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**Twenty-Five Group Cross Sections Used in
Los Alamos Rover Program**

by

Joseph Sapir

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Sapir

TWENTY-FIVE GROUP CROSS SECTIONS USED IN THE
LOS ALAMOS ROVER PROGRAM

by

Joseph Sapis

ABSTRACT

The most recent 25 energy-group cross sections used in the neutronic analyses of Rover reactors are presented.

This report tabulates the most recent 25 energy-group cross sections used in the neutronic analyses of Rover reactors at Los Alamos. Special acknowledgment is due to G. E. Hansen, C. B. Mills, and the late W. W. Clendenin for their contributions to the cross-section preparation effort.

The group-energy boundaries are shown in Table I. Except for small changes at thermal energies, the group structure is essentially that used by Mills.¹ For most elements, the upper six energy groups have been directly transcribed from the Hansen-Roach sets.² Resonance absorption cross sections were calculated with the CXS code³ for ²³⁵U and with the TRIX code⁴ for niobium, tantalum, molybdenum, zirconium, and ²³⁸U. Thermalization cross sections for beryllium, carbon, and hydrogen were generated by using codes written by Clendenin.⁵

The microscopic cross sections appear in alphabetical order in the format used by the S_n transport theory codes.⁶ An explanation of the 13 entries listed for each energy group is given in Table II. Unless otherwise specified, a nuclide temperature of 0.025 eV is assumed.

These cross sections have been used in the analyses of the Phoebus-2 and Pewee reactors designed and tested by the Los Alamos Scientific Laboratory (LASL). The median energy of neutrons

causing fission in these reactors range from 0 to 70 eV in Phoebus-2. However, because of the presence of a beryllium side reflector, the neutron spectrum has a significant radial dependence.

The use of these cross sections in conjunction with transport theory codes has, in general, yielded good agreement with experimental measurements obtained at both ambient and elevated conditions. A report summarizing the neutronic calculations for the Phoebus-2 program has recently been issued.

REFERENCES

1. L. D. Connolly, "Los Alamos Group-Averaged Cross Sections," LAMS-2941, Los Alamos Scientific Laboratory.
2. G. E. Hansen and W. H. Roach, "Six and Sixteen Group Cross Sections for Fast and Intermediate Criticality Reactors," LAMS-2543, Los Alamos Scientific Laboratory.
3. Jessie Rudnick, "CXS-A Resonance Integral Code for Mixtures," Los Alamos Scientific Laboratory.
4. J. M. Otter, "TRIX-1, An Improved Analytical Code for Resonance Integrals," Argonne Code Center Report, Abstract, Atomics International, NAA-SR-ME-100.
5. W. W. Clendenin, "Calculation of Thermal Neutron Cross Sections for Crystalline Materials: LA-3823, Los Alamos Scientific Laboratory (LASL)."
6. W. W. Clendenin, "Calculation of Thermal Neutron Length and Group Cross Sections: The GLEN Code."

TWENTY-FIVE GROUP CROSS SECTIONS USED IN THE
LOS ALAMOS ROVER PROGRAM

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Joseph Sapir

ABSTRACT

The most recent 25 energy-group cross sections used in the neutronic analyses of Rover reactors are presented.

The most recent 25 energy-group cross sections used in the neutronic analyses of Rover reactors at Los Alamos is due to G. E. Hansen, C. B. Mills, and their contributions to the cross-

sections are shown in Table I. Except for the fast group, the group structure is essentially the same for most elements, the upper six energy groups are transcribed from the Hansen-Roach cross sections were calculated with the TRIX code⁴ for niobium, tantalum, and ²³⁸U. Thermalization cross sections for carbon, and hydrogen were generated by the code.⁵

The cross sections appear in alphabetical order in Table I. The transport theory codes.⁶ An explanation for each energy group is given in Table I. Specified, a nuclide temperature of

has been used in the analyses of the cross sections designed and tested by the Los Alamos Rover Program. The median energy of neutrons

causing fission in these reactors range from 0.4 eV in Pewee-1 to 70 eV in Phoebus-2. However, because of the presence of a thick beryllium side reflector, the neutron spectrum exhibits a strong radial dependence.

The use of these cross sections in conjunction with S_N transport theory codes has, in general, yielded good agreement with experimental measurements obtained at both ambient and operating conditions. A report summarizing the neutronic calculations performed for the Phoebus-2 program has recently been issued.⁷

REFERENCES

1. L. D. Connolly, "Los Alamos Group-Averaged Cross Sections," LAMS-2941, Los Alamos Scientific Laboratory (1963).
2. G. E. Hansen and W. H. Roach, "Six and Sixteen Group Cross Sections for Fast and Intermediate Critical Assemblies," LAMS-2543, Los Alamos Scientific Laboratory (1961).
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4. J. M. Otter, "TRIX-1, An Improved Analytical Calculation of Resonance Integrals," Argonne Code Center Reference Material Abstract, Atomics International, NAA-SR-MEMO-11538 (1965).
5. W. W. Clendenin, "Calculation of Thermal Neutron Scattering Cross Sections for Crystalline Materials: The TOR Program," LA-3823, Los Alamos Scientific Laboratory (1967).
6. W. W. Clendenin, "Calculation of Thermal Neutron Diffusion Length and Group Cross Sections: The GLEN Program," LA-3893,

Los Alamos Scientific Laboratory (1968).

W. W. Clendenin, "Calculation of Thermal Neutron Scattering Cross Sections for Molecular Hydrogen: The COL Program," Los Alamos Scientific Laboratory, Unpublished.

6. K. D. Lathrop, "DTF-IV, a FORTRAN IV Program Multigroup Transport Equation with Anisotropic Cross Sections," LA-3373, Los Alamos Scientific Laboratory (1968).
7. J. D. Orndoff and L. J. Sapir, "Neutronics of Reactor," LA-4455, Los Alamos Scientific Laboratory (1968).

TABLE I

TWENTY-FIVE GROUP-ENERGY BOUNDARIES

Group	Upper Energy Boundary
1	10.0 MeV
2	3.0 MeV
3	1.4 MeV
4	0.9 MeV
5	0.4 MeV
6	0.1 MeV
7	17.0 keV
8	3.0 keV
9	454.0 eV
10	61.4 eV
11	22.6 eV
12	8.32 eV
13	3.06 eV
14	1.125 eV
15	0.425 eV
16	0.325 eV
17	0.250 eV
18	0.200 eV
19	0.150 eV
20	0.090 eV
21	0.055 eV
22	0.035 eV
23	0.025 eV
24	0.020 eV
25	0.0063 eV

TABLE II

GROUP g

Position	Cross
1	σ absorption
2	$\nu \sigma$ fission
3	σ transport
4	σ upscatter
5	$\sigma g+4 \rightarrow g$
6	$\sigma g+3 \rightarrow g$
7	$\sigma g+2 \rightarrow g$
8	$\sigma g+1 \rightarrow g$
9	$\sigma g \rightarrow g$
10	$\sigma g-1 \rightarrow g$
11	$\sigma g-2 \rightarrow g$
12	$\sigma g-3 \rightarrow g$
13	$\sigma g-4 \rightarrow g$

Neutron Scattering
COL Program,"
ed.

6. K. D. Lethrop, "DTF-IV, a FORTRAN IV Program for Solving the Multigroup Transport Equation with Anisotropic Scattering," LA-3373, Los Alamos Scientific Laboratory (1965).
7. J. D. Orndoff and L. J. Sapir, "Neutronics of the Phoebe-2 Reactor," LA-4455, Los Alamos Scientific Laboratory (1970).

TABLE II

GROUP g

RIES

or Energy
boundary

	Position	Cross Section	
0 MeV	1	σ absorption	
0 MeV	2	$\nu \sigma$ fission	
4 MeV	3	σ transport	
9 MeV	4	σ upscattering	
4 MeV	5	$\sigma g+4 \rightarrow g$	upscattering
1 MeV	6	$\sigma g+3 \rightarrow g$	
0 keV	7	$\sigma g+2 \rightarrow g$	
0 keV	8	$\sigma g+1 \rightarrow g$	
0 eV	9	$\sigma g \rightarrow g$	downscattering
4 eV	10	$\sigma g-1 \rightarrow g$	
6 eV	11	$\sigma g-2 \rightarrow g$	
32 eV	12	$\sigma g-3 \rightarrow g$	
06 eV	13	$\sigma g-4 \rightarrow g$	
125 eV			
425 eV			
325 eV			
250 eV			
200 eV			
150 eV			
90 eV			
55 eV			
35 eV			
25 eV			
20 eV			
063 eV			

2

3	4	5	6	7	8
8.0000E-04	7.00000E-04	2.00000E-03	5.00000E-03	6.00000E-03	1.00000E-03
0.	0.	0.	0.	0.	0.
1.4038E+00	2.72670E+00	2.83200E+00	1.43500E+00	1.47600E+00	1.36600E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
6.1000E+00	2.47000E+00	2.69000E+00	1.36000E+00	1.40300E+00	1.31400E+00
2.30000E-01	3.80000E-01	2.50000E-01	1.40000E-01	7.00000E-02	6.70000E-02
1.00000E-01	1.10000E-01	1.40000E-01	1.00000E-09	0.	0.
0.	3.00000E-02	2.00000E-02	1.00000E-02	0.	0.
0.	0.	0.	9.00000E-04	0.	0.
11	12	13	14	15	16
1.00000E-02	1.70000E-02	2.77000E-02	4.50000E-02	6.10000E-02	7.00000E-02
0.	0.	0.	0.	0.	0.
3.7500E+00	1.38200E+00	1.39270E+00	1.45900E+00	1.49200E+00	1.50300E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.6500E+00	1.26500E+00	1.26500E+00	1.30900E+00	1.01100E+00	1.01300E+00
1.00000E-01	1.00000E-01	1.00000E-01	1.00000E-01	1.05000E-01	4.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
1.11000E-01	1.42000E-01	1.78000E-01	2.17000E-01	2.50000E-01	3.22000E-01
0.	0.	0.	0.	0.	0.
5.5400E+00	1.49700E+00	1.50400E+00	1.49400E+00	1.49800E+00	1.73600E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.3300E+00	1.15500E+00	1.12600E+00	9.57000E-01	1.24800E+00	1.41400E+00
2.00000E-01	2.10000E-01	2.00000E-01	2.00000E-01	3.20000E-01	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

BERYLLIUM

60 K

	1	2	3	4	5	6	7
1	-3.93000E-01	-2.60000E-02	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.37000E+00	1.55000E+00	2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.43000E-01	1.00600E+00	1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00
10	0.	6.40000E-01	4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01
11	0.	0.	1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.
12	0.	0.	0.	3.40000E-01	3.00000E-02	1.00000E-10	0.
13	0.	0.	0.	0.	2.30000E-01	8.00000E-02	0.

	9	10	11	12	13	14	15
1	0.	2.00000E-04	4.00000E-04	7.00000E-04	1.11790E-03	1.83030E-03	2.48210E-03
2	0.	0.	0.	0.	0.	0.	0.
3	5.55600E+00	5.55620E+00	5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56159E+00
4	0.	0.	0.	0.	0.	2.71940E-04	2.88780E-04
5	0.	0.	0.	0.	2.43830E-80	4.14870E-21	1.77400E-11
6	0.	0.	0.	0.	1.70050E-72	1.04240E-16	2.49030E-11
7	0.	0.	0.	0.	3.81530E-63	3.67590E-10	2.89950E-04
8	0.	0.	0.	0.	2.71940E-04	2.88780E-03	3.62020E-04
9	4.93300E+00	4.31000E+00	4.31000E+00	4.31000E+00	4.37820E+00	4.44560E+00	2.60980E+00
10	6.23000E-01	6.23000E-01	1.24600E+00	1.24600E+00	1.24600E+00	1.15760E+00	8.19300E-01
11	0.	0.	0.	0.	0.	0.	1.38540E-01
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.19910E-03	3.65080E-03	4.54620E-03	5.79960E-03	7.30820E-03	8.81390E-03	1.01330E-02
2	0.	0.	0.	0.	0.	0.	0.
3	5.44014E+00	5.60970E+00	5.67360E+00	5.70380E+00	5.63423E+00	6.25680E+00	7.03910E+00
4	5.24450E-03	4.64697E-03	2.30978E-03	3.23670E-03	4.16050E-03	5.05160E-03	5.35580E-03
5	9.19030E-15	1.79540E-11	1.12620E-06	1.13200E-04	4.21770E-04	0.	0.
6	1.25640E-11	5.25400E-10	5.57830E-06	2.80930E-04	6.62380E-04	4.85120E-04	0.
7	2.18430E-06	7.73790E-07	9.84320E-05	6.02950E-04	1.77590E-03	1.21940E-03	4.38050E-04
8	4.63270E-03	2.30760E-03	3.23590E-03	4.06210E-03	4.44310E-03	3.29780E-03	1.12860E-03
9	3.10280E+00	3.63440E+00	4.51470E+00	5.17250E+00	5.51790E+00	6.21820E+00	7.01150E+00
10	1.57210E+00	1.31300E+00	1.54330E+00	6.81250E-01	1.56010E-01	1.98210E-02	4.99620E-02
11	6.72950E-01	8.65510E-01	8.68840E-01	3.27490E-01	3.36190E-01	1.33780E-01	1.26880E-01
12	4.94900E-02	2.62700E-01	3.23990E-01	1.22720E-01	6.93070E-02	7.91530E-02	6.82300E-02
13	1.62590E-08	1.81200E-02	7.95740E-02	3.99320E-02	2.43330E-02	2.68980E-02	5.54790E-02

	25
1	2.97340E-02
2	0.
3	4.20700E-01
4	3.34374E-03
5	0.
6	0.
7	0.
8	0.
9	3.87620E-01
10	1.41520E-03
11	2.69200E-03
12	4.66810E-03
13	2.04560E-02

	4	5	6	7	8
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00	5.55600E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00	4.93300E+00
-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01	7.68000E-01
-01	6.00000E-02	1.00000E-10	1.00000E-10	0.	0.
	3.40000E-01	3.00000E-02	1.00000E-10	0.	0.
	0.	2.30000E-01	8.00000E-02	0.	0.
	12	13	14	15	16
-04	7.00000E-04	1.11790E-03	1.83030E-03	2.48210E-03	2.83480E-03
	0.	0.	0.	0.	0.
+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56159E+00	5.69780E+00
	0.	0.	2.71940E-04	2.88780E-03	3.62020E-03
	0.	2.43830E-80	4.14870E-21	1.77400E-17	5.34610E-16
	0.	1.70050E-72	1.04240E-16	2.49030E-12	9.93410E-11
	0.	3.81530E-63	3.67590E-10	2.89950E-08	1.42700E-05
	0.	2.71940E-04	2.88780E-03	3.62020E-03	5.24450E-03
+00	4.31000E+00	4.37820E+00	4.44560E+00	2.60980E+00	2.88980E+00
+00	1.24600E+00	1.24600E+00	1.15760E+00	8.19300E-01	1.93120E+00
	0.	0.	0.	1.38540E-04	2.39220E-01
	0.	0.	0.	0.	3.11880E-06
	0.	0.	0.	0.	0.
	20	21	22	23	24
-03	5.79960E-03	7.30820E-03	8.81390E-03	1.01330E-02	1.36930E-02
	0.	0.	0.	0.	0.
+00	5.70380E+00	5.63423E+00	6.25680E+00	7.03910E+00	6.76770E+00
-03	3.23670E-03	4.16050E-03	5.05160E-03	5.35580E-03	3.12360E-03
-06	1.13200E-04	4.21770E-04	0.	0.	0.
-06	2.80930E-04	6.62380E-04	4.85120E-04	0.	0.
-05	6.02950E-04	1.77590E-03	1.21940E-03	4.38050E-04	0.
-03	4.06210E-03	4.44310E-03	3.29780E-03	1.12860E-03	1.99880E-03
+00	5.17250E+00	5.51790E+00	6.21820E+00	7.01150E+00	6.74950E+00
+00	6.81250E-01	1.56010E-01	1.98210E-02	4.99620E-03	9.42830E-03
-01	3.27490E-01	3.36190E-01	1.33780E-01	1.26880E-02	1.51120E-02
-01	1.22720E-01	6.93070E-02	7.91530E-02	6.82300E-02	5.18880E-02
-02	3.99320E-02	2.43330E-02	2.68980E-02	5.54790E-02	1.64250E-01

