05 2.1389E-04 5.3026E-02 3.9218E-04	1.6283E-09 1.9223E-05 8.9958E-06 5.0551E-04 1.6663E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	26976 2297	3.5657E-01 3.2965E-02	1.1132E-03 2.6782E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	9 2 7 3172 26	1.3713E-04 2.0381E-05 9.9380E-05 4.7022E-02 3.7590E-04	1.3969E-08 1.6531E-06 4.4727E-06 4.5121E-04 6.3774E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	64932 5366	8.5915E-01 7.7789E-02	2.6506E-03 4.5277E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6851 628	9.0332E-02 9.0631E-03	2.7942E-04 6.2852E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	0 0 4 346 4	.0000E+00 .0000E+00 5.9186E-05 5.1575E-03 5.4369E-05	.0000E+00 .0000E+00 2.5719E-06 4.0173E-05 2.9963E-06	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5891 489	7.7505E-02 7.1232E-03	2.4001E-04 4.6576E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	35818 3576	4.9424E-01 5.3191E-02	1.1530E-03 4.1642E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	5 33 34 6 3 896 443 4448 1322 105	7.6346E-05 4.8843E-04 5.2142E-04 9.1621E-05 4.8239E-05 1.3406E-02 6.7939E-03 6.4455E-02 1.9322E-02 1.6118E-03	2.4799E-09 7.4057E-06 3.0419E-06 2.1838E-07 7.4890E-07 6.1585E-04 3.1324E-04 1.7005E-03 5.8311E-04 1.7168E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	5010.50C 5011.56C	2.2580E-02 9.3555E-02	3887 243	4.5896E-02 3.6310E-03	4.5144E-02 1.8555E-07	.0000E+00 .0000E+00	.0000E+00 .0000E+00

		13027.50C	8.8339E-01	1751	2.7345E-02	1.2580E-04	.0000E+00	.0000E+00
		29000.50C	4.7440E-04	3	4.6315E-05	4.5519E-06	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	5	7.1282E-05	1.6385E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	20	2.8573E-04	9.2536E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	34	5.1156E-04	3.1885E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	6	8.9046E-05	1.5760E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	881	1.3018E-02	6.2757E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	349	5.1766E-03	3.3294E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4436	6.3344E-02	1.9220E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1332	1.9127E-02	5.8799E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	106	1.5466E-03	1.6343E-04	.0000E+00	.0000E+00
53	54	1001.50C	6.6667E-01	1176	1.1833E-02	6.0902E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	58	6.5445E-04	1.3660E-08	.0000E+00	.0000E+00
54	55	1001.50C	6.6667E-01	36803	5.0711E-01	1.1950E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3593	5.3503E-02	3.5489E-05	.0000E+00	.0000E+00
55	56	6000.50C	1.3966E-03	4	5.8530E-05	1.4760E-11	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	27	4.1084E-04	8.0005E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	29	4.6256E-04	1.2952E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	4	5.5565E-05	9.0510E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	991	1.4867E-02	6.4706E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	403	6.1429E-03	2.3285E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4497	6.4907E-02	1.8667E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1449	2.0882E-02	6.5372E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	102	1.5816E-03	1.6666E-04	.0000E+00	.0000E+00
56	57	5010.50C	2.2580E-02	3939	4.6242E-02	4.5664E-02	.0000E+00	.0000E+00
		5011.56C	9.3555E-02	290	4.3285E-03	3.1668E-07	.0000E+00	.0000E+00
		13027.50C	8.8339E-01	1795	2.8150E-02	1.3565E-04	.0000E+00	.0000E+00
		29000.50C	4.7440E-04	4	6.3440E-05	8.1049E-06	.0000E+00	.0000E+00
57	58	6000.50C	1.3966E-03	5	7.6336E-05	5.6517E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	28	3.9322E-04	1.1343E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	32	4.8166E-04	1.3922E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.8374E-05	7.4401E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.4137E-05	1.0276E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1017	1.5037E-02	6.6015E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	407	6.0911E-03	2.7154E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4465	6.3755E-02	1.7668E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1308	1.8887E-02	6.0644E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	121	1.8146E-03	2.0050E-04	.0000E+00	.0000E+00
58	59	1001.50C	6.6667E-01	1060	8.9313E-03	4.6921E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	43	4.1705E-04	1.0097E-08	.0000E+00	.0000E+00
59	60	1001.50C	6.6667E-01	59040	8.1386E-01	1.7286E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6021	8.9187E-02	5.3448E-05	.0000E+00	.0000E+00
60	61	6000.50C	1.3966E-03	17	2.5423E-04	4.9390E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	5.5260E-04	1.8299E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	48	7.2120E-04	3.5873E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.3035E-04	2.3559E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1674	2.4692E-02	1.0316E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	746	1.1075E-02	5.3722E-04	.0000E+00	.0000E+00

		26000.55C	6.4626E-01	7536	1.0743E-01	2.7014E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2323	3.3285E-02	9.1872E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	212	3.1205E-03	2.8800E-04	.0000E+00	.0000E+00
61	62	1001.50C	6.6667E-01	1190	1.0324E-02	5.9941E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	57	5.7002E-04	2.8024E-08	.0000E+00	.0000E+00
62	63	1001.50C	6.6667E-01	58063	7.9852E-01	1.6551E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	5907	8.7684E-02	6.5314E-05	.0000E+00	.0000E+00
63	64	6000.50C	1.3966E-03	7	7.2606E-05	1.6093E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	35	4.7688E-04	1.5028E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	73	1.0919E-03	7.1451E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.1882E-05	1.7368E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1651	2.4232E-02	8.8593E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	717	1.0686E-02	4.1296E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7450	1.0601E-01	2.5745E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2289	3.2747E-02	8.0627E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	190	2.7989E-03	2.7191E-04	.0000E+00	.0000E+00
64	65	1001.50C	6.6667E-01	1034	8.7527E-03	4.6363E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	60	5.8782E-04	1.3279E-08	.0000E+00	.0000E+00
65	66	1001.50C	6.6667E-01	378504	3.4716E+00	1.8384E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	18880	1.9291E-01	7.0141E-05	.0000E+00	.0000E+00
66	67	6000.50C	1.3966E-03	10	1.1383E-04	1.5109E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	39	3.9176E-04	2.3726E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	37	4.6344E-04	9.1292E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.4740E-05	1.0724E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3890E-05	9.0454E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1360	1.5308E-02	2.3331E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	411	5.3873E-03	1.0431E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8023	8.5493E-02	6.6254E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2330	2.5199E-02	2.1220E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	134	1.6266E-03	2.2651E-04	.0000E+00	.0000E+00
67	68	6000.50C	1.3966E-03	6	8.2837E-05	4.4458E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	32	3.4594E-04	1.7288E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	51	6.6674E-04	1.2482E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	3.6791E-05	2.3027E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	2.2622E-05	1.5296E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1303	1.4919E-02	2.1242E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	406	5.2173E-03	1.2176E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8022	8.6673E-02	6.7372E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2438	2.6680E-02	2.2170E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	115	1.3740E-03	2.2239E-04	.0000E+00	.0000E+00
68	70	6000.50C	1.3966E-03	9	1.2997E-04	1.9467E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	25	3.5387E-04	7.5460E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	56	8.5316E-04	3.9400E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.8317E-05	2.7177E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.0113E-05	2.5504E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1025	1.5131E-02	3.8841E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	409	5.9898E-03	2.5933E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4564	6.5024E-02	1.2018E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1477	2.0931E-02	4.1820E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	128	1.8578E-03	2.0983E-04	.0000E+00	.0000E+00

69	71	5010.50C	2.2580E-02	3004	3.6561E-02	3.4621E-02	.0000E+00	.0000E+00
		5011.56C	9.3555E-02	708	1.0627E-02	2.4332E-07	.0000E+00	.0000E+00
		13027.50C	8.8339E-01	5048	7.8394E-02	1.5981E-04	.0000E+00	.0000E+00
		29000.50C	4.7440E-04	5	8.1503E-05	5.9966E-07	.0000E+00	.0000E+00
70	72	6000.50C	1.3966E-03	36	5.5806E-04	6.4771E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	131	1.9095E-03	1.7585E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	220	3.3841E-03	7.7702E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	14	2.2236E-04	8.4387E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	6.3238E-05	1.3198E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5117	7.7232E-02	6.8677E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2158	3.1584E-02	5.5740E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	20366	2.9536E-01	1.8951E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6612	9.6095E-02	6.9863E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	734	1.0995E-02	7.9064E-04	.0000E+00	.0000E+00
71	73	6000.50C	1.3966E-03	6	8.7482E-05	3.1607E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	21	3.2117E-04	9.9740E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	6.9635E-04	2.5129E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	4.6520E-05	5.8339E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.1843E-05	1.1005E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1031	1.5409E-02	4.1718E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	473	6.9750E-03	2.6507E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4685	6.6963E-02	1.3645E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1406	2.0078E-02	4.1949E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	144	2.1426E-03	2.0674E-04	.0000E+00	.0000E+00
72	74	5010.50C	2.2580E-02	3177	3.8662E-02	3.7043E-02	.0000E+00	.0000E+00
		5011.56C	9.3555E-02	729	1.1090E-02	2.8962E-07	.0000E+00	.0000E+00
		13027.50C	8.8339E-01	5106	7.9761E-02	1.4650E-04	.0000E+00	.0000E+00
		29000.50C	4.7440E-04	4	6.2313E-05	1.0402E-06	.0000E+00	.0000E+00
73	75	6000.50C	1.3966E-03	35	5.1862E-04	3.9003E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	114	1.6215E-03	1.7071E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	244	3.7398E-03	6.9056E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	16	2.5658E-04	4.1703E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	5	7.4790E-05	3.1810E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5230	7.8802E-02	7.2346E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	2115	3.1053E-02	4.7612E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	20556	2.9852E-01	1.9265E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6761	9.8369E-02	7.4206E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	703	1.0607E-02	8.1288E-04	.0000E+00	.0000E+00
74	76	1001.50C	6.6667E-01	1986	1.6166E-02	9.1808E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	83	7.7901E-04	2.5242E-08	.0000E+00	.0000E+00
75	77	1001.50C	6.6667E-01	2061	1.7575E-02	1.0370E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	84	8.1573E-04	3.5016E-08	.0000E+00	.0000E+00
76	80	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	3	1.7504E-05	7.1040E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1	1.2705E-05	1.1256E-05	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	20	1.6045E-04	2.1345E-05	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2	1.1465E-05	2.7679E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

77	81	6000.50C	1.3966E-03	7	9.4710E-05	5.1005E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	25	2.3643E-04	1.4423E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	54	6.7301E-04	1.0334E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	2.5104E-05	2.8967E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6360E-05	2.5250E-08	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1180	1.3702E-02	1.4672E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	320	4.1132E-03	6.4746E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6310	6.6775E-02	3.9999E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1865	2.0127E-02	1.2817E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	110	1.4293E-03	2.0732E-04	.0000E+00	.0000E+00
78	82	1001.50C	6.6667E-01	9892	1.0722E-01	3.5079E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	729	9.3387E-03	2.8952E-06	.0000E+00	.0000E+00
79	83	1001.50C	6.6667E-01	283	2.9797E-03	1.4401E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	17	2.0993E-04	4.5273E-09	.0000E+00	.0000E+00
80	84	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	85	6000.50C	2.3404E-03	2	3.1583E-05	1.3562E-11	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	4	5.7234E-05	2.7729E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	17	2.4243E-04	6.6178E-07	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	32	3.8696E-04	3.2188E-05	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	625	8.1061E-03	4.4467E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	84	1.1364E-03	6.6533E-05	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	1112	1.3061E-02	4.0687E-04	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	2524	3.0185E-02	1.0547E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	86	1.0606E-03	7.4024E-05	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	63	8.2381E-04	6.1050E-05	.0000E+00	.0000E+00
82	86	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
83	87	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	88	6000.50C	1.0113E-02	54	6.5983E-04	3.3448E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	20	2.8094E-04	8.0370E-07	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	3	4.8425E-05	6.0703E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.6307E-05	2.4226E-06	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	163	2.1343E-03	9.1342E-05	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	8002	9.1330E-02	1.7667E-03	.0000E+00	.0000E+00
85	89	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

86	90	1001.50C	6.6667E-01	37541	3.2016E-01	1.7363E-03	.0000E+00	.0000E+00	
		8016.50C	3.3333E-01	1773	1.6653E-02	5.2675E-07	.0000E+00	.0000E+00	
TOTAL				2962632	3.8276E+01	6.8088E-01	3.2176E-01	1.1689E-03	
TOTAL OVER ALL CELLS FOR EACH NUCLIDE									
				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)	
		1001.50C		2220721	2.7517E+01	8.7725E-02	.0000E+00	.0000E+00	
		2004.50C		9	1.4280E-04	.0000E+00	.0000E+00	.0000E+00	
		5010.50C		14007	1.6736E-01	1.6247E-01	.0000E+00	.0000E+00	
		5011.56C		1970	2.9677E-02	1.0352E-06	.0000E+00	.0000E+00	
		6000.50C		208	2.8862E-03	1.0267E-07	.0000E+00	.0000E+00	
		7014.50C		570	7.7880E-03	1.7694E-04	.0000E+00	.0000E+00	
		8016.50C		278081	3.9591E+00	3.0574E-03	.0000E+00	.0000E+00	
		13027.50C		13704	2.1371E-01	5.6804E-04	.0000E+00	.0000E+00	
		14000.50C		994	1.4790E-02	7.4190E-05	.0000E+00	.0000E+00	
		15031.50C		76	1.1557E-03	7.1291E-06	.0000E+00	.0000E+00	
		16032.50C		22	3.3154E-04	1.1133E-05	.0000E+00	.0000E+00	
		22000.50C		32	3.8696E-04	3.2188E-05	.0000E+00	.0000E+00	
		24000.50C		24058	3.4493E-01	1.3151E-02	.0000E+00	9.7083E-06	
		25055.50C		9605	1.3957E-01	6.7360E-03	.0000E+00	1.4645E-05	
		26000.55C		114728	1.5426E+00	3.8629E-02	.0000E+00	.0000E+00	
		28000.50C		35438	4.8193E-01	1.3113E-02	.0000E+00	.0000E+00	
		29000.50C		102	1.3142E-03	8.8321E-05	.0000E+00	.0000E+00	
		40000.50C		56369	8.3934E-01	7.2068E-03	.0000E+00	5.0636E-05	
		42000.50C		2967	4.3330E-02	3.9995E-03	.0000E+00	1.3398E-05	
		45103.50C		550	7.3357E-03	6.2287E-03	.0000E+00	.0000E+00	
		47109.50C		56	7.7977E-04	6.4291E-04	.0000E+00	.0000E+00	
		50000.35C		558	8.2640E-03	2.0256E-04	.0000E+00	.0000E+00	
		62149.50C		809	9.2641E-03	9.1933E-03	.0000E+00	.0000E+00	
		63151.55C		14	1.7647E-04	1.7222E-04	.0000E+00	.0000E+00	
		63153.55C		102	1.3031E-03	1.1254E-03	.0000E+00	.0000E+00	
		64155.50C		391	4.2652E-03	4.2579E-03	.0000E+00	.0000E+00	
		92233.50C		0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	
		92234.50C		111	1.5222E-03	1.0222E-03	2.4605E-05	.0000E+00	
		92235.50C		19947	3.9745E-01	3.5273E-02	1.7341E-01	1.0329E-05	
		92236.50C		793	1.1604E-02	4.0431E-03	1.8347E-04	.0000E+00	
		92238.50C		145550	2.1436E+00	1.7803E-01	2.0906E-02	1.0608E-03	
		93237.55C		209	2.7798E-03	2.1584E-03	2.6802E-05	.0000E+00	
		94238.50C		42	5.2242E-04	3.4089E-04	2.6219E-05	.0000E+00	
		94239.55C		14226	2.8889E-01	5.3831E-02	1.0932E-01	.0000E+00	
		94240.50C		3017	4.0423E-02	3.5625E-02	1.5870E-04	.0000E+00	
		94241.50C		2111	4.4304E-02	6.3093E-03	1.7597E-02	9.3576E-06	
		94242.50C		99	1.4142E-03	1.0120E-03	7.1225E-06	.0000E+00	
		95241.50C		362	4.6063E-03	4.1594E-03	4.6668E-05	.0000E+00	
		95242.50C		6	2.0797E-04	1.1152E-05	5.5694E-05	.0000E+00	
		95243.50C		18	2.1764E-04	2.0115E-04	.0000E+00	.0000E+00	
		96245.35C		0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	

 DUMP NO. 2 ON FILE RUNTPE NPS = 59894 CTM = 108.03

10 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

Feb 21 01:04 1995 File Name: /users/davis/mcnp/MPC12/m12bb5.o

ATTACHMENT XXXIV BBABA0000-01717-0200-00001 - Page 39

COMPUTER TIME = 108.17 MINUTES

MCNP VERSION 4A-B 10/04/91

02/21/95 01:04:51

PROBID = 02/20/95 23:16:29

1MCNP VERSION 4A-B LD=10/04/91

07/28/95 12:26:55

PROBID = 07/28/95 12:26:55

INP=mpc12tb4 OUTP=m12tb4.0

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12tb4)
2- C MULTI-PURPOSE CANISTER WITH FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -1.0000 -68 42 -69 41 TRCL=( 15.082519 15.082519 0.) $ SHIFTED EXTRA
7- IMP:N=1 LAT=1 U=1
8- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
9- C SS316L SPACERS WELDED TO MPC SHELL
10- 3 1 -1.0000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
11- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
12- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
13- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
14- C FULL ASSEMBLY LATTICE POSITION
15- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
16- C ASSEMBLY CELL TOP
17- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
18- IMP:N=1 FILL=9 U=11
19- C ASSEMBLY CELL BOTTOM
20- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
21- IMP:N=1 FILL=9 U=11
22- C TOP OF ASSEMBLY OUTSIDE LATTICE
23- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
24- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
25- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
26- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
27- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
28- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
29- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
30- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
31- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
32- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
33- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
34- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
35- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
36- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
37- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
38- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
39- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
40- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
41- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
42- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
43- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
44- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
45- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
46- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
47- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
48- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
49- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
50- C PIN LATTICE DESCRIPTION
51- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
52- C FUEL ROD
53- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
54- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
55- 35 1 -1.0000 -17 5 IMP:N=1 U=2
56- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
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57- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
58- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
59- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
60- 40 1 -1.0000 19 IMP:N=1 U=2
61- C CONTROL ROD/GUIDE TUBE
62- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
63- 42 1 -1.0000 -21 5 IMP:N=1 U=3
64- 43 4 -6.6000 21 -22 IMP:N=1 U=3
65- 44 1 -1.0000 22 -23 IMP:N=1 U=3
66- 45 4 -6.6000 23 -24 IMP:N=1 U=3
67- 46 1 -1.0000 24 IMP:N=1 U=3
68- C INSTRUMENTATION TUBE
69- 47 1 -1.0000 -25 IMP:N=1 U=4
70- 48 4 -6.6000 25 -26 IMP:N=1 U=4
71- 49 1 -1.0000 26 IMP:N=1 U=4
72- C WATER GAP - ASSEMBLY TOP
73- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
74- C SS TUBE WALL - ASSEMBLY TOP
75- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
76- C AL-B WALL -ASSEMBLY TOP
77- 52 6 -2.74700 44 -46 -4 IMP:N=1 U=5
78- C SS WALL - ASSEMBLY TOP
79- 53 8 -8.2380 46 -4 -39 IMP:N=1 U=5
80- C FLUX TRAP .986" - ASSEMBLY TOP
81- 54 1 -1.0000 39 -4 IMP:N=1 U=5
82- C WATER ABOVE BASKET
83- 55 1 -1.000 4 IMP:N=1 U=5
84- C WATER GAP - ASSEMBLY RIGHT
85- 56 1 -1.0000 -36 -4 IMP:N=1 U=6
86- C SS TUBE WALL - ASSEMBLY RIGHT
87- 57 8 -8.2380 36 -43 -4 IMP:N=1 U=6
88- C AL-B WALL - ASSEMBLY RIGHT
89- 58 6 -2.747000 43 -45 -4 IMP:N=1 U=6
90- C SS WALL - ASSEMBLY RIGHT
91- 59 8 -8.2380 45 -4 -40 IMP:N=1 U=6
92- C FLUX TRAP - .986" - ASSEMBLY RIGHT
93- 60 1 -1.0000 40 -4 IMP:N=1 U=6
94- C WATER ABOVE BASKET
95- 61 1 -1.000 4 IMP:N=1 U=6
96- C WATER GAP - ASSEMBLY BOTTOM
97- 62 1 -1.0000 37 -4 IMP:N=1 U=7
98- C SS TUBE WALL - ASSEMBLY BOTTOM
99- 63 8 -8.2380 -37 -4 IMP:N=1 U=7
100- C WATER ABOVE BASKET
101- 64 1 -1.000 4 IMP:N=1 U=7
102- C WATER GAP - ASSEMBLY LEFT
103- 65 1 -1.0000 38 -4 IMP:N=1 U=8
104- C LOWER ST COMB - ASSEMBLY LEFT
105- 66 8 -8.2380 -38 -4 IMP:N=1 U=8
106- C WATER ABOVE BASKET
107- 67 1 -1.000 4 IMP:N=1 U=8
108- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
109- 68 1 -1.0000 74 75 IMP:N=1 U=10
110- 69 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
111- 70 5 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
112- C AXIS MATERIALS
113- 71 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
114- 72 6 -2.7470000 -59 61 -55 -9 3 -4 IMP:N=1
115- 73 8 -8.2380 -61 82 -55 -9 3 -4 IMP:N=1
116- 74 1 -1.0000 -82 1 -9 -55 3 -4 IMP:N=1 $ FLUX TRAP

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117- 75 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
118- 76 6 -2.747000 -60 62 55 -9 3 -4 IMP:N=1
119- 77 8 -8.2380 -62 83 55 -9 3 -4 IMP:N=1
120- 78 1 -1.0000 -83 2 55 -9 3 -4 IMP:N=1 $ FLUX TRAP
121- 79 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
122- 80 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
123- C SS316L MPC LID
124- 81 8 -8.2380 1 2 -9 6 -7 IMP:N=1
125- C SS316L MPC LINER
126- 82 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
127- C GAP SS316L/INNER 825 BARRIER
128- 83 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
129- C GAP BETWEEN MPC LID AND INNER BARRIER LID
130- 84 1 -1.0000 -10 1 2 7 -71 IMP:N=1
131- C INNER BARRIER LID - ALLOY 825
132- 85 5 -8.1400 1 2 -11 71 -8 IMP:N=1
133- C INNER BARRIER - ALLOY 825
134- 86 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
135- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
136- 87 1 -1.0000 8 -72 -12 1 2 IMP:N=1
137- C OUTER BARRIER LID A516 CARBON STEEL
138- 88 7 -7.832 -12 72 -73 1 2 IMP:N=1
139- C OUTER BARRIER - A516 CARBON STEEL
140- 89 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
141- C WATER, ENDS
142- 90 1 -1.0000 1 2 73 -80 -81 IMP:N=1
143- C WATER, SIDE
144- 91 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
145- C OUTSIDE WORLD
146- 92 0 -1:-2:-3:80:81 IMP:N=0
147-
148- C SURFACE SPECIFICATIONS
149- 1* PX 0.0
150- 2* PY 0.00
151- 3* PZ 0.00
152- 4 PZ 203.2000 $ TOP ACTIVE FUEL
153- 5 PZ 222.2500 $ TOP FUEL HARDWARE
154- 6 PZ 229.2500 $ TOP FUEL REGION
155- 7 PZ 231.7500 $ TOP ALLOY 825 LID
156- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
157- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
158- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
159- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
160- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
161- C PIN LATTICE BOUNDS
162- 13 PX 0.72135
163- 14 PX -0.72135
164- 15 PY 0.72135
165- 16 PY -0.72135
166- C FUEL ROD
167- 17 CZ 0.468122
168- 18 CZ 0.478790
169- 19 CZ 0.546100
170- C CONTROL ROD/GUIDE TUBE
171- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
172- 21 CZ 0.50292
173- 22 CZ 0.56007
174- 23 CZ 0.63246
175- 24 CZ 0.67310
176- C INSTRUMENTATION TUBE

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177-	25	CZ	0.56007	
178-	26	CZ	0.62611	
179-	C	CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL		
180-	27	PX	12.80923	
181-	28	PX	-12.80923	
182-	29	PY	12.80923	
183-	30	PY	-12.80923	
184-	C	ASSEMBLY LATTICE BOUNDS		
185-	31	PY	10.82024	\$ ACTUAL 10.82025
186-	32	PX	10.82024	\$ ACTUAL 10.82025
187-	33	PY	-10.82024	\$ ACTUAL -10.82025
188-	34	PX	-10.82024	\$ ACTUAL -10.82025
189-	35	PY	11.4300	
190-	36	PX	11.4300	
191-	37	PY	-11.4300	
192-	38	PX	-11.4300	
193-	39	PY	12.17930	
194-	40	PX	12.17930	
195-	41	PY	-11.66876	
196-	42	PX	-11.66876	
197-	43	PX	11.66876	
198-	44	PY	11.66876	
199-	45	PX	11.94054	
200-	46	PY	11.94054	
201-	C	BLANK PIN CELL		
202-	48	PX	-0.7213	
203-	49	PX	0.7213	
204-	50	PY	-0.7213	
205-	51	PY	0.7213	
206-	52	PY	0.0001	
207-	53	PY	-0.0001	
208-	54	PY	0.0	
209-	55	P	1. -1. 0. 0.	
210-	56	P	1. 1. 0. 0.	\$ 24.35
211-	C	EXTRA CARDS		
212-	57	PX	3.41376	\$ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
213-	58	PY	3.41376	
214-	59	PX	3.17500	
215-	60	PY	3.17500	
216-	61	PX	2.540	
217-	62	PY	2.540	
218-	64	PX	-.0000005	
219-	65	PY	-.0000005	
220-	66	PX	95.	
221-	67	PY	95.	
222-	68	PX	14.68374	\$ FLUX TRAP WATER GAP
223-	69	PY	14.68374	\$ FLUX TRAP WATER GAP
224-	C	OUTER BARRIER		
225-	70	CZ	76.5250	\$OD OF OUTER BARRIER - A516 CARBON STEEL
226-	71	PZ	246.3500	\$ GAP BETWEEN MPC AND INNER BARRIER LIDS
227-	72	PZ	271.3500	\$ GAP BETWEEN INNER AND OUTER BARRIER LIDS
228-	73	PZ	282.3500	\$TOP OF OUTER BARRIER
229-	74	PX	-11.85672	\$ INNER DIMENSION OF ALLOY 825 SPACES
230-	75	PY	-11.85672	\$ INNER DIMENSION OF ALLOY 825 SPACES
231-	80	PZ	312.3500	\$ WET TUFF OVERPACK, END
232-	81	CZ	106.5250	\$ WET TUFF OVERPACK, SIDE
233-	C	ADDED OFFSET (.5") FOR CENTRAL FLUX TRAP		
234-	82	PX	1.270	
235-	83	PY	1.270	
236-				

[illegible]

297-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
298-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
299-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
300-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
301-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
302-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
303-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
304-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
305-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
306-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.
307-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
308-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
309-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
310-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
311-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
312-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
313-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
314-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
315-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
316-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
317-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
318-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
319-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
320-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
321-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
322-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
323-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
324-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
325-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
326-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
327-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
328-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
329-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
330-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
331-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
332-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
333-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
334-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
335-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
336-	C	MATERIAL SPECIFICATIONS								
337-	C	WATER AT 300 K								
338-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
339-	MT1	LWTR.01T								
340-	C	3.75%/0 GWD/0 YEAR -- U02								
341-	C	M2	8016.50C	4.6973E-02						
342-	C	92235.50C	8.9111E-04							
343-	C	92238.50C	2.2583E-02							
344-	C	3.00%/20 GWD/5 YEAR -- U02								
345-	M2	8016.50C	4.7767E-02							
346-		45103.50C	1.7033E-05							
347-		47109.50C	2.0436E-06							
348-		62149.50C	1.3260E-07							
349-		63151.55C	1.6963E-08							
350-		63153.55C	2.1975E-06							
351-		64155.50C	1.0128E-07							
352-		92233.50C	3.2712E-11							
353-		92234.50C	4.9053E-06							
354-		92235.50C	3.1513E-04							
355-		92236.50C	7.0520E-05							
356-		92238.50C	2.2844E-02							

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357-          93237.55C 5.4646E-06
358-          94238.50C 9.9680E-07
359-          94239.55C 1.0790E-04
360-          94240.50C 3.0974E-05
361-          94241.50C 1.4571E-05
362-          94242.50C 3.7204E-06
363-          95241.50C 4.3471E-06
364-          95242.50C 1.3739E-08
365-          95243.50C 4.1755E-07
366-          96245.35C 1.4221E-09
367-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
368-      M3      2004.50C 1.0
369-      C      ZIRCALOY-4
370-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
371-          40000.50C -0.9818 50000.35C -0.0140
372-      C      ALLOY 825
373-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
374-          16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
375-          25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
376-          29000.50C -0.0250 42000.50C -0.0300
377-      C      1100 ALUMINUM ALLOY - 4wt% natural boron
378-      M6      5010.50C -0.00720 5011.56C -0.03280 13027.50C -0.95880
379-          29000.50C -0.00120
380-      C      A516 CARBON STEEL
381-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
382-          16032.50C -0.00035 25055.50C -0.0090
383-          26000.55C -0.98535
384-      C      SS316L
385-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
386-          15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
387-          25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
388-          42000.50C -0.02500
389-      C      TALLIES
390-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.

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SURFACES 20049 AND 23049 OF CELL 8 ARE THE SAME. 23049 WILL BE DELETED.
 SURFACES 24048 AND 27048 OF CELL 9 ARE THE SAME. 27048 WILL BE DELETED.
 SURFACES 24049 AND 27049 OF CELL 9 ARE THE SAME. 27049 WILL BE DELETED.
 SURFACES 24050 AND 25050 OF CELL 9 ARE THE SAME. 25050 WILL BE DELETED.
 SURFACES 24050 AND 28050 OF CELL 9 ARE THE SAME. 28050 WILL BE DELETED.
 SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	2985
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	2985
POINTS AFTER EXPANSION OR CONTRACTION	2993
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01
 MATERIAL

NUMBER	COMPONENT NUCLIDE, ATOM FRACTION							
1	1001,	.66667	8016,	.33333				
ASSOCIATED THERMAL S(A,B) DATA SETS:	LWTR.01T							
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00000	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00007	92235,	.00443	92236,	.00099	92238,	.32088
	93237,	.00008	94238,	.00001	94239,	.00152	94240,	.00044
	94241,	.00020	94242,	.00005	95241,	.00006	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	5010,	.01832	5011,	.07590	13027,	.90530	29000,	.00048
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	5010,	.00720	5011,	.03280	13027,	.95880	29000,	.00120
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.

WARNING. 1 OF THE MATERIALS APPEAR AT MORE THAN ONE DENSITY.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
3	3	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
4	4	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
5	5	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	INFINITE
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

68	69	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
69	70	8.80188E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
70	71	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	72	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	74	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	76	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	77	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	78	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	79	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	80	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	82	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	84	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	86	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	87	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
88	89	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
89	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
90	91	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
91	92	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	ASYMMETRIC
2	2	.00000E+00	ASYMMETRIC
3	3	.00000E+00	ASYMMETRIC
4	4	.00000E+00	ASYMMETRIC
5	5	1.73150E+00	
6	6	.00000E+00	ASYMMETRIC
7	7	.00000E+00	ASYMMETRIC
8	8	.00000E+00	ASYMMETRIC
9	9	.00000E+00	ASYMMETRIC
10	10	.00000E+00	ASYMMETRIC
11	11	.00000E+00	ASYMMETRIC
12	12	.00000E+00	ASYMMETRIC
13	13	.00000E+00	INFINITE
14	14	.00000E+00	INFINITE
15	15	.00000E+00	INFINITE
16	16	.00000E+00	INFINITE
17	17	.00000E+00	INFINITE
18	18	.00000E+00	INFINITE
19	19	.00000E+00	INFINITE
20	20	.00000E+00	INFINITE
21	21	.00000E+00	INFINITE
22	22	.00000E+00	INFINITE
23	23	.00000E+00	INFINITE
24	24	.00000E+00	INFINITE
25	25	.00000E+00	INFINITE
26	26	.00000E+00	INFINITE
27	27	.00000E+00	NOT A BOUNDARY
28	28	.00000E+00	NOT A BOUNDARY
29	29	.00000E+00	NOT A BOUNDARY
30	30	.00000E+00	NOT A BOUNDARY
31	31	.00000E+00	INFINITE
32	32	.00000E+00	INFINITE

32	33	.00000E+00	.00000E+00	INFINITE
33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	INFINITE
39	40	.00000E+00	.00000E+00	INFINITE
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	68	.00000E+00	.00000E+00	NOT A BOUNDARY
66	69	.00000E+00	.00000E+00	NOT A BOUNDARY
67	70	.00000E+00	.00000E+00	ASYMMETRIC
68	71	.00000E+00	.00000E+00	ASYMMETRIC
69	72	.00000E+00	.00000E+00	ASYMMETRIC
70	73	.00000E+00	.00000E+00	ASYMMETRIC
71	74	.00000E+00	.00000E+00	INFINITE
72	75	.00000E+00	.00000E+00	INFINITE
73	80	.00000E+00	.00000E+00	ASYMMETRIC
74	81	.00000E+00	.00000E+00	ASYMMETRIC
75	82	.00000E+00	.00000E+00	ASYMMETRIC
76	83	.00000E+00	.00000E+00	ASYMMETRIC
77	2068	.00000E+00	.00000E+00	INFINITE
78	2042	.00000E+00	.00000E+00	INFINITE
79	2069	.00000E+00	.00000E+00	INFINITE
80	2041	.00000E+00	.00000E+00	INFINITE
81	3027	.00000E+00	.00000E+00	INFINITE
82	3028	.00000E+00	.00000E+00	INFINITE
83	3029	.00000E+00	.00000E+00	INFINITE
84	3030	.00000E+00	.00000E+00	INFINITE
85	4027	.00000E+00	.00000E+00	INFINITE
86	4028	.00000E+00	.00000E+00	INFINITE
87	4029	.00000E+00	.00000E+00	INFINITE
88	4030	.00000E+00	.00000E+00	INFINITE
89	5027	.00000E+00	.00000E+00	INFINITE
90	5028	.00000E+00	.00000E+00	INFINITE
91	5029	.00000E+00	.00000E+00	INFINITE

92	5030	.00000E+00	.00000E+00	INFINITE
93	16048	.00000E+00	.00000E+00	INFINITE
94	16049	.00000E+00	.00000E+00	INFINITE
95	16050	.00000E+00	.00000E+00	INFINITE
96	16051	.00000E+00	.00000E+00	INFINITE
97	17048	.00000E+00	.00000E+00	INFINITE
98	17049	.00000E+00	.00000E+00	INFINITE
99	18048	.00000E+00	.00000E+00	INFINITE
100	18049	.00000E+00	.00000E+00	INFINITE
101	18050	.00000E+00	.00000E+00	INFINITE
102	18051	.00000E+00	.00000E+00	INFINITE
103	19050	.00000E+00	.00000E+00	INFINITE
104	19051	.00000E+00	.00000E+00	INFINITE
105	20048	.00000E+00	.00000E+00	INFINITE
106	20049	.00000E+00	.00000E+00	INFINITE
107	21048	.00000E+00	.00000E+00	INFINITE
108	21049	.00000E+00	.00000E+00	INFINITE
109	22048	.00000E+00	.00000E+00	INFINITE
110	22049	.00000E+00	.00000E+00	INFINITE
111	24048	.00000E+00	.00000E+00	INFINITE
112	24049	.00000E+00	.00000E+00	INFINITE
113	24050	.00000E+00	.00000E+00	INFINITE
114	24051	.00000E+00	.00000E+00	INFINITE
115	25048	.00000E+00	.00000E+00	INFINITE
116	25049	.00000E+00	.00000E+00	INFINITE
117	26048	.00000E+00	.00000E+00	INFINITE
118	26049	.00000E+00	.00000E+00	INFINITE
119	26050	.00000E+00	.00000E+00	INFINITE
120	26051	.00000E+00	.00000E+00	INFINITE
121	27050	.00000E+00	.00000E+00	INFINITE
122	27051	.00000E+00	.00000E+00	INFINITE
123	28048	.00000E+00	.00000E+00	INFINITE
124	28049	.00000E+00	.00000E+00	INFINITE
125	29048	.00000E+00	.00000E+00	INFINITE
126	29049	.00000E+00	.00000E+00	INFINITE
127	30048	.00000E+00	.00000E+00	INFINITE
128	30049	.00000E+00	.00000E+00	INFINITE

1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S	1.00309E-01	1.00000E+00	.00000E+00	0	1.0000E+00

19	20	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
60	61	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	69	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	70	5	8.80188E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	71	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	72	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	74	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	76	6	6.49339E-02	2.74700E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	77	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	78	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	79	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

79	80	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
80	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	82	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	84	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	86	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	87	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
88	89	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
89	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
90	91	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
91	92	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES

1.31148E+01 8.65579E+01

PRINT TABLE 70

	SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX	.0000000E+00
2	2	REFL.	PY	.0000000E+00
3	3	REFL.	PZ	.0000000E+00
4	4		PZ	2.0320000E+02
5	5		PZ	2.2225000E+02
6	6		PZ	2.2925000E+02
7	7		PZ	2.3175000E+02
8	8		PZ	2.4885000E+02
9	9		CZ	6.0794900E+01
10	10		CZ	6.3017400E+01
11	11		CZ	6.4525000E+01
12	12		CZ	6.6525000E+01
13	13		PX	7.2135000E-01
14	14		PX	-7.2135000E-01
15	15		PY	7.2135000E-01
16	16		PY	-7.2135000E-01
17	17		CZ	4.6812200E-01
18	18		CZ	4.7879000E-01
19	19		CZ	5.4610000E-01
20	21		CZ	5.0292000E-01
21	22		CZ	5.6007000E-01
22	23		CZ	6.3246000E-01
23	24		CZ	6.7310000E-01
24	25		CZ	5.6007000E-01
25	26		CZ	6.2611000E-01
26	27		PX	1.2809230E+01
27	28		PX	-1.2809230E+01
28	29		PY	1.2809230E+01
29	30		PY	-1.2809230E+01
30	31		PY	1.0820240E+01
31	32		PX	1.0820240E+01
32	33		PY	-1.0820240E+01
33	34		PX	-1.0820240E+01
34	35		PY	1.1430000E+01
35	36		PX	1.1430000E+01
36	37		PY	-1.1430000E+01
37	38		PX	-1.1430000E+01
38	39		PY	1.2179300E+01
39	40		PX	1.2179300E+01
40	41		PY	-1.1668760E+01
41	42		PX	-1.1668760E+01

42	43	PX	1.1668760E+01			
43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	3.4137600E+00			
56	58	PY	3.4137600E+00			
57	59	PX	3.1750000E+00			
58	60	PY	3.1750000E+00			
59	61	PX	2.5400000E+00			
60	62	PY	2.5400000E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	68	PX	1.4683740E+01			
66	69	PY	1.4683740E+01			
67	70	CZ	7.6525000E+01			
68	71	PZ	2.4635000E+02			
69	72	PZ	2.7135000E+02			
70	73	PZ	2.8235000E+02			
71	74	PX	-1.1856720E+01			
72	75	PY	-1.1856720E+01			
73	80	PZ	3.1235000E+02			
74	81	CZ	1.0652500E+02			
75	82	PX	1.2700000E+00			
76	83	PY	1.2700000E+00			
77	2068	1001 PX	2.9766259E+01			
78	2042	1001 PX	3.4137590E+00			
79	2069	1001 PY	2.9766259E+01			
80	2041	1001 PY	3.4137590E+00			
81	3027	1002 PX	2.9032230E+01			
82	3028	1002 PX	3.4137700E+00			
83	3029	1002 PY	7.9232790E+01			
84	3030	1002 PY	5.3614330E+01			
85	4027	1003 PX	5.3515300E+01			
86	4028	1003 PX	2.7896840E+01			
87	4029	1003 PY	5.3515300E+01			
88	4030	1003 PY	2.7896840E+01			
89	5027	1004 PX	7.9232790E+01			
90	5028	1004 PX	5.3614330E+01			
91	5029	1004 PY	2.9032230E+01			
92	5030	1004 PY	3.4137700E+00			
93	16048	1005 PX	2.1641000E+00			
94	16049	1005 PX	3.6067000E+00			
95	16050	1005 PY	2.1641000E+00			
96	16051	1005 PY	3.6067000E+00			
97	17048	1006 PX	6.4922000E+00			
98	17049	1006 PX	7.9348000E+00			
99	18048	1007 PX	5.0495000E+00			
100	18049	1007 PX	6.4921000E+00			
101	18050	1007 PY	5.0495000E+00			

102	18051	1007	PY	6.4921000E+00
103	19050	1008	PY	6.4922000E+00
104	19051	1008	PY	7.9348000E+00
105	20048	1009	PX	-3.6067000E+00
106	20049	1009	PX	-2.1641000E+00
107	21048	1010	PX	-7.9348000E+00
108	21049	1010	PX	-6.4922000E+00
109	22048	1011	PX	-6.4921000E+00
110	22049	1011	PX	-5.0495000E+00
111	24048	1013	PX	-3.6067000E+00
112	24049	1013	PX	-2.1641000E+00
113	24050	1013	PY	-3.6067000E+00
114	24051	1013	PY	-2.1641000E+00
115	25048	1014	PX	-7.9348000E+00
116	25049	1014	PX	-6.4922000E+00
117	26048	1015	PX	-6.4921000E+00
118	26049	1015	PX	-5.0495000E+00
119	26050	1015	PY	-6.4921000E+00
120	26051	1015	PY	-5.0495000E+00
121	27050	1016	PY	-7.9348000E+00
122	27051	1016	PY	-6.4922000E+00
123	28048	1017	PX	2.1641000E+00
124	28049	1017	PX	3.6067000E+00
125	29048	1018	PX	6.4922000E+00
126	29049	1018	PX	7.9348000E+00
127	30048	1019	PX	5.0495000E+00
128	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08

31	2.5300E-08
32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
69	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
78	2.5300E-08
79	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08

91 2.5300E-08

3 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C	1153	NJOY
2004.50C	2716	NJOY
5010.50C	9587	NJOY
6000.50C	16126	NJOY
7014.50C	22772	NJOY
8016.50C	23669	NJOY
13027.50C	22891	NJOY
24000.50C	89104	NJOY
26000.55C	84136	NJOY
28000.50C	82267	NJOY
29000.50C	22473	NJOY
92233.50C	14205	NJOY
92235.50C	44188	NJOY
92238.50C	66440	NJOY
94239.55C	67551	NJOY
94240.50C	42744	NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301)	79/07/31.
(1270)	79/06/19.
(1305)	79/09/10.
(1306)	79/07/31.
(1275)	79/09/08.
(1276)	05/14/81
(1313)	79/09/08.
(1324)	79/06/21.
(260)	10/21/82
(1328)	79/06/21.
(1329)	02/05/80
(1393)	79/09/12.
(1395)	79/09/12.
(1398)	79/09/13.
(1399)	02/21/85
(1380)	79/09/13.

TABLES FROM FILE NEWXS2

5011.56C	28379
63151.55C	33336
63153.55C	30265

06/28/88
06/28/88
06/28/88

TABLES FROM FILE ENDF5P2

14000.50C	48275	NJOY
40000.50C	35842	NJOY

(1314)	79/06/21.
(1340)	79/07/31.

WARNING. NUBAR OF	92234.50C	MAY BE EITHER PROMPT OR TOTAL.
92234.50C	76999	NJOY

(1394)	79/10/17.
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WARNING. NUBAR OF	92236.50C	MAY BE EITHER PROMPT OR TOTAL.
92236.50C	119238	NJOY

(1396)	79/08/30.
---------	-----------

WARNING. NUBAR OF	94238.50C	MAY BE EITHER PROMPT OR TOTAL.
94238.50C	16458	NJOY

94241.50C	22523	NJOY
94242.50C	43433	NJOY

TOTAL NU
TOTAL NU

(1338)	79/09/12.
(1381)	79/08/30.
(1342)	79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C	2779	NJOY
16032.50C	2684	NJOY
22000.50C	25231	NJOY
25055.50C	60097	NJOY
42000.50C	18467	NJOY
62149.50C	11116	NJOY
64155.50C	31471	NJOY

(1315)	79/10/29.
(1316)	79/10/29.
(1322)	79/06/21.
(1325)	79/06/21.
(1321)	79/08/01.
(1319)	02/12/85
(1365)	79/07/28.

WARNING. NUBAR OF	95241.50C	MAY BE EITHER PROMPT OR TOTAL.
95241.50C	29300	NJOY

(1361)	79/08/29.
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WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

(1369) 79/09/24.

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
47109.50C 10147 NJOY
93237.55C 29142 NJOY

(1310) 11/01/85
(1373) 11/01/85
(1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=0K

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=0K

(93) 86/04/23

TABLES FROM FILE TMCCS2

LMTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1385457

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 104224
TALLIES 0
BANK 18403
CROSS SECTIONS 1385457
TOTAL 1508084

DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRC1P

CYCLE = 0

11 WARNING MESSAGES SO FAR.
STARTING MCRUM. FIELD LENGTH = 0 CP0 = .13

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15X15 FUEL 3.00%/20 GMD/5 year (mpc12tb4)

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-3.651E-01	2.376E-01	4.392E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	1.002E+00	2.245E+00
2	3.450E-02	-4.613E-01	1.013E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	1.002E+00	2.346E-01
3	-1.818E-01	9.581E-02	3.325E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	1.002E+00	3.830E-01
4	-1.997E-01	-1.912E-01	2.777E+01	33	0	9.710E-01	-5.465E-02	-2.323E-01	.000E+00	1.002E+00	5.355E-01
5	1.853E-01	-3.541E-01	2.410E+01	33	0	5.861E-01	-1.496E-01	-7.963E-01	.000E+00	1.002E+00	4.509E-01
6	-1.691E-01	-3.816E-01	2.421E+01	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	1.002E+00	5.017E-01
7	4.020E-01	-1.255E-01	2.447E+01	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	1.002E+00	4.488E-01
8	2.357E-01	-2.810E-01	1.000E+01	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	1.002E+00	5.346E-01
9	2.790E-01	-1.800E-02	2.625E+00	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	1.002E+00	2.190E+00
10	1.076E-02	4.332E-01	7.666E+00	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	1.002E+00	6.518E+00

11	-3.835E-02	-4.130E-01	8.876E+00	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	1.002E+00	1.721E+00
12	5.339E-02	1.271E-02	8.190E+00	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	1.002E+00	2.493E+00
13	3.905E-02	3.011E-01	4.843E+00	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	1.002E+00	2.201E+00
14	3.449E-01	-3.091E-01	5.612E+00	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	1.002E+00	1.944E+00
15	-1.232E-01	2.024E-01	1.962E+00	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	1.002E+00	5.055E+00
16	-1.407E-01	-6.754E-03	2.062E+01	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	1.002E+00	1.862E+00
17	3.178E-01	-1.424E-01	2.860E+00	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	1.002E+00	2.821E+00
18	-2.078E-01	4.814E-02	1.378E+01	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	1.002E+00	2.319E+00
19	-3.740E-01	-2.632E-01	1.468E+01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	1.002E+00	4.767E+00
20	3.774E-01	1.138E-01	1.433E+01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	1.002E+00	4.710E-01
21	-1.650E-01	3.887E-01	1.030E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	1.002E+00	1.487E+00
22	2.378E-01	-3.459E-01	7.163E+00	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	1.002E+00	2.323E-01
23	4.150E-01	-5.029E-02	7.615E+00	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	1.002E+00	8.644E-01
24	1.039E-01	3.970E-01	1.014E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	1.002E+00	2.655E+00
25	1.950E-01	3.791E-01	1.049E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	1.002E+00	2.839E-01
26	3.229E-02	-8.253E-02	1.119E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	1.002E+00	1.489E+00
27	8.570E-02	1.675E-01	1.184E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	1.002E+00	1.317E+00
28	1.889E-01	-2.042E-01	1.865E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	1.002E+00	1.504E+00
29	2.059E-01	-3.887E-01	2.114E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	1.002E+00	1.359E+00
30	-1.396E-02	6.480E-02	1.959E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	1.002E+00	2.539E-01
31	1.655E-02	-2.578E-01	2.685E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	1.002E+00	1.177E+00
32	1.526E-02	-3.801E-01	2.549E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	1.002E+00	1.743E+00
33	-2.305E-01	-1.520E-01	5.620E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	1.002E+00	3.859E+00
34	-4.068E-01	1.160E-01	5.213E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	1.002E+00	1.106E+00
35	-6.954E-02	-3.945E-01	4.944E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	1.002E+00	7.992E-01
36	1.560E-01	-2.114E-01	5.177E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	1.002E+00	1.413E+00
37	-5.143E-02	-1.008E-01	8.491E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	1.002E+00	2.102E+00
38	2.831E-01	-1.867E-01	8.476E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	1.002E+00	1.031E+00
39	-6.435E-02	-2.922E-01	1.095E+02	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	1.002E+00	1.632E+00
40	-9.957E-02	2.573E-01	1.119E+02	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	1.002E+00	2.179E+00
41	-3.844E-01	1.860E-01	1.125E+02	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	1.002E+00	3.168E+00
42	-1.329E-01	4.004E-02	7.669E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	1.002E+00	1.746E+00
43	1.974E-01	1.065E-01	7.674E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	1.002E+00	1.508E+00
44	3.749E-01	2.004E-01	7.681E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	1.002E+00	9.591E-01
45	-3.027E-01	1.514E-01	7.448E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	1.002E+00	6.906E-01
46	-1.433E-01	1.388E-01	5.201E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	1.002E+00	4.510E+00
47	-7.318E-02	2.462E-01	5.142E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	1.002E+00	3.779E+00
48	5.911E-02	-2.110E-01	4.687E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	1.002E+00	5.471E+00
49	1.159E-01	2.665E-01	6.137E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	1.002E+00	1.159E+00
50	-2.301E-01	-1.865E-01	6.183E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	1.002E+00	1.787E+00

CYCLE 1 K(COLLISION) .749894 REMOVAL LIFETIME(ABS) 3.0291E+03 SOURCE POINTS GENERATED 2288

CYCLE 2 K(COLLISION) .774963 REMOVAL LIFETIME(ABS) 2.9490E+03 SOURCE POINTS GENERATED 3136

CYCLE 3 K(COLLISION) .764743 REMOVAL LIFETIME(ABS) 3.0846E+03 SOURCE POINTS GENERATED 2947

CYCLE 4 K(COLLISION) .774733 REMOVAL LIFETIME(ABS) 3.0877E+03 SOURCE POINTS GENERATED 3026

CYCLE 5 K(COLLISION) .756085 REMOVAL LIFETIME(ABS) 3.0425E+03 SOURCE POINTS GENERATED 2902

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .765768 REMOVAL LIFETIME(ABS) 2.9470E+03 SOURCE POINTS GENERATED 3066

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2 CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.756911		.761339	.0058	K(COL/ABS)	.000000 .0000	.000000 .0000
K(ABSORPTION)		.753791		.766442	.0165	K(ABS/TK LN)	.000000 .0000	.000000 .0000

K(TRK LENGTH) .766737 .759846 .0091
 REM LIFE(COL) 3.1225E+03 3.0257E+03 .0320
 REM LIFE(ABS) 3.1077E+03 3.0273E+03 .0266
 SOURCE POINTS GENERATED 2966

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

K(TK LN/COL) .000000 .0000 .000000 .0000 .0000
 LIFE(COL/ABS) .0000E+00 .0000 .0000E+00 .0000 .0000

CYCLE = 7

ESTIMATOR CYCLE 8 AVE OF 3 CYCLES
 K(COLLISION) .783673 .768784 .0102
 K(ABSORPTION) .786419 .773101 .0128
 K(TRK LENGTH) .789920 .769871 .0140
 REM LIFE(COL) 2.9293E+03 2.9935E+03 .0215
 REM LIFE(ABS) 2.9584E+03 3.0044E+03 .0172
 SOURCE POINTS GENERATED 3105

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .770942 .0112 .767611 .0152 .8772
 K(ABS/TK LN) .771486 .0110 .771703 .0156 .3536
 K(TK LN/COL) .769327 .0114 .768729 .0145 .7592
 LIFE(COL/ABS) 2.9990E+03 .0194 3.0449E+03 .0077 .9981

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 8

ESTIMATOR CYCLE 9 AVE OF 4 CYCLES
 K(COLLISION) .736710 .760765 .0128
 K(ABSORPTION) .741319 .765156 .0138
 K(TRK LENGTH) .741963 .762894 .0135
 REM LIFE(COL) 3.0323E+03 3.0032E+03 .0155
 REM LIFE(ABS) 3.0159E+03 3.0073E+03 .0122
 SOURCE POINTS GENERATED 2791

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .762960 .0132 .759795 .0167 .9472
 K(ABS/TK LN) .764025 .0125 .763942 .0154 .6791
 K(TK LN/COL) .761830 .0128 .761352 .0157 .8739
 K(COL/ABS/TK LN) .762938 .0126 .771847 .0713
 LIFE(COL/ABS) 3.0052E+03 .0138 3.0176E+03 .0087 .9896

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 9

ESTIMATOR CYCLE 10 AVE OF 5 CYCLES
 K(COLLISION) .772114 .763035 .0103
 K(ABSORPTION) .765586 .765242 .0107
 K(TRK LENGTH) .787788 .767873 .0123
 REM LIFE(COL) 3.2609E+03 3.0548E+03 .0206
 REM LIFE(ABS) 3.2715E+03 3.0601E+03 .0196
 SOURCE POINTS GENERATED 3114

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .764138 .0103 .763679 .0120 .9102
 K(ABS/TK LN) .766557 .0102 .766125 .0117 .5822
 K(TK LN/COL) .765454 .0109 .762635 .0122 .8626
 K(COL/ABS/TK LN) .765383 .0103 .777525 .0454
 LIFE(COL/ABS) 3.0574E+03 .0201 3.0691E+03 .0220 .9903

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR CYCLE 11 AVE OF 6 CYCLES
 K(COLLISION) .749735 .760818 .0090
 K(ABSORPTION) .755387 .763599 .0090
 K(TRK LENGTH) .770485 .768308 .0100
 REM LIFE(COL) 3.0510E+03 3.0541E+03 .0168
 REM LIFE(ABS) 3.0739E+03 3.0624E+03 .0160
 SOURCE POINTS GENERATED 2883

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .762209 .0088 .762032 .0100 .9134
 K(ABS/TK LN) .765954 .0084 .765372 .0094 .5511
 K(TK LN/COL) .764563 .0090 .762375 .0103 .7961
 K(COL/ABS/TK LN) .764242 .0085 .769384 .0182
 LIFE(COL/ABS) 3.0583E+03 .0164 3.0735E+03 .0177 .9885

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR CYCLE 12 AVE OF 7 CYCLES
 K(COLLISION) .752465 .759625 .0077
 K(ABSORPTION) .754165 .762251 .0078
 K(TRK LENGTH) .758154 .766857 .0087
 REM LIFE(COL) 3.0358E+03 3.0515E+03 .0143
 REM LIFE(ABS) 3.0717E+03 3.0637E+03 .0135
 SOURCE POINTS GENERATED 2976

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .760938 .0076 .760683 .0085 .9171
 K(ABS/TK LN) .764554 .0073 .763966 .0080 .5731
 K(TK LN/COL) .763241 .0078 .760983 .0087 .8050
 K(COL/ABS/TK LN) .762911 .0074 .766968 .0154
 LIFE(COL/ABS) 3.0576E+03 .0138 3.0749E+03 .0150 .9843

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR CYCLE 13 AVE OF 8 CYCLES
 K(COLLISION) .767786 .760645 .0068
 K(ABSORPTION) .788533 .765537 .0080

COMBINATION SIMPLE AVERAGE COMBINED AVERAGE CORR
 K(COL/ABS) .763091 .0072 .760364 .0075 .8645
 K(ABS/TK LN) .765625 .0065 .765630 .0070 .3706

K(TRK LENGTH)	.757702	.765713	.0077	K(TK LN/COL)	.763179	.0068	.762001	.0073	.7362
REM LIFE(COL)	3.0262E+03	3.0484E+03	.0124	K(COL/ABS/TK LN)	.763965	.0066	.766159	.0144	
REM LIFE(ABS)	3.0329E+03	3.0599E+03	.0118	LIFE(COL/ABS)	3.0541E+03	.0121	3.0696E+03	.0129	.9842
SOURCE POINTS GENERATED	3060								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 13

ESTIMATOR	CYCLE	14	AVE OF	9	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.735768		.757881	.0071	K(COL/ABS)	.760798	.0070	.759415
K(ABSORPTION)		.749136		.763714	.0075	K(ABS/TK LN)	.764411	.0060	.764508
K(TRK LENGTH)		.760258		.765107	.0068	K(TK LN/COL)	.761494	.0064	.761751
REM LIFE(COL)	3.0307E+03		3.0464E+03		.0110	K(COL/ABS/TK LN)	.762234	.0062	.768080
REM LIFE(ABS)	3.0835E+03		3.0625E+03		.0104	LIFE(COL/ABS)	3.0545E+03	.0106	3.0676E+03
SOURCE POINTS GENERATED	2862								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 14

ESTIMATOR	CYCLE	15	AVE OF	10	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.763838		.758477	.0064	K(COL/ABS)	.760774	.0063	.759873
K(ABSORPTION)		.757275		.763070	.0067	K(ABS/TK LN)	.763644	.0054	.763717
K(TRK LENGTH)		.756211		.764217	.0062	K(TK LN/COL)	.761347	.0057	.761447
REM LIFE(COL)	3.1470E+03		3.0565E+03		.0103	K(COL/ABS/TK LN)	.761921	.0056	.764145
REM LIFE(ABS)	3.1369E+03		3.0699E+03		.0096	LIFE(COL/ABS)	3.0632E+03	.0099	3.0787E+03
SOURCE POINTS GENERATED	3090								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 15

ESTIMATOR	CYCLE	16	AVE OF	11	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.759087		.758532	.0058	K(COL/ABS)	.760310	.0057	.759489
K(ABSORPTION)		.752251		.762087	.0062	K(ABS/TK LN)	.762797	.0050	.762900
K(TRK LENGTH)		.756402		.763507	.0057	K(TK LN/COL)	.761020	.0052	.761013
REM LIFE(COL)	3.1903E+03		3.0686E+03		.0101	K(COL/ABS/TK LN)	.761375	.0051	.762454
REM LIFE(ABS)	3.1763E+03		3.0796E+03		.0092	LIFE(COL/ABS)	3.0741E+03	.0096	3.0913E+03
SOURCE POINTS GENERATED	2973								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 16

ESTIMATOR	CYCLE	17	AVE OF	12	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.783682		.760628	.0059	K(COL/ABS)	.762079	.0057	.761937
K(ABSORPTION)		.779399		.763529	.0060	K(ABS/TK LN)	.764281	.0050	.764382
K(TRK LENGTH)		.781817		.765033	.0056	K(TK LN/COL)	.762830	.0053	.763206
REM LIFE(COL)	2.9702E+03		3.0604E+03		.0096	K(COL/ABS/TK LN)	.763063	.0052	.764835
REM LIFE(ABS)	2.9643E+03		3.0700E+03		.0090	LIFE(COL/ABS)	3.0652E+03	.0093	3.0767E+03
SOURCE POINTS GENERATED	3170								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 17

ESTIMATOR	CYCLE	18	AVE OF	13	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.750315		.759835	.0055	K(COL/ABS)	.760866	.0055	.760454
K(ABSORPTION)		.742304		.761897	.0059	K(ABS/TK LN)	.762765	.0050	.762916
K(TRK LENGTH)		.746839		.763633	.0055	K(TK LN/COL)	.761734	.0051	.761805
REM LIFE(COL)	3.1573E+03		3.0679E+03		.0092	K(COL/ABS/TK LN)	.761788	.0050	.762451
REM LIFE(ABS)	3.1608E+03		3.0770E+03		.0086	LIFE(COL/ABS)	3.0724E+03	.0088	3.0841E+03
SOURCE POINTS GENERATED	2828								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 18

ESTIMATOR	CYCLE	19	AVE OF	14	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.771568		.760673	.0052	K(COL/ABS)	.762059	.0053	.761167
K(ABSORPTION)		.783582		.763446	.0058	K(ABS/TK LN)	.764839	.0054	.764682

K(TRK LENGTH)	.800029	.766233	.0061	K(TK LN/COL)	.763453	.0052	.762134	.0053	.6871
REM LIFE(COL)	3.0245E+03	3.0648E+03	.0086	K(COL/ABS/TK LN)	.763450	.0051	.762425	.0062	
REM LIFE(ABS)	3.0294E+03	3.0736E+03	.0080	LIFE(COL/ABS)	3.0692E+03	.0082	3.0802E+03	.0083	.9776
SOURCE POINTS GENERATED	3016								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)		.765810		.761015	.0049	K(COL/ABS)	.762516	.761501	.8357
K(ABSORPTION)		.772022		.764017	.0055	K(ABS/TK LN)	.764906	.764821	.5967
K(TRK LENGTH)		.759672		.765795	.0057	K(TK LN/COL)	.763405	.762318	.6715
REM LIFE(COL)	3.1841E+03		3.0727E+03		.0084	K(COL/ABS/TK LN)	.763609	.762636	.0057
REM LIFE(ABS)	3.1966E+03		3.0818E+03		.0079	LIFE(COL/ABS)	3.0773E+03	3.0879E+03	.9796
SOURCE POINTS GENERATED	2970								

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12tb4)

07/28/95 14:38:35
PROBID = 07/28/95 12:26:55

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59192	1.0137E+00	2.0734E+00	ESCAPE	2	2.1869E-05	7.3914E-05
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	4.6853E-02	9.2732E-07	WEIGHT CUTOFF	59266	4.6159E-02	1.0860E-06
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.3044E-07	DOWNSCATTERING	0	0.	1.9696E+00
(N,XN)	152	2.1255E-03	1.4708E-03	CAPTURE	0	7.2144E-01	3.1568E-02
FISSION	0	0.	0.	LOSS TO (N,XN)	76	1.0628E-03	8.7117E-03
TOTAL	59344	1.0626E+00	2.0749E+00	LOSS TO FISSION	0	2.9395E-01	6.4953E-02
				TOTAL	59344	1.0626E+00	2.0749E+00

NUMBER OF NEUTRONS BANKED 76
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0026E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 5.6255E+01
 TOTAL NEUTRON COLLISIONS 3329818
 NET MULTIPLICATION 1.0010E+00 .0003

AVERAGE LIFETIME, SHAKES
 ESCAPE 1.8107E+04
 CAPTURE 3.0654E+03
 CAPTURE OR ESCAPE 3.0657E+03
 ANY TERMINATION 3.3553E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 96.83 MINUTES
 COMPUTER TIME IN MCRUN 96.70 MINUTES
 SOURCE PARTICLES PER MINUTE 6.1212E+02
 RANDOM NUMBERS GENERATED 39114089

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 10445 IN HISTORY 17439

RANGE OF SAMPLED SOURCE WEIGHTS = 9.4637E-01 TO 1.3112E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
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88 NO DATA AVAILABLE YET FOR THIS CELL.