BERYLLIUM

100 K

	1	2	3	4	5	6	7
1	-3.93000E-01	-2.60000E-02	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.37000E+00	1.55000E+00	2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.43000E-01	1.00600E+00	1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00
10	0.	6.40000E-01	4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01
11	0.	0.	1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.
12	0.	0.	0.	3.40000E-01	3.00000E-02	1.00000E-10	0.
13	0.	0.	0.	0.	2.30000E-01	8.00000E-02	0.
	9	10	11	12	13	14	15
1	0.	2.00000E-04	4.00000E-04	7.00000E-04	1.11790E-03	1.83030E-03	2.48210E-03
2	0.	0.	0.	0.	0.	0.	0.
3	5.55600E+00	5.55620E+00	5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56156E+00
4	0.	0.	0.	0.	0.	6.83330E-04	9.30080E-03
5	0.	0.	0.	0.	0.	0.	1.95430E-11
6	0.	0.	0.	0.	0.	0.	4.40960E-08
7	0.	0.	0.	0.	0.	9.34440E-07	1.37100E-05
8	0.	0.	0.	0.	6.83330E-04	9.30080E-03	1.30200E-02
9	4.93300E+00	4.31000E+00	4.31000E+00	4.31000E+00	4.37750E+00	4.44450E+00	2.60250E+00
10	6.23000E-01	6.23000E-01	1.24600E+00	1.24600E+00	1.24600E+00	1.15830E+00	8.19450E-01
11	0.	0.	0.	0.	0.	0.	1.40760E-04
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	3.19910E-03	3.65080E-03	4.54620E-03	5.79960E-03	7.30820E-03	8.81390E-03	1.01330E-02
2	0.	0.	0.	0.	0.	0.	0.
3	5.44020E+00	5.60970E+00	5.67360E+00	5.70380E+00	5.63430E+00	6.25687E+00	7.04010E+00
4	2.07657E-02	1.85617E-02	1.15740E-02	1.76926E-02	2.12370E-02	2.27100E-02	2.27153E-02
5	1.19810E-09	1.78440E-07	1.99050E-04	4.15520E-03	1.08650E-02	0.	0.
6	1.09420E-07	1.30150E-06	5.42420E-04	6.68390E-03	6.31880E-03	3.85430E-03	0.
7	1.73610E-04	1.02570E-04	3.24980E-03	9.15020E-03	8.34930E-03	4.40370E-03	2.07490E-03
8	1.78480E-02	1.14000E-02	1.75900E-02	1.79860E-02	1.30170E-02	7.48300E-03	2.73730E-03
9	3.07540E+00	3.61160E+00	4.49780E+00	5.15030E+00	5.49510E+00	6.19660E+00	6.99220E+00
10	1.57140E+00	1.32400E+00	1.55100E+00	6.88530E-01	1.62520E-01	2.31980E-02	6.62560E-03
11	6.72540E-01	8.65730E-01	8.69430E-01	3.28450E-01	3.36230E-01	1.34690E-01	1.36940E-02
12	4.96960E-02	2.63290E-01	3.24430E-01	1.22940E-01	6.94230E-02	7.92390E-02	6.84160E-02
13	1.65150E-08	1.82360E-02	8.00460E-02	4.01910E-02	2.44920E-02	2.69740E-02	5.56600E-02
	25						
1	2.97340E-02						
2	0.						
3	4.42630E-01						
4	2.21889E-02						
5	0.						
6	0.						
7	0.						
8	0.						
9	3.90710E-01						
10	1.77180E-03						
11	2.96940E-03						
12	4.88950E-03						
13	2.05900E-02						

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00	5.55600E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00	4.93300E+00
4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01	7.68000E-01
1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.	0.
0.	3.40000E-01	3.00000E-02	1.00000E-10	0.	0.
0.	0.	2.30000E-01	8.00000E-02	0.	0.
11	12	13	14	15	16
4.00000E-04	7.00000E-04	1.11790E-03	1.83030E-03	2.48210E-03	2.83480E-03
0.	0.	0.	0.	0.	0.
5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56156E+00	5.69790E+00
0.	0.	0.	6.83330E-04	9.30080E-03	1.30210E-02
0.	0.	0.	0.	1.95430E-11	1.80410E-10
0.	0.	0.	0.	4.40960E-08	3.47060E-07
0.	0.	0.	9.34440E-07	1.37100E-05	7.13730E-04
0.	0.	6.83330E-04	9.30080E-03	1.30200E-02	2.07520E-02
4.31000E+00	4.31000E+00	4.37750E+00	4.44450E+00	2.60250E+00	2.88030E+00
1.24600E+00	1.24600E+00	1.24600E+00	1.15830E+00	8.19450E-01	1.93140E+00
0.	0.	0.	0.	1.40760E-04	2.39420E-01
0.	0.	0.	0.	0.	3.18020E-06
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
4.54620E-03	5.79960E-03	7.30820E-03	8.81390E-03	1.01330E-02	1.36930E-02
0.	0.	0.	0.	0.	0.
5.67360E+00	5.70380E+00	5.63430E+00	6.25687E+00	7.04010E+00	6.77472E+00
1.15740E-02	1.76926E-02	2.12370E-02	2.27100E-02	2.27153E-02	1.76150E-02
1.99050E-04	4.15520E-03	1.08650E-02	0.	0.	0.
5.42470E-04	6.68390E-03	6.31880E-03	3.85430E-03	0.	0.
3.24980E-03	9.15020E-03	8.34930E-03	4.40370E-03	2.07490E-03	0.
1.75900E-02	1.79860E-02	1.30170E-02	7.48300E-03	2.73730E-03	5.39470E-03
4.49780E+00	5.15030E+00	5.49510E+00	6.19660E+00	6.99220E+00	6.74160E+00
1.55100E+00	6.88530E-01	1.62520E-01	2.31980E-02	6.62560E-03	1.21140E-02
8.69430E-01	3.28450E-01	3.36230E-01	1.34690E-01	1.36940E-02	1.72330E-02
3.24430E-01	1.22940E-01	6.94230E-02	7.92390E-02	6.84160E-02	5.31410E-02
8.00460E-02	4.01910E-02	2.44920E-02	2.69740E-02	5.56600E-02	1.64370E-01

BERYLLIUM

150 K

	1	2	3	4	5	6	7
1	-3.93000E-01	-2.60000E-02	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.37000E+00	1.55000E+00	2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.43000E-01	1.00600E+00	1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800
10	0.	6.40000E-01	4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000
11	0.	0.	1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.
12	0.	0.	0.	3.40000E-01	3.00000E-02	1.00000E-10	0.
13	0.	0.	0.	0.	2.30000E-01	8.00000E-02	0.
	9	10	11	12	13	14	15
1	0.	2.00000E-04	4.00000E-04	7.00000E-04	1.11750E-03	1.83010E-03	2.48190
2	0.	0.	0.	0.	0.	0.	0.
3	5.55600E+00	5.55620E+00	5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56150
4	0.	0.	0.	0.	0.	1.77050E-03	3.12750
5	0.	0.	0.	0.	0.	1.09790E-09	2.73200
6	0.	0.	0.	0.	0.	1.04600E-07	6.62490
7	0.	0.	0.	0.	0.	5.55150E-05	3.96300
8	0.	0.	0.	0.	1.77050E-03	3.12750E-02	4.69790
9	4.93300E+00	4.31000E+00	4.31000E+00	4.31000E+00	4.38060E+00	4.44350E+00	2.58460
10	6.23000E-01	6.23000E-01	1.24600E+00	1.24600E+00	1.24600E+00	1.15520E+00	8.17110
11	0.	0.	0.	0.	0.	0.	1.58180
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	3.20100E-03	3.65670E-03	4.53510E-03	5.79440E-03	7.29810E-03	8.80550E-03	1.01280
2	0.	0.	0.	0.	0.	0.	0.
3	5.44025E+00	5.60976E+00	5.67350E+00	5.70380E+00	5.63430E+00	6.25980E+00	7.05418
4	7.33490E-02	6.32030E-02	4.74280E-02	7.04572E-02	7.69140E-02	7.77590E-02	7.61670
5	5.46220E-07	1.98130E-05	2.84150E-03	2.92820E-02	6.59560E-02	0.	0.
6	1.31710E-05	7.98060E-05	5.84320E-03	3.79760E-02	2.38440E-02	1.19510E-02	0.
7	1.99410E-03	1.47190E-03	2.23500E-02	4.44500E-02	2.19840E-02	9.87220E-03	5.05370
8	5.78910E-02	4.54070E-02	6.89720E-02	5.44830E-02	2.74460E-02	1.33630E-02	5.05630
9	2.99780E+00	3.54360E+00	4.44250E+00	5.07810E+00	5.42760E+00	6.13810E+00	6.94850
10	1.56410E+00	1.33920E+00	1.55500E+00	7.12710E-01	1.77430E-01	2.86780E-02	8.92450
11	6.70780E-01	8.67510E-01	8.76110E-01	3.35280E-01	3.33370E-01	1.37570E-01	1.56720
12	5.05530E-02	2.65700E-01	3.28040E-01	1.25160E-01	7.11330E-02	7.76580E-02	6.93620
13	4.22130E-09	1.88330E-02	8.21330E-02	4.15430E-02	2.54340E-02	2.78910E-02	5.53230
	25						
1	2.94260E-02						
2	0.						
3	5.38230E-01						
4	9.32790E-02						
5	0.						
6	0.						
7	0.						
8	0.						
9	4.15620E-01						
10	2.28720E-03						
11	3.46510E-03						
12	5.40480E-03						
13	2.13010E-02						

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00	5.55600E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00	4.93300E+00
4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01	7.68000E-01
1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.	0.
0.	3.40000E-01	3.00000E-02	1.00000E-10	0.	0.
0.	0.	2.30000E-01	8.00000E-02	0.	0.

11	12	13	14	15	16
4.00000E-04	7.00000E-04	1.11750E-03	1.83010E-03	2.48190E-03	2.83530E-03
0.	0.	0.	0.	0.	0.
5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56150E+00	5.69786E+00
0.	0.	0.	1.77050E-03	3.12750E-02	4.70345E-02
0.	0.	0.	1.09790E-09	2.73200E-08	1.35380E-07
0.	0.	0.	1.04600E-07	6.62490E-06	2.68710E-05
0.	0.	0.	5.55150E-05	3.96300E-04	5.30560E-03
0.	0.	1.77050E-03	3.12750E-02	4.69790E-02	7.29530E-02
4.31000E+00	4.31000E+00	4.38060E+00	4.44350E+00	2.58460E+00	2.84680E+00
1.24600E+00	1.24600E+00	1.24600E+00	1.15520E+00	8.17110E-01	1.92450E+00
0.	0.	0.	0.	1.58180E-04	2.40180E-01
0.	0.	0.	0.	0.	4.15420E-06
0.	0.	0.	0.	0.	0.

19	20	21	22	23	24
4.53510E-03	5.79440E-03	7.29810E-03	8.80550E-03	1.01280E-02	1.36330E-02
0.	0.	0.	0.	0.	0.
5.67350E+00	5.70380E+00	5.63430E+00	6.25980E+00	7.05418E+00	6.80630E+00
4.74280E-02	7.04572E-02	7.69140E-02	7.77590E-02	7.61670E-02	6.80550E-02
2.84150E-03	2.92820E-02	6.59560E-02	0.	0.	0.
5.84320E-03	3.79780E-02	2.38440E-02	1.19510E-02	0.	0.
2.23500E-02	4.44500E-02	2.19840E-02	9.87220E-03	5.05370E-03	0.
6.89720E-02	5.44830E-02	2.74460E-02	1.33630E-02	5.05630E-03	1.03180E-02
4.44250E+00	5.07810E+00	5.42760E+00	6.13810E+00	6.94850E+00	6.72230E+00
1.56500E+00	7.12710E-01	1.77430E-01	2.86760E-02	8.92450E-03	1.59150E-02
8.76110E-01	3.35280E-01	3.33370E-01	1.37570E-01	1.56720E-02	2.07470E-02
3.28040E-01	1.25160E-01	7.11330E-02	7.76580E-02	6.93620E-02	5.68780E-02
8.21330E-02	4.15430E-02	2.54340E-02	2.78910E-02	5.53230E-02	1.65030E-01

BERYLLIUM

200 K

	1	2	3	4	5	6	7
1	-3.93000E-01	-2.60000E-02	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.37000E+00	1.55000E+00	2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.43000E-01	1.00600E+00	1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00
10	0.	6.40000E-01	4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01
11	0.	0.	1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.
12	0.	0.	0.	3.40000E-01	3.00000E-02	1.00000E-10	0.
13	0.	0.	0.	0.	2.30000E-01	8.00000E-02	0.

	9	10	11	12	13	14	15
1	0.	2.00000E-04	4.00000E-04	7.00000E-04	1.11710E-03	1.82980E-03	2.48170E-03
2	0.	0.	0.	0.	0.	0.	0.
3	5.55600E+00	5.55620E+00	5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56150E+00
4	0.	0.	0.	0.	0.	3.62150E-03	7.02010E-02
5	0.	0.	0.	0.	0.	1.02240E-07	1.20800E-06
6	0.	0.	0.	0.	0.	3.93890E-06	9.20110E-05
7	0.	0.	0.	0.	0.	4.85560E-04	2.46930E-03
8	0.	0.	0.	0.	3.62150E-03	7.02010E-02	1.05550E-01
9	4.93300E+00	4.31000E+00	4.31000E+00	4.31000E+00	4.38370E+00	4.44070E+00	2.55080E+00
10	6.23000E-01	6.23000E-01	1.24600E+00	1.24600E+00	1.24600E+00	1.15210E+00	8.13430E-01
11	0.	0.	0.	0.	0.	0.	1.84710E-04
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.20260E-03	3.66110E-03	4.52670E-03	5.78100E-03	7.28790E-03	8.79620E-03	1.01220E-02
2	0.	0.	0.	0.	0.	0.	0.
3	5.44012E+00	5.60963E+00	5.67353E+00	5.70380E+00	5.63424E+00	6.26380E+00	7.08110E+00
4	1.60543E-01	1.38133E-01	1.12614E-01	1.62440E-01	1.69725E-01	1.69172E-01	1.65660E-01
5	1.31850E-05	2.25350E-04	1.14030E-02	8.30540E-02	1.73970E-01	0.	0.
6	1.61600E-04	6.88190E-04	2.02500E-02	9.56620E-02	4.95590E-02	2.21990E-02	0.
7	7.67130E-03	6.28520E-03	6.27040E-02	1.04660E-01	3.89380E-02	1.61070E-02	8.42560E-03
8	1.22140E-01	1.04670E-01	1.55990E-01	1.06320E-01	4.40370E-02	1.96580E-02	7.53890E-03
9	2.88250E+00	3.44010E+00	4.35220E+00	4.95680E+00	5.32050E+00	6.04370E+00	6.88130E+00
10	1.55010E+00	1.35370E+00	1.58110E+00	7.37810E-01	1.95880E-01	3.47470E-02	1.13800E-02
11	6.71020E-01	8.69020E-01	8.84270E-01	3.43670E-01	3.33220E-01	1.44620E-01	1.79640E-02
12	5.21670E-02	2.70530E-01	3.34620E-01	1.28920E-01	7.37230E-02	7.71940E-02	7.13710E-02
13	5.67490E-09	1.99070E-02	8.61160E-02	4.38920E-02	2.69810E-02	2.92450E-02	5.59620E-02

	25
1	2.89210E-02
2	0.
3	7.06920E-01
4	2.20054E-01
5	0.
6	0.
7	0.
8	0.
9	4.57940E-01
10	2.83480E-03
11	4.02980E-03
12	6.04400E-03
13	2.23600E-02

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00	5.55600E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00	4.93300E+00
4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01	7.68000E-01
1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.	0.
0.	3.40000E-01	3.00000E-02	1.00000E-10	0.	0.
0.	0.	2.30000E-01	8.00000E-02	0.	0.
11	12	13	14	15	16
4.00000E-04	7.00000E-04	1.11710E-03	1.82980E-03	2.48170E-03	2.83580E-03
0.	0.	0.	0.	0.	0.
5.55640E+00	5.55670E+00	5.53710E+00	5.57380E+00	5.56150E+00	5.69780E+00
0.	0.	0.	3.62150E-03	7.02010E-02	1.06036E-01
0.	0.	0.	1.02240E-07	1.20800E-06	4.28850E-06
0.	0.	0.	3.93890E-06	9.20110E-05	2.71320E-04
0.	0.	0.	4.85560E-04	2.46930E-03	1.59010E-02
0.	0.	3.62150E-03	7.02010E-02	1.05550E-01	1.58070E-01
4.31000E+00	4.31000E+00	4.38370E+00	4.44070E+00	2.55080E+00	2.79130E+00
1.24600E+00	1.24600E+00	1.24600E+00	1.15210E+00	8.13430E-01	1.91030E+00
0.	0.	0.	0.	1.84710E-04	2.42130E-01
0.	0.	0.	0.	0.	4.96510E-06
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
4.52670E-03	5.78100E-03	7.28790E-03	8.79620E-03	1.01220E-02	1.35550E-02
0.	0.	0.	0.	0.	0.
5.67353E+00	5.70380E+00	5.63424E+00	6.26380E+00	7.08110E+00	6.86600E+00
1.12614E-01	1.62440E-01	1.69725E-01	1.69172E-01	1.65660E-01	1.56260E-01
1.14030E-02	8.30540E-02	1.73970E-01	0.	0.	0.
2.02500E-02	9.56620E-02	4.95590E-02	2.21990E-02	0.	0.
6.27040E-02	1.04660E-01	3.89380E-02	1.61070E-02	8.42660E-03	0.
1.55990E-01	1.06320E-01	4.40370E-02	1.96580E-02	7.53890E-03	1.54580E-02
4.35220E+00	4.95680E+00	5.32050E+00	6.04370E+00	6.88130E+00	6.69340E+00
1.58110E+00	7.37810E-01	1.95880E-01	3.47470E-02	1.13800E-02	1.99570E-02
8.84270E-01	3.43670E-01	3.33220E-01	1.44620E-01	1.79640E-02	2.46570E-02
3.34620E-01	1.28920E-01	7.37230E-02	7.71940E-02	7.13710E-02	6.16550E-02
8.61160E-02	4.38920E-02	2.69810E-02	2.92450E-02	5.59620E-02	1.66910E-01

2

BERYLLIUM

293 K

	1	2	3	4	5	6	7
1	-3.93000E-01	-2.60000E-02	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.37000E+00	1.55000E+00	2.38000E+00	3.30999E+00	3.94000E+00	5.17999E+00	5.55600E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.43000E-01	1.00600E+00	1.17299E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00
10	0.	6.40000E-01	4.00000E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01
11	0.	0.	1.10000E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.
12	0.	0.	0.	3.40000E-01	3.00000E-02	1.00000E-10	0.
13	0.	0.	0.	0.	2.30000E-01	8.00000E-02	0.

	9	10	11	12	13	14	15
1	0.	2.00000E-04	4.00000E-04	7.00000E-04	1.11640E-03	1.82940E-03	2.48140E-03
2	0.	0.	0.	0.	0.	0.	0.
3	5.55600E+00	5.55620E+00	5.55640E+00	5.55670E+00	5.53710E+00	5.57383E+00	5.56150E+00
4	0.	0.	0.	0.	0.	8.94950E-03	1.72160E-02
5	0.	0.	0.	0.	4.41500E-21	9.30360E-06	5.52210E-05
6	0.	0.	0.	0.	2.49930E-18	1.46790E-04	1.32120E-03
7	0.	0.	0.	0.	1.12820E-15	4.47950E-03	1.59700E-02
8	0.	0.	0.	0.	8.94950E-03	1.72160E-01	2.48680E-01
9	4.93300E+00	4.31000E+00	4.31000E+00	4.31000E+00	4.39060E+00	4.43335E+00	2.47190E+00
10	6.23000E-01	6.23000E-01	1.24600E+00	1.24600E+00	1.24600E+00	1.14510E+00	8.02950E-01
11	0.	0.	0.	0.	0.	0.	2.75960E-01
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.20510E-03	3.66710E-03	4.51500E-03	5.76580E-03	7.26730E-03	8.77430E-03	1.01050E-02
2	0.	0.	0.	0.	0.	0.	0.
3	5.44020E+00	5.60960E+00	5.67350E+00	5.70380E+00	5.63432E+00	6.30180E+00	7.16210E+00
4	3.66650E-01	3.22874E-01	2.84713E-01	3.94643E-01	4.03663E-01	4.01415E-01	3.96280E-01
5	3.23250E-04	2.58630E-03	4.74940E-02	2.43440E-01	4.37160E-01	0.	0.
6	1.97710E-03	5.94940E-03	7.16330E-02	2.42910E-01	1.05010E-01	3.90840E-02	0.
7	3.17260E-02	2.85770E-02	1.78580E-01	2.49920E-01	7.39560E-02	2.84700E-02	1.38640E-01
8	2.69200E-01	2.50070E-01	3.63950E-01	2.18810E-01	7.72760E-02	3.19280E-02	1.23740E-01
9	2.62930E+00	3.20040E+00	4.13040E+00	4.66880E+00	5.05790E+00	5.83590E+00	6.72280E+00
10	1.51000E+00	1.37250E+00	1.60890E+00	7.80660E-01	2.29930E-01	4.65010E-02	1.61270E-01
11	6.67880E-01	8.67800E-01	8.98820E-01	3.63860E-01	3.36270E-01	1.56180E-01	2.24660E-01
12	5.65810E-02	2.82800E-01	3.51260E-01	1.38400E-01	8.00400E-02	7.81040E-02	7.54700E-02
13	6.89950E-08	2.31710E-02	9.76160E-02	5.06570E-02	3.13020E-02	3.28170E-02	5.88290E-02

	25
1	2.52050E-02
2	0.
3	1.19733E+00
4	5.13830E-01
5	0.
6	0.
7	0.
8	0.
9	6.58300E-01
10	3.91430E-03
11	5.14390E-03
12	7.36040E-03
13	2.48280E-02

	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
00E+00	3.30999E+C0	3.94000E+00	5.17999E+00	5.55600E+00	5.55600E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
99E+00	2.39699E+00	3.30600E+00	4.52500E+00	4.78800E+00	4.93300E+00
00E-01	1.20699E+00	9.12999E-01	6.33999E-01	6.55000E-01	7.68000E-01
00E-01	6.00000E-02	1.00000E-10	1.00000E-10	0.	0.
	3.40000E-01	3.00000E-02	1.00000E-10	0.	0.
0.	0.	2.30000E-01	8.00000E-02	0.	0.
	12	13	14	15	16
00E-04	7.00000E-04	1.11640E-03	1.82940E-03	2.48140E-03	2.83660E-03
0.	0.	0.	0.	0.	0.
00E+00	5.55670E+00	5.53710E+00	5.57383E+00	5.56150E+00	5.69780E+00
0.	0.	0.	8.94950E-03	1.72160E-01	2.53160E-01
0.	0.	4.41500E-21	9.30360E-06	5.52210E-05	1.38850E-04
0.	0.	2.49930E-18	1.46790E-04	1.32120E-03	2.86180E-03
0.	0.	1.12820E-15	4.47950E-03	1.59700E-02	5.23430E-02
0.	0.	8.94950E-03	1.72160E-01	2.48680E-01	3.50530E-01
00E+00	4.31000E+00	4.39060E+00	4.43335E+00	2.47190E+00	2.66210E+00
00E+00	1.24600E+00	1.24600E+00	1.14510E+00	8.02950E-01	1.86670E+00
0.	0.	0.	0.	2.75960E-04	2.47000E-01
0.	0.	0.	0.	0.	9.86030E-06
0.	0.	0.	0.	0.	0.
	20	21	22	23	24
00E-03	5.76580E-03	7.26730E-03	8.77430E-03	1.01050E-02	1.33000E-02
0.	0.	0.	0.	0.	0.
00E+00	5.70380E+00	5.63432E+00	6.30180E+00	7.16210E+00	7.03030E+00
00E-01	3.94643E-01	4.03663E-01	4.01415E-01	3.96288E-01	3.89294E-01
00E-02	2.43440E-01	4.37160E-01	0.	0.	0.
00E-02	2.42910E-01	1.05010E-01	3.90840E-02	0.	0.
00E-01	2.49920E-01	7.39560E-02	2.84700E-02	1.39640E-02	0.
00E-01	2.18810E-01	7.72760E-02	3.19280E-02	1.23740E-02	2.37190E-02
00E+00	4.66880E+00	5.05790E+00	5.83590E+00	6.72280E+00	6.62380E+00
00E+00	7.80660E-01	2.29930E-01	4.65010E-02	1.61270E-02	2.77570E-02
00E-01	3.60860E-01	3.36270E-01	1.56180E-01	2.24660E-02	3.22820E-02
00E-01	1.38400E-01	8.00400E-02	7.81040E-02	7.54700E-02	7.16940E-02
00E-02	5.06570E-02	3.13020E-02	3.28170E-02	5.88290E-02	1.73040E-01

BORON-NATURAL

	1	2	3	4	5	6	7
1	4.00000E-02	6.00000E-02	3.99999E-02	7.99999E-02	2.70000E-01	6.10000E-01	1.50000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	1.51999E+00	1.78999E+00	2.14000E+00	2.26999E+00	3.15999E+00	4.07999E+00	4.96999E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.09999E-01	1.30999E+00	1.22000E+00	1.68999E+00	2.51000E+00	3.10999E+00	3.09999E+00
10	0.	6.69999E-01	4.19999E-01	8.80000E-01	5.00000E-01	3.79999E-01	3.60000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	9.50000E+00	2.00000E+01	3.30000E+01	5.09999E+01	9.00000E+01	1.46599E+02	2.05399E+02
2	0.	0.	0.	0.	0.	0.	0.
3	1.30000E+01	2.35000E+01	3.65000E+01	5.45000E+01	9.35000E+01	1.49500E+02	2.05399E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	3.19999E+00	2.89999E+00	2.89999E+00	2.89999E+00	2.89999E+00	2.89999E+00	0.
10	3.00000E-01	3.00000E-01	6.00000E-01	6.00000E-01	6.00000E-01	6.00000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.54399E+02	2.88399E+02	3.48799E+02	4.47699E+02	5.75299E+02	7.01399E+02	7.93500E+02
2	0.	0.	0.	0.	0.	0.	0.
3	2.54399E+02	2.88399E+02	3.48799E+02	4.47699E+02	5.75299E+02	7.01399E+02	7.93500E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.95000E+03
2	0.
3	1.95000E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	0.
10	0.
11	0.
12	0.
13	0.

3.99999E-02	7.99999E-02	2.70000E-01	6.10000E-01	1.50000E+00	3.50000E+00
0.	0.	0.	0.	0.	0.
2.14010E+00	2.26999E+00	1.15999E+00	4.07999E+00	4.96999E+00	7.00000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.22000E+00	1.68999E+00	2.51000E+00	3.10999E+00	3.09999E+00	3.20000E+00
4.19999E-01	8.80000E-01	5.00000E-01	3.79999E-01	3.60000E-01	3.70000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
3.30000E+01	5.09999E+01	9.00000E+01	1.46599E+02	2.05399E+02	2.25000E+02
0.	0.	0.	0.	0.	0.
3.65000E+01	5.45000E+01	9.35000E+01	1.49500E+02	2.05399E+02	2.25000E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.89999E+00	2.89999E+00	2.89999E+00	2.89999E+00	0.	0.
6.00000E-01	6.00000E-01	6.00000E-01	6.00000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
3.48799E+02	4.47699E+02	5.75299E+02	7.01399E+02	7.93500E+02	1.04000E+03
0.	0.	0.	0.	0.	0.
3.48799E+02	4.47699E+02	5.75299E+02	7.01399E+02	7.93500E+02	1.04000E+03
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

CARBON

.025 EV

1

2

3

4

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6

7

1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.22599E+00	1.41999E+00	2.26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	7.14999E-01	1.10599E+00	1.40399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900
10	0.	5.14999E-01	3.13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

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1	0.	1.00000E-04	1.00000E-04	2.00000E-04	4.00730E-04	6.56090E-04	8.88380
2	0.	0.	0.	0.	0.	0.	0.
3	4.44800E+00	4.44810E+00	4.44810E+00	4.44820E+00	4.44440E+00	4.42170E+00	4.43090
4	0.	0.	0.	0.	0.	1.37260E-02	1.53130
5	0.	0.	0.	0.	1.28170E-19	6.48510E-06	5.60840
6	0.	0.	0.	0.	7.59110E-18	9.59100E-05	7.70210
7	0.	0.	0.	0.	1.25010E-15	2.08190E-03	7.00840
8	0.	0.	0.	0.	1.37260E-02	1.53130E-01	1.84000
9	4.07600E+00	3.70400E+00	3.70400E+00	3.70400E+00	3.75907E+00	3.76790E+00	2.76810
10	3.72000E-01	3.72000E-01	7.44000E-01	7.44000E-01	7.44000E-01	6.84390E-01	4.42260
11	0.	0.	0.	0.	0.	0.	4.77040
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

17

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22

23

1	1.14520E-03	1.30420E-03	1.59480E-03	2.04500E-03	2.58030E-03	3.13160E-03	3.60560
2	0.	0.	0.	0.	0.	0.	0.
3	4.52515E+00	4.43424E+00	4.66960E+00	4.78910E+00	4.95660E+00	5.11410E+00	5.21760
4	2.63964E-01	2.45433E-01	1.70674E-01	2.11304E-01	2.24833E-01	2.33747E-01	2.24407
5	4.40570E-04	1.87580E-03	1.47450E-02	4.71750E-02	8.83650E-02	0.	0.
6	1.19230E-03	3.08360E-03	1.94490E-02	4.75800E-02	5.67620E-02	3.36600E-02	0.
7	1.23130E-02	1.06860E-02	3.91590E-02	6.98520E-02	9.33510E-02	5.50180E-02	2.45470
8	2.23460E-01	1.56710E-01	1.99250E-01	1.82150E-01	1.42570E-01	6.87310E-02	2.71520
9	3.06320E+00	3.32560E+00	4.06020E+00	4.32120E+00	4.57570E+00	4.77570E+00	4.91980
10	6.95480E-01	7.24030E-01	6.55120E-01	3.17350E-01	1.71730E-01	8.44760E-02	3.47840
11	3.16580E-01	3.51230E-01	3.28370E-01	1.33030E-01	7.21660E-02	4.10570E-02	2.75210
12	3.74530E-02	1.79550E-01	2.12690E-01	8.94890E-02	4.15760E-02	2.23450E-02	1.43640
13	6.28380E-06	2.27660E-02	9.08030E-02	6.58090E-02	5.49540E-02	3.21740E-02	2.53080

25

1	8.69380E-03
2	0.
3	5.41440E+00
4	1.98324E-01
5	0.
6	0.
7	0.
8	0.
9	5.20740E+00
10	8.83960E-03
11	8.96120E-03
12	6.26230E-03
13	4.81300E-03