90 NO DATA AVAILABLE YET FOR THIS CELL.
1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	655	380	0	.0000E+00	7.6891E-04	4.2759E-01	1.3811E+00
3	3	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	623150	59268	248379	3.6285E+00	8.2197E-04	7.9494E-01	9.0223E-01
33	34	3466	205	678	7.1751E-03	6.6534E-05	3.0236E-01	6.1807E-01
34	35	166	19	423	3.2298E-03	1.9648E-05	1.3912E-01	4.6911E-01
35	36	1108158	59268	15	2.3645E-04	7.1124E-04	7.5571E-01	8.9858E-01
36	37	293	18	19	1.4617E-04	1.9210E-05	1.1614E-01	4.6079E-01
37	38	1200484	59268	43184	6.6331E-01	6.8358E-04	7.4352E-01	8.9786E-01
38	39	323	18	121	9.0521E-04	1.4074E-05	8.7090E-02	4.6899E-01
39	40	1920967	59268	1168022	1.6023E+01	5.9247E-04	7.0767E-01	8.9547E-01
40	41	50752	28428	76552	1.0494E+00	4.3324E-04	6.5124E-01	8.9180E-01
41	42	15	5	40	3.8316E-04	3.8003E-08	5.0869E-08	5.3251E-01
42	43	107243	30105	3272	4.9820E-02	4.5773E-04	6.6402E-01	8.9110E-01
43	44	120080	32300	26255	3.5867E-01	4.5730E-04	6.6655E-01	8.9102E-01
44	45	131366	33298	2934	4.4634E-02	4.6553E-04	6.7732E-01	8.9083E-01
45	46	159983	38215	62274	8.5357E-01	4.6993E-04	6.7485E-01	8.9138E-01
46	47	6693	3143	6595	9.0753E-02	4.5047E-04	6.4063E-01	8.9379E-01
47	48	8924	3436	294	4.4981E-03	5.1284E-04	6.7542E-01	8.9699E-01
48	49	11735	4726	5681	7.8483E-02	5.0694E-04	6.8120E-01	8.9752E-01
49	50	23036	12806	36001	5.0751E-01	6.3170E-04	6.7019E-01	9.0464E-01
50	51	21001	12050	6659	9.8049E-02	1.0025E-03	7.0274E-01	9.1003E-01
51	52	22479	12286	5665	7.3118E-02	1.4449E-03	7.2331E-01	9.2161E-01
52	53	21064	11448	6847	9.8339E-02	8.3333E-04	6.7012E-01	8.9484E-01
53	54	24796	12401	157136	1.9682E+00	2.1146E-04	4.8725E-01	8.3632E-01

54	55	211	72	2508	2.5509E-02	6.2588E-05	2.4344E-01	6.7691E-01	8.6060E-01
55	56	23023	12696	37522	5.2351E-01	6.0083E-04	6.6007E-01	9.0238E-01	1.6400E+00
56	57	20828	11910	6660	9.8195E-02	1.0041E-03	7.1218E-01	9.0967E-01	2.2859E+00
57	58	22167	12068	5446	7.0404E-02	1.4445E-03	7.3587E-01	9.2200E-01	5.0276E+00
58	59	20670	11260	6718	9.7119E-02	8.4176E-04	6.7410E-01	8.9811E-01	2.2778E+00
59	60	24041	12106	151266	1.8993E+00	2.1038E-04	4.8221E-01	8.3722E-01	1.3098E+00
60	61	262	74	3187	2.9823E-02	6.7121E-05	3.4766E-01	6.3779E-01	9.6553E-01
61	62	35079	15328	63230	8.3101E-01	4.2560E-04	6.0064E-01	8.7150E-01	1.5414E+00
62	63	34151	14423	12176	1.6486E-01	4.6985E-04	5.9823E-01	8.5860E-01	2.1597E+00
63	64	263	69	981	9.1313E-03	4.7417E-05	2.0509E-01	6.2241E-01	7.6702E-01
64	65	34697	15079	62000	8.1191E-01	4.3994E-04	6.0986E-01	8.7158E-01	1.5559E+00
65	66	33918	14212	11885	1.6304E-01	5.1711E-04	6.1962E-01	8.6349E-01	2.1833E+00
66	67	247	59	1167	1.0629E-02	4.4099E-05	2.2996E-01	5.8998E-01	7.7839E-01
67	68	13498	6905	587357	5.7356E+00	7.0101E-05	2.8897E-01	6.5844E-01	9.2178E-01
68	69	10830	5121	13863	1.7460E-01	5.0540E-04	5.9525E-01	8.1955E-01	2.1994E+00
69	70	10826	5161	16110	2.0355E-01	5.2649E-04	5.7604E-01	8.1605E-01	1.9643E+00
70	71	19057	7937	5772	8.6367E-02	1.7142E-03	6.9900E-01	9.1590E-01	2.4456E+00
71	72	20048	7659	7401	1.0200E-01	3.5888E-03	7.4592E-01	9.3167E-01	5.3894E+00
72	73	20267	6504	33118	4.6307E-01	9.7554E-04	6.3162E-01	8.8230E-01	2.3813E+00
73	74	11061	5341	105444	1.3596E+00	2.3445E-04	4.4907E-01	8.5068E-01	1.2919E+00
74	75	18524	7779	5751	8.5577E-02	1.6000E-03	6.9295E-01	9.1613E-01	2.4754E+00
75	76	19732	7553	7386	1.0159E-01	3.3073E-03	7.2477E-01	9.3123E-01	5.4278E+00
76	77	19719	6435	32567	4.5363E-01	9.0961E-04	6.2216E-01	8.7807E-01	2.3566E+00
77	78	10718	5227	100687	1.2996E+00	2.4359E-04	4.6020E-01	8.5170E-01	1.3083E+00
78	79	95	36	3570	3.2622E-02	5.4975E-05	2.7634E-01	6.0528E-01	8.5154E-01
79	80	162	53	4633	4.0568E-02	5.8566E-05	2.7613E-01	5.9824E-01	8.7081E-01
80	81	11	6	35	4.2628E-04	6.3403E-04	5.7477E-01	7.9280E-01	2.0898E+00
81	82	7198	2988	21721	2.5435E-01	4.0079E-04	4.8529E-01	7.6611E-01	2.1032E+00
82	83	4920	1922	28501	3.1561E-01	2.2799E-04	3.8392E-01	7.6529E-01	1.2117E+00
83	84	16	4	403	3.1639E-03	1.5072E-04	5.0634E-01	5.8849E-01	1.1668E+00
84	85	1	1	0	.0000E+00	3.6508E+00	3.6508E+00	7.3573E-01	3.2188E+00
85	86	3720	1507	10983	1.3323E-01	7.6599E-04	4.9619E-01	7.8950E-01	2.0815E+00
86	87	4	1	112	9.4070E-04	4.0547E-04	1.0750E+00	6.0851E-01	1.9121E+00
87	88	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	2319	1001	18955	2.2605E-01	1.9335E-03	4.9142E-01	8.0994E-01	4.4621E+00
89	90	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	905	499	103657	8.9344E-01	3.0224E-05	1.2697E-01	5.6368E-01	6.4303E-01
TOTAL		6010017	671355	3329818	4.2302E+01				
1NEUTRON WEIGHT BALANCE IN EACH CELL --		EXTERNAL EVENTS							PRINT TABLE 130
CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	-4.2819E-01	-4.2819E-01			
2	2	9.3538E-03	.0000E+00	.0000E+00	-4.4585E-01	-4.3649E-01			
3	3	.0000E+00	.0000E+00	.0000E+00	-2.5651E-02	-2.5651E-02			
4	4	.0000E+00	.0000E+00	.0000E+00	-6.1108E-02	-6.1108E-02			
5	5	.0000E+00	.0000E+00	.0000E+00	-2.3227E-02	-2.3227E-02			
6	6	.0000E+00	.0000E+00	.0000E+00	-1.8945E-01	-1.8945E-01			
7	8	.0000E+00	.0000E+00	.0000E+00	-1.5318E+00	-1.5318E+00			
8	9	.0000E+00	.0000E+00	.0000E+00	-1.7319E+00	-1.7319E+00			
9	10	.0000E+00	.0000E+00	.0000E+00	-1.4875E-01	-1.4875E-01			
10	11	.0000E+00	.0000E+00	.0000E+00	-1.4891E-01	-1.4891E-01			
11	12	.0000E+00	.0000E+00	.0000E+00	-2.3346E-01	-2.3346E-01			
12	13	.0000E+00	.0000E+00	.0000E+00	-2.3200E-01	-2.3200E-01			
13	14	.0000E+00	.0000E+00	.0000E+00	-7.6811E-02	-7.6811E-02			
14	15	.0000E+00	.0000E+00	.0000E+00	-7.5794E-02	-7.5794E-02			
15	16	.0000E+00	.0000E+00	.0000E+00	-8.9016E-02	-8.9016E-02			
16	17	.0000E+00	.0000E+00	.0000E+00	-7.1489E-02	-7.1489E-02			

17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.7417E-02	-6.7417E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3544E-02	-7.3544E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0110E-01	-1.0110E-01
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8551E-02	-8.8551E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0823E-02	-8.0823E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.0044E-02	-8.0044E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0411E-01	-1.0411E-01
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9826E-02	-8.9826E-02
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4388E-02	-9.4388E-02
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1385E-02	-9.1385E-02
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.8508E-02	-9.8508E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.9796E-02	-7.9796E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.5191E-02	-8.5191E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1267E-02	-9.1267E-02
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6886E+01	-1.6886E+01
32	33	8.5422E+00	1.0137E+00	.0000E+00	.0000E+00	-8.4902E+00	1.0657E+00
33	34	3.6268E-02	.0000E+00	.0000E+00	.0000E+00	-3.4542E-02	1.7259E-03
34	35	1.3060E-03	.0000E+00	.0000E+00	.0000E+00	-1.2532E-03	5.2835E-05
35	36	1.6825E+01	.0000E+00	.0000E+00	.0000E+00	-1.6815E+01	1.0463E-02
36	37	2.2675E-03	.0000E+00	.0000E+00	.0000E+00	-2.2667E-03	7.8932E-07
37	38	1.8223E+01	.0000E+00	.0000E+00	.0000E+00	-1.8150E+01	7.3033E-02
38	39	2.5409E-03	.0000E+00	.0000E+00	.0000E+00	-2.5357E-03	5.2056E-06
39	40	2.9096E+01	.0000E+00	.0000E+00	.0000E+00	-9.4509E+00	1.9646E+01
40	41	7.6597E-01	.0000E+00	.0000E+00	.0000E+00	-7.6282E-01	3.1527E-03
41	42	1.3022E-04	.0000E+00	.0000E+00	.0000E+00	-1.2794E-04	2.2742E-06
42	43	1.6153E+00	.0000E+00	.0000E+00	.0000E+00	-1.6148E+00	4.8580E-04
43	44	1.8092E+00	.0000E+00	.0000E+00	.0000E+00	-1.8081E+00	1.0788E-03
44	45	1.9794E+00	.0000E+00	.0000E+00	.0000E+00	-1.9789E+00	4.2841E-04
45	46	2.4126E+00	.0000E+00	.0000E+00	.0000E+00	-1.0237E+00	1.3889E+00
46	47	1.0124E-01	.0000E+00	.0000E+00	.0000E+00	-6.1495E-02	3.9749E-02
47	48	1.3511E-01	.0000E+00	.0000E+00	.0000E+00	-1.3050E-01	4.6093E-03
48	49	1.7781E-01	.0000E+00	.0000E+00	.0000E+00	-6.9029E-02	1.0878E-01
49	50	3.5341E-01	.0000E+00	.0000E+00	.0000E+00	-2.1240E-01	1.4100E-01
50	51	3.2501E-01	.0000E+00	.0000E+00	.0000E+00	-3.1862E-01	6.3907E-03
51	52	3.3840E-01	.0000E+00	.0000E+00	.0000E+00	-2.8994E-01	4.8463E-02
52	53	3.2078E-01	.0000E+00	.0000E+00	.0000E+00	-3.1369E-01	7.0914E-03
53	54	3.6167E-01	.0000E+00	.0000E+00	.0000E+00	-1.3752E-01	2.2415E-01
54	55	2.5219E-03	.0000E+00	.0000E+00	.0000E+00	-2.3024E-04	2.2916E-03
55	56	3.5255E-01	.0000E+00	.0000E+00	.0000E+00	-2.1137E-01	1.4118E-01
56	57	3.2254E-01	.0000E+00	.0000E+00	.0000E+00	-3.1576E-01	6.7751E-03
57	58	3.3411E-01	.0000E+00	.0000E+00	.0000E+00	-2.8779E-01	4.6317E-02
58	59	3.1538E-01	.0000E+00	.0000E+00	.0000E+00	-3.0816E-01	7.2208E-03
59	60	3.5143E-01	.0000E+00	.0000E+00	.0000E+00	-1.3285E-01	2.1858E-01
60	61	2.8056E-03	.0000E+00	.0000E+00	.0000E+00	-2.7092E-04	2.5346E-03
61	62	5.1923E-01	.0000E+00	.0000E+00	.0000E+00	-2.8966E-01	2.2957E-01
62	63	5.0367E-01	.0000E+00	.0000E+00	.0000E+00	-2.0967E-01	2.9399E-01
63	64	2.9182E-03	.0000E+00	.0000E+00	.0000E+00	-6.2453E-05	2.8557E-03
64	65	5.1354E-01	.0000E+00	.0000E+00	.0000E+00	-2.8534E-01	2.2820E-01
65	66	5.0095E-01	.0000E+00	.0000E+00	.0000E+00	-2.0860E-01	2.9234E-01
66	67	2.5541E-03	.0000E+00	.0000E+00	.0000E+00	-4.4440E-05	2.5096E-03
67	68	1.8601E-01	.0000E+00	.0000E+00	.0000E+00	-1.0052E-01	8.5490E-02
68	69	1.5208E-01	.0000E+00	.0000E+00	.0000E+00	-8.3608E-02	6.8476E-02
69	70	1.5158E-01	.0000E+00	.0000E+00	.0000E+00	-8.3358E-02	6.8220E-02
70	71	2.9591E-01	.0000E+00	.0000E+00	.0000E+00	-2.9378E-01	2.1243E-03
71	72	3.0384E-01	.0000E+00	.0000E+00	.0000E+00	-2.6397E-01	3.9871E-02
72	73	3.0820E-01	.0000E+00	.0000E+00	.0000E+00	-2.8994E-01	1.8256E-02
73	74	1.6377E-01	.0000E+00	.0000E+00	.0000E+00	-1.5907E-01	4.7012E-03
74	75	2.8808E-01	.0000E+00	.0000E+00	.0000E+00	-2.8574E-01	2.3451E-03
75	76	2.9846E-01	.0000E+00	.0000E+00	.0000E+00	-2.5742E-01	4.1042E-02
76	77	2.9915E-01	.0000E+00	.0000E+00	.0000E+00	-2.8144E-01	1.7708E-02

77	78	1.5812E-01	.0000E+00	.0000E+00	.0000E+00	-1.5375E-01	4.3711E-03
78	79	1.1677E-03	.0000E+00	.0000E+00	.0000E+00	-9.9462E-04	1.7312E-04
79	80	1.8796E-03	.0000E+00	.0000E+00	.0000E+00	-1.6313E-03	2.4828E-04
80	81	1.2085E-04	.0000E+00	.0000E+00	.0000E+00	-9.5269E-05	2.5583E-05
81	82	9.3414E-02	.0000E+00	.0000E+00	.0000E+00	-7.7930E-02	1.5484E-02
82	83	6.4785E-02	.0000E+00	.0000E+00	.0000E+00	-6.3836E-02	9.4849E-04
83	84	1.9889E-04	.0000E+00	.0000E+00	.0000E+00	-1.7938E-04	1.9512E-05
84	85	1.2430E-05	.0000E+00	.0000E+00	.0000E+00	-1.2430E-05	.0000E+00
85	86	5.0193E-02	.0000E+00	.0000E+00	.0000E+00	-4.4801E-02	5.3921E-03
86	87	4.1494E-05	.0000E+00	.0000E+00	.0000E+00	-3.7417E-05	4.0771E-06
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	3.0604E-02	.0000E+00	.0000E+00	.0000E+00	-2.6104E-02	4.5000E-03
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	1.2210E-02	.0000E+00	.0000E+00	.0000E+00	-7.6409E-03	4.5688E-03

TOTAL	9.0018E+01	1.0137E+00	.0000E+00	.0000E+00	-9.0018E+01	1.0136E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL -- VARIANCE REDUCTION EVENTS						

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	2.1064E-04	.0000E+00	.0000E+00	.0000E+00	2.1064E-04
33	34	.0000E+00	.0000E+00	2.2880E-06	.0000E+00	.0000E+00	.0000E+00	2.2880E-06
34	35	.0000E+00	.0000E+00	-4.2119E-06	.0000E+00	.0000E+00	.0000E+00	-4.2119E-06
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	7.3126E-06	.0000E+00	.0000E+00	.0000E+00	7.3126E-06
38	39	.0000E+00	.0000E+00	2.9562E-08	.0000E+00	.0000E+00	.0000E+00	2.9562E-08
39	40	.0000E+00	.0000E+00	-3.8304E-05	.0000E+00	.0000E+00	.0000E+00	-3.8304E-05

40	41	.0000E+00	.0000E+00	4.6866E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6866E-06
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	4.4031E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4031E-06
43	44	.0000E+00	.0000E+00	-1.6758E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6758E-05
44	45	.0000E+00	.0000E+00	1.3045E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3045E-05
45	46	.0000E+00	.0000E+00	4.6217E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.6217E-06
46	47	.0000E+00	.0000E+00	-4.1916E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1916E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	3.2525E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2525E-08
49	50	.0000E+00	.0000E+00	2.1381E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1381E-05
50	51	.0000E+00	.0000E+00	1.0240E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.0240E-04
51	52	.0000E+00	.0000E+00	-3.2325E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2325E-05
52	53	.0000E+00	.0000E+00	-5.8623E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.8623E-05
53	54	.0000E+00	.0000E+00	2.8135E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.8135E-05
54	55	.0000E+00	.0000E+00	-2.5236E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.5236E-05
55	56	.0000E+00	.0000E+00	-1.6622E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.6622E-05
56	57	.0000E+00	.0000E+00	-5.0721E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-5.0721E-05
57	58	.0000E+00	.0000E+00	6.4482E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.4482E-06
58	59	.0000E+00	.0000E+00	3.2277E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.2277E-05
59	60	.0000E+00	.0000E+00	-1.1979E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1979E-04
60	61	.0000E+00	.0000E+00	1.6498E-07	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6498E-07
61	62	.0000E+00	.0000E+00	-1.1869E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1869E-05
62	63	.0000E+00	.0000E+00	4.3576E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.3576E-05
63	64	.0000E+00	.0000E+00	4.2249E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2249E-06
64	65	.0000E+00	.0000E+00	6.8364E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.8364E-05
65	66	.0000E+00	.0000E+00	-1.4089E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.4089E-04
66	67	.0000E+00	.0000E+00	8.5003E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5003E-06
67	68	.0000E+00	.0000E+00	2.6018E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.6018E-04
68	69	.0000E+00	.0000E+00	-6.1933E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-6.1933E-05
69	70	.0000E+00	.0000E+00	1.3752E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3752E-04
70	71	.0000E+00	.0000E+00	5.9400E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.9400E-05
71	72	.0000E+00	.0000E+00	-8.1150E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1150E-05
72	73	.0000E+00	.0000E+00	-1.7740E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7740E-04
73	74	.0000E+00	.0000E+00	-3.2319E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.2319E-05
74	75	.0000E+00	.0000E+00	-2.2475E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2475E-05
75	76	.0000E+00	.0000E+00	8.0060E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.0060E-05
76	77	.0000E+00	.0000E+00	5.6359E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.6359E-05
77	78	.0000E+00	.0000E+00	1.4234E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.4234E-05
78	79	.0000E+00	.0000E+00	-8.2456E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.2456E-06
79	80	.0000E+00	.0000E+00	-3.3440E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.3440E-05
80	81	.0000E+00	.0000E+00	-7.1544E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.1544E-06
81	82	.0000E+00	.0000E+00	1.7757E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.7757E-04
82	83	.0000E+00	.0000E+00	6.4326E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.4326E-05
83	84	.0000E+00	.0000E+00	-4.1898E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1898E-06
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	.0000E+00	.0000E+00	1.9716E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.9716E-04
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	.0000E+00	.0000E+00	-3.3621E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.3621E-05
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	.0000E+00	.0000E+00	6.6189E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.6189E-05
TOTAL		.0000E+00	.0000E+00	6.9407E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.9407E-04
1NEUTRON WEIGHT BALANCE IN EACH CELL --				PHYSICAL EVENTS					PRINT TABLE 130
CELL	(N,XN)	FISSION	CAPTURE	LOSS TO (N,XN)	LOSS TO FISSIOM	TOTAL			
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00			

3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	2.0424E-03	.0000E+00	-3.0692E-01	-1.0212E-03	-2.9395E-01	-5.9984E-01
33	34	.0000E+00	.0000E+00	-1.5430E-04	.0000E+00	.0000E+00	-1.5430E-04
34	35	.0000E+00	.0000E+00	-1.8264E-05	.0000E+00	.0000E+00	-1.8264E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-7.8932E-07	.0000E+00	.0000E+00	-7.8932E-07
37	38	8.3130E-05	.0000E+00	-5.6955E-03	-4.1565E-05	.0000E+00	-5.6539E-03
38	39	.0000E+00	.0000E+00	-5.2352E-06	.0000E+00	.0000E+00	-5.2352E-06
39	40	.0000E+00	.0000E+00	-4.1746E-02	.0000E+00	.0000E+00	-4.1746E-02
40	41	.0000E+00	.0000E+00	-3.1574E-03	.0000E+00	.0000E+00	-3.1574E-03
41	42	.0000E+00	.0000E+00	-2.2742E-06	.0000E+00	.0000E+00	-2.2742E-06
42	43	.0000E+00	.0000E+00	-4.9020E-04	.0000E+00	.0000E+00	-4.9020E-04
43	44	.0000E+00	.0000E+00	-1.0620E-03	.0000E+00	.0000E+00	-1.0620E-03
44	45	.0000E+00	.0000E+00	-4.4146E-04	.0000E+00	.0000E+00	-4.4146E-04
45	46	.0000E+00	.0000E+00	-2.4637E-03	.0000E+00	.0000E+00	-2.4637E-03
46	47	.0000E+00	.0000E+00	-2.6512E-04	.0000E+00	.0000E+00	-2.6512E-04
47	48	.0000E+00	.0000E+00	-4.2936E-05	.0000E+00	.0000E+00	-4.2936E-05
48	49	.0000E+00	.0000E+00	-2.2366E-04	.0000E+00	.0000E+00	-2.2366E-04
49	50	.0000E+00	.0000E+00	-1.1821E-03	.0000E+00	.0000E+00	-1.1821E-03
50	51	.0000E+00	.0000E+00	-3.8024E-03	.0000E+00	.0000E+00	-3.8024E-03
51	52	.0000E+00	.0000E+00	-4.5286E-02	.0000E+00	.0000E+00	-4.5286E-02
52	53	.0000E+00	.0000E+00	-4.3399E-03	.0000E+00	.0000E+00	-4.3399E-03
53	54	.0000E+00	.0000E+00	-7.3257E-03	.0000E+00	.0000E+00	-7.3257E-03
54	55	.0000E+00	.0000E+00	-1.2591E-04	.0000E+00	.0000E+00	-1.2591E-04
55	56	.0000E+00	.0000E+00	-1.2693E-03	.0000E+00	.0000E+00	-1.2693E-03
56	57	.0000E+00	.0000E+00	-3.8524E-03	.0000E+00	.0000E+00	-3.8524E-03
57	58	.0000E+00	.0000E+00	-4.3040E-02	.0000E+00	.0000E+00	-4.3040E-02
58	59	.0000E+00	.0000E+00	-4.1909E-03	.0000E+00	.0000E+00	-4.1909E-03
59	60	.0000E+00	.0000E+00	-7.0610E-03	.0000E+00	.0000E+00	-7.0610E-03
60	61	.0000E+00	.0000E+00	-1.5567E-04	.0000E+00	.0000E+00	-1.5567E-04
61	62	.0000E+00	.0000E+00	-2.3700E-03	.0000E+00	.0000E+00	-2.3700E-03
62	63	.0000E+00	.0000E+00	-1.0471E-02	.0000E+00	.0000E+00	-1.0471E-02

63	64	.0000E+00	.0000E+00	-4.7635E-05	.0000E+00	.0000E+00	-4.7635E-05
64	65	.0000E+00	.0000E+00	-2.2827E-03	.0000E+00	.0000E+00	-2.2827E-03
65	66	.0000E+00	.0000E+00	-9.5087E-03	.0000E+00	.0000E+00	-9.5087E-03
66	67	.0000E+00	.0000E+00	-5.5112E-05	.0000E+00	.0000E+00	-5.5112E-05
67	68	.0000E+00	.0000E+00	-2.8031E-02	.0000E+00	.0000E+00	-2.8031E-02
68	69	.0000E+00	.0000E+00	-1.0428E-02	.0000E+00	.0000E+00	-1.0428E-02
69	70	.0000E+00	.0000E+00	-1.1828E-02	.0000E+00	.0000E+00	-1.1828E-02
70	71	.0000E+00	.0000E+00	-2.1837E-03	.0000E+00	.0000E+00	-2.1837E-03
71	72	.0000E+00	.0000E+00	-3.9790E-02	.0000E+00	.0000E+00	-3.9790E-02
72	73	.0000E+00	.0000E+00	-1.8079E-02	.0000E+00	.0000E+00	-1.8079E-02
73	74	.0000E+00	.0000E+00	-4.6689E-03	.0000E+00	.0000E+00	-4.6689E-03
74	75	.0000E+00	.0000E+00	-2.3227E-03	.0000E+00	.0000E+00	-2.3227E-03
75	76	.0000E+00	.0000E+00	-4.1123E-02	.0000E+00	.0000E+00	-4.1123E-02
76	77	.0000E+00	.0000E+00	-1.7764E-02	.0000E+00	.0000E+00	-1.7764E-02
77	78	.0000E+00	.0000E+00	-4.3853E-03	.0000E+00	.0000E+00	-4.3853E-03
78	79	.0000E+00	.0000E+00	-1.6487E-04	.0000E+00	.0000E+00	-1.6487E-04
79	80	.0000E+00	.0000E+00	-2.1484E-04	.0000E+00	.0000E+00	-2.1484E-04
80	81	.0000E+00	.0000E+00	-1.8429E-05	.0000E+00	.0000E+00	-1.8429E-05
81	82	.0000E+00	.0000E+00	-1.5662E-02	.0000E+00	.0000E+00	-1.5662E-02
82	83	.0000E+00	.0000E+00	-1.0128E-03	.0000E+00	.0000E+00	-1.0128E-03
83	84	.0000E+00	.0000E+00	-1.5323E-05	.0000E+00	.0000E+00	-1.5323E-05
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	.0000E+00	.0000E+00	-5.5893E-03	.0000E+00	.0000E+00	-5.5893E-03
86	87	.0000E+00	.0000E+00	-4.0771E-06	.0000E+00	.0000E+00	-4.0771E-06
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	.0000E+00	.0000E+00	-4.4664E-03	.0000E+00	.0000E+00	-4.4664E-03
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	.0000E+00	.0000E+00	-4.6350E-03	.0000E+00	.0000E+00	-4.6350E-03

TOTAL 2.1255E-03 .0000E+00 -7.2144E-01 -1.0628E-03 -2.9395E-01 -1.0143E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
3	3	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
4	4	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
5	5	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
6	6	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
7	8	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
8	9	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
9	10	1001.50C 8016.50C	6.6667E-01 3.3333E-01	0 0	.0000E+00 .0000E+00	.0000E+00 .0000E+00	.0000E+00 .0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7097E-01	83939	1.2682E+00	1.1186E-03	.0000E+00	.0000E+00
		45103.50C	2.3926E-04	473	6.2478E-03	5.4987E-03	.0000E+00	.0000E+00
		47109.50C	2.8706E-05	40	5.0139E-04	4.1084E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	784	9.1101E-03	9.0398E-03	.0000E+00	.0000E+00
		63151.55C	2.3827E-07	17	2.2439E-04	2.2287E-04	.0000E+00	.0000E+00
		63153.55C	3.0867E-05	78	1.0579E-03	9.1841E-04	.0000E+00	.0000E+00
		64155.50C	1.4226E-06	318	3.5591E-03	3.5535E-03	.0000E+00	.0000E+00
		92233.50C	4.5949E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	6.8903E-05	104	1.4164E-03	9.1417E-04	2.2833E-05	.0000E+00
		92235.50C	4.4265E-03	18016	3.6336E-01	3.2252E-02	1.5912E-01	.0000E+00
		92236.50C	9.9057E-04	719	1.0871E-02	3.8276E-03	1.8598E-04	.0000E+00
		92238.50C	3.2088E-01	126304	1.9118E+00	1.5775E-01	1.9523E-02	1.0212E-03
		93237.55C	7.6759E-05	165	2.1537E-03	1.6596E-03	3.1781E-05	.0000E+00
		94238.50C	1.4002E-05	46	5.8698E-04	4.4031E-04	1.7679E-05	.0000E+00
		94239.55C	1.5156E-03	12507	2.6065E-01	4.8344E-02	9.8645E-02	.0000E+00
		94240.50C	4.3508E-04	2506	3.4268E-02	3.0106E-02	1.4603E-04	.0000E+00
		94241.50C	2.0467E-04	1904	4.0455E-02	5.7450E-03	1.6132E-02	.0000E+00
		94242.50C	5.2259E-05	83	1.2315E-03	7.7645E-04	1.0901E-05	.0000E+00
		95241.50C	6.1062E-05	350	4.5180E-03	4.1129E-03	4.1985E-05	.0000E+00
		95242.50C	1.9299E-07	7	1.8157E-04	1.2545E-05	6.1085E-05	.0000E+00
		95243.50C	5.8652E-06	19	2.7760E-04	2.1400E-04	4.7059E-06	.0000E+00
		96245.35C	1.9976E-08	0	2.1068E-06	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	4	3.7146E-05	9.9761E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	1	1.2084E-05	3.8289E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	3	1.9088E-05	4.1638E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	663	7.0218E-03	1.4050E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	7	8.4996E-05	5.8119E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	404	3.0756E-03	1.8259E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	19	1.5415E-04	4.5241E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	15	2.3645E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	17	1.3201E-04	7.8862E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	1.4154E-05	6.9610E-10	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	133	1.9232E-03	5.8897E-08	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	63	9.2364E-04	7.5537E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	207	2.8942E-03	1.4792E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	42345	6.5092E-01	5.3171E-03	.0000E+00	4.1565E-05
		50000.35C	1.0711E-02	436	6.6462E-03	1.5485E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	115	8.5873E-04	5.2328E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6	4.6477E-05	2.3574E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1069576	1.4549E+01	4.0547E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	98446	1.4735E+00	1.1990E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	70542	9.5966E-01	3.0692E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6010	8.9782E-02	8.8181E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	38	3.6721E-04	2.2734E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2	1.5944E-05	7.5256E-10	.0000E+00	.0000E+00

42	43	8016.50C	6.8138E-03	10	1.5139E-04	5.2019E-10	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	9	1.4488E-04	6.7343E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	7	8.6760E-05	5.8870E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	3214	4.8933E-02	4.6590E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	32	5.0316E-04	1.1684E-05	.0000E+00	.0000E+00
43	44	1001.50C	6.6667E-01	24202	3.2799E-01	1.0343E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	2053	3.0684E-02	2.7731E-05	.0000E+00	.0000E+00
44	45	8016.50C	6.8138E-03	15	2.1119E-04	6.8300E-07	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	8	1.0832E-04	1.6022E-05	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	12	1.6351E-04	1.6010E-05	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	2878	4.3840E-02	3.9888E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	21	3.1080E-04	9.8624E-06	.0000E+00	.0000E+00
45	46	1001.50C	6.6667E-01	57288	7.7906E-01	2.4186E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4986	7.4504E-02	4.5040E-05	.0000E+00	.0000E+00
46	47	1001.50C	6.6667E-01	6118	8.3600E-02	2.6112E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	477	7.1529E-03	4.0007E-06	.0000E+00	.0000E+00
47	48	8016.50C	6.8138E-03	2	3.2356E-05	2.7500E-13	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	2	2.5697E-05	1.1843E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	290	4.4401E-03	4.1752E-05	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	1001.50C	6.6667E-01	5204	7.1362E-02	2.1467E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	477	7.1211E-03	8.9858E-06	.0000E+00	.0000E+00
49	50	1001.50C	6.6667E-01	32825	4.5920E-01	1.1467E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	3176	4.8310E-02	3.5367E-05	.0000E+00	.0000E+00
50	51	6000.50C	1.3966E-03	3	4.4163E-05	9.5659E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	23	3.2632E-04	1.0374E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	34	5.3185E-04	2.4235E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	5.5438E-05	4.8326E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.6162E-05	1.9498E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	842	1.2840E-02	6.1209E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	340	5.2688E-03	4.0312E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4076	5.9467E-02	1.9238E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1233	1.7986E-02	6.2216E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	104	1.5130E-03	2.2597E-04	.0000E+00	.0000E+00
51	52	5010.50C	1.8319E-02	3937	4.5670E-02	4.5124E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	189	2.9231E-03	1.5365E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	1536	2.4485E-02	1.5104E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	3	3.9982E-05	1.0911E-05	.0000E+00	.0000E+00
52	53	6000.50C	1.3966E-03	5	8.2291E-05	1.1114E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	23	3.3948E-04	1.6957E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	38	5.9573E-04	1.9699E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	3	5.0918E-05	9.2144E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.7339E-05	1.0779E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	860	1.2710E-02	7.6232E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	345	5.2921E-03	4.0801E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	4197	5.9418E-02	2.2599E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1302	1.8789E-02	7.5069E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	73	1.0446E-03	1.3888E-04	.0000E+00	.0000E+00

53	54	1001.50C 8016.50C	6.6667E-01 3.3333E-01	147091 10045	1.8282E+00 1.4000E-01	7.2259E-03 9.9824E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	2384 124	2.4001E-02 1.5087E-03	1.2587E-04 3.9806E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	1001.50C 8016.50C	6.6667E-01 3.3333E-01	34329 3193	4.7516E-01 4.8345E-02	1.2388E-03 3.0444E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
56	57	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	6 18 35 2 0 809 359 4123 1223 85	9.4545E-05 2.5755E-04 5.5400E-04 3.2059E-05 .0000E+00 1.2260E-02 5.5951E-03 3.1020E-04 2.0333E-03 1.7789E-02 1.3485E-03	2.8715E-08 1.2940E-05 2.4870E-06 6.2995E-08 .0000E+00 7.2402E-04 3.1020E-04 2.0333E-03 6.2464E-04 1.4474E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
57	58	5010.50C 5011.56C 13027.50C 29000.50C	1.8319E-02 7.5901E-02 9.0530E-01 4.8109E-04	3743 181 1519 3	4.3262E-02 2.8450E-03 2.4248E-02 4.9110E-05	4.2881E-02 2.0651E-07 1.5760E-04 4.7205E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00
58	59	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	5 13 37 2 1 783 373 4165 1247 92	8.1452E-05 1.6662E-04 5.9274E-04 2.3474E-05 8.6526E-06 1.1655E-02 5.7238E-03 5.9763E-02 1.7698E-02 1.4065E-03	2.1054E-09 4.2220E-06 1.5499E-06 4.1946E-08 2.6572E-06 6.5956E-04 5.3254E-04 2.1119E-03 7.0432E-04 1.7404E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
59	60	1001.50C 8016.50C	6.6667E-01 3.3333E-01	141657 9609	1.7650E+00 1.3432E-01	6.9856E-03 7.5413E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
60	61	1001.50C 8016.50C	6.6667E-01 3.3333E-01	3058 129	2.8449E-02 1.3736E-03	1.5534E-04 3.3673E-07	.0000E+00 .0000E+00	.0000E+00 .0000E+00
61	62	1001.50C 8016.50C	6.6667E-01 3.3333E-01	58419 4811	7.6056E-01 7.0449E-02	2.3157E-03 5.4280E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
62	63	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	9 38 60 5 2 1509 599 7538 2233 183	1.2682E-04 5.0750E-04 9.3300E-04 7.0890E-05 2.7150E-05 2.1013E-02 8.9991E-03 1.0058E-01 2.9942E-02 2.6566E-03	1.9752E-08 3.1897E-05 9.0515E-06 9.8034E-07 2.9630E-06 2.0145E-03 9.1235E-04 5.4872E-03 1.6801E-03 3.3203E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
63	64	1001.50C 8016.50C	6.6667E-01 3.3333E-01	943 38	8.8031E-03 3.2817E-04	4.7625E-05 9.5702E-09	.0000E+00 .0000E+00	.0000E+00 .0000E+00
64	65	1001.50C	6.6667E-01	57038	7.3958E-01	2.2359E-03	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	4962	7.2329E-02	4.6764E-05	.0000E+00	.0000E+00
65	66	6000.50C	1.3966E-03	2	2.8925E-05	6.0304E-12	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	28	3.6118E-04	1.5775E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	45	6.4961E-04	7.3151E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	2	3.1180E-05	4.1986E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1444	2.0512E-02	1.7472E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	576	8.5868E-03	7.6839E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	7378	9.9556E-02	5.0167E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2261	3.1126E-02	1.6338E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	149	2.1852E-03	3.1921E-04	.0000E+00	.0000E+00
66	67	1001.50C	6.6667E-01	1112	1.0076E-02	5.4763E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	55	5.5271E-04	3.4913E-07	.0000E+00	.0000E+00
67	68	1001.50C	6.6667E-01	559389	5.4284E+00	2.7940E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	27968	3.0715E-01	9.1255E-05	.0000E+00	.0000E+00
68	69	6000.50C	1.3966E-03	10	1.2469E-04	1.7517E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	49	6.3903E-04	2.8901E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	64	9.3745E-04	5.6615E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	9.0440E-05	1.3375E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	6.8355E-06	2.1143E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1630	2.1695E-02	1.7889E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	578	8.2690E-03	9.7232E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	8758	1.0795E-01	5.6382E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	2577	3.2247E-02	1.6820E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	188	2.6421E-03	3.0865E-04	.0000E+00	.0000E+00
69	70	6000.50C	2.3404E-03	11	1.6776E-04	2.2217E-08	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	15	2.0381E-04	3.8289E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	41	5.6861E-04	4.8812E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	3	3.9019E-05	3.5269E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	131	1.8084E-03	1.9376E-04	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	2081	2.7651E-02	2.2237E-03	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	296	4.2549E-03	5.3630E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	3928	4.8310E-02	2.4006E-03	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	9103	1.1384E-01	5.8266E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	286	3.6677E-03	2.9133E-04	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	215	3.0406E-03	3.4349E-04	.0000E+00	.0000E+00
70	71	6000.50C	1.3966E-03	5	7.7480E-05	4.1357E-10	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	19	2.6295E-04	7.5183E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	24	3.8116E-04	1.6848E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.6908E-05	5.7186E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.3536E-05	9.9657E-07	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	749	1.1421E-02	3.6538E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	272	4.2049E-03	2.0266E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	3515	5.2304E-02	1.0773E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1087	1.6137E-02	3.7812E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	98	1.5281E-03	1.4953E-04	.0000E+00	.0000E+00
71	72	5010.50C	1.8319E-02	3551	4.0575E-02	3.9614E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	422	6.4379E-03	3.4694E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	3423	5.4911E-02	1.7284E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	5	7.5304E-05	2.5929E-06	.0000E+00	.0000E+00
72	73	6000.50C	1.3966E-03	19	3.1818E-04	1.7499E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	104	1.4348E-03	5.0883E-05	.0000E+00	.0000E+00

		14000.50C	1.4932E-02	172	2.5632E-03	1.5829E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	15	2.3422E-04	2.0290E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.2903E-05	1.3982E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4373	6.3329E-02	3.3634E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1451	2.1712E-02	1.7303E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	20153	2.7793E-01	9.0938E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6313	8.7794E-02	3.0012E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	516	7.7222E-03	8.1964E-04	.0000E+00	.0000E+00
73	74	1001.50C	6.6667E-01	98184	1.2562E+00	4.6167E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7260	1.0340E-01	5.2167E-05	.0000E+00	.0000E+00
74	75	6000.50C	1.3966E-03	4	5.3023E-05	2.7976E-09	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	19	2.7928E-04	6.5909E-06	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	30	4.6825E-04	2.5957E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	1	1.6889E-05	2.6375E-08	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.8175E-05	1.7923E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	774	1.1774E-02	3.9947E-04	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	328	5.0842E-03	1.6893E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	3459	5.0983E-02	1.2073E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1045	1.5520E-02	3.7843E-04	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	89	1.3604E-03	1.5755E-04	.0000E+00	.0000E+00
75	76	5010.50C	1.8319E-02	3646	4.1765E-02	4.0926E-02	.0000E+00	.0000E+00
		5011.56C	7.5901E-02	373	5.8887E-03	1.5578E-07	.0000E+00	.0000E+00
		13027.50C	9.0530E-01	3365	5.3915E-02	1.9656E-04	.0000E+00	.0000E+00
		29000.50C	4.8109E-04	2	2.0537E-05	8.6172E-08	.0000E+00	.0000E+00
76	77	6000.50C	1.3966E-03	26	3.4421E-04	3.6157E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	102	1.3922E-03	5.7131E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	177	2.6297E-03	1.3749E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	15	2.0986E-04	2.2948E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.4125E-05	1.6465E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	4160	6.0429E-02	3.3398E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1477	2.2248E-02	1.5074E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	19956	2.7380E-01	9.0817E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	6137	8.4815E-02	2.9943E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	513	7.7054E-03	7.6593E-04	.0000E+00	.0000E+00
77	78	1001.50C	6.6667E-01	93829	1.2016E+00	4.3288E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6858	9.8002E-02	5.6494E-05	.0000E+00	.0000E+00
78	79	1001.50C	6.6667E-01	3403	3.0928E-02	1.6446E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	167	1.6946E-03	4.1956E-07	.0000E+00	.0000E+00
79	80	1001.50C	6.6667E-01	4425	3.8632E-02	2.1478E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	208	1.9363E-03	6.3245E-08	.0000E+00	.0000E+00
80	81	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	5	6.7823E-05	4.2262E-06	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	4	7.0122E-05	1.0505E-07	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	16	1.6525E-04	9.2237E-06	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	10	1.2309E-04	4.8735E-06	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
81	82	6000.50C	1.3966E-03	16	2.1556E-04	2.1162E-08	.0000E+00	.0000E+00

		7014.50C	3.9931E-03	71	7.9489E-04	3.4154E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	100	1.3025E-03	1.4862E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	14	1.8231E-04	1.8703E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	4	5.3410E-05	4.8619E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2530	3.1957E-02	2.7992E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	810	1.1110E-02	1.4436E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	13763	1.5697E-01	8.2669E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	4130	4.8086E-02	2.6277E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	283	3.6772E-03	4.6851E-04	.0000E+00	.0000E+00
82	83	1001.50C	6.6667E-01	26617	2.9131E-01	9.9667E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1884	2.4295E-02	1.6147E-05	.0000E+00	.0000E+00
83	84	1001.50C	6.6667E-01	387	3.0327E-03	1.5319E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	16	1.3125E-04	3.8100E-09	.0000E+00	.0000E+00
84	85	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	6000.50C	2.3404E-03	8	9.7012E-05	6.7110E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	12	1.7162E-04	5.8014E-07	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	26	3.4777E-04	3.5241E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	1	5.8118E-06	1.4897E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	95	1.2978E-03	1.0060E-04	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1362	1.7651E-02	9.9076E-04	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	230	3.2400E-03	2.3636E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	2564	3.0453E-02	1.0223E-03	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	6319	7.5045E-02	2.8319E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	198	2.5830E-03	1.4083E-04	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	168	2.3421E-03	2.6094E-04	.0000E+00	.0000E+00
86	87	1001.50C	6.6667E-01	100	8.2918E-04	4.0625E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	12	1.1151E-04	1.4600E-08	.0000E+00	.0000E+00
87	88	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	6000.50C	1.0113E-02	123	1.6281E-03	6.4916E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	47	6.9130E-04	4.8850E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	11	1.3612E-04	3.1146E-07	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.7447E-05	3.1001E-08	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	432	6.0163E-03	2.9951E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	18341	2.1756E-01	4.1616E-03	.0000E+00	.0000E+00
89	90	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

90	91	1001.50C	6.6667E-01	98962	8.4892E-01	4.6325E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4695	4.4515E-02	2.5014E-06	.0000E+00	.0000E+00
TOTAL				3329818	4.2594E+01	7.2144E-01	2.9395E-01	1.0628E-03

TOTAL OVER ALL CELLS FOR EACH NUCLIDE	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)
1001.50C	2597656	3.1975E+01	1.1202E-01	.0000E+00	.0000E+00
2004.50C	15	2.3645E-04	.0000E+00	.0000E+00	.0000E+00
5010.50C	14877	1.7127E-01	1.6855E-01	.0000E+00	.0000E+00
5011.56C	1165	1.8095E-02	8.6288E-07	.0000E+00	.0000E+00
6000.50C	252	3.4843E-03	2.5065E-07	.0000E+00	.0000E+00
7014.50C	507	6.7618E-03	2.7734E-04	.0000E+00	.0000E+00
8016.50C	281791	4.0523E+00	3.0542E-03	.0000E+00	.0000E+00
13027.50C	9870	1.5793E-01	6.8245E-04	.0000E+00	.0000E+00
14000.50C	930	1.3747E-02	9.2469E-05	.0000E+00	.0000E+00
15031.50C	82	1.1507E-03	1.0522E-05	.0000E+00	.0000E+00
16032.50C	25	3.5057E-04	2.6505E-05	.0000E+00	.0000E+00
22000.50C	226	3.1062E-03	2.9436E-04	.0000E+00	.0000E+00
24000.50C	23992	3.3815E-01	2.1897E-02	.0000E+00	.0000E+00
25055.50C	8470	1.2568E-01	1.0432E-02	.0000E+00	.0000E+00
26000.55C	126161	1.6587E+00	6.0967E-02	.0000E+00	.0000E+00
28000.50C	46220	6.0693E-01	2.5741E-02	.0000E+00	.0000E+00
29000.50C	497	6.4356E-03	4.4622E-04	.0000E+00	.0000E+00
40000.50C	49390	7.5515E-01	6.3641E-03	.0000E+00	4.1565E-05
42000.50C	2756	4.0172E-02	4.6091E-03	.0000E+00	.0000E+00
45103.50C	473	6.2478E-03	5.4987E-03	.0000E+00	.0000E+00
47109.50C	40	5.0139E-04	4.1084E-04	.0000E+00	.0000E+00
50000.35C	496	7.5452E-03	1.8220E-04	.0000E+00	.0000E+00
62149.50C	784	9.1101E-03	9.0398E-03	.0000E+00	.0000E+00
63151.55C	17	2.2439E-04	2.2287E-04	.0000E+00	.0000E+00
63153.55C	78	1.0579E-03	9.1841E-04	.0000E+00	.0000E+00
64155.50C	318	3.5591E-03	3.5535E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	104	1.4164E-03	9.1417E-04	2.2833E-05	.0000E+00
92235.50C	18016	3.6336E-01	3.2252E-02	1.5912E-01	.0000E+00
92236.50C	719	1.0871E-02	3.8276E-03	1.8598E-04	.0000E+00
92238.50C	126304	1.9118E+00	1.5775E-01	1.9523E-02	1.0212E-03
93237.55C	165	2.1537E-03	1.6596E-03	3.1781E-05	.0000E+00
94238.50C	46	5.8698E-04	4.4031E-04	1.7679E-05	.0000E+00
94239.55C	12507	2.6065E-01	4.8344E-02	9.8645E-02	.0000E+00
94240.50C	2506	3.4268E-02	3.0106E-02	1.4603E-04	.0000E+00
94241.50C	1904	4.0455E-02	5.7450E-03	1.6132E-02	.0000E+00
94242.50C	83	1.2315E-03	7.7645E-04	1.0901E-05	.0000E+00
95241.50C	350	4.5180E-03	4.1129E-03	4.1985E-05	.0000E+00
95242.50C	7	1.8157E-04	1.2545E-05	6.1085E-05	.0000E+00
95243.50C	19	2.7760E-04	2.1400E-04	4.7059E-06	.0000E+00
96245.35C	0	2.1068E-06	.0000E+00	.0000E+00	.0000E+00