CARBON

.050 EV

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.22999E+00	1.41999E+00	2.26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	7.14999E-01	1.10599E+00	1.40399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900E+00
10	0.	5.14999E-01	3.13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	0.	1.00000E-04	1.00000E-04	2.00000E-04	3.98070E-04	6.52600E-04	8.89230E-04
2	0.	0.	0.	0.	0.	0.	0.
3	4.44800E+00	4.44810E+00	4.44810E+00	4.44820E+00	4.44440E+00	4.43670E+00	4.43697E+00
4	0.	0.	0.	0.	0.	3.67090E-02	3.82240E-01
5	0.	0.	0.	0.	1.00390E-11	1.15500E-03	3.68650E-02
6	0.	0.	0.	0.	1.41790E-10	5.76460E-03	1.88780E-02
7	0.	0.	0.	0.	3.37240E-09	3.48730E-02	7.00840E-02
8	0.	0.	0.	0.	3.67090E-02	3.82240E-01	4.28320E-01
9	4.07600E+00	3.70400E+00	3.70400E+00	3.70400E+00	3.79440E+00	3.75880E+00	2.44850E+00
10	3.72000E-01	3.72000E-01	7.44000E-01	7.44000E-01	7.44000E-01	6.48910E-01	4.39460E-01
11	0.	0.	0.	0.	0.	0.	6.15040E-04
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.14670E-03	1.30730E-03	1.60000E-03	2.04950E-03	2.58910E-03	3.14190E-03	3.61820E-03
2	0.	0.	0.	0.	0.	0.	0.
3	4.52610E+00	4.43830E+00	4.69965E+00	4.82800E+00	5.01760E+00	5.23580E+00	5.37310E+00
4	6.15420E-01	5.86340E-01	4.58870E-01	5.65950E-01	6.07420E-01	6.34777E-01	6.21800E-01
5	1.45430E-02	3.52170E-02	1.17510E-01	2.42900E-01	4.28840E-01	0.	0.
6	2.02870E-02	3.40520E-02	1.06180E-01	1.56870E-01	1.45630E-01	8.65120E-02	0.
7	7.42490E-02	6.91890E-02	1.61510E-01	2.01040E-01	2.11440E-01	1.19150E-01	5.69200E-02
8	4.49410E-01	3.54980E-01	4.68790E-01	3.97310E-01	2.92340E-01	1.35980E-01	5.53290E-02
9	2.53820E+00	2.79860E+00	3.66330E+00	3.89120E+00	4.16670E+00	4.43030E+00	4.62820E+00
10	8.00550E-01	8.55420E-01	8.22340E-01	4.30580E-01	2.56420E-01	1.35160E-01	5.92130E-02
11	3.29160E-01	3.83610E-01	3.67490E-01	1.51000E-01	8.99080E-02	5.75210E-02	4.31920E-02
12	3.90230E-02	1.83050E-01	2.19310E-01	9.36560E-02	4.51620E-02	2.64550E-02	1.93200E-02
13	1.16830E-05	2.52180E-02	1.00790E-01	7.01920E-02	5.47430E-02	3.35900E-02	2.89390E-02

	25
1	8.92470E-03
2	0.
3	5.77090E+00
4	6.83662E-01
5	0.
6	0.
7	0.
8	0.
9	5.07830E+00
10	1.52310E-02
11	1.47000E-02
12	9.80800E-03
13	6.84230E-03

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800E+00	4.44800E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
40399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900E+00	4.07600E+00
13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01	4.59000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
11	12	13	14	15	16
00000E-04	2.00000E-04	3.98070E-04	6.52600E-04	8.89230E-04	1.01700E-03
0.	0.	0.	0.	0.	0.
44810E+00	4.44820E+00	4.44440E+00	4.43670E+00	4.43697E+00	4.43600E+00
0.	0.	0.	3.67090E-02	3.82240E-01	4.63193E-01
0.	0.	1.00390E-11	1.15500E-03	3.68650E-03	7.68670E-03
0.	0.	1.41790E-10	5.76460E-03	1.88780E-02	2.59550E-02
0.	0.	3.37240E-09	3.48730E-02	7.00840E-02	1.16900E-01
0.	0.	3.67090E-02	3.82240E-01	4.28320E-01	5.39570E-01
70400E+00	3.70400E+00	3.79440E+00	3.75880E+00	2.44850E+00	2.49810E+00
44000E-01	7.44000E-01	7.44000E-01	6.48910E-01	4.39460E-01	9.92340E-01
0.	0.	0.	0.	6.15040E-04	1.36820E-01
0.	0.	0.	0.	0.	8.51560E-05
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
60000E-03	2.04950E-03	2.58910E-03	3.14190E-03	3.61820E-03	4.68540E-03
0.	0.	0.	0.	0.	0.
69965E+00	4.82800E+00	5.01760E+00	5.23580E+00	5.37310E+00	5.60843E+00
58870E-01	5.65950E-01	6.07420E-01	6.34777E-01	6.21800E-01	5.63010E-01
17510E-01	2.42900E-01	4.28840E-01	0.	0.	0.
06180E-01	1.56870E-01	1.45630E-01	8.65120E-02	0.	0.
61510E-01	2.01040E-01	2.11440E-01	1.19150E-01	5.69200E-02	0.
68790E-01	3.97310E-01	2.92340E-01	1.35980E-01	5.53290E-02	1.11390E-01
66330E+00	3.89120E+00	4.16670E+00	4.43030E+00	4.62820E+00	5.02550E+00
22340E-01	4.30580E-01	2.56420E-01	1.35160E-01	5.92130E-02	1.04790E-01
67490E-01	1.51000E-01	8.99080E-02	5.75210E-02	4.31920E-02	9.85770E-02
19310E-01	9.36560E-02	4.51620E-02	2.64550E-02	1.93200E-02	5.56800E-02
00790E-01	7.01920E-02	5.47430E-02	3.35900E-02	2.89390E-02	3.55450E-02

2

CARBCN

.100 EV

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.22999E+00	1.41999E+00	2.26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	7.14999E-01	1.10599E+00	1.40399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900E+00
10	0.	5.14999E-01	3.13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	0.	1.00000E-04	1.00000E-04	2.00000E-04	3.98070E-04	6.56120E-04	8.92000E-04
2	0.	0.	0.	0.	0.	0.	0.
3	4.44800E+00	4.44810E+00	4.44810E+00	4.44820E+00	4.44440E+00	4.45063E+00	4.47890E+00
4	0.	0.	0.	0.	0.	9.81650E-02	7.87090E-02
5	0.	0.	0.	0.	4.18250E-07	2.68630E-02	5.13300E-02
6	0.	0.	0.	0.	2.03440E-06	7.06470E-02	1.23070E-01
7	0.	0.	0.	0.	1.44210E-05	2.07810E-01	2.76030E-01
8	0.	0.	0.	0.	9.81650E-02	7.87040E-01	7.47330E-01
9	4.07600E+00	3.70400E+00	3.70400E+00	3.70400E+00	3.78270E+00	3.63370E+00	1.98940E+00
10	3.72000E-01	3.72000E-01	7.44000E-01	7.44000E-01	7.44000E-01	6.59560E-01	4.65710E-01
11	0.	0.	0.	0.	0.	0.	1.38300E-01
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.14590E-03	1.30380E-03	1.59040E-03	2.04040E-03	2.57990E-03	3.13470E-03	3.61160E-03
2	0.	0.	0.	0.	0.	0.	0.
3	4.54120E+00	4.51030E+00	4.74660E+00	4.94300E+00	5.23358E+00	5.55120E+00	5.77467E+00
4	1.18758E+00	1.19001E+00	1.05437E+00	1.26919E+00	1.39426E+00	1.48713E+00	1.50123E+00
5	1.17640E-01	2.17470E-01	4.94830E-01	8.34510E-01	1.43260E+00	0.	0.
6	1.05260E-01	1.45490E-01	3.25320E-01	3.67190E-01	3.03960E-01	1.83910E-01	0.
7	2.34510E-01	2.26770E-01	4.25090E-01	4.34820E-01	4.00670E-01	2.23880E-01	1.13600E-01
8	6.93730E-01	6.30010E-01	8.59580E-01	7.06040E-01	5.09520E-01	2.38540E-01	1.01770E-01
9	1.85610E+00	2.11010E+00	2.97200E+00	3.15600E+00	3.47020E+00	3.78950E+00	4.06820E+00
10	8.10730E-01	8.90940E-01	9.26430E-01	5.27800E-01	3.53920E-01	2.03570E-01	9.64400E-02
11	3.60300E-01	4.29230E-01	4.35030E-01	1.87140E-01	1.18280E-01	8.27890E-02	6.57220E-02
12	5.15890E-02	2.05940E-01	2.47720E-01	1.09950E-01	5.53190E-02	3.46420E-02	2.79040E-02
13	6.27240E-05	3.90620E-02	1.33330E-01	8.51800E-02	6.04790E-02	3.99750E-02	3.79060E-02

	25
1	8.79290E-03
2	0.
3	6.91580E+00
4	1.94342E+00
5	0.
6	0.
7	0.
8	0.
9	4.96360E+00
10	2.64700E-02
11	2.44940E-02
12	1.61780E-02
13	1.07820E-02

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800E+00	4.44800E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
40399E+00	2.32549E+00	3.15699E+00	3.84899E+00	3.98900E+00	4.07600E+00
13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01	4.59000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
11	12	13	14	15	16
00000E-04	2.00000E-04	3.98070E-04	6.56120E-04	8.92060E-04	1.01730E-03
0.	0.	0.	0.	0.	0.
44810E+00	4.44820E+00	4.44440E+00	4.45063E+00	4.47890E+00	4.48100E+00
0.	0.	0.	9.31650E-02	7.87050E-01	9.55140E-01
0.	0.	4.18250E-07	2.68630E-02	5.13380E-02	7.75760E-02
0.	0.	2.03440E-06	7.06470E-02	1.23070E-01	1.38510E-01
0.	0.	1.44210E-05	2.07810E-01	2.76030E-01	3.46350E-01
0.	0.	9.81650E-02	7.87040E-01	7.47330E-01	8.40900E-01
70400E+00	3.70400E+00	3.78270E+00	3.63370E+00	1.98940E+00	1.95200E+00
44000E-01	7.44000E-01	7.44000E-01	6.59560E-01	4.65710E-01	1.00200E+00
0.	0.	0.	0.	1.38300E-03	1.61750E-01
0.	0.	0.	0.	0.	2.54250E-04
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
59040E-03	2.04040E-03	2.57990E-03	3.13470E-03	3.61160E-03	4.68570E-03
0.	0.	0.	0.	0.	0.
74660E+00	4.94300E+00	5.23358E+00	5.55120E+00	5.77467E+00	6.14620E+00
05437E+00	1.26919E+00	1.39426E+00	1.48713E+00	1.50123E+00	1.46417E+00
94830E-01	8.34510E-01	1.43260E+00	0.	0.	0.
25320E-01	3.67190E-01	3.03960E-01	1.83910E-01	0.	0.
25090E-01	4.34820E-01	4.00670E-01	2.23880E-01	1.13600E-01	0.
59580E-01	7.06040E-01	5.09520E-01	2.38540E-01	1.01770E-01	2.13310E-01
97200E+00	3.15600E+00	3.47020E+00	3.78950E+00	4.06820E+00	4.65090E+00
26430E-01	5.27800E-01	3.53920E-01	2.03570E-01	9.64400E-02	1.77130E-01
95030E-01	1.87140E-01	1.18280E-01	8.27890E-02	6.57220E-02	1.58780E-01
77720E-01	1.09950E-01	5.53190E-02	3.46420E-02	2.79040E-02	8.64640E-02
83330E-01	8.51800E-02	6.04790E-02	3.99750E-02	3.79060E-02	5.11980E-02

CARBON

.150 EV

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.22999E+00	1.41999E+00	2.26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	7.14999E-01	1.10599E+00	1.40399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900E+00
10	0.	5.14999E-01	3.13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	0.	1.00000E-04	1.00000E-04	2.00000E-04	3.98820E-04	6.63890E-04	8.90720E-04
2	0.	0.	0.	0.	0.	0.	0.
3	4.44800E+00	4.44810E+00	4.44810E+00	4.44820E+00	4.44440E+00	4.47070E+00	4.51096E+00
4	0.	0.	0.	0.	0.	1.57810E-01	1.12808E+00
5	0.	0.	0.	0.	2.57930E-05	9.47190E-01	1.52770E-01
6	0.	0.	0.	0.	8.57140E-05	1.94010E-01	2.35560E-01
7	0.	0.	0.	0.	3.78500E-04	4.30340E-01	4.45350E-01
8	0.	0.	0.	0.	1.57810E-01	1.12770E+00	8.94960E-01
9	4.07600E+00	3.70400E+00	3.70400E+00	3.70400E+00	3.75860E+00	3.50380E+00	1.70030E+00
10	3.72000E-01	3.72000E-01	7.44000E-01	7.44000E-01	7.44000E-01	6.81910E-01	4.93750E-01
11	0.	0.	0.	0.	0.	0.	2.68560E-03
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.14570E-03	1.30330E-03	1.58800E-03	2.03540E-03	2.57870E-03	3.13110E-03	3.61160E-03
2	0.	0.	0.	0.	0.	0.	0.
3	4.57114E+00	4.58137E+00	4.79161E+00	5.07110E+00	5.45860E+00	5.81202E+00	6.16470E+00
4	1.57908E+00	1.60954E+00	1.51450E+00	1.83360E+00	2.05960E+00	2.24970E+00	2.32283E+00
5	2.90000E-01	4.82440E-01	9.55070E-01	1.50440E+00	2.57920E+00	0.	0.
6	1.98740E-01	2.61720E-01	5.25140E-01	5.34070E-01	4.27490E-01	2.66330E-01	0.
7	3.55830E-01	3.61990E-01	6.35610E-01	6.05830E-01	5.28260E-01	2.98290E-01	1.58350E-01
8	7.64460E-01	7.47200E-01	1.06380E+00	8.72280E-01	6.36290E-01	3.05430E-01	1.35770E-01
9	1.47340E+00	1.71040E+00	2.48650E+00	2.63910E+00	2.94920E+00	3.21640E+00	3.57660E+00
10	7.58600E-01	8.50120E-01	9.33030E-01	5.61130E-01	3.97890E-01	2.42030E-01	1.20450E-01
11	3.66000E-01	4.42170E-01	4.72010E-01	2.14300E-01	1.39350E-01	9.98740E-02	8.06230E-02
12	6.66370E-02	2.20190E-01	2.71220E-01	1.25870E-01	6.53380E-02	4.18510E-02	3.43880E-02
13	2.03540E-04	5.81550E-02	1.62210E-01	1.02070E-01	6.95150E-02	4.74520E-02	4.66870E-02

	25
1	8.75380E-03
2	0.
3	8.12730E+00
4	3.29720E+00
5	0.
6	0.
7	0.
8	0.
9	4.82130E+00
10	3.52120E-02
11	3.22190E-02
12	2.15120E-02
13	1.47740E-02

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.6000E+00	2.92999E+00	3.59999E+00	4.25000E+00	4.44800E+00	4.44800E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900E+00	4.07600E+00
0.399E-01	4.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01	4.59000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
11	12	13	14	15	16
0.000E-04	2.00000E-04	3.98820E-04	4.63890E-04	8.90720E-04	1.01630E-03
0.	0.	0.	0.	0.	0.
0.4810E+00	4.44820E+00	4.44440E+00	4.47070E+00	4.51056E+00	4.52906E+00
0.	0.	0.	1.57810E-01	1.12808E+00	1.32539E+00
0.	2.57930E-05	9.47190E-02	1.52770E-01	2.09080E-01	2.09080E-01
0.	4.57140E-05	1.94010E-01	2.45660E-01	2.58700E-01	2.58700E-01
0.	3.78500E-04	4.30340E-01	4.45350E-01	5.04710E-01	5.04710E-01
0.	1.57810E-01	1.12770E+00	8.74960E-01	9.39690E-01	9.39690E-01
0.400E+00	3.70400E+00	3.75860E+00	3.50380E+00	1.70030E+00	1.62860E+00
0.400E-01	7.44000E-01	7.44000E-01	6.81910E-01	4.93750E-01	9.33290E-01
0.	0.	0.	0.	2.68560E-03	1.89850E-01
0.	0.	0.	0.	0.	6.02980E-04
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
0.8800E-03	2.03540E-03	2.57870E-03	3.13110E-03	3.61160E-03	4.09680E-03
0.	0.	0.	0.	0.	0.
0.5161E+00	5.07110E+00	5.45860E+00	5.81202E+00	6.16470E+00	6.72010E+00
0.1450E+00	1.83360E+00	2.05960E+00	2.24970E+00	2.32283E+00	2.36595E+00
0.3070E-01	1.50440E+00	2.57920E+00	0.	0.	0.
0.5140E-01	5.74070E-01	4.27490E-01	2.66330E-01	0.	0.
0.5610E-01	6.05830E-01	5.28250E-01	2.98290E-01	1.58350E-01	0.
0.6780E+00	8.72280E-01	8.36290E-01	3.05430E-01	1.35770E-01	2.93300E-01
0.8650E+00	2.63910E+00	2.94420E+00	3.21640E+00	3.57660E+00	4.21430E+00
0.9030E-01	5.61150E-01	3.97890E-01	2.42030E-01	1.20450E-01	2.29440E-01
0.2010E-01	2.14300E-01	1.39350E-01	9.98740E-02	8.06230E-02	2.00830E-01
0.1220E-01	1.25870E-01	6.33380E-02	4.18510E-02	3.43860E-02	1.10270E-01
0.2210E-01	1.02070E-01	8.95150E-02	4.74520E-02	4.66870E-02	6.41490E-02

2

CARBON

.200 EV

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	1.22999E+00	1.41999E+00	2.26000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	7.14994E-01	1.10599E+00	1.40399E+00	2.32599E+00	3.15499E+00	3.84899E+00	3.9899E+00
10	0.	5.14999E-01	3.13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.0100E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	0.	1.00000E-04	1.00000E-04	2.00000E-04	3.98820E-04	6.63890E-04	8.9072E-04
2	0.	0.	0.	0.	0.	0.	0.
3	4.44800E+00	4.44810E+00	4.44810E+00	4.44820E+00	4.44444E+00	4.48963E+00	4.5344E+00
4	0.	0.	0.	0.	0.	2.28470E-01	1.3834E-01
5	0.	0.	0.	0.	2.60350E-04	1.94800E-01	2.8912E-01
6	0.	0.	0.	0.	6.89910E-04	3.44560E-01	3.5225E-01
7	0.	0.	0.	0.	2.29350E-03	6.46500E-01	3.6066E-01
8	0.	0.	0.	0.	2.28470E-01	1.38110E+00	9.5284E-01
9	4.07600E+00	3.70400E+00	3.70400E+00	3.70400E+00	3.74770E+00	3.43660E+00	1.4934E+00
10	3.72000E-01	3.72000E-01	7.44000E-01	7.44000E-01	7.44000E-01	6.90300E-01	4.7944E-01
11	0.	0.	0.	0.	0.	0.	4.2842E-01
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.14570E-03	1.30330E-03	1.58800E-03	2.03540E-03	2.57870E-03	3.13110E-03	3.6116E-03
2	0.	0.	0.	0.	0.	0.	0.
3	4.62320E+00	4.65124E+00	4.86260E+00	5.22004E+00	5.68957E+00	6.18730E+00	6.5356E+00
4	1.86980E+00	1.92650E+00	1.87950E+00	2.28460E+00	2.62050E+00	2.91600E+00	3.0679E+00
5	5.06010E-01	7.92590E-01	1.44590E+00	2.19910E+00	3.79380E+00	0.	0.
6	2.80730E-01	3.84960E-01	6.92810E-01	6.63950E-01	3.22040E-01	3.34730E-01	0.
7	4.36910E-01	4.63470E-01	7.92880E-01	7.26040E-01	6.11230E-01	3.49830E-01	1.9244E-01
8	7.77180E-01	7.94090E-01	1.16089E+00	9.56630E-01	7.4600E-01	3.46780E-01	1.5924E-01
9	1.24660E+00	1.45410E+00	2.15750E+00	2.29020E+00	2.56270E+00	2.87770E+00	3.1596E+00
10	7.09500E-01	8.00040E-01	9.08790E-01	5.67400E-01	4.16700E-01	2.61720E-01	1.3509E-01
11	3.64660E-01	4.42060E-01	4.88450E-01	2.32250E-01	1.54100E-01	1.11720E-01	3.9907E-01
12	7.43300E-02	2.30350E-01	2.87960E-01	1.38480E-01	7.36980E-02	4.78120E-02	3.9429E-02
13	4.53830E-04	7.26460E-02	1.89190E-01	1.18510E-01	7.86810E-02	5.46070E-02	5.4644E-02

	25
1	8.75380E-03
2	0.
3	9.75170E+00
4	4.67450E+00
5	0.
6	0.
7	0.
8	0.
9	5.06850E+00
10	4.17180E-02
11	3.80290E-02
12	2.59210E-02
13	1.72850E-02

3	4	5	6	7	8
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.6000E+00	2.92999E+00	3.58999E+00	4.25000E+00	4.44800E+00	4.44800E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
4.0399E+00	2.32599E+00	3.15699E+00	3.84899E+00	3.98900E+00	4.07600E+00
1.13999E-01	8.55999E-01	6.03999E-01	4.33000E-01	4.01000E-01	4.59000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
11	12	13	14	15	16
0.00000E-04	2.00000E-04	3.98820E-04	6.63890E-04	8.90720E-04	1.01630E-03
0.	0.	0.	0.	0.	0.
4.4810E+00	4.44820E+00	4.4444E+00	4.48963E+00	4.53690E+00	4.56508E+00
0.	0.	0.	2.28470E-01	1.38340E+00	1.60000E+00
0.	0.	2.60350E-04	1.94800E-01	2.89150E-01	3.79530E-01
0.	0.	6.89910E-04	3.44560E-01	3.52250E-01	3.59390E-01
0.	0.	2.29350E-03	6.46500E-01	5.60650E-01	6.02260E-01
0.	0.	2.28470E-01	1.38110E+00	9.52840E-01	9.64300E-01
7.0400E+00	3.70400E+00	3.74790E+00	3.43660E+00	1.49360E+00	1.40600E+00
4.4000E-01	7.44000E-01	7.44000E-01	6.90300E-01	4.79400E-01	8.74860E-01
0.	0.	0.	0.	4.28430E-03	1.97520E-01
0.	0.	0.	0.	0.	1.10800E-03
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
5.8800E-03	2.03540E-03	2.57870E-03	3.13110E-03	3.61160E-03	4.69680E-03
0.	0.	0.	0.	0.	0.
6.6260E+00	5.22004E+00	5.68957E+00	6.18730E+00	6.53500E+00	7.46570E+00
8.7950E+00	2.28460E+00	2.62050E+00	2.91600E+00	3.06790E+00	3.23050E+00
4.590E+00	2.19910E+00	3.79380E+00	0.	0.	0.
2.810E-01	6.63950E-01	5.22040E-01	3.34730E-01	0.	0.
2.830E-01	7.26040E-01	6.11230E-01	3.49830E-01	1.92490E-01	0.
1.6080E+00	9.56630E-01	7.04600E-01	3.46780E-01	1.59490E-01	3.53430E-01
1.5750E+00	2.29020E+00	2.56970E+00	2.87770E+00	3.15980E+00	4.18880E+00
8.8790E-01	5.67400E-01	4.16700E-01	2.61720E-01	1.35090E-01	2.65650E-01
8.8450E-01	2.32250E-01	1.54100E-01	1.11720E-01	8.99010E-02	2.29430E-01
8.7960E-01	1.38480E-01	7.36980E-02	4.78120E-02	3.94290E-02	1.27910E-01
8.9190E-01	1.18510E-01	7.86810E-02	5.46070E-02	5.46480E-02	7.54250E-02

CHROMIUM

	1	2	3	4	5	6	7
1	4.00000E-03	3.00000E-03	3.00000E-03	3.00000E-03	3.00000E-03	4.00000E-03	2.31000E-03
2	0.	0.	0.	0.	0.	0.	0.
3	2.44400E+00	2.41300E+00	2.16300E+00	2.58300E+00	3.55300E+00	3.69400E+00	1.33510E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.02000E+00	1.65000E+00	1.92000E+00	2.37000E+00	3.22000E+00	3.62000E+00	1.27400E+00
10	0.	2.80000E-01	2.90000E-01	2.40000E-01	2.10000E-01	3.30000E-01	7.03000E-01
11	0.	0.	5.70000E-01	2.40000E-01	1.00000E-09	0.	0.
12	0.	0.	0.	0.	2.20000E-01	0.	0.
13	0.	0.	0.	0.	5.70000E-01	1.00000E-02	0.
	9	10	11	12	13	14	15
1	3.90000E-02	8.10000E-02	1.33000E-01	2.20000E-01	3.65000E-01	5.98000E-01	8.09000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	4.25900E+00	4.18100E+00	4.23300E+00	4.32000E+00	4.46500E+00	4.69800E+00	4.90900E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.12000E+00	3.94000E+00	3.94000E+00	3.94000E+00	3.94000E+00	3.94000E+00	3.47000E+00
10	1.00000E-01	1.00000E-01	1.60000E-01	1.60000E-01	1.60000E-01	1.60000E-01	1.60000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	1.04000E+00	1.18000E+00	1.45000E+00	1.86000E+00	2.34000E+00	2.86000E+00	3.29000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	5.14000E+00	5.28000E+00	5.55000E+00	5.96000E+00	6.44000E+00	5.86000E+00	6.29000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	3.47000E+00	3.47000E+00	3.79000E+00	3.79000E+00	3.79000E+00	3.00000E+00	3.00000E+00
10	6.30000E-01	6.30000E-01	6.30000E-01	3.10000E-01	3.10000E-01	3.10000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	7.93000E+00						
2	0.						
3	1.09300E+01						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	3.00000E+00						
10	0.						
11	0.						
12	0.						
13	0.						

3	4	5	6	7	8
3.00000E-03	3.00000E-03	3.00000E-03	4.00000E-03	2.31000E-01	1.50000E-02
0.	0.	0.	0.	0.	0.
2.16300E+00	2.58300E+00	3.55300E+00	3.69400E+00	1.33510E+01	4.81500E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.92000E+00	2.37000E+00	3.22000E+00	3.62000E+00	1.27400E+01	4.70000E+00
2.90000E-01	2.40000E-01	2.10000E-01	3.30000E-01	7.00000E-02	3.80000E-01
5.70000E-01	2.40000E-01	1.00000E-09	0.	0.	0.
0.	0.	2.20000E-01	0.	0.	0.
0.	0.	5.70000E-01	1.00000E-02	0.	0.

11	12	13	14	15	16
1.33000E-01	2.20000E-01	3.65000E-01	5.98000E-01	8.09000E-01	9.25000E-01
0.	0.	0.	0.	0.	0.
4.23300E+00	4.32000E+00	4.46500E+00	4.69800E+00	4.90900E+00	5.02500E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
3.94000E+00	3.94000E+00	3.94000E+00	3.94000E+00	3.47000E+00	3.47000E+00
1.60000E-01	1.60000E-01	1.60000E-01	1.60000E-01	1.60000E-01	6.30000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

19	20	21	22	23	24
1.45000E+00	1.86000E+00	2.34000E+00	2.86000E+00	3.29000E+00	4.25000E+00
0.	0.	0.	0.	0.	0.
5.55000E+00	5.96000E+00	6.44000E+00	5.86000E+00	6.29000E+00	7.25000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
3.79000E+00	3.79000E+00	3.79000E+00	3.00000E+00	3.00000E+00	3.00000E+00
6.30000E-01	3.10000E-01	3.10000E-01	3.10000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

HYDROGEN FREE GAS 45 K

1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	6.0
2	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01
9	10	11	12	13	14	
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02
2	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	6.94059E+00	7.02374E+00
4	0.	0.	0.	0.	0.	5.77690E-03
5	0.	0.	0.	0.	1.91180E-99	2.64280E-26
6	0.	0.	0.	0.	3.31590E-91	6.15020E-21
7	0.	0.	0.	0.	2.46550E-80	1.07600E-12
8	0.	0.	0.	0.	5.77690E-03	7.02520E-02
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-5.94004E+00	-5.93436E+00
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	7.99650E+00
11	1.13900E+00	7.34000E-01	1.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00
12	1.68506E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00
13	2.22000E-02	2.64000E-02	3.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01
17	18	19	20	21	22	
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01
2	0.	0.	0.	0.	0.	0.
3	7.36495E+00	7.52460E+00	7.83239E+00	8.34641E+00	9.05327E+00	9.83136E+00
4	1.60650E-01	1.38681E-01	8.63190E-02	2.35550E-01	4.87005E-01	1.36880E+00
5	3.28970E-17	3.70090E-13	2.60710E-07	2.63010E-04	9.16180E-03	0.
6	8.68450E-14	2.30680E-11	1.51590E-06	1.39210E-03	1.46810E-02	8.41890E-02
7	1.32580E-07	6.07400E-08	9.45000E-05	8.08520E-03	2.35460E-01	4.13310E-01
8	1.38660E-01	8.63190E-02	2.35550E-01	4.86910E-01	1.36070E+00	2.17650E+00
9	-1.09893E+01	-1.03727E+01	-8.69825E+00	-8.04780E+00	-7.44260E+00	-7.71971E+00
10	3.57690E+00	4.55750E+00	7.13710E+00	6.45820E+00	6.00200E+00	4.75820E+00
11	2.75260E+00	3.59110E+00	5.48800E+00	4.18000E+00	3.71040E+00	3.02000E+00
12	1.52370E+00	2.75300E+00	4.30620E+00	3.19850E+00	2.38500E+00	1.85480E+00
13	2.83970E+00	6.03370E+00	8.14220E+00	6.31430E+00	4.84050E+00	3.92970E+00
25						
1	1.03290E+00					
2	0.					
3	2.26716E+01					
4	1.03878E+01					
5	0.					
6	0.					
7	0.					
8	0.					
9	1.17509E+01					
10	7.79530E+00					
11	4.13460E+00					
12	3.14220E+00					
13	2.17070E+00					

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
33000E+00	1.83000E+00	1.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
06000E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
00000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
99000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
2000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
8160E+00	6.79070E+00	6.94059E+00	7.02374E+00	7.16777E+00	7.26213E+00
0.	0.	0.	5.77690E-03	7.02520E-02	1.03460E-01
0.	1.91180E-09	2.64290E-26	2.64290E-26	2.50060E-21	4.35350E-19
0.	3.31590E-91	6.15020E-21	6.15020E-21	2.84790E-15	6.64350E-13
0.	2.46550E-80	1.07600E-12	1.07600E-12	6.69660E-10	7.64450E-07
0.	5.77690E-03	7.02520E-02	7.02520E-02	1.03460E-01	1.60650E-01
6530E+00	-6.75970E+00	-5.94004E+00	-5.93436E+00	-1.07546E+01	-1.07283E+01
1060E+00	8.11630E+00	8.10500E+00	7.99650E+00	3.04480E+00	4.11810E+00
4000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14580E+00	2.24650E+00
0000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.59800E-01
0000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
7920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
9239E+00	8.34641E+00	9.05327E+00	9.83136E+00	1.05553E+01	1.26825E+01
190E-02	2.35550E-01	4.87005E-01	1.36880E+00	2.41335E+00	1.63395E+00
0710E-07	2.63010E-04	9.16180E-03	0.	0.	0.
1590E-06	1.39210E-03	4.46810E-02	8.41890E-02	0.	0.
0000E-05	8.08520E-03	2.35460E-01	4.13310E-01	2.38490E-01	0.
5550E-01	4.86910E-01	1.36070E+00	2.17650E+00	1.17170E+00	1.00560E+01
9825E+00	-8.04780E+00	-7.44260E+00	-7.71971E+00	-8.41065E+00	2.77766E+00
710E+00	6.45820E+00	6.00200E+00	4.75820E+00	3.45020E+00	1.22660E+01
800E+00	4.18000E+00	3.71040E+00	3.02000E+00	2.38470E+00	9.28370E+00
620E+00	3.19850E+00	2.38500E+00	1.84480E+00	1.50870E+00	6.44140E+00
220E+00	6.31430E+00	4.84050E+00	3.92970E+00	4.26300E+00	5.42650E+00

HYDROGEN FREE GAS 60 K

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	6.00000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.40600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40000E-01
	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	6.92940E+00	7.06970E+00	7.26110E+00
4	0.	0.	0.	0.	0.	6.11540E-03	7.45020E-03
5	0.	0.	0.	0.	6.25750E-75	5.29500E-20	2.35170E-15
6	0.	0.	0.	0.	8.31390E-69	5.13470E-16	9.21490E-11
7	0.	0.	0.	0.	1.00820E-60	6.87580E-10	8.99370E-04
8	0.	0.	0.	0.	6.11540E-03	7.45020E-02	1.06570E-01
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-5.91110E+00	-5.86580E+00	-1.06304E+01
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	7.98140E+00	3.04480E+01
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14260E+01
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01
	17	18	19	20	21	22	23
1	1.11130E-01	1.26620E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01
2	0.	0.	0.	0.	0.	0.	0.
3	7.51156E+00	7.70090E+00	8.06840E+00	8.76880E+00	9.53570E+00	1.05631E+01	1.14472E+01
4	1.74530E-01	1.63550E-01	1.05334E-01	2.90093E-01	6.89550E-01	1.92017E+00	3.38056E+00
5	5.18860E-13	7.56420E-10	1.96380E-05	3.74050E-03	7.36280E-02	0.	0.
6	1.38060E-10	1.29680E-08	6.62860E-05	1.21710E-02	1.71990E-01	3.61890E-01	0.
7	4.44680E-06	3.44720E-06	1.13720E-03	4.10030E-02	5.59070E-01	8.64420E-01	6.87160E-01
8	1.64530E-01	1.05330E-01	2.90090E-01	6.88410E-01	1.87910E+00	2.80930E+00	1.64870E+00
9	-1.07979E+01	-1.01408E+01	-8.36760E+00	-7.48670E+00	-6.85440E+00	-7.11440E+00	-8.14930E+00
10	3.57770E+00	4.55790E+00	7.13780E+00	6.46420E+00	6.00590E+00	4.75970E+00	3.44740E+00
11	2.75220E+00	3.59050E+00	5.48630E+00	4.17670E+00	3.71060E+00	3.01650E+00	2.37840E+00
12	1.52340E+00	2.75260E+00	4.30680E+00	3.19850E+00	2.38440E+00	1.85360E+00	1.50400E+00
13	2.82050E+00	6.01160E+00	8.10660E+00	6.26770E+00	4.78110E+00	3.85240E+00	4.14430E+00
	25						
1	1.07290E+00						
2	0.						
3	2.91516E+01						
4	1.50687E+01						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.30500E+01						
10	7.18510E+00						
11	3.80700E+00						
12	2.89170E+00						
13	1.99750E+00						