 DUMP NO. 2 ON FILE RUNTPE NPS = 59192 CTM = 96.70

11 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

Jul 28 14:38 1995 File Name: /users/davis/mcnp/MPC12TRP/m12tb4.0

ATTACHMENT XXXV BBABA0000-01717-0200-00001 - Page 40

COMPUTER TIME = 96.85 MINUTES

MCNP VERSION 4A-B 10/04/91

07/28/95 14:38:35

PROBID = 07/28/95 12:26:55

1MCNP VERSION 4A-B LD=10/04/91

07/28/95 13:49:11

PROBID = 07/28/95 13:49:11

INP=mpc12txb OUTP=m12txb.0

```
1- MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12txb) 50% mod in trap
2- C MULTI-PURPOSE CANISTER WITH FLUX TRAPS
3- C CELL SPECIFICATIONS
4- 1 0 57 58 3 -6 -9 FILL=12 IMP:N=1
5- C ASSEMBLY LATTICE DESCRIPTION
6- 2 1 -0.5000 -68 42 -69 41 TRCL=( 15.082519 15.082519 0.) $ SHIFTED EXTRA
7- IMP:N=1 LAT=1 U=1
8- FILL=0:3 0:3 0:0 11 11 1 1 11 1 1 1 1 1 1 1 1 1 1
9- C SS316L SPACERS WELDED TO MPC SHELL
10- 3 1 -0.5000 -27 28 -29 30 IMP:N=1 FILL=10 U=12
11- TRCL=( 16.22300 66.42356 0) $ TOP - .00001 ADDED TO ACTUAL
12- 4 LIKE 3 BUT TRCL=(40.70607 40.70607 0) $ MIDDLE
13- 5 LIKE 3 BUT TRCL=(66.42356 16.22300 0) $ SIDE
14- C FULL ASSEMBLY LATTICE POSITION
15- 6 1 -1.000 64 -66 65 -67 #3 #4 #5 FILL=1 U=12 IMP:N=1
16- C ASSEMBLY CELL TOP
17- 8 1 -1.0000 -32 34 -31 54 #14 #16 #17 #18 #19 #20 #21 #22 #23
18- IMP:N=1 FILL=9 U=11
19- C ASSEMBLY CELL BOTTOM
20- 9 1 -1.0000 -32 34 -54 33 #15 #24 #25 #26 #27 #28 #29 #30 #31
21- IMP:N=1 FILL=9 U=11
22- C TOP OF ASSEMBLY OUTSIDE LATTICE
23- 10 1 -1.0000 -55 56 31 IMP:N=1 FILL=5 U=11
24- C RIGHT SIDE OF ASSEMBLY OUTSIDE LATTICE
25- 11 1 -1.0000 32 55 56 IMP:N=1 FILL=6 U=11
26- C BOTTOM OF ASSEMBLY OUTSIDE LATTICE
27- 12 1 -1.0000 55 -56 -33 IMP:N=1 FILL=7 U=11
28- C LEFT SIDE OF ASSEMBLY OUTSIDE LATTICE
29- 13 1 -1.0000 -34 -55 -56 IMP:N=1 FILL=8 U=11
30- C CONTROL AND INSTRUMENTATION TUBE LATTICE POSITIONS IN ASSEMBLY
31- 14 1 -1.0000 48 -49 -51 52 IMP:N=1 FILL=4 U=11 $ INSTR. UPPER
32- 15 1 -1.0000 48 -49 50 -53 IMP:N=1 FILL=4 U=11 $ INSTR. LOWER
33- 16 1 -1.0000 48 -49 50 -51 TRCL=(2.8854 2.8854 0.)
34- IMP:N=1 FILL=3 U=11 $ CONTROL POSITION
35- 17 LIKE 16 BUT TRCL=( 7.2135 2.8854 0.) $ CONTROL POSITION
36- 18 LIKE 16 BUT TRCL=( 5.7708 5.7708 0.) $ CONTROL POSITION
37- 19 LIKE 16 BUT TRCL=( 2.8854 7.2135 0.) $ CONTROL POSITION
38- 20 LIKE 16 BUT TRCL=(-2.8854 2.8854 0.) $ CONTROL POSITION
39- 21 LIKE 16 BUT TRCL=(-7.2135 2.8854 0.) $ CONTROL POSITION
40- 22 LIKE 16 BUT TRCL=(-5.7708 5.7708 0.) $ CONTROL POSITION
41- 23 LIKE 16 BUT TRCL=(-2.8854 7.2135 0.) $ CONTROL POSITION
42- 24 LIKE 16 BUT TRCL=(-2.8854 -2.8854 0.) $ CONTROL POSITION
43- 25 LIKE 16 BUT TRCL=(-7.2135 -2.8854 0.) $ CONTROL POSITION
44- 26 LIKE 16 BUT TRCL=(-5.7708 -5.7708 0.) $ CONTROL POSITION
45- 27 LIKE 16 BUT TRCL=(-2.8854 -7.2135 0.) $ CONTROL POSITION
46- 28 LIKE 16 BUT TRCL=( 2.8854 -2.8854 0.) $ CONTROL POSITION
47- 29 LIKE 16 BUT TRCL=( 7.2135 -2.8854 0.) $ CONTROL POSITION
48- 30 LIKE 16 BUT TRCL=( 5.7708 -5.7708 0.) $ CONTROL POSITION
49- 31 LIKE 16 BUT TRCL=( 2.8854 -7.2135 0.) $ CONTROL POSITION
50- C PIN LATTICE DESCRIPTION
51- 32 1 -1.0000 -13 14 -15 16 IMP:N=1 LAT=1 FILL=2 U=9
52- C FUEL ROD
53- 33 2 7.1192-2 -17 -4 IMP:N=1 U=2
54- 34 4 -6.6000 -17 4 -5 IMP:N=1 U=2
55- 35 1 -1.0000 -17 5 IMP:N=1 U=2
56- 36 3 -1.785-3 17 -18 -5 IMP:N=1 U=2
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57- 37 1 -1.0000 17 -18 5 IMP:N=1 U=2
58- 38 4 -6.6000 18 -19 -5 IMP:N=1 U=2
59- 39 1 -1.0000 18 -19 5 IMP:N=1 U=2
60- 40 1 -1.0000 19 IMP:N=1 U=2
61- C CONTROL ROD/GUIDE TUBE
62- 41 1 -1.0000 -21 -5 IMP:N=1 U=3
63- 42 1 -1.0000 -21 5 IMP:N=1 U=3
64- 43 4 -6.6000 21 -22 IMP:N=1 U=3
65- 44 1 -1.0000 22 -23 IMP:N=1 U=3
66- 45 4 -6.6000 23 -24 IMP:N=1 U=3
67- 46 1 -1.0000 24 IMP:N=1 U=3
68- C INSTRUMENTATION TUBE
69- 47 1 -1.0000 -25 IMP:N=1 U=4
70- 48 4 -6.6000 25 -26 IMP:N=1 U=4
71- 49 1 -1.0000 26 IMP:N=1 U=4
72- C WATER GAP - ASSEMBLY TOP
73- 50 1 -1.0000 -35 -4 IMP:N=1 U=5
74- C SS TUBE WALL - ASSEMBLY TOP
75- 51 8 -8.2380 35 -44 -4 IMP:N=1 U=5
76- C AL-B WALL - ASSEMBLY TOP
77- 52 6 -2.700 44 -46 -4 IMP:N=1 U=5
78- C SS WALL - ASSEMBLY TOP
79- 53 8 -8.2380 46 -4 -39 IMP:N=1 U=5
80- C FLUX TRAP .986" - ASSEMBLY TOP
81- 54 1 -0.5000 39 -4 IMP:N=1 U=5
82- C WATER ABOVE BASKET
83- 55 1 -1.000 4 IMP:N=1 U=5
84- C WATER GAP - ASSEMBLY RIGHT
85- 56 1 -1.0000 -36 -4 IMP:N=1 U=6
86- C SS TUBE WALL - ASSEMBLY RIGHT
87- 57 8 -8.2380 36 -43 -4 IMP:N=1 U=6
88- C AL-B WALL - ASSEMBLY RIGHT
89- 58 6 -2.7000 43 -45 -4 IMP:N=1 U=6
90- C SS WALL - ASSEMBLY RIGHT
91- 59 8 -8.2380 45 -4 -40 IMP:N=1 U=6
92- C FLUX TRAP - .986" - ASSEMBLY RIGHT
93- 60 1 -0.5000 40 -4 IMP:N=1 U=6
94- C WATER ABOVE BASKET
95- 61 1 -1.000 4 IMP:N=1 U=6
96- C WATER GAP - ASSEMBLY BOTTOM
97- 62 1 -1.0000 37 -4 IMP:N=1 U=7
98- C SS TUBE WALL - ASSEMBLY BOTTOM
99- 63 8 -8.2380 -37 -4 IMP:N=1 U=7
100- C WATER ABOVE BASKET
101- 64 1 -1.000 4 IMP:N=1 U=7
102- C WATER GAP - ASSEMBLY LEFT
103- 65 1 -1.0000 38 -4 IMP:N=1 U=8
104- C LOWER ST COMB - ASSEMBLY LEFT
105- 66 8 -8.2380 -38 -4 IMP:N=1 U=8
106- C WATER ABOVE BASKET
107- 67 1 -1.000 4 IMP:N=1 U=8
108- C SS316L SPACER DIMENSIONS- UPPER RIGHT QUADRANT
109- 68 1 -1.0000 74 75 IMP:N=1 U=10
110- 69 8 -8.2380 -75 55 IMP:N=1 U=10 $ BOTTOM
111- 70 5 -8.2380 -74 -55 IMP:N=1 U=10 $ LEFT
112- C AXIS MATERIALS
113- 71 8 -8.2380 -57 59 -55 -9 3 -4 IMP:N=1 $ LEFT
114- 72 6 -2.70000 -59 61 -55 -9 3 -4 IMP:N=1
115- 73 8 -8.2380 -61 82 -55 -9 3 -4 IMP:N=1
116- 74 1 -1.0000 -82 1 -9 -55 3 -4 IMP:N=1 $ FLUX TRAP

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117- 75 8 -8.2380 -58 60 55 -9 3 -4 IMP:N=1 $ BOTTOM
118- 76 6 -2.7000 -60 62 55 -9 3 -4 IMP:N=1
119- 77 8 -8.2380 -62 83 55 -9 3 -4 IMP:N=1
120- 78 1 -1.0000 -83 2 55 -9 3 -4 IMP:N=1 $ FLUX TRAP
121- 79 1 -1.0000 -57 1 -55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
122- 80 1 -1.0000 -58 2 55 4 -6 -9 3 IMP:N=1 $ WATER ABOVE BASKET
123- C SS316L MPC LID
124- 81 8 -8.2380 1 2 -9 6 -7 IMP:N=1
125- C SS316L MPC LINER
126- 82 8 -8.2380 9 -10 1 2 3 -7 IMP:N=1
127- C GAP SS316L/INNER 825 BARRIER
128- 83 1 -1.0000 10 -11 1 2 3 -71 IMP:N=1
129- C GAP BETWEEN MPC LID AND INNER BARRIER LID
130- 84 1 -1.0000 -10 1 2 7 -71 IMP:N=1
131- C INNER BARRIER LID - ALLOY 825
132- 85 5 -8.1400 1 2 -11 71 -8 IMP:N=1
133- C INNER BARRIER - ALLOY 825
134- 86 5 -8.1400 11 -12 1 2 3 -8 IMP:N=1
135- C GAP BETWEEN INNER BARRIER LID AND OUTER BARRIER LID
136- 87 1 -1.0000 8 -72 -12 1 2 IMP:N=1
137- C OUTER BARRIER LID A516 CARBON STEEL
138- 88 7 -7.832 -12 72 -73 1 2 IMP:N=1
139- C OUTER BARRIER - A516 CARBON STEEL
140- 89 7 -7.832 1 2 3 -73 12 -70 IMP:N=1
141- C WATER, ENDS
142- 90 1 -1.0000 1 2 73 -80 -81 IMP:N=1
143- C WATER, SIDE
144- 91 1 -1.0000 1 2 3 70 -73 -81 IMP:N=1
145- C OUTSIDE WORLD
146- 92 0 -1:-2:-3:80:81 IMP:N=0
147-
148- C SURFACE SPECIFICATIONS
149- 1* PX 0.0
150- 2* PY 0.00
151- 3* PZ 0.00
152- 4 PZ 203.2000 $ TOP ACTIVE FUEL
153- 5 PZ 222.2500 $ TOP FUEL HARDWARE
154- 6 PZ 229.2500 $ TOP FUEL REGION
155- 7 PZ 231.7500 $ TOP ALLOY 825 LID
156- 8 PZ 248.8500 $ TOP INNER BARRIER ALLOY 825 LID
157- 9 CZ 60.7949 $ ID OF WASTE CONTAINER
158- 10 CZ 63.0174 $ OD OF ALLOY 825 CONTAINER
159- 11 CZ 64.5250 $ ID OF INNER BARRIER ALLOY 825
160- 12 CZ 66.5250 $ OD OF INNER BARRIER ALLOY 825
161- C PIN LATTICE BOUNDS
162- 13 PX 0.72135
163- 14 PX -0.72135
164- 15 PY 0.72135
165- 16 PY -0.72135
166- C FUEL ROD
167- 17 CZ 0.468122
168- 18 CZ 0.478790
169- 19 CZ 0.546100
170- C CONTROL ROD/GUIDE TUBE
171- 20 CZ 0.49022 $ EXCESSED FOR CURRENT DCRA
172- 21 CZ 0.50292
173- 22 CZ 0.56007
174- 23 CZ 0.63246
175- 24 CZ 0.67310
176- C INSTRUMENTATION TUBE

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177- 25 CZ 0.56007
178- 26 CZ 0.62611
179- C CELL FOR ALLOY 825 SPACERS WELDED TO MPC SHELL
180- 27 PX 12.80923
181- 28 PX -12.80923
182- 29 PY 12.80923
183- 30 PY -12.80923
184- C ASSEMBLY LATTICE BOUNDS
185- 31 PY 10.82024 $ ACTUAL 10.82025
186- 32 PX 10.82024 $ ACTUAL 10.82025
187- 33 PY -10.82024 $ ACTUAL -10.82025
188- 34 PX -10.82024 $ ACTUAL -10.82025
189- 35 PY 11.4300
190- 36 PX 11.4300
191- 37 PY -11.4300
192- 38 PX -11.4300
193- 39 PY 12.17930
194- 40 PX 12.17930
195- 41 PY -11.66876
196- 42 PX -11.66876
197- 43 PX 11.66876
198- 44 PY 11.66876
199- 45 PX 11.94054
200- 46 PY 11.94054
201- C BLANK PIN CELL
202- 48 PX -0.7213
203- 49 PX 0.7213
204- 50 PY -0.7213
205- 51 PY 0.7213
206- 52 PY 0.0001
207- 53 PY -0.0001
208- 54 PY 0.0
209- 55 P 1. -1. 0. 0.
210- 56 P 1. 1. 0. 0. $ 24.35
211- C EXTRA CARDS
212- 57 PX 3.41376 $ OFFSET DUE TO COLLAPSED CENTRAL AXIS FLUX TRAP
213- 58 PY 3.41376
214- 59 PX 3.17500
215- 60 PY 3.17500
216- 61 PX 2.540
217- 62 PY 2.540
218- 64 PX -.0000005
219- 65 PY -.0000005
220- 66 PX 95.
221- 67 PY 95.
222- 68 PX 14.68374 $ FLUX TRAP WATER GAP
223- 69 PY 14.68374 $ FLUX TRAP WATER GAP
224- C OUTER BARRIER
225- 70 CZ 76.5250 $OD OF OUTER BARRIER - A516 CARBON STEEL
226- 71 PZ 246.3500 $ GAP BETWEEN MPC AND INNER BARRIER LIDS
227- 72 PZ 271.3500 $ GAP BETWEEN INNER AND OUTER BARRIER LIDS
228- 73 PZ 282.3500 $TOP OF OUTER BARRIER
229- 74 PX -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
230- 75 PY -11.85672 $ INNER DIMENSION OF ALLOY 825 SPACES
231- 80 PZ 312.3500 $ WET TUFF OVERPACK, END
232- 81 CZ 106.5250 $ WET TUFF OVERPACK, SIDE
233- C ADDED OFFSET (.5") FOR CENTRAL FLUX TRAP
234- 82 PX 1.270
235- 83 PY 1.270
236-

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[illegible]

297-	C	4.87	43.23	200.	4.87	47.55	200.	9.20	30.24	200.
298-	C	9.20	34.57	200.	9.20	38.90	200.	9.20	43.23	200.
299-	C	9.20	47.55	200.	13.53	30.24	200.	13.53	34.57	200.
300-	C	13.53	38.90	200.	13.53	43.23	200.	17.86	30.24	200.
301-	C	17.86	34.57	200.	17.86	38.90	200.	17.86	43.23	200.
302-	C	17.86	47.55	200.	22.19	30.24	200.	22.19	34.57	200.
303-	C	22.19	38.90	200.	22.19	43.23	200.	22.19	47.55	200.
304-	C	30.24	4.87	10.	30.24	9.20	10.	30.24	13.53	10.
305-	C	30.24	17.86	10.	30.24	22.19	10.	34.57	4.87	10.
306-	C	34.57	9.20	10.	34.57	13.53	10.	34.57	17.86	10.
307-	C	34.57	22.19	10.	38.90	4.87	10.	38.90	9.20	10.
308-	C	38.90	17.86	10.	38.90	22.19	10.	43.23	4.87	10.
309-	C	43.23	9.20	10.	43.23	13.53	10.	43.23	17.86	10.
310-	C	43.23	22.19	10.	47.55	4.87	10.	47.55	9.20	10.
311-	C	47.55	13.53	10.	47.55	17.86	10.	47.55	22.19	10.
312-	C	30.24	4.87	75.	30.24	9.20	75.	30.24	13.53	75.
313-	C	30.24	17.86	75.	30.24	22.19	75.	34.57	4.87	75.
314-	C	34.57	9.20	75.	34.57	13.53	75.	34.57	17.86	75.
315-	C	34.57	22.19	75.	38.90	4.87	75.	38.90	9.20	75.
316-	C	38.90	17.86	75.	38.90	22.19	75.	43.23	4.87	75.
317-	C	43.23	9.20	75.	43.23	13.53	75.	43.23	17.86	75.
318-	C	43.23	22.19	75.	47.55	4.87	75.	47.55	9.20	75.
319-	C	47.55	13.53	75.	47.55	17.86	75.	47.55	22.19	75.
320-	C	30.24	4.87	150.	30.24	9.20	150.	30.24	13.53	150.
321-	C	30.24	17.86	150.	30.24	22.19	150.	34.57	4.87	150.
322-	C	34.57	9.20	150.	34.57	13.53	150.	34.57	17.86	150.
323-	C	34.57	22.19	150.	38.90	4.87	150.	38.90	9.20	150.
324-	C	38.90	17.86	150.	38.90	22.19	150.	43.23	4.87	150.
325-	C	43.23	9.20	150.	43.23	13.53	150.	43.23	17.86	150.
326-	C	43.23	22.19	150.	47.55	4.87	150.	47.55	9.20	150.
327-	C	47.55	13.53	150.	47.55	17.86	150.	47.55	22.19	150.
328-	C	30.24	4.87	200.	30.24	9.20	200.	30.24	13.53	200.
329-	C	30.24	17.86	200.	30.24	22.19	200.	34.57	4.87	200.
330-	C	34.57	9.20	200.	34.57	13.53	200.	34.57	17.86	200.
331-	C	34.57	22.19	200.	38.90	4.87	200.	38.90	9.20	200.
332-	C	38.90	17.86	200.	38.90	22.19	200.	43.23	4.87	200.
333-	C	43.23	9.20	200.	43.23	13.53	200.	43.23	17.86	200.
334-	C	43.23	22.19	200.	47.55	4.87	200.	47.55	9.20	200.
335-	C	47.55	13.53	200.	47.55	17.86	200.	47.55	22.19	200.
336-	C	MATERIAL SPECIFICATIONS								
337-	C	WATER AT 300 K								
338-	M1	1001.50C	6.6878-2		8016.50C	3.3439-2				
339-	MT1	LWTR.01T								
340-	C	3.75%/0 GWD/0 YEAR -- UO2								
341-	C	M2	8016.50C	4.6973E-02						
342-	C	92235.50C	8.9111E-04							
343-	C	92238.50C	2.2583E-02							
344-	C	3.00%/20 GWD/5 YEAR -- UO2								
345-	M2	8016.50C	4.7767E-02							
346-		45103.50C	1.7033E-05							
347-		47109.50C	2.0436E-06							
348-		62149.50C	1.3260E-07							
349-		63151.55C	1.6963E-08							
350-		63153.55C	2.1975E-06							
351-		64155.50C	1.0128E-07							
352-		92233.50C	3.2712E-11							
353-		92234.50C	4.9053E-06							
354-		92235.50C	3.1513E-04							
355-		92236.50C	7.0520E-05							
356-		92238.50C	2.2844E-02							

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357-          93237.55C 5.4646E-06
358-          94238.50C 9.9680E-07
359-          94239.55C 1.0790E-04
360-          94240.50C 3.0974E-05
361-          94241.50C 1.4571E-05
362-          94242.50C 3.7204E-06
363-          95241.50C 4.3471E-06
364-          95242.50C 1.3739E-08
365-          95243.50C 4.1755E-07
366-          96245.35C 1.4221E-09
367-      C      He AT 10 ATM DENSITY=1.785E-3 GM/CC
368-      M3      2004.50C 1.0
369-      C      ZIRCALOY-4
370-      M4      8016.50C -0.0012 24000.50C -0.0010 26000.55C -0.0020
371-          40000.50C -0.9818 50000.35C -0.0140
372-      C      ALLOY 825
373-      M5      6000.50C -0.0005 13027.50C -0.0020 14000.50C -0.0050
374-          16032.50C -0.0003 22000.50C -0.0090 24000.50C -0.2150
375-          25055.50C -0.0100 26000.55C -0.2857 28000.50C -0.4200
376-          29000.50C -0.0250 42000.50C -0.0300
377-      C      1100 ALUMINUM ALLOY
378-      M6      13027.50C -0.99880 29000.50C -0.00120
379-      C      A516 CARBON STEEL
380-      M7      6000.50C -0.0022 14000.50C -0.00275 15031.50C -0.00035
381-          16032.50C -0.00035 25055.50C -0.0090
382-          26000.55C -0.98535
383-      C      SS316L
384-      M8      6000.50C -0.00030 7014.50C -0.00100 14000.50C -0.00750
385-          15031.50C -0.00045 16032.50C -0.00030 24000.50C -0.17000
386-          25055.50C -0.02000 26000.55C -0.64545 28000.50C -0.12000
387-          42000.50C -0.02500
388-      C      TALLIES
389-      PRINT

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SURFACES 16048 AND 19048 OF CELL      8 ARE THE SAME.      19048 WILL BE DELETED.
SURFACES 16049 AND 19049 OF CELL      8 ARE THE SAME.      19049 WILL BE DELETED.
SURFACES 16050 AND 17050 OF CELL      8 ARE THE SAME.      17050 WILL BE DELETED.
SURFACES 16050 AND 20050 OF CELL      8 ARE THE SAME.      20050 WILL BE DELETED.
SURFACES 16050 AND 21050 OF CELL      8 ARE THE SAME.      21050 WILL BE DELETED.
SURFACES 16051 AND 17051 OF CELL      8 ARE THE SAME.      17051 WILL BE DELETED.
SURFACES 16051 AND 20051 OF CELL      8 ARE THE SAME.      20051 WILL BE DELETED.
SURFACES 16051 AND 21051 OF CELL      8 ARE THE SAME.      21051 WILL BE DELETED.
SURFACES 18050 AND 22050 OF CELL      8 ARE THE SAME.      22050 WILL BE DELETED.
SURFACES 18051 AND 22051 OF CELL      8 ARE THE SAME.      22051 WILL BE DELETED.
SURFACES 19050 AND 23050 OF CELL      8 ARE THE SAME.      23050 WILL BE DELETED.
SURFACES 19051 AND 23051 OF CELL      8 ARE THE SAME.      23051 WILL BE DELETED.
SURFACES 20048 AND 23048 OF CELL      8 ARE THE SAME.      23048 WILL BE DELETED.

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SURFACES 20049 AND 23049 OF CELL 8 ARE THE SAME. 23049 WILL BE DELETED.
 SURFACES 24048 AND 27048 OF CELL 9 ARE THE SAME. 27048 WILL BE DELETED.
 SURFACES 24049 AND 27049 OF CELL 9 ARE THE SAME. 27049 WILL BE DELETED.
 SURFACES 24050 AND 25050 OF CELL 9 ARE THE SAME. 25050 WILL BE DELETED.
 SURFACES 24050 AND 28050 OF CELL 9 ARE THE SAME. 28050 WILL BE DELETED.
 SURFACES 24050 AND 29050 OF CELL 9 ARE THE SAME. 29050 WILL BE DELETED.
 SURFACES 24051 AND 25051 OF CELL 9 ARE THE SAME. 25051 WILL BE DELETED.
 SURFACES 24051 AND 28051 OF CELL 9 ARE THE SAME. 28051 WILL BE DELETED.
 SURFACES 24051 AND 29051 OF CELL 9 ARE THE SAME. 29051 WILL BE DELETED.
 SURFACES 26050 AND 30050 OF CELL 9 ARE THE SAME. 30050 WILL BE DELETED.
 SURFACES 26051 AND 30051 OF CELL 9 ARE THE SAME. 30051 WILL BE DELETED.
 SURFACES 27050 AND 31050 OF CELL 9 ARE THE SAME. 31050 WILL BE DELETED.
 SURFACES 27051 AND 31051 OF CELL 9 ARE THE SAME. 31051 WILL BE DELETED.
 SURFACES 28048 AND 31048 OF CELL 9 ARE THE SAME. 31048 WILL BE DELETED.
 SURFACES 28049 AND 31049 OF CELL 9 ARE THE SAME. 31049 WILL BE DELETED.

WARNING. 28 SURFACES WERE DELETED FOR BEING THE SAME AS OTHERS.
 1 INITIAL SOURCE FROM FILE SRCTP

ORIGINAL NUMBER OF POINTS	3114
POINTS NOT IN ANY CELL	0
POINTS IN CELLS OF ZERO IMPORTANCE	0
POINTS IN VOID CELLS	0
POINTS IN AMBIGUOUS CELLS	0
TOTAL POINTS REJECTED	0
POINTS REMAINING	3114
POINTS AFTER EXPANSION OR CONTRACTION	3011
NOMINAL SOURCE SIZE	3000

INITIAL GUESS FOR K(EFF.) 1.000000

CYCLES TO SKIP BEFORE TALLYING 5

TOTAL FISSION NUBAR DATA ARE BEING USED.
 1 MATERIAL COMPOSITION

PRINT TABLE 40

THE SUM OF THE FRACTIONS OF MATERIAL 1 WAS 1.003170E-01
 THE SUM OF THE FRACTIONS OF MATERIAL 2 WAS 7.119149E-02
 THE SUM OF THE FRACTIONS OF MATERIAL 5 WAS 1.002500E+00
 THE SUM OF THE FRACTIONS OF MATERIAL 8 WAS 9.900000E-01

MATERIAL
 NUMBER COMPONENT NUCLIDE, ATOM FRACTION

1	1001,	.66667	8016,	.33333				
	ASSOCIATED THERMAL S(A,B) DATA SETS: LWTR.01T							
2	8016,	.67097	45103,	.00024	47109,	.00003	62149,	.00000
	63151,	.00000	63153,	.00003	64155,	.00000	92233,	.00000
	92234,	.00007	92235,	.00443	92236,	.00099	92238,	.32088
	93237,	.00008	94238,	.00001	94239,	.00152	94240,	.00044
	94241,	.00020	94242,	.00005	95241,	.00006	95242,	.00000
	95243,	.00001	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00681	24000,	.00175	26000,	.00325	40000,	.97748
	50000,	.01071						
5	6000,	.00234	13027,	.00417	14000,	.01001	16032,	.00053
	22000,	.01057	24000,	.23247	25055,	.01023	26000,	.28763
	28000,	.40235	29000,	.02212	42000,	.01758		
6	13027,	.99949	29000,	.00051				
7	6000,	.01011	14000,	.00541	15031,	.00062	16032,	.00060
	25055,	.00905	26000,	.97421				
8	6000,	.00140	7014,	.00399	14000,	.01493	15031,	.00081
	16032,	.00052	24000,	.18282	25055,	.02036	26000,	.64626
	28000,	.11433	42000,	.01457				

1 MATERIAL
NUMBER COMPONENT NUCLIDE, MASS FRACTION

PRINT TABLE 40

1	1001,	.11191	8016,	.88809				
2	8016,	.12057	45103,	.00028	47109,	.00004	62149,	.00000
	63151,	.00000	63153,	.00005	64155,	.00000	92233,	.00000
	92234,	.00018	92235,	.01169	92236,	.00263	92238,	.85819
	93237,	.00020	94238,	.00004	94239,	.00407	94240,	.00117
	94241,	.00055	94242,	.00014	95241,	.00017	95242,	.00000
	95243,	.00002	96245,	.00000				
3	2004,	1.00000						
4	8016,	.00120	24000,	.00100	26000,	.00200	40000,	.98180
	50000,	.01400						
5	6000,	.00050	13027,	.00200	14000,	.00499	16032,	.00030
	22000,	.00898	24000,	.21446	25055,	.00998	26000,	.28499
	28000,	.41895	29000,	.02494	42000,	.02993		
6	13027,	.99880	29000,	.00120				
7	6000,	.00220	14000,	.00275	15031,	.00035	16032,	.00035
	25055,	.00900	26000,	.98535				
8	6000,	.00030	7014,	.00101	14000,	.00758	15031,	.00045
	16032,	.00030	24000,	.17172	25055,	.02020	26000,	.65197
	28000,	.12121	42000,	.02525				

WARNING. 4 OF THE MATERIALS HAD UNNORMALIZED FRACTIONS.

WARNING. 2 OF THE MATERIALS APPEAR AT MORE THAN ONE DENSITY.
1 CELL VOLUMES AND MASSES

PRINT TABLE 50

CELL	ATOM DENSITY	GRAM DENSITY	INPUT VOLUME	CALCULATED VOLUME	MASS	PIECES	REASON VOLUME NOT CALCULATED
1	1	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
2	2	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	INFINITE
3	3	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	INFINITE
4	4	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	INFINITE
5	5	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	INFINITE
6	6	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
7	8	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE
8	9	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	INFINITE

9	10	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
10	11	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
11	12	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
12	13	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
13	14	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
14	15	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
15	16	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
16	17	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
17	18	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
18	19	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
19	20	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
20	21	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
21	22	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
22	23	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
23	24	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
24	25	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
25	26	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
26	27	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
27	28	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
28	29	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
29	30	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
30	31	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
31	32	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
32	33	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
33	34	4.37620E-02	6.60000E+00	.00000E+00	1.31148E+01	8.65579E+01	1	
34	35	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
35	36	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
36	37	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
37	38	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
38	39	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
39	40	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
40	41	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
41	42	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
42	43	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
43	44	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
44	45	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
45	46	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
46	47	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
47	48	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
48	49	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
49	50	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
50	51	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
51	52	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
52	53	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
53	54	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
54	55	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
55	56	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
56	57	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
57	58	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
58	59	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
59	60	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
60	61	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
61	62	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
62	63	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
63	64	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
64	65	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
65	66	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
66	67	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
67	68	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
68	69	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE

69	70	8.80188E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	INFINITE
70	71	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
71	72	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
72	73	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
73	74	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
74	75	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
75	76	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
76	77	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
77	78	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
78	79	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