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
6.78160E+00	6.79070E+00	6.92940E+00	7.06970E+00	7.26110E+00	7.37810E+00
0.	0.	0.	6.11540E-03	7.45020E-02	1.08570E-01
0.	0.	6.25750E-75	5.29500E-20	2.35170E-16	1.53990E-14
0.	0.	8.31390E-69	5.13470E-16	9.21490E-12	4.95920E-10
0.	0.	1.00820E-60	6.87580E-10	8.99370E-08	1.95670E-05
0.	0.	6.11540E-03	7.45020E-02	1.08570E-01	1.74530E-01
-6.06530E+00	-6.05970E+00	-5.91110E+00	-5.86580E+00	-1.06304E+01	-1.05716E+01
8.11060E+00	8.11630E+00	8.10500E+00	7.98140E+00	3.04480E+00	4.11940E+00
2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14260E+00	2.28600E+00
2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.57150E-01
6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
8.06840E+00	8.76880E+00	9.53570E+00	1.05631E+01	1.14472E+01	1.42566E+01
1.05334E-01	2.90093E-01	6.89550E-01	1.92017E+00	3.38056E+00	2.68885E+00
1.96380E-05	3.74050E-03	7.36280E-02	0.	0.	0.
6.62860E-05	1.21710E-02	1.71990E-01	3.61890E-01	0.	0.
1.13720E-03	4.10030E-02	5.59070E-01	8.64420E-01	6.87160E-01	0.
2.90090E-01	6.88410E-01	1.87910E+00	2.80930E+00	1.64870E+00	1.39460E+01
-8.36760E+00	-7.48670E+00	-6.85440E+00	-7.11440E+00	-8.14930E+00	3.90700E+00
7.13780E+00	6.46420E+00	6.00590E+00	4.75970E+00	3.44740E+00	1.20570E+01
5.48630E+00	4.17670E+00	3.71060E+00	3.01650E+00	2.37840E+00	9.11210E+00
4.30680E+00	3.19850E+00	2.38440E+00	1.85360E+00	1.50400E+00	6.31110E+00
8.10660E+00	6.26770E+00	4.78110E+00	3.85240E+00	4.14430E+00	5.23750E+00

2

HYDROGEN FREE GAS 95 K

	1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	0.	6.0
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.4
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.2
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.8
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.6
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.2
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.4
	9	10	11	12	13	14	
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.6
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	6.95756E+00	7.18468E+00	7.4
4	0.	0.	0.	0.	0.	7.05080E-03	9.1
5	0.	0.	0.	0.	9.82270E-48	5.38370E-13	9.7
6	0.	0.	0.	0.	5.64400E-44	1.65500E-10	8.0
7	0.	0.	0.	0.	5.83530E-39	9.54910E-07	2.4
8	0.	0.	0.	0.	7.05080E-03	9.12330E-02	1.3
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-5.83268E+00	-5.70445E+00	-1.0
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	7.96770E+00	3.0
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.1
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.1
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.5
	17	18	19	20	21	22	
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.5
2	0.	0.	0.	0.	0.	0.	0.
3	7.80546E+00	8.06846E+00	8.62222E+00	9.51266E+00	1.07117E+01	1.20385E+01	1.3
4	2.32735E-01	2.44870E-01	1.75560E-01	5.16000E-01	1.38440E+00	3.44770E+00	5.7
5	3.07890E-08	3.92930E-06	2.64960E-03	8.61260E-02	8.22900E-01	0.	0.
6	6.96330E-07	1.79260E-05	5.07280E-03	1.57000E-01	8.87040E-01	1.80490E+00	0.
7	3.08420E-04	4.06620E-04	2.31940E-02	3.00340E-01	1.64340E+00	2.13650E+00	2.1
8	2.44070E-01	1.75250E-01	5.15590E-01	1.36120E+00	3.14230E+00	3.96000E+00	2.5
9	-1.04231E+01	-9.66993E+00	-7.60946E+00	-6.51240E+00	-5.67021E+00	-6.21625E+00	-7.5
10	3.57860E+00	4.55830E+00	7.13730E+00	6.46990E+00	6.00220E+00	4.73570E+00	3.3
11	2.75200E+00	3.59030E+00	5.48500E+00	4.17340E+00	3.70600E+00	2.99270E+00	2.3
12	1.52340E+00	2.75230E+00	4.30750E+00	3.19850E+00	2.38080E+00	1.84070E+00	1.4
13	2.79050E+00	5.96450E+00	8.02330E+00	6.15930E+00	4.64290E+00	3.67520E+00	3.8
	25						
1	1.03290E+00						
2	0.						
3	3.19090E+01						
4	2.48650E+01						
5	0.						
6	0.						
7	0.						
8	0.						
9	6.01097E+00						
10	6.15950E+00						
11	3.26340E+00						
12	2.47580E+00						
13	1.70960E+00						

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
.78160E+00	6.79070E+00	6.95756E+00	7.18468E+00	7.44895E+00	7.61736E+00
0.	0.	0.	7.05080E-03	9.12330E-02	1.33390E-01
0.	0.	9.82270E-48	5.38370E-13	9.78290E-11	2.18930E-09
0.	0.	5.64400E-44	1.65500E-10	8.03080E-03	9.69350E-07
0.	0.	5.83530E-39	9.54910E-07	2.47480E-05	7.97830E-04
0.	0.	7.05080E-03	9.12330E-02	1.33390E-01	2.32710E-01
.06530E+00	-6.05970E+00	-5.83268E+00	-5.70445E+00	-1.03755E+01	-1.02502E+01
.11060E+00	8.11630E+00	8.10500E+00	7.96770E+00	3.04490E+00	4.11940E+00
.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13910E+00	2.28570E+00
.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.54110E-01
.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
.62222E+00	9.51266E+00	1.07117E+01	1.20385E+01	1.32614E+01	1.66121E+01
.75560E-01	5.16000E-01	1.38440E+00	3.44770E+00	5.76310E+00	5.66470E+00
.64960E-03	8.61260E-02	8.22900E-01	0.	0.	0.
.07280E-03	1.57000E-01	8.87040E-01	1.80490E+00	0.	0.
.31940E-02	3.00340E-01	1.64340E+00	2.13650E+00	2.15020E+00	0.
.15590E-01	1.36120E+00	3.14230E+00	3.00000E+00	2.55500E+00	2.00870E+01
.60946E+00	-6.51240E+00	-5.67021E+00	-6.21625E+00	-7.54306E+00	4.31232E+00
.13730E+00	6.46990E+00	6.00220E+00	4.73570E+00	3.39740E+00	1.14260E+01
.48500E+00	4.17340E+00	3.70600E+00	2.99270E+00	2.33940E+00	8.62770E+00
.30750E+00	3.19850E+00	2.38080E+00	1.84070E+00	1.47750E+00	5.95900E+00
.02330E+00	6.15930E+00	4.64290E+00	3.67520E+00	3.88160E+00	4.83520E+00

HYDROGEN FREE GAS 293 K

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	6.00000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40000E-01

	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.87800E-02	6.35470E-02	8.61950E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77630E+00	6.78160E+00	6.79070E+00	7.10800E+00	7.75671E+00	8.40151E+00
4	0.	0.	0.	0.	0.	1.83660E-02	3.60310E-02
5	0.	0.	0.	0.	0.	1.79050E-04	1.37590E-04
6	0.	0.	0.	0.	0.	1.05580E-03	8.64380E-03
7	0.	0.	0.	0.	0.	1.19330E-02	5.09760E-02
8	0.	0.	0.	0.	1.83660E-02	3.60310E-01	5.69480E-01
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-5.50626E+00	-4.87100E+00	-9.21180E+00
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	7.93770E+00	3.04280E+00
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13060E+00
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01
13	2.27000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01

	17	18	19	20	21	22	23
1	1.11340E-01	1.27380E-01	1.56840E-01	2.00280E-01	2.52440E-01	3.04790E-01	3.51030E-01
2	0.	0.	0.	0.	0.	0.	0.
3	9.28130E+00	9.86517E+00	1.10784E+01	1.27880E+01	1.55518E+01	1.83814E+01	2.09612E+01
4	1.00736E+00	1.19530E+00	1.38940E+00	3.56370E+00	7.38190E+00	1.25827E+01	1.71994E+01
5	2.41670E-02	1.39500E-01	1.34500E+00	5.37580E+00	1.71630E+01	0.	0.
6	3.93660E-02	1.55760E-01	1.31680E+00	3.94570E+00	6.42830E+00	8.22400E+00	0.
7	1.60250E-01	2.96230E-01	1.69790E+00	4.26980E+00	6.33140E+00	5.66310E+00	5.50860E+00
8	1.02310E+00	1.20230E+00	3.22150E+00	5.50410E+00	6.85660E+00	5.57730E+00	3.79650E+00
9	-9.00690E+00	-7.95120E+00	-4.62070E+00	-3.81530E+00	-3.62140E+00	-5.27170E+00	-7.14460E+00
10	3.58570E+00	4.57810E+00	7.18380E+00	6.26910E+00	5.57850E+00	4.14090E+00	2.81190E+00
11	2.75040E+00	3.59390E+00	5.48920E+00	4.12850E+00	3.42720E+00	2.60350E+00	1.93180E+00
12	1.52200E+00	2.74970E+00	4.30110E+00	3.14940E+00	2.25290E+00	1.59900E+00	1.21550E+00
13	2.66120E+00	5.69780E+00	7.54870E+00	5.56530E+00	3.95260E+00	2.92850E+00	2.85760E+00

	25
1	8.75550E-01
2	0.
3	5.55270E+01
4	5.30380E+01
5	0.
6	0.
7	0.
8	0.
9	1.61400E+00
10	3.64210E+00
11	2.04340E+00
12	1.54090E+00
13	1.06030E+00

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.36120E+00
6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
2.39000E-01	6.90000E-01	1.07600E+00	7.81090E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
1.42000E-02	2.35000E-02	3.87800E-02	6.35470E-02	8.61950E-02	9.85350E-02
0.	0.	0.	0.	0.	0.
6.78160E+00	6.79070E+00	7.10800E+00	7.75671E+00	8.40151E+00	8.86125E+00
0.	0.	0.	1.83660E-02	3.60310E-01	5.81410E-01
0.	0.	0.	1.79050E-04	1.37590E-03	6.59630E-03
0.	0.	0.	1.05580E-03	8.64380E-03	2.54720E-02
0.	0.	0.	1.19330E-02	5.09760E-02	1.63370E-01
0.	0.	1.83660E-02	3.60310E-01	5.69480E-01	9.55330E-01
-6.06530E+00	-6.05970E+00	-5.50626E+00	-4.87100E+00	-9.21180E+00	-3.86470E+00
8.11060E+00	8.11630E+00	8.10500E+00	7.93770E+00	3.04280E+00	4.11800E+00
2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13060E+00	2.28320E+00
2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.45980E-01
6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
1.56840E-01	2.00280E-01	2.52440E-01	3.04790E-01	3.51030E-01	4.62000E-01
0.	0.	0.	0.	0.	0.
1.10784E+01	1.27880E+01	1.55518E+01	1.83814E+01	2.09612E+01	2.76900E+01
1.38940E+00	3.56370E+00	7.38190E+00	1.25827E+01	1.71994E+01	2.12637E+01
1.34500E+00	5.37580E+00	1.71630E+01	0.	0.	0.
1.31680E+00	3.94570E+00	6.42830E+00	8.22400E+00	0.	0.
1.69790E+00	4.26980E+00	6.33140E+00	5.66310E+00	5.50860E+00	0.
3.22150E+00	5.50410E+00	6.85660E+00	5.57730E+00	3.79650E+00	2.21420E+01
-4.62070E+00	-3.81530E+00	-3.62140E+00	-5.27170E+00	-7.14460E+00	2.32200E+00
7.18380E+00	6.26910E+00	5.57850E+00	4.14090E+00	2.81190E+00	8.51200E+00
5.48920E+00	4.12850E+00	3.42720E+00	2.60350E+00	1.93180E+00	6.41280E+00
4.30110E+00	3.14960E+00	2.25290E+00	1.59300E+00	1.21550E+00	4.40580E+00
7.54370E+00	5.56530E+00	3.95260E+00	2.92850E+00	2.85760E+00	3.44170E+00

2

HYDROGEN ORTHO

45 K

	1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	0.	6.00
2	0.	0.	0.	0.	0.	0.	0.
3	6.00900E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40
	9	10	11	12	13	14	15
1	4.20300E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.72410E+00	8.95820E+00	1.00
4	0.	0.	0.	0.	0.	1.37210E-02	1.66
5	0.	0.	0.	0.	3.69040E-94	1.25940E-25	3.34
6	0.	0.	0.	0.	5.05430E-86	6.84580E-21	1.22
7	0.	0.	0.	0.	1.33940E-77	5.14750E-12	5.10
8	0.	0.	0.	0.	1.37210E-02	1.66620E-01	2.40
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.88167E+00	-3.85930E+00	-9.14
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	8.02500E+00	3.29
11	1.13900E+00	7.34000E-01	2.04000E+00	2.53590E+00	2.98020E+00	2.93810E+00	1.14
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.59
	17	18	19	20	21	22	23
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51
2	0.	0.	0.	0.	0.	0.	0.
3	1.16723E+01	1.21830E+01	1.21860E+01	1.32832E+01	1.56158E+01	1.86558E+01	2.13
4	3.86500E-01	3.46917E-01	2.19400E-01	6.15900E-01	1.35374E+00	3.62146E+00	6.22
5	5.46460E-17	1.55050E-12	2.44000E-06	2.56110E-03	7.00980E-02	0.	0.
6	3.16000E-13	1.62400E-10	1.43590E-05	1.32620E-02	2.92930E-01	5.32920E-01	0.
7	1.25970E-06	5.68520E-07	9.40470E-04	6.48460E-02	9.84590E-01	1.49430E+00	1.12
8	3.46910E-01	2.19400E-01	6.15900E-01	1.35280E+00	3.55660E+00	5.22820E+00	2.91
9	-9.34453E+00	-8.28811E+00	-5.63961E+00	-4.80296E+00	-4.30821E+00	-5.62544E+00	-8.51
10	4.15330E+00	5.36810E+00	8.31000E+00	7.96060E+00	8.09430E+00	7.50560E+00	6.22
11	3.32510E+00	4.23620E+00	6.40550E+00	4.80540E+00	4.00110E+00	3.32470E+00	3.04
12	1.53750E+00	3.13100E+00	5.18950E+00	3.96320E+00	2.91960E+00	1.94980E+00	1.56
13	2.55250E+00	5.51740E+00	7.69020E+00	5.92460E+00	4.78240E+00	3.96240E+00	3.53
	25						
1	1.03290E+00						
2	0.						
3	4.77915E+01						
4	2.18380E+01						
5	0.						
6	0.						
7	0.						
8	0.						
9	2.49205E+01						
10	1.09320E+01						
11	3.73370E+00						
12	2.29280E+00						
13	1.37770E+00						