79	80	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
80	81	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
81	82	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
82	83	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
83	84	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
84	85	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
85	86	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
86	87	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
87	88	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
88	89	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
89	90	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
90	91	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC
91	92	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	ASYMMETRIC

1SURFACE AREAS

PRINT TABLE 50

SURFACE	INPUT AREA	CALCULATED AREA	REASON AREA NOT CALCULATED
1	1	.00000E+00	.00000E+00
2	2	.00000E+00	.00000E+00
3	3	.00000E+00	.00000E+00
4	4	.00000E+00	.00000E+00
5	5	.00000E+00	1.73150E+00
6	6	.00000E+00	.00000E+00
7	7	.00000E+00	.00000E+00
8	8	.00000E+00	.00000E+00
9	9	.00000E+00	.00000E+00
10	10	.00000E+00	.00000E+00
11	11	.00000E+00	.00000E+00
12	12	.00000E+00	.00000E+00
13	13	.00000E+00	.00000E+00
14	14	.00000E+00	.00000E+00
15	15	.00000E+00	.00000E+00
16	16	.00000E+00	.00000E+00
17	17	.00000E+00	.00000E+00
18	18	.00000E+00	.00000E+00
19	19	.00000E+00	.00000E+00
20	21	.00000E+00	.00000E+00
21	22	.00000E+00	.00000E+00
22	23	.00000E+00	.00000E+00
23	24	.00000E+00	.00000E+00
24	25	.00000E+00	.00000E+00
25	26	.00000E+00	.00000E+00
26	27	.00000E+00	.00000E+00
27	28	.00000E+00	.00000E+00
28	29	.00000E+00	.00000E+00
29	30	.00000E+00	.00000E+00
30	31	.00000E+00	.00000E+00
31	32	.00000E+00	.00000E+00
32	33	.00000E+00	.00000E+00

33	34	.00000E+00	.00000E+00	INFINITE
34	35	.00000E+00	.00000E+00	INFINITE
35	36	.00000E+00	.00000E+00	INFINITE
36	37	.00000E+00	.00000E+00	INFINITE
37	38	.00000E+00	.00000E+00	INFINITE
38	39	.00000E+00	.00000E+00	INFINITE
39	40	.00000E+00	.00000E+00	INFINITE
40	41	.00000E+00	.00000E+00	NOT A BOUNDARY
41	42	.00000E+00	.00000E+00	NOT A BOUNDARY
42	43	.00000E+00	.00000E+00	INFINITE
43	44	.00000E+00	.00000E+00	INFINITE
44	45	.00000E+00	.00000E+00	INFINITE
45	46	.00000E+00	.00000E+00	INFINITE
46	48	.00000E+00	.00000E+00	INFINITE
47	49	.00000E+00	.00000E+00	INFINITE
48	50	.00000E+00	.00000E+00	INFINITE
49	51	.00000E+00	.00000E+00	INFINITE
50	52	.00000E+00	.00000E+00	INFINITE
51	53	.00000E+00	.00000E+00	INFINITE
52	54	.00000E+00	.00000E+00	INFINITE
53	55	.00000E+00	.00000E+00	ASYMMETRIC
54	56	.00000E+00	.00000E+00	INFINITE
55	57	.00000E+00	.00000E+00	ASYMMETRIC
56	58	.00000E+00	.00000E+00	ASYMMETRIC
57	59	.00000E+00	.00000E+00	ASYMMETRIC
58	60	.00000E+00	.00000E+00	ASYMMETRIC
59	61	.00000E+00	.00000E+00	ASYMMETRIC
60	62	.00000E+00	.00000E+00	ASYMMETRIC
61	64	.00000E+00	.00000E+00	INFINITE
62	65	.00000E+00	.00000E+00	INFINITE
63	66	.00000E+00	.00000E+00	INFINITE
64	67	.00000E+00	.00000E+00	INFINITE
65	68	.00000E+00	.00000E+00	NOT A BOUNDARY
66	69	.00000E+00	.00000E+00	NOT A BOUNDARY
67	70	.00000E+00	.00000E+00	ASYMMETRIC
68	71	.00000E+00	.00000E+00	ASYMMETRIC
69	72	.00000E+00	.00000E+00	ASYMMETRIC
70	73	.00000E+00	.00000E+00	ASYMMETRIC
71	74	.00000E+00	.00000E+00	INFINITE
72	75	.00000E+00	.00000E+00	INFINITE
73	80	.00000E+00	.00000E+00	ASYMMETRIC
74	81	.00000E+00	.00000E+00	ASYMMETRIC
75	82	.00000E+00	.00000E+00	ASYMMETRIC
76	83	.00000E+00	.00000E+00	ASYMMETRIC
77	2068	.00000E+00	.00000E+00	INFINITE
78	2042	.00000E+00	.00000E+00	INFINITE
79	2069	.00000E+00	.00000E+00	INFINITE
80	2041	.00000E+00	.00000E+00	INFINITE
81	3027	.00000E+00	.00000E+00	INFINITE
82	3028	.00000E+00	.00000E+00	INFINITE
83	3029	.00000E+00	.00000E+00	INFINITE
84	3030	.00000E+00	.00000E+00	INFINITE
85	4027	.00000E+00	.00000E+00	INFINITE
86	4028	.00000E+00	.00000E+00	INFINITE
87	4029	.00000E+00	.00000E+00	INFINITE
88	4030	.00000E+00	.00000E+00	INFINITE
89	5027	.00000E+00	.00000E+00	INFINITE
90	5028	.00000E+00	.00000E+00	INFINITE
91	5029	.00000E+00	.00000E+00	INFINITE
92	5030	.00000E+00	.00000E+00	INFINITE

93 16048 .00000E+00 .00000E+00 INFINITE
 94 16049 .00000E+00 .00000E+00 INFINITE
 95 16050 .00000E+00 .00000E+00 INFINITE
 96 16051 .00000E+00 .00000E+00 INFINITE
 97 17048 .00000E+00 .00000E+00 INFINITE
 98 17049 .00000E+00 .00000E+00 INFINITE
 99 18048 .00000E+00 .00000E+00 INFINITE
 100 18049 .00000E+00 .00000E+00 INFINITE
 101 18050 .00000E+00 .00000E+00 INFINITE
 102 18051 .00000E+00 .00000E+00 INFINITE
 103 19050 .00000E+00 .00000E+00 INFINITE
 104 19051 .00000E+00 .00000E+00 INFINITE
 105 20048 .00000E+00 .00000E+00 INFINITE
 106 20049 .00000E+00 .00000E+00 INFINITE
 107 21048 .00000E+00 .00000E+00 INFINITE
 108 21049 .00000E+00 .00000E+00 INFINITE
 109 22048 .00000E+00 .00000E+00 INFINITE
 110 22049 .00000E+00 .00000E+00 INFINITE
 111 24048 .00000E+00 .00000E+00 INFINITE
 112 24049 .00000E+00 .00000E+00 INFINITE
 113 24050 .00000E+00 .00000E+00 INFINITE
 114 24051 .00000E+00 .00000E+00 INFINITE
 115 25048 .00000E+00 .00000E+00 INFINITE
 116 25049 .00000E+00 .00000E+00 INFINITE
 117 26048 .00000E+00 .00000E+00 INFINITE
 118 26049 .00000E+00 .00000E+00 INFINITE
 119 26050 .00000E+00 .00000E+00 INFINITE
 120 26051 .00000E+00 .00000E+00 INFINITE
 121 27050 .00000E+00 .00000E+00 INFINITE
 122 27051 .00000E+00 .00000E+00 INFINITE
 123 28048 .00000E+00 .00000E+00 INFINITE
 124 28049 .00000E+00 .00000E+00 INFINITE
 125 29048 .00000E+00 .00000E+00 INFINITE
 126 29049 .00000E+00 .00000E+00 INFINITE
 127 30048 .00000E+00 .00000E+00 INFINITE
 128 30049 .00000E+00 .00000E+00 INFINITE
 1CELLS

PRINT TABLE 60

CELL	MAT	ATOM DENSITY	GRAM DENSITY	VOLUME	MASS	PIECES	NEUTRON IMPORTANCE
1	1	0	.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
2	2	1S 5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	1.0000E+00
3	3	1S 5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	1.0000E+00
4	4	1S 5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	1.0000E+00
5	5	1S 5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	1.0000E+00
6	6	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
7	8	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
8	9	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
9	10	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
10	11	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
11	12	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
12	13	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
13	14	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
14	15	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
15	16	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
16	17	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
17	18	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
18	19	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
19	20	1S 1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

20	21	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
21	22	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
22	23	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
23	24	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
24	25	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
25	26	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
26	27	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
27	28	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
28	29	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
29	30	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
30	31	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
31	32	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
32	33	2	7.11920E-02	1.05224E+01	.00000E+00	.00000E+00	0	1.0000E+00
33	34	4	4.37620E-02	6.60000E+00	1.31148E+01	8.65579E+01	1	1.0000E+00
34	35	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
35	36	3	2.68559E-04	1.78500E-03	.00000E+00	.00000E+00	0	1.0000E+00
36	37	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
37	38	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
38	39	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
39	40	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
40	41	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
41	42	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
42	43	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
43	44	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
44	45	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
45	46	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
46	47	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
47	48	4	4.37620E-02	6.60000E+00	.00000E+00	.00000E+00	0	1.0000E+00
48	49	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
49	50	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
50	51	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
51	52	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
52	53	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
53	54	1S	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	1.0000E+00
54	55	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
55	56	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
56	57	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
57	58	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
58	59	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
59	60	1S	5.01543E-02	5.00000E-01	.00000E+00	.00000E+00	0	1.0000E+00
60	61	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
61	62	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
62	63	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
63	64	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
64	65	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
65	66	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
66	67	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
67	68	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
68	69	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
69	70	5	8.80188E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
70	71	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
71	72	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
72	73	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
73	74	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
74	75	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
75	76	6	6.02200E-02	2.70000E+00	.00000E+00	.00000E+00	0	1.0000E+00
76	77	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
77	78	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
78	79	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
79	80	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00

80	81	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
81	82	8	8.96179E-02	8.23800E+00	.00000E+00	.00000E+00	0	1.0000E+00
82	83	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
83	84	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
84	85	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
85	86	5	8.69717E-02	8.14000E+00	.00000E+00	.00000E+00	0	1.0000E+00
86	87	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
87	88	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
88	89	7	8.54217E-02	7.83200E+00	.00000E+00	.00000E+00	0	1.0000E+00
89	90	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
90	91	1S	1.00309E-01	1.00000E+00	.00000E+00	.00000E+00	0	1.0000E+00
91	92	0	.00000E+00	.00000E+00	.00000E+00	.00000E+00	0	.0000E+00

TOTAL
1SURFACES 1.31148E+01 8.65579E+01

PRINT TABLE 70

SURFACE	TRANS	TYPE	SURFACE COEFFICIENTS
1	1	REFL.	PX .0000000E+00
2	2	REFL.	PY .0000000E+00
3	3	REFL.	PZ .0000000E+00
4	4		PZ 2.0320000E+02
5	5		PZ 2.2225000E+02
6	6		PZ 2.2925000E+02
7	7		PZ 2.3175000E+02
8	8		PZ 2.4885000E+02
9	9		CZ 6.0794900E+01
10	10		CZ 6.3017400E+01
11	11		CZ 6.4525000E+01
12	12		CZ 6.6525000E+01
13	13		PX 7.2135000E-01
14	14		PX -7.2135000E-01
15	15		PY 7.2135000E-01
16	16		PY -7.2135000E-01
17	17		CZ 4.6812200E-01
18	18		CZ 4.7879000E-01
19	19		CZ 5.4610000E-01
20	21		CZ 5.0292000E-01
21	22		CZ 5.6007000E-01
22	23		CZ 6.3246000E-01
23	24		CZ 6.7310000E-01
24	25		CZ 5.6007000E-01
25	26		CZ 6.2611000E-01
26	27		PX 1.2809230E+01
27	28		PX -1.2809230E+01
28	29		PY 1.2809230E+01
29	30		PY -1.2809230E+01
30	31		PY 1.0820240E+01
31	32		PX 1.0820240E+01
32	33		PY -1.0820240E+01
33	34		PX -1.0820240E+01
34	35		PY 1.1430000E+01
35	36		PX 1.1430000E+01
36	37		PY -1.1430000E+01
37	38		PX -1.1430000E+01
38	39		PY 1.2179300E+01
39	40		PX 1.2179300E+01
40	41		PY -1.1668760E+01
41	42		PX -1.1668760E+01
42	43		PX 1.1668760E+01

43	44	PY	1.1668760E+01			
44	45	PX	1.1940540E+01			
45	46	PY	1.1940540E+01			
46	48	PX	-7.2130000E-01			
47	49	PX	7.2130000E-01			
48	50	PY	-7.2130000E-01			
49	51	PY	7.2130000E-01			
50	52	PY	1.0000000E-04			
51	53	PY	-1.0000000E-04			
52	54	PY	.0000000E+00			
53	55	P	1.0000000E+00	-1.0000000E+00	.0000000E+00	.0000000E+00
54	56	P	1.0000000E+00	1.0000000E+00	.0000000E+00	.0000000E+00
55	57	PX	3.4137600E+00			
56	58	PY	3.4137600E+00			
57	59	PX	3.1750000E+00			
58	60	PY	3.1750000E+00			
59	61	PX	2.5400000E+00			
60	62	PY	2.5400000E+00			
61	64	PX	-5.0000000E-07			
62	65	PY	-5.0000000E-07			
63	66	PX	9.5000000E+01			
64	67	PY	9.5000000E+01			
65	68	PX	1.4683740E+01			
66	69	PY	1.4683740E+01			
67	70	CZ	7.6525000E+01			
68	71	PZ	2.4635000E+02			
69	72	PZ	2.7135000E+02			
70	73	PZ	2.8235000E+02			
71	74	PX	-1.1856720E+01			
72	75	PY	-1.1856720E+01			
73	80	PZ	3.1235000E+02			
74	81	CZ	1.0652500E+02			
75	82	PX	1.2700000E+00			
76	83	PY	1.2700000E+00			
77	2068	1001 PX	2.9766259E+01			
78	2042	1001 PX	3.4137590E+00			
79	2069	1001 PY	2.9766259E+01			
80	2041	1001 PY	3.4137590E+00			
81	3027	1002 PX	2.9032230E+01			
82	3028	1002 PX	3.4137700E+00			
83	3029	1002 PY	7.9232790E+01			
84	3030	1002 PY	5.3614330E+01			
85	4027	1003 PX	5.3515300E+01			
86	4028	1003 PX	2.7896840E+01			
87	4029	1003 PY	5.3515300E+01			
88	4030	1003 PY	2.7896840E+01			
89	5027	1004 PX	7.9232790E+01			
90	5028	1004 PX	5.3614330E+01			
91	5029	1004 PY	2.9032230E+01			
92	5030	1004 PY	3.4137700E+00			
93	16048	1005 PX	2.1641000E+00			
94	16049	1005 PX	3.6067000E+00			
95	16050	1005 PY	2.1641000E+00			
96	16051	1005 PY	3.6067000E+00			
97	17048	1006 PX	6.4922000E+00			
98	17049	1006 PX	7.9348000E+00			
99	18048	1007 PX	5.0495000E+00			
100	18049	1007 PX	6.4921000E+00			
101	18050	1007 PY	5.0495000E+00			
102	18051	1007 PY	6.4921000E+00			

103	19050	1008	PY	6.4922000E+00
104	19051	1008	PY	7.9348000E+00
105	20048	1009	PX	-3.6067000E+00
106	20049	1009	PX	-2.1641000E+00
107	21048	1010	PX	-7.9348000E+00
108	21049	1010	PX	-6.4922000E+00
109	22048	1011	PX	-6.4921000E+00
110	22049	1011	PX	-5.0495000E+00
111	24048	1013	PX	-3.6067000E+00
112	24049	1013	PX	-2.1641000E+00
113	24050	1013	PY	-3.6067000E+00
114	24051	1013	PY	-2.1641000E+00
115	25048	1014	PX	-7.9348000E+00
116	25049	1014	PX	-6.4922000E+00
117	26048	1015	PX	-6.4921000E+00
118	26049	1015	PX	-5.0495000E+00
119	26050	1015	PY	-6.4921000E+00
120	26051	1015	PY	-5.0495000E+00
121	27050	1016	PY	-7.9348000E+00
122	27051	1016	PY	-6.4922000E+00
123	28048	1017	PX	2.1641000E+00
124	28049	1017	PX	3.6067000E+00
125	29048	1018	PX	6.4922000E+00
126	29049	1018	PX	7.9348000E+00
127	30048	1019	PX	5.0495000E+00
128	30049	1019	PX	6.4921000E+00

1 TEMPERATURES OF THE CELLS.

PRINT TABLE 72

TIME: .0000E+00

CELL	TMP 1
2	2.5300E-08
3	2.5300E-08
4	2.5300E-08
5	2.5300E-08
6	2.5300E-08
8	2.5300E-08
9	2.5300E-08
10	2.5300E-08
11	2.5300E-08
12	2.5300E-08
13	2.5300E-08
14	2.5300E-08
15	2.5300E-08
16	2.5300E-08
17	2.5300E-08
18	2.5300E-08
19	2.5300E-08
20	2.5300E-08
21	2.5300E-08
22	2.5300E-08
23	2.5300E-08
24	2.5300E-08
25	2.5300E-08
26	2.5300E-08
27	2.5300E-08
28	2.5300E-08
29	2.5300E-08
30	2.5300E-08
31	2.5300E-08

32	2.5300E-08
33	2.5300E-08
34	2.5300E-08
35	2.5300E-08
36	2.5300E-08
37	2.5300E-08
38	2.5300E-08
39	2.5300E-08
40	2.5300E-08
41	2.5300E-08
42	2.5300E-08
43	2.5300E-08
44	2.5300E-08
45	2.5300E-08
46	2.5300E-08
47	2.5300E-08
48	2.5300E-08
49	2.5300E-08
50	2.5300E-08
51	2.5300E-08
52	2.5300E-08
53	2.5300E-08
54	2.5300E-08
55	2.5300E-08
56	2.5300E-08
57	2.5300E-08
58	2.5300E-08
59	2.5300E-08
60	2.5300E-08
61	2.5300E-08
62	2.5300E-08
63	2.5300E-08
64	2.5300E-08
65	2.5300E-08
66	2.5300E-08
67	2.5300E-08
68	2.5300E-08
69	2.5300E-08
70	2.5300E-08
71	2.5300E-08
72	2.5300E-08
73	2.5300E-08
74	2.5300E-08
75	2.5300E-08
76	2.5300E-08
77	2.5300E-08
78	2.5300E-08
79	2.5300E-08
80	2.5300E-08
81	2.5300E-08
82	2.5300E-08
83	2.5300E-08
84	2.5300E-08
85	2.5300E-08
86	2.5300E-08
87	2.5300E-08
88	2.5300E-08
89	2.5300E-08
90	2.5300E-08
91	2.5300E-08

3 WARNING MESSAGES SO FAR.
1CROSS-SECTION TABLES

PRINT TABLE 100

TABLE LENGTH

TABLES FROM FILE RMCCS2

1001.50C 1153 NJOY
2004.50C 2716 NJOY
6000.50C 16126 NJOY
7014.50C 22772 NJOY
8016.50C 23669 NJOY
13027.50C 22891 NJOY
24000.50C 89104 NJOY
26000.55C 84136 NJOY
28000.50C 82267 NJOY
29000.50C 22473 NJOY
92233.50C 14205 NJOY
92235.50C 44188 NJOY
92238.50C 66440 NJOY
94239.55C 67551 NJOY
94240.50C 42744 NJOY

TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU
TOTAL NU

(1301) 79/07/31.
(1270) 79/06/19.
(1306) 79/07/31.
(1275) 79/09/08.
(1276) 05/14/81
(1313) 79/09/08.
(1324) 79/06/21.
(260) 10/21/82
(1328) 79/06/21.
(1329) 02/05/80
(1393) 79/09/12.
(1395) 79/09/12.
(1398) 79/09/13.
(1399) 02/21/85
(1380) 79/09/13.

TABLES FROM FILE ENDF5P2

14000.50C 48275 NJOY
40000.50C 35842 NJOY

WARNING. NUBAR OF 92234.50C MAY BE EITHER PROMPT OR TOTAL.
92234.50C 76999 NJOY

WARNING. NUBAR OF 92236.50C MAY BE EITHER PROMPT OR TOTAL.
92236.50C 119238 NJOY

WARNING. NUBAR OF 94238.50C MAY BE EITHER PROMPT OR TOTAL.
94238.50C 16458 NJOY
94241.50C 22523 NJOY
94242.50C 43433 NJOY

TOTAL NU
TOTAL NU

(1314) 79/06/21.
(1340) 79/07/31.
(1394) 79/10/17.
(1396) 79/08/30.
(1338) 79/09/12.
(1381) 79/08/30.
(1342) 79/09/06.

TABLES FROM FILE ENDF5U2

15031.50C 2779 NJOY
16032.50C 2684 NJOY
22000.50C 25231 NJOY
25055.50C 60097 NJOY
42000.50C 18467 NJOY
62149.50C 11116 NJOY
64155.50C 31471 NJOY

WARNING. NUBAR OF 95241.50C MAY BE EITHER PROMPT OR TOTAL.
95241.50C 29300 NJOY

WARNING. NUBAR OF 95242.50C MAY BE EITHER PROMPT OR TOTAL.
95242.50C 5248 NJOY

WARNING. NUBAR OF 95243.50C MAY BE EITHER PROMPT OR TOTAL.
95243.50C 51474 NJOY

(1315) 79/10/29.
(1316) 79/10/29.
(1322) 79/06/21.
(1325) 79/06/21.
(1321) 79/08/01.
(1319) 02/12/85
(1365) 79/07/28.
(1361) 79/08/29.
(1369) 79/09/24.
(1363) 79/08/30.

TABLES FROM FILE RMCCSA2

45103.50C 13648 NJOY
 47109.50C 10147 NJOY
 93237.55C 29142 NJOY

TOTAL NU

(1310) 11/01/85
 (1373) 11/01/85
 (1337) 04/04/85

TABLES FROM FILE ENDL852

50000.35C 2380 ZA=50000 ENDL-85 85/04/24 T=OK

(48) 86/02/01

WARNING. NUBAR OF 96245.35C MAY BE EITHER PROMPT OR TOTAL.
 96245.35C 15310 ZA=96245 ENDL-85 85/04/24 T=OK

(93) 86/04/23

TABLES FROM FILE NEWXS2

63151.55C 33336
 63153.55C 30265

06/28/88
 06/28/88

TABLES FROM FILE TMCCS2

LWTR.01T 10193 HYDROGEN IN LIGHT WATER AT 300 DEGREES KELVIN

1001 0 010/22/85

TOTAL 1347491

WARNING. NEUTRON ENERGY CUTOFF IS BELOW SOME CROSS-SECTION TABLES.
 1DECIMAL WORDS OF DYNAMICALLY ALLOCATED STORAGE

GENERAL 103594
 TALLIES 0
 BANK 18403
 CROSS SECTIONS 1347491

TOTAL 1469488

 DUMP NO. 1 ON FILE RUNTPE NPS = 0 CTM = .00

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 0

11 WARNING MESSAGES SO FAR.
 1 STARTING MCRUN. FIELD LENGTH = 0 CPO = .10

PRINT TABLE 110

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12txb) 50% mod in trap

NPS	X	Y	Z	CELL	SURF	U	V	W	TIME	WEIGHT	ENERGY
1	-8.411E-02	-1.371E-01	7.889E+01	33	0	5.085E-01	4.733E-01	7.193E-01	.000E+00	9.963E-01	1.191E+00
2	-1.226E-01	-3.916E-01	7.904E+01	33	0	8.952E-01	-4.447E-01	-2.944E-02	.000E+00	9.963E-01	3.941E-01
3	-3.766E-01	2.067E-01	6.975E+01	33	0	-6.184E-01	-4.495E-01	6.446E-01	.000E+00	9.963E-01	7.945E-01
4	-1.324E-01	-9.430E-02	6.910E+01	33	0	9.710E-01	-5.665E-02	-2.323E-01	.000E+00	9.963E-01	1.499E+00
5	-1.290E-01	-4.180E-01	1.436E+02	33	0	5.861E-01	1.496E-01	-7.963E-01	.000E+00	9.963E-01	1.082E+00
6	-1.290E-01	-4.180E-01	1.436E+02	33	0	-6.489E-02	-1.626E-01	9.845E-01	.000E+00	9.963E-01	9.269E-01
7	1.539E-01	3.155E-01	1.231E+02	33	0	-7.068E-02	3.263E-02	-9.970E-01	.000E+00	9.963E-01	1.123E+00
8	4.541E-01	4.755E-02	1.186E+02	33	0	-3.915E-01	4.664E-01	-7.932E-01	.000E+00	9.963E-01	9.352E-01
9	-5.879E-02	-2.927E-01	1.205E+02	33	0	-2.368E-01	9.215E-01	-3.079E-01	.000E+00	9.963E-01	1.406E-01
10	-2.652E-01	1.703E-01	1.506E+02	33	0	1.946E-01	-3.204E-01	9.271E-01	.000E+00	9.963E-01	5.478E-01
11	-3.503E-01	7.513E-02	1.353E+02	33	0	-6.698E-01	-7.177E-01	-1.905E-01	.000E+00	9.963E-01	3.293E+00
12	1.953E-01	1.369E-01	1.217E+02	33	0	-8.398E-01	-4.129E-01	3.524E-01	.000E+00	9.963E-01	1.469E+00
13	4.586E-01	-9.234E-02	1.226E+02	33	0	-1.714E-01	-8.572E-01	4.857E-01	.000E+00	9.963E-01	1.436E+00

14	4.586E-01	-9.234E-02	1.226E+02	33	0	-2.489E-01	-5.118E-01	-8.222E-01	.000E+00	9.963E-01	1.451E+00
15	4.560E-01	-9.430E-02	1.226E+02	33	0	-2.959E-01	2.119E-01	9.314E-01	.000E+00	9.963E-01	2.537E+00
16	-1.779E-02	-2.576E-01	1.214E+02	33	0	1.395E-01	-9.829E-01	1.202E-01	.000E+00	9.963E-01	2.706E+00
17	1.318E-02	-7.734E-02	1.117E+02	33	0	6.909E-01	-7.110E-01	1.307E-01	.000E+00	9.963E-01	7.843E-01
18	-2.201E-01	-4.075E-01	1.831E+00	33	0	-6.580E-01	5.320E-01	-5.329E-01	.000E+00	9.963E-01	1.180E+00
19	-4.272E-02	-2.166E-01	7.392E-01	33	0	-9.903E-01	-1.380E-01	1.353E-02	.000E+00	9.963E-01	2.565E+00
20	1.429E-01	-3.781E-01	9.008E-01	33	0	7.462E-01	4.859E-01	-4.551E-01	.000E+00	9.963E-01	3.333E-02
21	2.182E-01	-3.959E-01	2.521E+01	33	0	-1.977E-01	9.797E-01	3.360E-02	.000E+00	9.963E-01	1.232E+00
22	5.745E-02	-1.005E-01	2.636E+01	33	0	-9.117E-01	-3.647E-01	-1.891E-01	.000E+00	9.963E-01	1.475E+00
23	-1.961E-01	1.649E-01	3.143E+01	33	0	-4.287E-01	8.361E-01	-3.423E-01	.000E+00	9.963E-01	1.123E+00
24	-2.677E-01	2.920E-01	4.014E+01	33	0	1.080E-01	3.412E-01	-9.338E-01	.000E+00	9.963E-01	2.129E+00
25	3.557E-01	9.921E-02	4.061E+01	33	0	-9.111E-01	-9.012E-03	-4.122E-01	.000E+00	9.963E-01	1.354E+00
26	2.311E-02	4.220E-01	2.938E+01	33	0	-2.568E-01	-6.391E-01	-7.249E-01	.000E+00	9.963E-01	1.433E+00
27	-2.631E-01	-1.659E-01	1.334E+01	33	0	-2.912E-01	8.086E-01	5.113E-01	.000E+00	9.963E-01	4.014E+00
28	2.182E-01	-1.363E-01	2.117E+01	33	0	1.472E-01	-9.514E-01	2.705E-01	.000E+00	9.963E-01	2.399E+00
29	-2.102E-01	-5.481E-02	2.093E+01	33	0	-6.135E-01	-7.645E-01	-1.978E-01	.000E+00	9.963E-01	3.257E-01
30	3.101E-01	2.926E-01	1.964E+01	33	0	-5.702E-01	5.651E-01	-5.963E-01	.000E+00	9.963E-01	1.643E+00
31	-8.318E-02	-3.992E-01	5.730E+01	33	0	-6.607E-01	5.373E-01	-5.242E-01	.000E+00	9.963E-01	7.385E+00
32	-3.265E-03	4.299E-01	5.711E+01	33	0	-9.742E-02	-3.639E-01	-9.263E-01	.000E+00	9.963E-01	4.706E-01
33	-9.304E-02	4.178E-01	5.704E+01	33	0	-1.965E-01	-3.145E-01	-9.287E-01	.000E+00	9.963E-01	2.822E-01
34	6.194E-02	2.161E-01	5.612E+01	33	0	4.097E-01	8.465E-01	-3.399E-01	.000E+00	9.963E-01	3.732E-01
35	-4.830E-02	-8.671E-03	6.055E+01	33	0	-4.048E-02	8.831E-01	4.675E-01	.000E+00	9.963E-01	3.140E+00
36	-3.722E-01	-2.004E-01	5.062E+01	33	0	3.371E-01	-9.269E-01	-1.652E-01	.000E+00	9.963E-01	1.698E-01
37	-2.278E-01	-1.529E-01	3.529E+01	33	0	-1.867E-01	9.756E-01	-1.155E-01	.000E+00	9.963E-01	1.628E+00
38	-1.750E-01	-1.181E-01	3.527E+01	33	0	-2.616E-01	2.336E-01	-9.365E-01	.000E+00	9.963E-01	1.987E+00
39	-5.188E-02	-5.409E-02	3.519E+01	33	0	9.780E-01	-7.641E-02	-1.939E-01	.000E+00	9.963E-01	4.415E+00
40	-1.153E-01	-1.853E-01	3.639E+01	33	0	2.580E-01	-7.076E-01	6.578E-01	.000E+00	9.963E-01	1.999E+00
41	-6.787E-02	-3.251E-01	2.696E+01	33	0	-3.212E-01	-7.678E-01	-5.543E-01	.000E+00	9.963E-01	1.673E+00
42	2.715E-02	3.837E-01	4.634E+01	33	0	5.039E-01	-1.460E-01	8.513E-01	.000E+00	9.963E-01	5.149E-01
43	-3.548E-01	2.086E-01	4.735E+01	33	0	6.080E-01	5.487E-01	5.738E-01	.000E+00	9.963E-01	1.020E+00
44	1.667E-01	5.947E-02	4.204E+01	33	0	-2.932E-01	9.304E-01	-2.199E-01	.000E+00	9.963E-01	6.259E+00