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
8.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
6.78160E+00	6.79070E+00	7.72410E+00	8.95820E+00	1.00712E+01	1.07513E+01
0.	0.	0.	1.37210E-02	1.66620E-01	2.40820E-01
0.	0.	3.69040E-94	1.25940E-25	3.34560E-21	4.35900E-19
0.	0.	5.05430E-86	6.88580E-21	1.22050E-14	3.13600E-12
0.	0.	1.33940E-77	5.14750E-12	5.10030E-09	7.44080E-06
0.	0.	1.37210E-02	1.66620E-01	2.40820E-01	3.86500E-01
6.06530E+00	-6.05970E+00	-4.88167E+00	-3.85930E+00	-9.14062E+00	-9.09161E+00
8.11060E+00	8.11630E+00	8.10500E+00	8.02500E+00	3.29270E+00	4.81270E+00
2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14040E+00	2.39260E+00
2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.49040E-01
6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
1.21860E+01	1.32832E+01	1.56158E+01	1.86558E+01	2.13978E+01	2.74491E+01
2.19400E-01	6.15900E-01	1.35374E+00	3.62146E+00	6.22600E+00	4.70919E+00
2.44000E-06	2.56110E-03	7.00980E-02	0.	0.	0.
1.43590E-05	1.32620E-02	2.92930E-01	5.32920E-01	0.	0.
9.40470E-04	6.48460E-02	9.84590E-01	1.49430E+00	1.12200E+00	0.
6.15700E-01	1.35280E+00	3.55660E+00	5.22820E+00	2.91940E+00	2.01130E+01
5.63961E+00	-4.80296E+00	-4.30821E+00	-5.62544E+00	-8.51289E+00	1.13321E+01
8.31000E+00	7.96060E+00	8.09430E+00	7.50560E+00	6.22080E+00	1.95990E+01
6.40550E+00	4.80540E+00	4.00110E+00	3.32470E+00	3.04910E+00	1.18400E+01
5.18950E+00	3.96320E+00	2.91960E+00	1.94980E+00	1.56720E+00	6.38410E+00
7.69020E+00	5.92460E+00	4.78240E+00	3.96240E+00	3.53680E+00	4.28260E+00

HYDROGEN ORTHO

60 K

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	6.00000E-04
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.31000E-01	6.64200E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40000E-02

	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.73129E+00	8.96941E+00	1.01166E+01
4	0.	0.	0.	0.	0.	1.35100E-02	1.65820E-01
5	0.	0.	0.	0.	7.88450E-72	5.75010E-20	1.39880E-16
6	0.	0.	0.	0.	7.98080E-66	2.46620E-16	1.45860E-11
7	0.	0.	0.	0.	2.66770E-59	1.37020E-09	2.68520E-07
8	0.	0.	0.	0.	1.35100E-02	1.65820E-01	2.39100E-01
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.87029E+00	-3.83038E+00	-9.06734E+00
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	8.02480E+00	3.28970E+00
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14000E+00
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01

	17	18	19	20	21	22	23
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01
2	0.	0.	0.	0.	0.	0.	0.
3	1.16748E+01	1.22273E+01	1.23366E+01	1.34083E+01	1.57585E+01	1.87476E+01	2.14585E+01
4	3.93010E-01	3.71126E-01	2.42717E-01	6.88290E-01	1.65862E+00	4.39930E+00	7.50690E+00
5	4.20290E-13	1.13880E-09	6.69190E-05	1.42840E-02	2.33960E-01	0.	0.
6	2.09380E-10	3.10840E-08	2.41980E-04	4.83160E-02	5.63610E-01	1.05580E+00	0.
7	1.65170E-05	1.21640E-05	4.62130E-03	1.52780E-01	1.51660E+00	2.14010E+00	1.71990E+00
8	3.71050E-01	2.42700E-01	6.88280E-01	1.65400E+00	4.24630E+00	5.94190E+00	3.45670E+00
9	-9.24262E+00	-8.14860E+00	-5.43125E+00	-4.49774E+00	-4.05643E+00	-5.55568E+00	-8.52286E+00
10	4.15260E+00	5.35710E+00	8.30420E+00	7.91710E+00	7.97970E+00	7.24660E+00	5.90020E+00
11	3.30810E+00	4.23160E+00	6.40800E+00	4.81370E+00	4.00030E+00	3.30690E+00	2.97950E+00
12	1.53830E+00	3.12100E+00	5.15590E+00	3.92770E+00	2.88910E+00	1.93420E+00	1.54020E+00
13	2.54900E+00	5.50420E+00	7.68880E+00	5.90870E+00	4.72050E+00	3.87090E+00	3.51560E+00

	25
1	1.03290E+00
2	0.
3	5.03990E+01
4	2.78117E+01
5	0.
6	0.
7	0.
8	0.
9	2.15544E+01
10	1.01130E+01
11	3.55450E+00
12	2.32660E+00
13	1.39230E+00

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
3.000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
0.000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
9.000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
2.000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
8.160E+00	6.79070E+00	7.73129E+00	8.96941E+00	1.01166E+01	1.07757E+01
0.	0.	0.	1.35100E-02	1.65820E-01	2.39100E-01
0.	0.	7.88450E-72	5.75010E-20	1.39880E-16	8.98520E-15
0.	0.	7.98080E-66	2.46620E-16	1.45860E-11	9.55930E-10
0.	0.	2.66770E-59	1.37020E-09	2.68520E-07	7.62590E-05
0.	0.	1.35100E-02	1.65820E-01	2.39100E-01	3.93010E-01
6.530E+00	-6.05970E+00	-4.87029E+00	-3.83038E+00	-9.06734E+00	-9.01073E+00
1.060E+00	8.11630E+00	8.10500E+00	8.02480E+00	3.28970E+00	4.81400E+00
4.000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14000E+00	2.39050E+00
0.000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.48950E-01
6.000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
7.920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
3.366E+01	1.34083E+01	1.57585E+01	1.87476E+01	2.14585E+01	2.77444E+01
2.717E-01	6.88290E-01	1.65862E-00	4.39930E+00	7.50690E+00	6.17470E+00
9.190E-05	1.42840E-02	2.33960E-01	0.	0.	0.
1.980E-04	4.83160E-02	5.63610E-01	1.05580E+00	0.	0.
2.130E-03	1.52780E-01	1.51660E+00	2.14010E+00	1.71990E+00	0.
8.280E-01	1.65400E+00	4.24630E+00	5.94190E+00	3.45670E+00	2.48020E+01
3.125E+00	-4.49774E+00	-4.05643E+00	-5.55568E+00	-8.52286E+00	1.09811E+01
0.420E+00	7.91710E+00	7.97970E+00	7.24660E+00	5.90020E+00	1.84680E+01
0.800E+00	4.81370E+00	4.00030E+00	3.30690E+00	2.97950E+00	1.13710E+01
5.590E+00	3.92770E+00	2.88910E+00	1.93420E+00	1.54020E+00	6.28400E+00
8.880E+00	5.90870E+00	4.72050E+00	3.87090E+00	3.51560E+00	4.18950E+00

2

HYDROGEN ORTHO

95 K

	1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	0.	6.0
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.4
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.2
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.0
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.6
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.2
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.4
	9	10	11	12	13	14	
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.6
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.74817E+00	8.99582E+00	1.0
4	0.	0.	0.	0.	0.	1.35470E-02	1.7
5	0.	0.	0.	0.	4.57540E-47	1.60510E-13	3.1
6	0.	0.	0.	0.	2.02770E-43	4.68570E-11	5.3
7	0.	0.	0.	0.	5.37390E-39	8.48430E-07	2.9
8	0.	0.	0.	0.	1.35470E-02	1.74200E-01	2.5
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.84256E+00	-3.76508E+00	-8.9
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	8.02310E+00	3.2
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.1
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51300E-01	1.09640E+00	1.08030E+00	4.1
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.3
	17	18	19	20	21	22	
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.5
2	0.	0.	0.	0.	0.	0.	0.
3	1.16942E+01	1.23272E+01	1.26613E+01	1.37305E+01	1.61000E+01	1.90668E+01	2.1
4	4.40210E-01	4.55250E-01	3.24000E-01	9.55010E-01	2.51400E+00	6.15520E+00	1.0
5	1.28660E-08	2.52910E-06	3.33380E-03	1.28530E-01	1.16430E+00	0.	0.
6	4.70310E-07	1.61880E-05	7.12030E-03	2.63700E-01	1.48630E+00	2.75950E+00	0.
7	4.41920E-04	5.44430E-04	3.86740E-02	5.30790E-01	2.85750E+00	3.58100E+00	3.3
8	4.54000E-01	3.23560E-01	9.54460E-01	2.47530E+00	5.61730E+00	6.98620E+00	4.3
9	-9.04208E+00	-7.87882E+00	-5.00018E+00	-3.95451E+00	-3.73581E+00	-5.63068E+00	-8.7
10	4.15640E+00	5.34290E+00	8.30290E+00	7.84110E+00	7.75820E+00	6.78970E+00	5.3
11	3.27220E+00	4.21710E+00	6.40240E+00	4.81500E+00	3.98990E+00	3.24270E+00	2.8
12	1.53970E+00	3.10220E+00	5.08800E+00	3.85150E+00	2.81760E+00	1.90430E+00	1.4
13	2.54090E+00	5.47440E+00	7.67650E+00	5.86640E+00	4.58810E+00	3.68850E+00	3.4
	25						
1	1.03290E+00						
2	0.						
3	5.51825E+01						
4	3.93320E+01						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.48175E+01						
10	8.79220E+00						
11	3.46480E+00						
12	2.30020E+00						
13	1.37500E+00						

K

	3	4	5	6	7	8
	0.	0.	0.	0.	6.00000E-04	1.50000E-03
	0.	0.	0.	0.	0.	0.
1	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
1	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
1	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
	0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
	11	12	13	14	15	16
3	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
	0.	0.	0.	0.	0.	0.
0	6.78160E+00	6.79070E+00	6.92940E+00	7.06970E+00	7.26110E+00	7.37810E+00
	0.	0.	0.	6.11540E-03	7.45020E-02	1.08570E-01
	0.	0.	6.25750E-75	5.29500E-20	2.35170E-16	1.53990E-14
	0.	0.	8.31390E-69	5.13470E-16	9.21490E-12	4.95920E-10
	0.	0.	1.00820E-60	6.87580E-10	8.99370E-08	1.95670E-05
	0.	0.	6.11540E-03	7.45020E-02	1.08570E-01	1.74530E-01
0	-6.06530E+00	-6.05970E+00	-5.91110E+00	-5.86580E+00	-1.06304E+01	-1.05716E+01
0	8.11060E+00	8.11630E+00	8.10500E+00	7.98140E+00	3.04480E+00	4.11940E+00
0	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.14260E+00	2.28600E+00
1	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.57150E-01
2	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
	19	20	21	22	23	24
1	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
	0.	0.	0.	0.	0.	0.
0	8.06840E+00	8.76880E+00	9.53570E+00	1.05631E+01	1.14472E+01	1.42566E+01
1	1.05334E-01	2.90093E-01	6.89550E-01	1.92017E+00	3.38056E+00	2.68885E+00
0	1.96380E-05	3.74050E-03	7.36280E-02	0.	0.	0.
8	6.62860E-05	1.21710E-02	1.71990E-01	3.61890E-01	0.	0.
6	1.13720E-03	4.10030E-02	5.59070E-01	8.64420E-01	6.87160E-01	0.
1	2.90090E-01	6.88410E-01	1.87910E+00	2.80930E+00	1.64870E+00	1.39460E+01
1	-8.36760E+00	-7.48670E+00	-6.85440E+00	-7.11440E+00	-8.14930E+00	3.90700E+00
0	7.13780E+00	6.46420E+00	6.00590E+00	4.75970E+00	3.44740E+00	1.20570E+01
0	5.48630E+00	4.17670E+00	3.71060E+00	3.01650E+00	2.37840E+00	9.11210E+00
0	4.30680E+00	3.19850E+00	2.38440E+00	1.85360E+00	1.50400E+00	6.31110E+00
0	8.10660E+00	6.26770E+00	4.78110E+00	3.85240E+00	4.14430E+00	5.23750E+00

2

HYDROGEN ORTHO

293 K

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	6.00000E-04
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40000E-02

	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.87800E-02	6.35470E-02	8.61950E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.83782E+00	9.15708E+00	1.06054E+01
4	0.	0.	0.	0.	0.	2.04760E-02	3.68450E-01
5	0.	0.	0.	0.	1.96350E-17	2.73210E-05	2.79620E-04
6	0.	0.	0.	0.	2.72290E-16	2.35280E-04	2.91500E-03
7	0.	0.	0.	0.	1.01980E-14	5.01030E-03	2.63580E-02
8	0.	0.	0.	0.	2.04760E-02	3.68450E-01	5.81880E-01
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.65741E+00	-3.39844E+00	-8.25988E+00
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	7.99160E+00	3.25010E+00
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13290E+00
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01

	17	18	19	20	21	22	23
1	1.11340E-01	1.27380E-01	1.56840E-01	2.00280E-01	2.52440E-01	3.04790E-01	3.51030E-01
2	0.	0.	0.	0.	0.	0.	0.
3	1.20566E+01	1.29401E+01	1.40867E+01	1.57036E+01	1.82989E+01	2.15602E+01	2.47387E+01
4	1.03380E+00	1.19010E+00	1.31710E+00	3.55790E+00	7.70050E+00	1.37690E+01	1.93770E+01
5	6.55910E-03	5.17540E-02	7.66900E-01	3.82360E+00	1.36710E+01	0.	0.
6	1.50640E-02	7.20590E-02	8.57440E-01	3.44390E+00	6.75620E+00	9.40210E+00	0.
7	9.84120E-02	1.79290E-01	1.30530E+00	4.08470E+00	7.37810E+00	7.14340E+00	7.04850E+00
8	1.08080E+00	1.20830E+00	3.36200E+00	6.31660E+00	8.77460E+00	7.78770E+00	5.33520E+00
9	-8.34400E+00	-7.03291E+00	-3.21251E+00	-2.54138E+00	-3.50839E+00	-6.43850E+00	-9.54477E+00
10	4.18000E+00	5.37470E+00	8.38760E+00	7.40790E+00	6.81910E+00	5.39640E+00	3.92840E+00
11	3.14200E+00	4.12100E+00	6.26090E+00	4.65420E+00	3.76310E+00	2.88770E+00	2.34050E+00
12	1.53800E+00	3.03790E+00	4.84700E+00	3.54370E+00	2.51530E+00	1.71370E+00	1.29740E+00
13	2.48680E+00	5.31840E+00	7.46300E+00	5.56860E+00	4.07610E+00	3.09840E+00	2.94070E+00

	25
1	8.75550E-01
2	0.
3	6.21436E+01
4	6.34570E+01
5	0.
6	0.
7	0.
8	0.
9	-2.18943E+00
10	5.42690E+00
11	2.62600E+00
12	1.82410E+00
13	1.12640E+00

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
1.42000E-02	2.35000E-02	3.87800E-02	6.35470E-02	8.61950E-02	9.85350E-02
0.	0.	0.	0.	0.	0.
6.78160E+00	6.79070E+00	7.83782E+00	9.15708E+00	1.06054E+01	1.12662E+01
0.	0.	0.	2.04760E-02	3.68450E-01	5.96890E-01
0.	0.	1.96350E-17	2.73210E-05	2.79620E-04	1.54790E-03
0.	0.	2.72290E-16	2.35280E-04	2.91500E-03	1.00990E-02
0.	0.	1.01980E-14	5.01030E-03	2.63580E-02	1.06390E-01
0.	0.	2.04760E-02	3.68450E-01	5.81880E-01	1.00720E+00
-6.06530E+00	-6.05970E+00	-4.65741E+00	-3.39844E+00	-8.25988E+00	-8.13587E+00
8.11060E+00	8.11640E+00	8.10500E+00	7.99160E+00	3.25010E+00	4.76770E+00
2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13290E+00	2.36500E+00
2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.45150E-01
6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
1.56840E-01	2.00280E-01	2.52440E-01	3.04790E-01	3.51030E-01	4.62000E-01
0.	0.	0.	0.	0.	0.
1.40867E+01	1.57036E+01	1.82989E+01	2.15602E+01	2.47387E+01	3.22304E+01
1.31710E+00	3.55790E+00	7.70050E+00	1.37690E+01	1.93770E+01	2.30580E+01
7.66900E-01	3.82360E+00	1.36710E+01	0.	0.	0.
8.57440E-01	3.44390E+00	6.75620E+00	9.40210E+00	0.	0.
1.30530E+00	4.08470E+00	7.37810E+00	7.14340E+00	7.04850E+00	0.
3.36200E+00	6.31660E+00	8.77460E+00	7.78770E+00	5.33520E+00	3.33360E+01
-3.21251E+00	-2.54138E+00	-3.50839E+00	-6.43850E+00	-9.54477E+00	3.28336E+00
8.38760E+00	7.40780E+00	6.81910E+00	5.39640E+00	3.92840E+00	1.19300E+01
6.26090E+00	4.65420E+00	3.76310E+00	2.88770E+00	2.34050E+00	8.17290E+00
4.84700E+00	3.54370E+00	2.51530E+00	1.71370E+00	1.29740E+00	4.99100E+00
7.46300E+00	5.56860E+00	4.07610E+00	3.09840E+00	2.94070E+00	3.48260E+00