45	-1.545E-01	-3.630E-01	3.975E+01	33	0	-8.475E-01	-3.993E-01	-3.497E-01	.000E+00	9.963E-01	1.965E+00
46	-3.185E-01	2.248E-02	4.393E+01	33	0	1.200E-01	-9.195E-01	-3.743E-01	.000E+00	9.963E-01	2.452E+00
47	-1.894E-01	2.856E-01	4.381E+01	33	0	7.085E-01	5.879E-01	3.904E-01	.000E+00	9.963E-01	3.131E-01
48	1.297E-01	1.455E-01	6.053E+01	33	0	4.261E-01	9.046E-01	9.254E-03	.000E+00	9.963E-01	1.535E+00
49	3.510E-02	-2.286E-01	8.954E+01	33	0	5.431E-01	4.270E-01	-7.230E-01	.000E+00	9.963E-01	3.488E-01
50	-1.915E-01	7.737E-02	9.367E+01	33	0	-1.053E-01	-9.805E-01	1.658E-01	.000E+00	9.963E-01	1.153E+00

CYCLE 1 K(COLLISION) .847178 REMOVAL LIFETIME(ABS) 3.6893E+03 SOURCE POINTS GENERATED 2546

CYCLE 2 K(COLLISION) .848219 REMOVAL LIFETIME(ABS) 3.8762E+03 SOURCE POINTS GENERATED 3021

CYCLE 3 K(COLLISION) .851795 REMOVAL LIFETIME(ABS) 3.7520E+03 SOURCE POINTS GENERATED 3034

CYCLE 4 K(COLLISION) .851116 REMOVAL LIFETIME(ABS) 3.7416E+03 SOURCE POINTS GENERATED 2991

CYCLE 5 K(COLLISION) .863757 REMOVAL LIFETIME(ABS) 3.8527E+03 SOURCE POINTS GENERATED 3023

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 5

CYCLE 6 K(COLLISION) .852582 REMOVAL LIFETIME(ABS) 4.1324E+03 SOURCE POINTS GENERATED 2883

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP CYCLE = 6

ESTIMATOR	CYCLE	7	AVE OF	2	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.851196		.851889		.0008	K(COL/ABS)	.000000 .0000	.000000 .0000	.0000
K(ABSORPTION)	.851798		.838411		.0160	K(ABS/TK LN)	.000000 .0000	.000000 .0000	.0000
K(TRK LENGTH)	.863578		.866665		.0036	K(TK LN/COL)	.000000 .0000	.000000 .0000	.0000
REM LIFE(COL)	3.7456E+03		3.9733E+03		.0573				
REM LIFE(ABS)	3.7521E+03		3.9422E+03		.0482	LIFE(COL/ABS)	.0000E+00 .0000	.0000E+00 .0000	.0000

SOURCE POINTS GENERATED 2966

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 7

ESTIMATOR	CYCLE	8	AVE OF	3	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.834614	.846131	.0068			K(COL/ABS)	.843323 .0049	.844000 .0066	-.3290
K(ABSORPTION)	.844724	.840515	.0095			K(ABS/TK LN)	.848698 .0057	.847471 .0086	-.4314
K(TRK LENGTH)	.837310	.856880	.0116			K(TK LN/COL)	.851505 .0092	.832051 .0036	.9939
REM LIFE(COL)	3.7340E+03	3.8935E+03	.0395						
REM LIFE(ABS)	3.7463E+03	3.8769E+03	.0330			LIFE(COL/ABS)	3.8852E+03 .0362	3.7957E+03 .0025	1.0000

SOURCE POINTS GENERATED 2841

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 8

ESTIMATOR	CYCLE	9	AVE OF	4	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.827655	.841512	.0073			K(COL/ABS)	.840464 .0048	.840399 .0059	-.0710
K(ABSORPTION)	.836115	.839415	.0069			K(ABS/TK LN)	.845233 .0058	.843124 .0066	-.2044
K(TRK LENGTH)	.833567	.851051	.0107			K(TK LN/COL)	.846282 .0090	.825689 .0059	.9849
REM LIFE(COL)	3.9145E+03	3.8988E+03	.0279			K(COL/ABS/TK LN)	.843993 .0061	.822388 .0240	
REM LIFE(ABS)	3.8972E+03	3.8820E+03	.0233			LIFE(COL/ABS)	3.8904E+03 .0256	3.8000E+03 .0021	.9999

SOURCE POINTS GENERATED 2924

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 9

ESTIMATOR	CYCLE	10	AVE OF	5	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.841460	.841501	.0057			K(COL/ABS)	.840575 .0038	.840519 .0043	-.0710
K(ABSORPTION)	.840580	.839648	.0053			K(ABS/TK LN)	.845395 .0045	.843315 .0048	-.2034
K(TRK LENGTH)	.851505	.851142	.0083			K(TK LN/COL)	.846322 .0070	.825539 .0043	.9848
REM LIFE(COL)	3.8403E+03	3.8871E+03	.0219			K(COL/ABS/TK LN)	.844097 .0047	.822494 .0171	
REM LIFE(ABS)	3.8176E+03	3.8691E+03	.0184			LIFE(COL/ABS)	3.8781E+03 .0202	3.7832E+03 .0061	.9990

SOURCE POINTS GENERATED 3000

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 10

ESTIMATOR	CYCLE	11	AVE OF	6	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.847956	.842577	.0048			K(COL/ABS)	.844171 .0052	.843191 .0050	.1933
K(ABSORPTION)	.876343	.845764	.0084			K(ABS/TK LN)	.848122 .0049	.848517 .0053	-.2014
K(TRK LENGTH)	.847169	.850480	.0068			K(TK LN/COL)	.846529 .0057	.836995 .0054	.9128
REM LIFE(COL)	3.6520E+03	3.8479E+03	.0207			K(COL/ABS/TK LN)	.846274 .0046	.826352 .0249	
REM LIFE(ABS)	3.6710E+03	3.8361E+03	.0174			LIFE(COL/ABS)	3.8420E+03 .0191	3.7782E+03 .0048	.9992

SOURCE POINTS GENERATED 3029

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 11

ESTIMATOR	CYCLE	12	AVE OF	7	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.848842	.843472	.0042			K(COL/ABS)	.844149 .0044	.843764 .0042	.1458
K(ABSORPTION)	.839202	.844827	.0072			K(ABS/TK LN)	.848568 .0041	.849019 .0045	-.2402
K(TRK LENGTH)	.863290	.852310	.0062			K(TK LN/COL)	.847891 .0051	.836909 .0045	.9159
REM LIFE(COL)	3.8549E+03	3.8489E+03	.0175			K(COL/ABS/TK LN)	.846870 .0040	.826487 .0207	
REM LIFE(ABS)	3.8575E+03	3.8392E+03	.0147			LIFE(COL/ABS)	3.8440E+03 .0161	3.7934E+03 .0055	.9984

SOURCE POINTS GENERATED 2973

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 12

ESTIMATOR	CYCLE	13	AVE OF	8	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR
K(COLLISION)	.862444	.845844	.0046			K(COL/ABS)	.845217 .0040	.845423 .0042	.0877
K(ABSORPTION)	.842939	.844591	.0063			K(ABS/TK LN)	.848507 .0036	.848981 .0039	-.2410
K(TRK LENGTH)	.853219	.852424	.0053			K(TK LN/COL)	.849134 .0046	.847202 .0051	.7390
REM LIFE(COL)	3.7363E+03	3.8348E+03	.0157			K(COL/ABS/TK LN)	.847619 .0036	.848223 .0054	
REM LIFE(ABS)	3.7031E+03	3.8222E+03	.0136			LIFE(COL/ABS)	3.8285E+03 .0146	3.7735E+03 .0098	.9938

CYCLE = 13

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.847791	.0047	.847634	.0045	.3262
K(ABS/TK LN)	.850389	.0039	.851110	.0039	-.1497
K(TK LN/COL)	.850114	.0042	.849649	.0046	.6936
K(COL/ABS/TK LN)	.849432	.0038	.851159	.0050	
LIFE(COL/ABS)	3.8177E+03	.0132	3.7608E+03	.0096	.9929

CYCLE = 14

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.848266	.0042	.847514	.0040	.2562
K(ABS/TK LN)	.849430	.0036	.849417	.0038	.3035
K(TK LN/COL)	.848065	.0045	.847098	.0043	.6138
K(COL/ABS/TK LN)	.848587	.0035	.848667	.0043	
LIFE(COL/ABS)	3.8079E+03	.0121	3.7819E+03	.0090	.9886

CYCLE = 15

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.847840	.0038	.847622	.0036	.1975
K(ABS/TK LN)	.849141	.0033	.849210	.0035	-.3351
K(TK LN/COL)	.848734	.0041	.847622	.0039	.6251
K(COL/ABS/TK LN)	.848572	.0032	.848612	.0037	
LIFE(COL/ABS)	3.8097E+03	.0110	3.7986E+03	.0089	.9839

CYCLE = 16

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.847444	.0035	.847180	.0033	.2053
K(ABS/TK LN)	.848993	.0030	.849077	.0031	-.3346
K(TK LN/COL)	.848498	.0038	.847236	.0036	.6160
K(COL/ABS/TK LN)	.848312	.0029	.848420	.0034	
LIFE(COL/ABS)	3.8167E+03	.0102	3.8016E+03	.0081	.9843

CYCLE = 17

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.848345	.0034	.847321	.0031	.1147
K(ABS/TK LN)	.849908	.0030	.849872	.0030	-.3397
K(TK LN/COL)	.848116	.0035	.846846	.0034	.6205
K(COL/ABS/TK LN)	.848790	.0028	.848582	.0033	
LIFE(COL/ABS)	3.8085E+03	.0096	3.8009E+03	.0074	.9844

CYCLE = 18

COMBINATION	SIMPLE AVERAGE		COMBINED AVERAGE		CORR
K(COL/ABS)	.849685	.0035	.848806	.0033	.2262
K(ABS/TK LN)	.850857	.0030	.850772	.0030	-.2722
K(TK LN/COL)	.849216	.0035	.848564	.0035	.6227
K(COL/ABS/TK LN)	.849919	.0029	.850216	.0033	
LIFE(COL/ABS)	3.8039E+03	.0090	3.7983E+03	.0069	.9847

SOURCE POINTS GENERATED 3067

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP

CYCLE = 19

ESTIMATOR	CYCLE	20	AVE OF	15	CYCLES	COMBINATION	SIMPLE AVERAGE	COMBINED AVERAGE	CORR		
K(COLLISION)	.833890		.847099	.0034		K(COL/ABS)	.848722	.0035	.847848	.0033	.2811
K(ABSORPTION)	.836610		.850345	.0052		K(ABS/TK LN)	.849843	.0030	.849753	.0031	-.1883
K(TRK LENGTH)	.834663		.849340	.0042		K(TK LN/COL)	.848220	.0035	.847567	.0035	.6586
REM LIFE(COL)	3.8252E+03		3.8062E+03	.0091		K(COL/ABS/TK LN)	.848928	.0029	.849152	.0033	
REM LIFE(ABS)	3.8407E+03		3.8054E+03	.0078		LIFE(COL/ABS)	3.8058E+03	.0084	3.8037E+03	.0065	.9837
SOURCE POINTS GENERATED 2868											

SOURCE DISTRIBUTION WRITTEN TO FILE SRCTP
1PROBLEM SUMMARY

CYCLE = 20

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

+

0

MPC 12 ASSEMBLY, B&W 15x15 FUEL 3.00%/20 GWD/5 year (mpc12txb) 50% mod in trap

PROBID = 07/28/95 15:22:56
07/28/95 13:49:11

NEUTRON CREATION	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY	NEUTRON LOSS	TRACKS	WEIGHT (PER SOURCE PARTICLE)	ENERGY
SOURCE	59407	1.0100E+00	2.0663E+00	ESCAPE	4	3.6734E-05	6.8725E-05
				ENERGY CUTOFF	0	0.	0.
				TIME CUTOFF	0	0.	0.
WEIGHT WINDOW	0	0.	0.	WEIGHT WINDOW	0	0.	0.
CELL IMPORTANCE	0	0.	0.	CELL IMPORTANCE	0	0.	0.
WEIGHT CUTOFF	0	7.9386E-02	4.2707E-07	WEIGHT CUTOFF	59469	7.9316E-02	4.1119E-07
ENERGY IMPORTANCE	0	0.	0.	ENERGY IMPORTANCE	0	0.	0.
DXTRAN	0	0.	0.	DXTRAN	0	0.	0.
FORCED COLLISIONS	0	0.	0.	FORCED COLLISIONS	0	0.	0.
EXP. TRANSFORM	0	0.	0.	EXP. TRANSFORM	0	0.	0.
UPSCATTERING	0	0.	1.4927E-07	DOWNSCATTERING	0	0.	1.9628E+00
				CAPTURE	0	6.8566E-01	3.2065E-02
(N,XN)	132	1.8259E-03	1.3053E-03	LOSS TO (N,XN)	66	9.1295E-04	7.2269E-03
FISSION	0	0.	0.	LOSS TO FISSION	0	3.2526E-01	6.5483E-02
TOTAL	59539	1.0912E+00	2.0676E+00	TOTAL	59539	1.0912E+00	2.0676E+00

NUMBER OF NEUTRONS BANKED 66
 NEUTRON TRACKS PER SOURCE PARTICLE 1.0022E+00
 NEUTRON COLLISIONS PER SOURCE PARTICLE 6.3628E+01
 TOTAL NEUTRON COLLISIONS 3779972
 NET MULTIPLICATION 1.0009E+00 .0002

AVERAGE LIFETIME, SHAKES
 ESCAPE 1.0951E+04
 CAPTURE 3.7957E+03
 CAPTURE OR ESCAPE 3.7960E+03
 ANY TERMINATION 4.2692E+03

CUTOFFS
 TCO 1.0000E+34
 ECO .0000E+00
 WC1 -5.0000E-01
 WC2 -2.5000E-01

COMPUTER TIME SO FAR IN THIS RUN 83.00 MINUTES
 COMPUTER TIME IN MCRUN 82.90 MINUTES
 SOURCE PARTICLES PER MINUTE 7.1661E+02
 RANDOM NUMBERS GENERATED 43605705

MAXIMUM NUMBER EVER IN BANK 1
 BANK OVERFLOWS TO BACKUP FILE 0
 FIELD LENGTH 0
 MOST RANDOM NUMBERS USED WAS 9704 IN HISTORY 25899

RANGE OF SAMPLED SOURCE WEIGHTS = 9.6774E-01 TO 1.1783E+00

1WARNING. THE FOLLOWING CELLS ARE BOUNDED BY CELLS WITH NEUTRON IMPORTANCES
THAT MAY BE A FACTOR OF FOUR OR MORE DIFFERENT.

PRINT TABLE 120

CELL	IMPORTANCE	MAXIMUM NEIGHBOR	IMPORTANCE	RATIO	MINIMUM NEIGHBOR	IMPORTANCE	RATIO
84	NO DATA AVAILABLE YET FOR THIS CELL.						
85	NO DATA AVAILABLE YET FOR THIS CELL.						
87	NO DATA AVAILABLE YET FOR THIS CELL.						
88	NO DATA AVAILABLE YET FOR THIS CELL.						

90 NO DATA AVAILABLE YET FOR THIS CELL.
1NEUTRON ACTIVITY IN EACH CELL

PRINT TABLE 126

CELL	TRACKS ENTERING	POPULATION	COLLISIONS	COLLISIONS * WEIGHT (PER HISTORY)	NUMBER WEIGHTED ENERGY	FLUX WEIGHTED ENERGY	AVERAGE TRACK WEIGHT (RELATIVE)	AVERAGE TRACK MFP (CM)
1	1	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	842	448	0	.0000E+00	4.5157E-04	4.8102E-01	7.6001E-01
3	3	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	654826	59473	265481	3.7710E+00	7.3115E-04	7.7572E-01	8.8566E-01
33	34	3727	218	801	8.4296E-03	7.3901E-05	2.9369E-01	6.2804E-01
34	35	160	17	462	2.9627E-03	2.3498E-05	2.0275E-01	4.0123E-01
35	36	1166891	59473	9	1.4194E-04	6.3462E-04	7.3306E-01	8.8186E-01
36	37	294	17	22	1.5460E-04	2.2577E-05	1.5780E-01	4.3366E-01
37	38	1264322	59473	45779	6.8871E-01	6.0944E-04	7.2087E-01	8.8126E-01
38	39	322	18	141	9.5505E-04	2.2314E-05	1.5717E-01	4.2712E-01
39	40	2022849	59473	1298195	1.7162E+01	5.2632E-04	6.8751E-01	8.7788E-01
40	41	51694	28643	80663	1.0791E+00	4.1040E-04	6.3817E-01	8.7953E-01
41	42	16	7	35	2.0090E-04	1.5464E-04	1.1103E+00	4.2922E-01
42	43	109266	30305	3229	4.8749E-02	4.3416E-04	6.4482E-01	8.8082E-01
43	44	122449	32503	26678	3.5761E-01	4.3091E-04	6.4217E-01	8.8041E-01
44	45	134108	33486	2873	4.3465E-02	4.4183E-04	6.4949E-01	8.8109E-01
45	46	163513	38354	64685	8.6669E-01	4.4200E-04	6.4860E-01	8.8076E-01
46	47	6422	3041	6555	8.7379E-02	4.7215E-04	6.6510E-01	8.8425E-01
47	48	8650	3319	283	4.2622E-03	4.7025E-04	6.6261E-01	8.8356E-01
48	49	11459	4642	5577	7.5197E-02	4.7787E-04	6.7283E-01	8.8442E-01
49	50	31992	14544	62922	7.4936E-01	3.4214E-04	5.7032E-01	8.2421E-01
50	51	31577	13777	11823	1.4711E-01	3.8251E-04	5.6942E-01	8.0540E-01
51	52	31223	13462	2248	3.2426E-02	3.7241E-04	5.6485E-01	8.0079E-01
52	53	31436	13546	11800	1.4492E-01	3.5592E-04	5.5313E-01	7.9644E-01
53	54	33091	14150	99310	1.1438E+00	2.2649E-04	4.8520E-01	7.9615E-01

54	55	279	80	4125	3.6381E-02	2.1665E-05	7.7707E-02	5.6410E-01	5.6039E-01
55	56	31462	14400	61297	7.3314E-01	3.5818E-04	5.7755E-01	8.2748E-01	1.4965E+00
56	57	31275	13641	11943	1.5012E-01	4.0136E-04	5.7408E-01	8.0977E-01	2.0778E+00
57	58	31012	13309	2309	3.3296E-02	3.9279E-04	5.6087E-01	8.0627E-01	9.2214E+00
58	59	31085	13360	11839	1.4641E-01	3.6169E-04	5.3901E-01	8.0118E-01	2.0320E+00
59	60	32616	13891	97612	1.1168E+00	2.2965E-04	4.8473E-01	7.9545E-01	2.6585E+00
60	61	204	70	3047	2.7761E-02	4.8723E-05	1.9787E-01	6.1392E-01	7.7904E-01
61	62	42169	16828	83391	1.0013E+00	3.4404E-04	5.7132E-01	8.2766E-01	1.4815E+00
62	63	42601	16012	15668	1.9683E-01	3.9405E-04	5.6991E-01	8.1123E-01	2.1032E+00
63	64	328	74	1367	1.3150E-02	3.5948E-05	1.9194E-01	6.1617E-01	7.3395E-01
64	65	43516	17111	86108	1.0307E+00	3.2972E-04	5.4144E-01	8.2452E-01	1.4449E+00
65	66	43578	16244	16069	2.0229E-01	3.8022E-04	5.4190E-01	8.1066E-01	2.0710E+00
66	67	270	66	1181	1.0496E-02	2.7711E-05	1.5657E-01	5.7980E-01	6.5249E-01
67	68	16242	8147	709625	6.7964E+00	6.3201E-05	2.7301E-01	6.4509E-01	8.8611E-01
68	69	14270	6232	19434	2.2547E-01	3.4628E-04	5.3421E-01	7.6177E-01	2.0706E+00
69	70	13881	6183	21387	2.5085E-01	3.8767E-04	5.4863E-01	7.7014E-01	1.8575E+00
70	71	27226	8512	9837	1.2300E-01	5.5157E-04	5.6462E-01	8.0978E-01	2.1877E+00
71	72	26856	8197	4540	6.5955E-02	5.5822E-04	5.6570E-01	8.0894E-01	9.1706E+00
72	73	28688	8051	51697	6.2648E-01	4.3842E-04	5.2472E-01	7.9275E-01	2.1412E+00
73	74	14420	6455	159119	1.7955E+00	1.5511E-04	3.7834E-01	7.7135E-01	1.1540E+00
74	75	26297	8195	9519	1.1806E-01	5.8903E-04	5.8647E-01	8.1389E-01	2.2331E+00
75	76	26186	7897	4580	6.6377E-02	5.8908E-04	5.7846E-01	8.1068E-01	9.0322E+00
76	77	28347	7780	51414	6.2707E-01	4.5684E-04	5.2227E-01	7.9677E-01	2.1703E+00
77	78	14359	6300	157403	1.7962E+00	1.6240E-04	3.8163E-01	7.7921E-01	1.1654E+00
78	79	134	37	4161	3.7849E-02	1.9241E-05	8.4185E-02	5.8453E-01	5.4096E-01
79	80	170	47	4746	4.2612E-02	3.5532E-05	1.8083E-01	5.8415E-01	7.2800E-01
80	81	3	2	7	9.9947E-05	5.1584E-05	2.9258E-03	6.3659E-01	1.1426E+00
81	82	7582	3156	22790	2.5825E-01	3.5895E-04	4.8257E-01	7.4817E-01	2.0967E+00
82	83	4956	1938	27751	3.0389E-01	2.4989E-04	4.0585E-01	7.6275E-01	1.2534E+00
83	84	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	3775	1508	11544	1.4151E-01	7.9960E-04	4.9210E-01	7.9617E-01	2.0781E+00
86	87	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	2210	988	17879	2.1095E-01	2.0703E-03	4.9022E-01	8.0594E-01	4.8698E+00
89	90	0	0	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	777	447	107012	8.9931E-01	2.6633E-05	1.2202E-01	5.4706E-01	6.1815E-01
TOTAL		6467903	707547	3779972	4.5499E+01				
1NEUTRON WEIGHT BALANCE IN EACH CELL --		EXTERNAL EVENTS				PRINT TABLE 130			

CELL	ENTERING	SOURCE	ENERGY CUTOFF	TIME CUTOFF	EXITING	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	-4.8698E-01	-4.8698E-01
2	2	1.0631E-02	.0000E+00	.0000E+00	-5.1592E-01	-5.0529E-01
3	3	.0000E+00	.0000E+00	.0000E+00	-2.8246E-02	-2.8246E-02
4	4	.0000E+00	.0000E+00	.0000E+00	-7.6188E-02	-7.6188E-02
5	5	.0000E+00	.0000E+00	.0000E+00	-2.8002E-02	-2.8002E-02
6	6	.0000E+00	.0000E+00	.0000E+00	-2.3075E-01	-2.3075E-01
7	8	.0000E+00	.0000E+00	.0000E+00	-1.6043E+00	-1.6043E+00
8	9	.0000E+00	.0000E+00	.0000E+00	-1.7621E+00	-1.7621E+00
9	10	.0000E+00	.0000E+00	.0000E+00	-2.0132E-01	-2.0132E-01
10	11	.0000E+00	.0000E+00	.0000E+00	-1.9769E-01	-1.9769E-01
11	12	.0000E+00	.0000E+00	.0000E+00	-2.7794E-01	-2.7794E-01
12	13	.0000E+00	.0000E+00	.0000E+00	-2.8966E-01	-2.8966E-01
13	14	.0000E+00	.0000E+00	.0000E+00	-7.3229E-02	-7.3229E-02
14	15	.0000E+00	.0000E+00	.0000E+00	-7.3184E-02	-7.3184E-02
15	16	.0000E+00	.0000E+00	.0000E+00	-8.7942E-02	-8.7942E-02
16	17	.0000E+00	.0000E+00	.0000E+00	-7.4811E-02	-7.4811E-02

17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.3886E-02	-7.3886E-02
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-7.5006E-02	-7.5006E-02
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.5652E-02	-9.5652E-02
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.8912E-02	-8.8912E-02
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.6900E-02	-8.6900E-02
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3807E-02	-8.3807E-02
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.9866E-02	-9.9866E-02
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4535E-02	-9.4535E-02
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.3594E-02	-9.3594E-02
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.1734E-02	-9.1734E-02
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-9.4175E-02	-9.4175E-02
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.1156E-02	-8.1156E-02
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.4358E-02	-8.4358E-02
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.9260E-02	-8.9260E-02
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7308E+01	-1.7308E+01
32	33	8.8080E+00	1.0100E+00	.0000E+00	.0000E+00	-8.7049E+00	1.1130E+00
33	34	3.9416E-02	.0000E+00	.0000E+00	.0000E+00	-3.7421E-02	1.9954E-03
34	35	1.1125E-03	.0000E+00	.0000E+00	.0000E+00	-1.0107E-03	1.0179E-04
35	36	1.7328E+01	.0000E+00	.0000E+00	.0000E+00	-1.7317E+01	1.0861E-02
36	37	2.0263E-03	.0000E+00	.0000E+00	.0000E+00	-2.0068E-03	1.9489E-05
37	38	1.8768E+01	.0000E+00	.0000E+00	.0000E+00	-1.8697E+01	7.1489E-02
38	39	2.2224E-03	.0000E+00	.0000E+00	.0000E+00	-2.2161E-03	6.2431E-06
39	40	2.9959E+01	.0000E+00	.0000E+00	.0000E+00	-9.7730E+00	2.0186E+01
40	41	7.6787E-01	.0000E+00	.0000E+00	.0000E+00	-7.6463E-01	3.2409E-03
41	42	1.1098E-04	.0000E+00	.0000E+00	.0000E+00	-1.0989E-04	1.0933E-06
42	43	1.6201E+00	.0000E+00	.0000E+00	.0000E+00	-1.6196E+00	4.7443E-04
43	44	1.8158E+00	.0000E+00	.0000E+00	.0000E+00	-1.8148E+00	1.0395E-03
44	45	1.9886E+00	.0000E+00	.0000E+00	.0000E+00	-1.9881E+00	4.4106E-04
45	46	2.4273E+00	.0000E+00	.0000E+00	.0000E+00	-1.0291E+00	1.3981E+00
46	47	9.5838E-02	.0000E+00	.0000E+00	.0000E+00	-5.8497E-02	3.7341E-02
47	48	1.2879E-01	.0000E+00	.0000E+00	.0000E+00	-1.2417E-01	4.6213E-03
48	49	1.7069E-01	.0000E+00	.0000E+00	.0000E+00	-6.5726E-02	1.0496E-01
49	50	4.4534E-01	.0000E+00	.0000E+00	.0000E+00	-2.5432E-01	1.9102E-01
50	51	4.3221E-01	.0000E+00	.0000E+00	.0000E+00	-4.1754E-01	1.4672E-02
51	52	4.2318E-01	.0000E+00	.0000E+00	.0000E+00	-4.1823E-01	4.9543E-03
52	53	4.2558E-01	.0000E+00	.0000E+00	.0000E+00	-4.1126E-01	1.4323E-02
53	54	4.4536E-01	.0000E+00	.0000E+00	.0000E+00	-1.7658E-01	2.6877E-01
54	55	2.8787E-03	.0000E+00	.0000E+00	.0000E+00	-3.0556E-04	2.5731E-03
55	56	4.4023E-01	.0000E+00	.0000E+00	.0000E+00	-2.5286E-01	1.8737E-01
56	57	4.3004E-01	.0000E+00	.0000E+00	.0000E+00	-4.1601E-01	1.4022E-02
57	58	4.2262E-01	.0000E+00	.0000E+00	.0000E+00	-4.1711E-01	5.5016E-03
58	59	4.2308E-01	.0000E+00	.0000E+00	.0000E+00	-4.0893E-01	1.4147E-02
59	60	4.4143E-01	.0000E+00	.0000E+00	.0000E+00	-1.7526E-01	2.6618E-01
60	61	2.1783E-03	.0000E+00	.0000E+00	.0000E+00	-2.9936E-04	1.8790E-03
61	62	5.9016E-01	.0000E+00	.0000E+00	.0000E+00	-3.1704E-01	2.7312E-01
62	63	5.8831E-01	.0000E+00	.0000E+00	.0000E+00	-2.5862E-01	3.2969E-01
63	64	3.3730E-03	.0000E+00	.0000E+00	.0000E+00	-1.6003E-04	3.2129E-03
64	65	6.0779E-01	.0000E+00	.0000E+00	.0000E+00	-3.2267E-01	2.8512E-01
65	66	6.0085E-01	.0000E+00	.0000E+00	.0000E+00	-2.6597E-01	3.3487E-01
66	67	2.7227E-03	.0000E+00	.0000E+00	.0000E+00	-4.6236E-05	2.6764E-03
67	68	2.1349E-01	.0000E+00	.0000E+00	.0000E+00	-1.1978E-01	9.3711E-02
68	69	1.8562E-01	.0000E+00	.0000E+00	.0000E+00	-1.0052E-01	8.5097E-02
69	70	1.8239E-01	.0000E+00	.0000E+00	.0000E+00	-9.6886E-02	8.5503E-02
70	71	3.7347E-01	.0000E+00	.0000E+00	.0000E+00	-3.6700E-01	6.4773E-03
71	72	3.6573E-01	.0000E+00	.0000E+00	.0000E+00	-3.6482E-01	9.1783E-04
72	73	3.8762E-01	.0000E+00	.0000E+00	.0000E+00	-3.5007E-01	3.7550E-02
73	74	1.9297E-01	.0000E+00	.0000E+00	.0000E+00	-1.8585E-01	7.1267E-03
74	75	3.6291E-01	.0000E+00	.0000E+00	.0000E+00	-3.5660E-01	6.3109E-03
75	76	3.5880E-01	.0000E+00	.0000E+00	.0000E+00	-3.5791E-01	8.8311E-04
76	77	3.8562E-01	.0000E+00	.0000E+00	.0000E+00	-3.4817E-01	3.7453E-02

77	78	1.9356E-01	.0000E+00	.0000E+00	.0000E+00	-1.8669E-01	6.8771E-03
78	79	1.3854E-03	.0000E+00	.0000E+00	.0000E+00	-1.1945E-03	1.9089E-04
79	80	1.8957E-03	.0000E+00	.0000E+00	.0000E+00	-1.6571E-03	2.3861E-04
80	81	3.7875E-05	.0000E+00	.0000E+00	.0000E+00	-3.1047E-05	6.8277E-06
81	82	9.6157E-02	.0000E+00	.0000E+00	.0000E+00	-7.8695E-02	1.7462E-02
82	83	6.4861E-02	.0000E+00	.0000E+00	.0000E+00	-6.3907E-02	9.5412E-04
83	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	5.0834E-02	.0000E+00	.0000E+00	.0000E+00	-4.5406E-02	5.4286E-03
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	2.9285E-02	.0000E+00	.0000E+00	.0000E+00	-2.5358E-02	3.9270E-03
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	1.0426E-02	.0000E+00	.0000E+00	.0000E+00	-5.8427E-03	4.5831E-03

TOTAL	9.4118E+01	1.0100E+00	.0000E+00	.0000E+00	-9.4118E+01	1.0099E+00
1NEUTRON WEIGHT BALANCE IN EACH CELL --	VARIANCE REDUCTION EVENTS					

PRINT TABLE 130

CELL	WEIGHT WINDOW	CELL IMPORTANCE	WEIGHT CUTOFF	ENERGY IMPORTANCE	DXTRAN	FORCED COLLISION	EXPONENTIAL TRANSFORM	TOTAL
1	1	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
2	2	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	.0000E+00	.0000E+00	5.3377E-05	.0000E+00	.0000E+00	.0000E+00	5.3377E-05
33	34	.0000E+00	.0000E+00	1.3903E-05	.0000E+00	.0000E+00	.0000E+00	1.3903E-05
34	35	.0000E+00	.0000E+00	-1.6768E-05	.0000E+00	.0000E+00	.0000E+00	-1.6768E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	.0000E+00	.0000E+00	1.6369E-05	.0000E+00	.0000E+00	.0000E+00	1.6369E-05
38	39	.0000E+00	.0000E+00	4.2096E-06	.0000E+00	.0000E+00	.0000E+00	4.2096E-06
39	40	.0000E+00	.0000E+00	1.6643E-04	.0000E+00	.0000E+00	.0000E+00	1.6643E-04

40	41	.0000E+00	.0000E+00	1.3239E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.3239E-05
41	42	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
42	43	.0000E+00	.0000E+00	-2.8470E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.8470E-06
43	44	.0000E+00	.0000E+00	2.9589E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.9589E-05
44	45	.0000E+00	.0000E+00	4.2491E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.2491E-06
45	46	.0000E+00	.0000E+00	-1.2071E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2071E-05
46	47	.0000E+00	.0000E+00	-4.1824E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1824E-06
47	48	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
48	49	.0000E+00	.0000E+00	8.7296E-08	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.7296E-08
49	50	.0000E+00	.0000E+00	3.9422E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9422E-05
50	51	.0000E+00	.0000E+00	2.1805E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.1805E-04
51	52	.0000E+00	.0000E+00	1.1778E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.1778E-05
52	53	.0000E+00	.0000E+00	-3.4926E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4926E-05
53	54	.0000E+00	.0000E+00	2.3590E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3590E-05
54	55	.0000E+00	.0000E+00	-1.2257E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.2257E-05
55	56	.0000E+00	.0000E+00	5.8689E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	5.8689E-06
56	57	.0000E+00	.0000E+00	4.1778E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.1778E-05
57	58	.0000E+00	.0000E+00	2.3512E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	2.3512E-05
58	59	.0000E+00	.0000E+00	1.6275E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	1.6275E-04
59	60	.0000E+00	.0000E+00	-4.7636E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.7636E-05
60	61	.0000E+00	.0000E+00	4.4043E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	4.4043E-06
61	62	.0000E+00	.0000E+00	3.9900E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	3.9900E-05
62	63	.0000E+00	.0000E+00	8.5698E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	8.5698E-05
63	64	.0000E+00	.0000E+00	-8.3699E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-8.3699E-06
64	65	.0000E+00	.0000E+00	6.5487E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	6.5487E-05
65	66	.0000E+00	.0000E+00	-1.1195E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.1195E-04
66	67	.0000E+00	.0000E+00	-4.1757E-06	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-4.1757E-06
67	68	.0000E+00	.0000E+00	-2.4879E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.4879E-04
68	69	.0000E+00	.0000E+00	-1.7074E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.7074E-04
69	70	.0000E+00	.0000E+00	-1.0366E-04	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-1.0366E-04
70	71	.0000E+00	.0000E+00	-3.4717E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-3.4717E-05
71	72	.0000E+00	.0000E+00	-2.2463E-05	.0000E+00	.0000E+00	.0000E+00	.0000E+00	-2.2463E-05
72	73	.0000E+00	.0000E+00	2.3937E-04	.0000E+00				

3	3	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
4	4	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
5	5	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
6	6	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
7	8	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
8	9	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
9	10	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
10	11	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	1.6123E-03	.0000E+00	-3.3120E-01	-8.0613E-04	-3.2526E-01	-6.5566E-01
33	34	.0000E+00	.0000E+00	-1.6568E-04	.0000E+00	.0000E+00	-1.6568E-04
34	35	.0000E+00	.0000E+00	-1.7188E-05	.0000E+00	.0000E+00	-1.7188E-05
35	36	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
36	37	.0000E+00	.0000E+00	-8.6483E-07	.0000E+00	.0000E+00	-8.6483E-07
37	38	1.5353E-04	.0000E+00	-6.1372E-03	-7.6766E-05	.0000E+00	-6.0604E-03
38	39	.0000E+00	.0000E+00	-5.4471E-06	.0000E+00	.0000E+00	-5.4471E-06
39	40	.0000E+00	.0000E+00	-4.7276E-02	.0000E+00	.0000E+00	-4.7276E-02
40	41	.0000E+00	.0000E+00	-3.2541E-03	.0000E+00	.0000E+00	-3.2541E-03
41	42	.0000E+00	.0000E+00	-1.0933E-06	.0000E+00	.0000E+00	-1.0933E-06
42	43	2.7790E-05	.0000E+00	-4.8548E-04	-1.3895E-05	.0000E+00	-4.7158E-04
43	44	.0000E+00	.0000E+00	-1.0691E-03	.0000E+00	.0000E+00	-1.0691E-03
44	45	.0000E+00	.0000E+00	-4.4531E-04	.0000E+00	.0000E+00	-4.4531E-04
45	46	.0000E+00	.0000E+00	-2.5327E-03	.0000E+00	.0000E+00	-2.5327E-03
46	47	.0000E+00	.0000E+00	-2.5351E-04	.0000E+00	.0000E+00	-2.5351E-04
47	48	.0000E+00	.0000E+00	-3.8550E-05	.0000E+00	.0000E+00	-3.8550E-05
48	49	.0000E+00	.0000E+00	-2.1240E-04	.0000E+00	.0000E+00	-2.1240E-04
49	50	.0000E+00	.0000E+00	-2.3606E-03	.0000E+00	.0000E+00	-2.3606E-03
50	51	.0000E+00	.0000E+00	-1.0480E-02	.0000E+00	.0000E+00	-1.0480E-02
51	52	.0000E+00	.0000E+00	-6.1287E-04	.0000E+00	.0000E+00	-6.1287E-04
52	53	.0000E+00	.0000E+00	-1.0195E-02	.0000E+00	.0000E+00	-1.0195E-02
53	54	.0000E+00	.0000E+00	-4.1073E-03	.0000E+00	.0000E+00	-4.1073E-03
54	55	.0000E+00	.0000E+00	-1.8814E-04	.0000E+00	.0000E+00	-1.8814E-04
55	56	.0000E+00	.0000E+00	-2.2409E-03	.0000E+00	.0000E+00	-2.2409E-03
56	57	.0000E+00	.0000E+00	-9.9206E-03	.0000E+00	.0000E+00	-9.9206E-03
57	58	.0000E+00	.0000E+00	-6.4847E-04	.0000E+00	.0000E+00	-6.4847E-04
58	59	.0000E+00	.0000E+00	-1.0165E-02	.0000E+00	.0000E+00	-1.0165E-02
59	60	.0000E+00	.0000E+00	-3.9993E-03	.0000E+00	.0000E+00	-3.9993E-03
60	61	.0000E+00	.0000E+00	-1.4101E-04	.0000E+00	.0000E+00	-1.4101E-04
61	62	.0000E+00	.0000E+00	-3.1557E-03	.0000E+00	.0000E+00	-3.1557E-03
62	63	.0000E+00	.0000E+00	-1.3648E-02	.0000E+00	.0000E+00	-1.3648E-02

63	64	.0000E+00	.0000E+00	-7.0636E-05	.0000E+00	.0000E+00	-7.0636E-05
64	65	.0000E+00	.0000E+00	-3.2376E-03	.0000E+00	.0000E+00	-3.2376E-03
65	66	.0000E+00	.0000E+00	-1.4082E-02	.0000E+00	.0000E+00	-1.4082E-02
66	67	.0000E+00	.0000E+00	-5.4732E-05	.0000E+00	.0000E+00	-5.4732E-05
67	68	.0000E+00	.0000E+00	-3.3573E-02	.0000E+00	.0000E+00	-3.3573E-02
68	69	3.2328E-05	.0000E+00	-1.6109E-02	-1.6164E-05	.0000E+00	-1.6093E-02
69	70	.0000E+00	.0000E+00	-1.7364E-02	.0000E+00	.0000E+00	-1.7364E-02
70	71	.0000E+00	.0000E+00	-6.4426E-03	.0000E+00	.0000E+00	-6.4426E-03
71	72	.0000E+00	.0000E+00	-8.9537E-04	.0000E+00	.0000E+00	-8.9537E-04
72	73	.0000E+00	.0000E+00	-3.7789E-02	.0000E+00	.0000E+00	-3.7789E-02
73	74	.0000E+00	.0000E+00	-7.0222E-03	.0000E+00	.0000E+00	-7.0222E-03
74	75	.0000E+00	.0000E+00	-6.2483E-03	.0000E+00	.0000E+00	-6.2483E-03
75	76	.0000E+00	.0000E+00	-8.5545E-04	.0000E+00	.0000E+00	-8.5545E-04
76	77	.0000E+00	.0000E+00	-3.7321E-02	.0000E+00	.0000E+00	-3.7321E-02
77	78	.0000E+00	.0000E+00	-6.8855E-03	.0000E+00	.0000E+00	-6.8855E-03
78	79	.0000E+00	.0000E+00	-1.9956E-04	.0000E+00	.0000E+00	-1.9956E-04
79	80	.0000E+00	.0000E+00	-2.3042E-04	.0000E+00	.0000E+00	-2.3042E-04
80	81	.0000E+00	.0000E+00	-2.7535E-06	.0000E+00	.0000E+00	-2.7535E-06
81	82	.0000E+00	.0000E+00	-1.7227E-02	.0000E+00	.0000E+00	-1.7227E-02
82	83	.0000E+00	.0000E+00	-9.7611E-04	.0000E+00	.0000E+00	-9.7611E-04
83	84	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	.0000E+00	.0000E+00	-5.4779E-03	.0000E+00	.0000E+00	-5.4779E-03
86	87	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	.0000E+00	.0000E+00	-3.9214E-03	.0000E+00	.0000E+00	-3.9214E-03
89	90	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	.0000E+00	.0000E+00	-4.7170E-03	.0000E+00	.0000E+00	-4.7170E-03

TOTAL 1.8259E-03 .0000E+00 -6.8566E-01 -9.1295E-04 -3.2526E-01 -1.0100E+00
 1NEUTRON ACTIVITY OF EACH NUCLIDE IN EACH CELL, PER SOURCE PARTICLE

PRINT TABLE 140

CELL	NUCLIDES	ATOM FRACTION	TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT LOSS TO FISSION	WEIGHT GAIN BY (N,XN)
2	2	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
3	3	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
4	4	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
5	5	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
6	6	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
7	8	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
8	9	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
9	10	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00
10	11	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
11	12	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
12	13	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
13	14	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
14	15	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
15	16	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
16	17	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
17	18	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
18	19	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
19	20	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
20	21	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
21	22	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
22	23	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
23	24	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
24	25	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
25	26	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
26	27	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
27	28	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
28	29	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
29	30	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
30	31	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00

		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
31	32	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
32	33	8016.50C	6.7097E-01	88014	1.2973E+00	1.1446E-03	.0000E+00	.0000E+00
		45103.50C	2.3926E-04	487	6.2216E-03	5.5096E-03	.0000E+00	.0000E+00
		47109.50C	2.8706E-05	67	9.1268E-04	7.5802E-04	.0000E+00	.0000E+00
		62149.50C	1.8626E-06	877	9.6613E-03	9.5631E-03	.0000E+00	.0000E+00
		63151.55C	2.3827E-07	10	1.1307E-04	9.6657E-05	.0000E+00	.0000E+00
		63153.55C	3.0867E-05	90	1.1526E-03	1.0153E-03	.0000E+00	.0000E+00
		64155.50C	1.4226E-06	388	4.2149E-03	4.1613E-03	.0000E+00	.0000E+00
		92233.50C	4.5949E-10	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		92234.50C	6.8903E-05	117	1.5408E-03	1.0481E-03	2.2449E-05	.0000E+00
		92235.50C	4.4265E-03	20793	4.0480E-01	3.5752E-02	1.7806E-01	.0000E+00
		92236.50C	9.9057E-04	720	1.0691E-02	3.6532E-03	1.6194E-04	.0000E+00
		92238.50C	3.2088E-01	133900	1.9794E+00	1.6874E-01	1.9723E-02	8.0613E-04
		93237.55C	7.6759E-05	164	2.1164E-03	1.5993E-03	2.3182E-05	.0000E+00
		94238.50C	1.4002E-05	57	6.8409E-04	5.4439E-04	2.7746E-05	.0000E+00
		94239.55C	1.5156E-03	14337	2.8831E-01	5.3108E-02	1.0911E-01	.0000E+00
		94240.50C	4.3508E-04	2747	3.6673E-02	3.2610E-02	1.5692E-04	.0000E+00
		94241.50C	2.0467E-04	2186	4.4841E-02	6.3524E-03	1.7780E-02	.0000E+00
		94242.50C	5.2259E-05	104	1.4504E-03	9.6677E-04	4.5264E-06	.0000E+00
		95241.50C	6.1062E-05	397	5.0248E-03	4.4117E-03	8.7083E-05	.0000E+00
		95242.50C	1.9299E-07	10	2.0300E-04	1.9775E-05	9.6562E-05	.0000E+00
		95243.50C	5.8652E-06	16	2.3076E-04	1.5552E-04	1.0496E-05	.0000E+00
		96245.35C	1.9976E-08	0	2.0535E-06	.0000E+00	.0000E+00	.0000E+00
33	34	8016.50C	6.8138E-03	5	5.8539E-05	2.5074E-09	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	2	2.3238E-05	6.5828E-06	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	7	5.1872E-05	8.9755E-06	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	782	8.2284E-03	1.4697E-04	.0000E+00	.0000E+00
		50000.35C	1.0711E-02	5	6.7534E-05	3.1522E-06	.0000E+00	.0000E+00
34	35	1001.50C	6.6667E-01	446	2.8551E-03	1.7184E-05	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	16	1.0760E-04	3.3794E-09	.0000E+00	.0000E+00
35	36	2004.50C	1.0000E+00	9	1.4194E-04	.0000E+00	.0000E+00	.0000E+00
36	37	1001.50C	6.6667E-01	22	1.5460E-04	8.6483E-07	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
37	38	8016.50C	6.8138E-03	167	2.4154E-03	5.9426E-06	.0000E+00	.0000E+00
		24000.50C	1.7467E-03	71	9.6302E-04	1.0875E-04	.0000E+00	.0000E+00
		26000.55C	3.2526E-03	176	2.3936E-03	1.4071E-04	.0000E+00	.0000E+00
		40000.50C	9.7748E-01	44891	6.7594E-01	5.7077E-03	.0000E+00	7.6766E-05
		50000.35C	1.0711E-02	474	6.9944E-03	1.7411E-04	.0000E+00	.0000E+00
38	39	1001.50C	6.6667E-01	134	9.0674E-04	5.4452E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	7	4.8313E-05	1.9529E-09	.0000E+00	.0000E+00
39	40	1001.50C	6.6667E-01	1193491	1.5633E+01	4.5993E-02	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	104704	1.5292E+00	1.2830E-03	.0000E+00	.0000E+00
40	41	1001.50C	6.6667E-01	74469	9.8803E-01	3.1840E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	6194	9.1100E-02	7.0089E-05	.0000E+00	.0000E+00
41	42	1001.50C	6.6667E-01	34	1.9510E-04	1.0930E-06	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1	5.8018E-06	2.9988E-10	.0000E+00	.0000E+00

42	43	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 6 13 3155 43	1.6214E-04 9.3625E-05 1.9220E-04 4.7646E-02 6.5461E-04	2.5640E-09 6.6509E-06 1.4089E-05 4.4237E-04 2.2367E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 1.3895E-05 .0000E+00
43	44	1001.50C 8016.50C	6.6667E-01 3.3333E-01	24536 2142	3.2596E-01 3.1653E-02	1.0409E-03 2.8248E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
44	45	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	12 5 8 2816 32	1.8044E-04 7.8450E-05 1.0161E-04 4.2613E-02 4.9119E-04	8.0130E-09 4.1152E-06 4.1639E-06 4.2317E-04 1.3857E-05	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
45	46	1001.50C 8016.50C	6.6667E-01 3.3333E-01	59612 5073	7.9221E-01 7.4481E-02	2.4840E-03 4.8637E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
46	47	1001.50C 8016.50C	6.6667E-01 3.3333E-01	6021 534	7.9734E-02 7.6450E-03	2.4920E-04 4.3154E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
47	48	8016.50C 24000.50C 26000.55C 40000.50C 50000.35C	6.8138E-03 1.7467E-03 3.2526E-03 9.7748E-01 1.0711E-02	2 0 1 278 2	2.8313E-05 .0000E+00 1.5814E-05 4.1861E-03 3.2052E-05	1.4956E-10 .0000E+00 6.5419E-08 3.8286E-05 1.9890E-07	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
48	49	1001.50C 8016.50C	6.6667E-01 3.3333E-01	5158 419	6.9036E-02 6.1609E-03	2.0896E-04 3.4458E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
49	50	1001.50C 8016.50C	6.6667E-01 3.3333E-01	58495 4427	6.8888E-01 6.0480E-02	2.3193E-03 4.1316E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
50	51	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	14 32 40 1 2 1412 453 7472 2213 184	1.7709E-04 3.9502E-04 5.8656E-04 5.7480E-06 1.4510E-05 1.8365E-02 6.4763E-03 9.1310E-02 2.7252E-02 2.5306E-03	3.5574E-08 1.7136E-05 8.1186E-06 1.6539E-07 3.7793E-06 1.9925E-03 9.1977E-04 5.4277E-03 1.7335E-03 3.7712E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
51	52	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2243 5	3.2354E-02 7.1829E-05	6.1130E-04 1.5685E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
52	53	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	5 41 48 2 1 1331 454 7556 2225 137	5.1686E-05 5.3319E-04 7.0298E-04 2.6805E-05 7.3992E-06 1.7072E-02 6.4415E-03 9.0891E-02 2.7352E-02 1.8429E-03	1.0401E-08 2.6340E-05 5.8052E-06 3.5072E-08 1.6299E-06 1.7670E-03 8.6711E-04 5.5355E-03 1.7522E-03 2.3947E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
53	54	1001.50C 8016.50C	6.6667E-01 3.3333E-01	93098 6212	1.0611E+00 8.2715E-02	4.0508E-03 5.6469E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00

54	55	1001.50C 8016.50C	6.6667E-01 3.3333E-01	3946 179	3.4672E-02 1.7083E-03	1.8809E-04 4.8017E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
55	56	1001.50C 8016.50C	6.6667E-01 3.3333E-01	56914 4383	6.7316E-01 5.9977E-02	2.2082E-03 3.2703E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
56	57	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	6 56 56 4 1 1436 530 7498 2209 147	7.2619E-05 6.6205E-04 7.9990E-04 5.2576E-05 1.7139E-05 1.8931E-02 7.7383E-03 9.2397E-02 2.7424E-02 2.0241E-03	1.9708E-08 3.4485E-05 5.3429E-06 5.6257E-07 3.2113E-09 1.7724E-03 8.2718E-04 5.3570E-03 1.6155E-03 3.0810E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
57	58	13027.50C 29000.50C	9.9949E-01 5.0987E-04	2304 5	3.3239E-02 5.6821E-05	6.4248E-04 5.9930E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
58	59	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	13 29 57 2 1 1367 464 7484 2266 156	1.8495E-04 3.3482E-04 8.1943E-04 2.7130E-05 5.2510E-06 1.7717E-02 6.5360E-03 9.0395E-02 2.8307E-02 2.0853E-03	2.3925E-08 1.8758E-05 1.2663E-05 7.9922E-07 1.0636E-06 1.8200E-03 8.7968E-04 5.3981E-03 1.7522E-03 2.8158E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
59	60	1001.50C 8016.50C	6.6667E-01 3.3333E-01	91458 6154	1.0355E+00 8.1313E-02	3.9592E-03 4.0077E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
60	61	1001.50C 8016.50C	6.6667E-01 3.3333E-01	2899 148	2.6157E-02 1.6035E-03	1.3887E-04 2.1382E-06	.0000E+00 .0000E+00	.0000E+00 .0000E+00
61	62	1001.50C 8016.50C	6.6667E-01 3.3333E-01	77320 6071	9.1762E-01 8.3664E-02	3.1123E-03 4.3339E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
62	63	6000.50C 7014.50C 14000.50C 15031.50C 16032.50C 24000.50C 25055.50C 26000.55C 28000.50C 42000.50C	1.3966E-03 3.9931E-03 1.4932E-02 8.1237E-04 5.2467E-04 1.8282E-01 2.0356E-02 6.4626E-01 1.1433E-01 1.4572E-02	15 52 78 7 2 1772 604 9958 2970 210	2.2060E-04 6.3222E-04 1.0845E-03 1.0145E-04 3.0273E-05 2.3347E-02 8.6779E-03 1.2290E-01 3.6998E-02 2.8382E-03	1.5792E-08 4.1030E-05 1.5066E-05 1.4590E-06 4.7428E-07 2.3430E-03 1.2623E-03 7.1935E-03 2.3413E-03 4.4960E-04	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00	.0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00 .0000E+00
63	64	1001.50C 8016.50C	6.6667E-01 3.3333E-01	1300 67	1.2447E-02 7.0332E-04	7.0614E-05 2.1781E-08	.0000E+00 .0000E+00	.0000E+00 .0000E+00
64	65	1001.50C 8016.50C	6.6667E-01 3.3333E-01	80093 6015	9.4832E-01 8.2348E-02	3.1907E-03 4.6948E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00
65	66	6000.50C 7014.50C	1.3966E-03 3.9931E-03	8 65	1.1779E-04 7.7992E-04	8.7035E-09 3.9595E-05	.0000E+00 .0000E+00	.0000E+00 .0000E+00

[illegible]

		28000.50C	1.1433E-01	9749	1.1822E-01	6.2333E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	652	8.7959E-03	1.1382E-03	.0000E+00	.0000E+00
73	74	1001.50C	6.6667E-01	149638	1.6734E+00	6.9632E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9481	1.2216E-01	5.8967E-05	.0000E+00	.0000E+00
74	75	6000.50C	1.3966E-03	6	6.9667E-05	1.1368E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	40	4.8163E-04	1.8275E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	35	5.1134E-04	2.8297E-06	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	8	1.0508E-04	7.3141E-07	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	1	1.5967E-05	1.1508E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	1092	1.4200E-02	1.1100E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	353	4.9755E-03	5.6883E-04	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6055	7.3752E-02	3.2962E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	1801	2.2229E-02	1.0486E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	128	1.7216E-03	2.0171E-04	.0000E+00	.0000E+00
75	76	13027.50C	9.9949E-01	4565	6.6190E-02	8.3468E-04	.0000E+00	.0000E+00
		29000.50C	5.0987E-04	15	1.8697E-04	2.0765E-05	.0000E+00	.0000E+00
76	77	6000.50C	1.3966E-03	40	5.3641E-04	8.6088E-08	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	152	1.7852E-03	8.0859E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	235	3.2900E-03	3.1461E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	26	3.1093E-04	3.2570E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	7	1.1689E-04	8.8891E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	6190	7.9902E-02	6.9387E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	1988	2.7980E-02	3.3498E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	32284	3.8531E-01	1.9563E-02	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	9831	1.1900E-01	6.2629E-03	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	661	8.8461E-03	1.0823E-03	.0000E+00	.0000E+00
77	78	1001.50C	6.6667E-01	147809	1.6722E+00	6.8496E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	9594	1.2398E-01	3.5953E-05	.0000E+00	.0000E+00
78	79	1001.50C	6.6667E-01	3983	3.6107E-02	1.9951E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	178	1.7424E-03	5.2507E-08	.0000E+00	.0000E+00
79	80	1001.50C	6.6667E-01	4565	4.0861E-02	2.3037E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	181	1.7507E-03	5.4652E-08	.0000E+00	.0000E+00
80	81	6000.50C	1.3966E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	6	8.3358E-05	6.1192E-07	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.4572E-02	1	1.6588E-05	2.1416E-06	.0000E+00	.0000E+00
81	82	6000.50C	1.3966E-03	13	1.4242E-04	3.7679E-07	.0000E+00	.0000E+00
		7014.50C	3.9931E-03	72	8.6581E-04	3.2223E-05	.0000E+00	.0000E+00
		14000.50C	1.4932E-02	91	1.1856E-03	1.4999E-05	.0000E+00	.0000E+00
		15031.50C	8.1237E-04	10	1.2224E-04	1.3369E-06	.0000E+00	.0000E+00
		16032.50C	5.2467E-04	2	3.1030E-05	1.8452E-06	.0000E+00	.0000E+00
		24000.50C	1.8282E-01	2606	3.1417E-02	3.1366E-03	.0000E+00	.0000E+00
		25055.50C	2.0356E-02	742	9.8316E-03	1.4836E-03	.0000E+00	.0000E+00
		26000.55C	6.4626E-01	14543	1.6155E-01	9.0565E-03	.0000E+00	.0000E+00
		28000.50C	1.1433E-01	4452	4.9742E-02	3.0404E-03	.0000E+00	.0000E+00

		42000.50C	1.4572E-02	259	3.3608E-03	4.5941E-04	.0000E+00	.0000E+00
82	83	1001.50C	6.6667E-01	25871	2.7995E-01	9.6129E-04	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	1880	2.3941E-02	1.4821E-05	.0000E+00	.0000E+00
83	84	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
84	85	6000.50C	2.3404E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
85	86	6000.50C	2.3404E-03	8	1.0118E-04	8.4858E-09	.0000E+00	.0000E+00
		13027.50C	4.1674E-03	10	1.3155E-04	1.9483E-06	.0000E+00	.0000E+00
		14000.50C	1.0009E-02	19	2.6215E-04	1.3679E-06	.0000E+00	.0000E+00
		16032.50C	5.2754E-04	3	3.1010E-05	3.0412E-06	.0000E+00	.0000E+00
		22000.50C	1.0568E-02	102	1.3072E-03	1.1987E-04	.0000E+00	.0000E+00
		24000.50C	2.3247E-01	1535	2.0285E-02	1.0316E-03	.0000E+00	.0000E+00
		25055.50C	1.0234E-02	236	3.3832E-03	2.2849E-04	.0000E+00	.0000E+00
		26000.55C	2.8763E-01	2749	3.2861E-02	1.0802E-03	.0000E+00	.0000E+00
		28000.50C	4.0235E-01	6510	7.8322E-02	2.6653E-03	.0000E+00	.0000E+00
		29000.50C	2.2119E-02	207	2.6155E-03	1.1584E-04	.0000E+00	.0000E+00
		42000.50C	1.7582E-02	165	2.2139E-03	2.3013E-04	.0000E+00	.0000E+00
86	87	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
87	88	6000.50C	1.0113E-02	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
88	89	6000.50C	1.0113E-02	121	1.5711E-03	7.2224E-08	.0000E+00	.0000E+00
		14000.50C	5.4063E-03	46	6.9608E-04	3.1058E-06	.0000E+00	.0000E+00
		15031.50C	6.2391E-04	5	6.5912E-05	9.3333E-08	.0000E+00	.0000E+00
		16032.50C	6.0443E-04	1	1.6546E-05	3.4626E-09	.0000E+00	.0000E+00
		25055.50C	9.0452E-03	435	5.8839E-03	2.3477E-04	.0000E+00	.0000E+00
		26000.55C	9.7421E-01	17271	2.0272E-01	3.6833E-03	.0000E+00	.0000E+00
89	90	1001.50C	6.6667E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
90	91	1001.50C	6.6667E-01	102161	8.5505E-01	4.7122E-03	.0000E+00	.0000E+00
		8016.50C	3.3333E-01	4851	4.4263E-02	4.7766E-06	.0000E+00	.0000E+00
TOTAL				3779972	4.5824E+01	6.8566E-01	3.2526E-01	9.1295E-04
TOTAL OVER ALL CELLS FOR EACH NUCLIDE				TOTAL COLLISIONS	COLLISIONS * WEIGHT	WEIGHT LOST TO CAPTURE	WEIGHT GAIN BY FISSION	WEIGHT GAIN BY (N,XN)

1001.50C	2940738	3.4296E+01	1.2582E-01	.0000E+00	.0000E+00
2004.50C	9	1.4194E-04	.0000E+00	.0000E+00	.0000E+00
6000.50C	321	4.1622E-03	7.9478E-07	.0000E+00	.0000E+00
7014.50C	833	9.9018E-03	4.7415E-04	.0000E+00	.0000E+00
8016.50C	300664	4.1711E+00	3.1136E-03	.0000E+00	.0000E+00
13027.50C	13669	1.9795E-01	2.9928E-03	.0000E+00	.0000E+00
14000.50C	1136	1.5824E-02	1.5543E-04	.0000E+00	.0000E+00
15031.50C	104	1.3677E-03	1.4495E-05	.0000E+00	.0000E+00
16032.50C	38	5.2982E-04	3.5371E-05	.0000E+00	.0000E+00
22000.50C	258	3.3772E-03	3.6866E-04	.0000E+00	.0000E+00
24000.50C	32857	4.2254E-01	3.8810E-02	.0000E+00	1.6164E-05
25055.50C	10178	1.4282E-01	1.7912E-02	.0000E+00	.0000E+00
26000.55C	180081	2.1395E+00	1.0872E-01	.0000E+00	.0000E+00
28000.50C	64983	7.7840E-01	4.3336E-02	.0000E+00	.0000E+00
29000.50C	624	7.6791E-03	5.6355E-04	.0000E+00	.0000E+00
40000.50C	51922	7.7862E-01	6.7585E-03	.0000E+00	.0000E+00
42000.50C	3534	4.7300E-02	6.3166E-03	.0000E+00	9.0661E-05
45103.50C	487	6.2216E-03	5.5096E-03	.0000E+00	.0000E+00
47109.50C	67	9.1268E-04	7.5802E-04	.0000E+00	.0000E+00
50000.35C	556	8.2398E-03	2.1369E-04	.0000E+00	.0000E+00
62149.50C	877	9.6613E-03	9.5631E-03	.0000E+00	.0000E+00
63151.55C	10	1.1307E-04	9.6657E-05	.0000E+00	.0000E+00
63153.55C	90	1.1526E-03	1.0153E-03	.0000E+00	.0000E+00
64155.50C	388	4.2149E-03	4.1613E-03	.0000E+00	.0000E+00
92233.50C	0	.0000E+00	.0000E+00	.0000E+00	.0000E+00
92234.50C	117	1.5408E-03	1.0481E-03	.0000E+00	.0000E+00
92235.50C	20793	4.0480E-01	3.5752E-02	2.2449E-05	.0000E+00
92236.50C	720	1.0691E-02	3.6532E-03	1.7806E-01	.0000E+00
92238.50C	133900	1.9794E+00	1.6874E-01	1.6194E-04	.0000E+00
93237.55C	164	2.1164E-03	1.5993E-03	1.9723E-02	8.0613E-04
94238.50C	57	6.8409E-04	5.4439E-04	2.3182E-05	.0000E+00
94239.55C	14337	2.8831E-01	5.3108E-02	2.7746E-05	.0000E+00
94240.50C	2747	3.6673E-02	3.2610E-02	1.0911E-01	.0000E+00
94241.50C	2186	4.4841E-02	6.3524E-03	1.5692E-04	.0000E+00
94242.50C	104	1.4504E-03	9.6677E-04	1.7780E-02	.0000E+00
95241.50C	397	5.0248E-03	4.4117E-03	4.5264E-06	.0000E+00
95242.50C	10	2.0300E-04	1.9775E-05	8.7083E-05	.0000E+00
95243.50C	16	2.3076E-04	1.5552E-04	9.6562E-05	.0000E+00
96245.35C	0	2.0535E-06	.0000E+00	1.0496E-05	.0000E+00

 DUMP NO. 2 ON FILE RUNTPE NPS = 59407 CTM = 82.90

11 WARNING MESSAGES SO FAR.

RUN TERMINATED WHEN 20 KCODE CYCLES WERE DONE.

COMPUTER TIME = 83.00 MINUTES

MCNP VERSION 4A-B 10/04/91

07/28/95 15:22:56

PROBID = 07/28/95 13:49:11