2

HYDROGEN PARA

45 K

	1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	0.	6.00
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.44
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.20
10	0.	7.69000E-01	6.90000E-01	1.75600E+00	2.82700E+00	4.04100E+00	5.85
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40
	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.67634E+00	8.72941E+00	1.05
4	0.	0.	0.	0.	0.	6.80370E-04	7.79
5	0.	0.	0.	0.	1.48100E-96	9.41130E-28	2.30
6	0.	0.	0.	0.	1.97330E-88	4.54040E-23	2.76
7	0.	0.	0.	0.	5.83980E-80	1.01830E-14	1.18
8	0.	0.	0.	0.	6.80370E-04	7.79670E-03	1.12
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.95331E+00	-4.08619E+00	-9.13
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	8.02100E+00	3.26
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.12
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55
	17	18	19	20	21	22	23
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.515
2	0.	0.	0.	0.	0.	0.	0.
3	1.01058E+01	9.32595E+00	1.28276E+01	1.68686E+01	1.45595E+01	1.04016E+01	7.351
4	1.73250E-02	1.46330E-02	8.96500E-03	2.43190E-02	4.80340E-02	1.31995E-01	2.266
5	2.03470E-19	2.97250E-15	6.13200E-09	9.67460E-06	1.78880E-04	0.	0.
6	6.55520E-16	3.25810E-13	4.22310E-08	6.91360E-05	2.69570E-03	2.32650E-03	0.
7	4.09220E-09	1.60680E-09	4.40050E-06	5.05220E-04	1.86180E-02	3.11020E-02	8.312
8	1.46330E-02	8.96500E-03	2.43190E-02	4.80300E-02	1.31490E-01	2.07950E-01	1.019
9	-1.01213E+01	-1.02134E+01	-8.36121E+00	-6.66284E+00	-4.72202E+00	-2.88696E+00	-1.505
10	4.95220E+00	6.70010E+00	1.03810E+01	9.32240E+00	7.20490E+00	3.26390E+00	1.015
11	2.55820E+00	3.43080E+00	5.22720E+00	4.04520E+00	5.63470E+00	5.25260E+00	2.714
12	1.61280E+00	3.29990E+00	4.30650E+00	2.78240E+00	1.81220E+00	2.33720E+00	2.696
13	2.58240E+00	5.46820E+00	8.82150E+00	7.65270E+00	5.38880E+00	3.15950E+00	3.727
	25						
1	1.03290E+00						
2	0.						
3	2.56160E+00						
4	5.47610E-01						
5	0.						
6	0.						
7	0.						
8	0.						
9	9.81099E-01						
10	1.92090E+00						
11	3.62270E+00						
12	3.94420E+00						
13	3.18540E+00						

4	5	6	7	8
0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.
1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
12	13	14	15	16
2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.
6.79070E+00	7.67634E+00	8.72941E+00	1.05139E+01	1.14273E+01
0.	0.	6.80370E-04	7.79670E-03	1.12940E-02
0.	1.48100E-96	9.41130E-28	2.30660E-23	2.51530E-21
0.	1.97330E-86	4.54040E-23	2.76050E-17	6.24160E-15
0.	5.83980E-80	1.01830E-14	1.18350E-11	2.52680E-08
0.	6.80370E-04	7.79670E-03	1.12940E-02	1.73250E-02
-6.05970E+00	-4.95331E+00	-4.08619E+00	-9.13273E+00	-9.02468E+00
8.11630E+00	8.10500E+00	8.02100E+00	3.26960E+00	4.87300E+00
2.98590E+00	2.98020E+00	2.93810E+00	1.12880E+00	2.40070E+00
7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.58620E-01
1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
20	21	22	23	24
2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.
1.68686E+01	1.45595E+01	1.04016E+01	7.35355E+00	3.27426E+00
2.43190E-02	4.80340E-02	1.31995E-01	2.26637E-01	1.34887E-01
9.67460E-06	1.78880E-04	0.	0.	0.
6.91360E-05	2.69570E-03	2.32650E-03	0.	0.
5.05220E-04	1.86180E-02	3.11020E-02	8.31210E-03	0.
4.80300E-02	1.31490E-01	2.07950E-01	1.01080E-01	5.36790E-01
-6.66284E+00	-4.72202E+00	-2.88696E+00	-1.50587E+00	7.42846E-01
9.32240E+00	7.20490E+00	3.26390E+00	1.01560E+00	4.65810E+00
4.04520E+00	5.63470E+00	5.25260E+00	2.71490E+00	7.89060E+00
2.78240E+00	1.81220E+00	2.33720E+00	2.69870E+00	9.81540E+00
7.65270E+00	5.38880E+00	3.15950E+00	3.72760E+00	8.14930E+00

HYDROGEN PARA

60 K

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	6.00000E-04
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40000E-02

	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.63332E+00	8.74832E+00	1.04970E+01
4	0.	0.	0.	0.	0.	1.11370E-03	1.26810E-02
5	0.	0.	0.	0.	1.44420E-73	1.77990E-21	2.94080E-18
6	0.	0.	0.	0.	1.78660E-67	4.99290E-18	1.46000E-13
7	0.	0.	0.	0.	7.00960E-61	1.48470E-11	3.65600E-09
8	0.	0.	0.	0.	1.11370E-03	1.26810E-02	1.81620E-02
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.94267E+00	-4.05517E+00	-9.09402E+00
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	8.02090E+00	3.26780E+00
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13030E+00
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01

	17	18	19	20	21	22	23
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01
2	0.	0.	0.	0.	0.	0.	0.
3	1.02403E+01	7.55032E+00	1.27665E+01	1.67778E+01	1.51988E+01	1.16512E+01	8.86305E+00
4	2.86940E-02	2.63144E-02	1.66443E-02	4.52422E-02	1.04165E-01	2.85279E-01	4.80394E-01
5	4.61560E-15	1.03290E-11	9.84580E-07	2.61010E-04	2.44040E-03	0.	0.
6	2.11590E-12	3.42060E-10	4.02790E-06	1.16340E-03	1.71330E-02	1.50660E-02	0.
7	2.90910E-07	1.93830E-07	1.05410E-04	4.72470E-03	7.31500E-02	9.85830E-02	3.29800E-02
8	2.63130E-02	1.66440E-02	4.52420E-02	1.04060E-01	2.80550E-01	4.06080E-01	2.01050E-01
9	-9.94054E+00	-9.96788E+00	-8.11696E+00	-6.23053E+00	-3.90199E+00	-2.11986E+00	-9.81348E-01
10	4.85820E+00	6.56420E+00	1.01730E+01	9.21290E+00	7.36830E+00	3.64920E+00	1.35580E+00
11	2.63610E+00	3.49610E+00	5.31270E+00	4.08980E+00	5.45340E+00	5.09600E+00	2.80280E+00
12	1.60460E+00	3.28780E+00	4.40590E+00	2.90690E+00	1.91200E+00	2.28560E+00	2.58360E+00
13	2.57850E+00	5.46630E+00	8.72130E+00	7.46550E+00	5.25720E+00	3.19020E+00	3.75700E+00

	25
1	1.03290E+00
2	0.
3	3.04625E+00
4	8.86700E-01
5	0.
6	0.
7	0.
8	0.
9	1.12665E+00
10	2.12410E+00
11	3.45270E+00
12	3.58690E+00
13	2.88680E+00

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
78160E+00	6.79070E+00	7.68332E+00	8.74832E+00	1.04970E+01	1.13800E+01
	0.	0.	1.11370E-03	1.26810E-02	1.81620E-02
	0.	1.44420E-73	1.77990E-21	2.94080E-18	1.48360E-16
	0.	1.78660E-67	4.99290E-18	1.46000E-13	1.02150E-11
	0.	7.0960E-61	1.48470E-11	3.65600E-09	1.43300E-06
	0.	1.11370E-03	1.26810E-02	1.81620E-02	2.86940E-02
06530E+00	-6.05970E+00	-4.94267E+00	-4.05517E+00	-9.09402E+00	-8.96231E+00
11060E+00	8.11630E+00	8.10500E+00	8.02090E+00	3.26780E+00	4.84690E+00
04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13030E+00	2.40010E+00
70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.57460E-01
56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
27665E+01	1.67778E+01	1.51988E+01	1.16512E+01	8.86305E+00	4.55019E+00
66443E-02	4.52422E-02	1.04165E-01	2.85279E-01	4.80394E-01	3.17030E-01
84580E-07	2.61010E-04	2.44040E-03	0.	0.	0.
02790E-06	1.16340E-03	1.71330E-02	1.50660E-02	0.	0.
05410E-04	4.72470E-03	7.31500E-02	9.85830E-02	3.29800E-02	0.
52420E-02	1.04060E-01	2.80550E-01	4.06080E-01	2.01050E-01	8.36210E-01
11596E+00	-6.23053E+00	-3.90199E+00	-2.11986E+00	-9.81348E-01	1.63339E+00
01730E+01	9.21290E+00	7.36830E+00	3.64920E+00	1.35580E+00	5.55940E+00
31270E+00	4.08980E+00	5.45340E+00	5.09600E+00	2.80280E+00	8.23690E+00
40590E+00	2.90690E+00	1.91200E+00	2.28560E+00	2.58360E+00	9.40390E+00
72130E+00	7.46550E+00	5.25720E+00	3.19020E+00	3.75700E+00	7.71370E+00

2

HYDROGEN PARA

95 K

	1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	0.	6.00
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40

	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.621
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.69949E+00	8.79061E+00	1.044
4	0.	0.	0.	0.	0.	2.49170E-03	3.015
5	0.	0.	0.	0.	4.60550E-48	2.04470E-14	2.503
6	0.	0.	0.	0.	2.75650E-44	3.59650E-12	2.964
7	0.	0.	0.	0.	8.55790E-40	5.65070E-08	2.466
8	0.	0.	0.	0.	2.49170E-03	3.01570E-02	4.319
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.91750E+00	-3.98726E+00	-9.014
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	9.02080E+00	3.266
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.132
12	1.68500E-01	1.13000E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.197
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.559

	17	18	19	20	21	22	23
1	1.11130E-01	1.26820E-01	1.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.519
2	0.	0.	0.	0.	0.	0.	0.
3	1.05189E+01	1.00023E+01	1.27052E+01	1.66485E+01	1.63873E+01	1.40275E+01	1.185
4	7.42710E-02	7.69960E-02	5.38350E-02	1.56192E-01	4.17060E-01	1.01563E+00	1.591
5	5.48070E-10	1.28660E-07	3.20220E-04	1.36840E-02	7.27510E-02	0.	0.
6	2.62460E-08	1.03940E-06	7.39590E-04	3.38280E-02	1.84230E-01	1.75930E-01	0.
7	4.52950E-05	5.16460E-05	4.77240E-03	7.57100E-02	4.44520E-01	4.75360E-01	2.124
8	7.68560E-02	5.37900E-02	1.56140E-01	4.12290E-01	9.39180E-01	1.11250E+00	5.696
9	-9.58172E+00	-9.47568E+00	-7.54177E+00	-5.23312E+00	-2.26534E+00	-6.12095E-01	8.879
10	4.68830E+00	6.28880E+00	9.75780E+00	8.91170E+00	7.48690E+00	4.19910E+00	1.912
11	2.77540E+00	3.64360E+00	5.52750E+00	4.21880E+00	5.13480E+00	4.74350E+00	2.835
12	1.58940E+00	3.24520E+00	4.56090E+00	3.11220E+00	2.09080E+00	2.20520E+00	2.355
13	2.56960E+00	5.45980E+00	8.52700E+00	7.09890E+00	4.98670E+00	3.20680E+00	3.783

	25
1	1.03290E+00
2	0.
3	5.10078E+00
4	2.29243E+00
5	0.
6	0.
7	0.
8	0.
9	1.77548E+00
10	2.32490E+00
11	3.08020E+00
12	3.02360E+00
13	2.42590E+00

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
.50000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
.42000E-02	2.35000E-02	3.88340E-02	6.35800E-02	8.62190E-02	9.84720E-02
0.	0.	0.	0.	0.	0.
.78160E+00	6.79070E+00	7.69949E+00	8.79061E+00	1.04694E+01	1.13069E+01
0.	0.	0.	2.49170E-03	3.01570E-02	4.31940E-02
0.	0.	4.60550E-48	2.04470E-14	2.50310E-12	4.91750E-11
0.	0.	2.75650E-44	3.59650E-12	2.96400E-09	5.09300E-08
0.	0.	8.55790E-40	5.65070E-08	2.46680E-06	1.40080E-04
0.	0.	2.49170E-03	3.01570E-02	4.31940E-02	7.42680E-02
.66530E+00	-6.05970E+00	-4.91750E+00	-3.98726E+00	-3.01401E+00	-8.82649E+00
.11060E+00	8.11630E+00	8.10500E+00	8.02080E+00	3.26620E+00	4.81940E+00
.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13260E+00	2.39640E+00
.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.55160E-01
.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
.57920E-01	2.01460E-01	2.53870E-01	3.06170E-01	3.51990E-01	4.75630E-01
0.	0.	0.	0.	0.	0.
.27052E+01	1.66485E+01	1.63873E+01	1.40275E+01	1.18529E+01	7.83782E+00
.38350E-02	1.56192E-01	4.17060E-01	1.01563E+00	1.59117E+00	1.24296E+00
.20220E-04	1.36840E-02	7.27510E-02	0.	0.	0.
.39590E-04	3.38280E-02	1.84230E-01	1.75930E-01	0.	0.
.77240E-03	7.57100E-02	4.44520E-01	4.75360E-01	2.12450E-01	0.
.56140E-01	4.12290E-01	9.39180E-01	1.11250E+00	5.69690E-01	1.83130E+00
.54177E+00	-5.23312E+00	-2.26534E+00	-6.12095E-01	8.87982E-02	3.79432E+00
.75780E+00	8.91170E+00	7.48690E+00	4.19910E+00	1.91260E+00	6.74070E+00
.52750E+00	4.21880E+00	5.13480E+00	4.74350E+00	2.83510E+00	8.38160E+00
.56090E+00	3.11220E+00	2.09080E+00	2.20520E+00	2.35590E+00	8.52160E+00
.52700E+00	7.09890E+00	4.98670E+00	3.20680E+00	3.78350E+00	6.93770E+00

HYDROGEN PARA

293 K

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	6.00000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E-01	9.70000E-01	1.33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	-8.40000E-01	-9.61000E-01	-1.90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00
10	0.	7.69000E-01	6.90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00
11	0.	0.	2.39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01
12	0.	0.	0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01
13	0.	0.	0.	0.	1.93000E-01	1.36000E-01	6.40000E-01
	9	10	11	12	13	14	15
1	4.20000E-03	8.60000E-03	1.42000E-02	2.35000E-02	3.87800E-02	6.35470E-02	8.61950E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.76750E+00	6.77600E+00	6.78160E+00	6.79070E+00	7.78633E+00	9.00427E+00	1.05453E+01
4	0.	0.	0.	0.	0.	1.17520E-02	2.10350E-02
5	0.	0.	0.	0.	9.92910E-18	1.18090E-05	1.06680E-05
6	0.	0.	0.	0.	1.49110E-16	8.75850E-05	1.10940E-05
7	0.	0.	0.	0.	5.58630E-15	2.14860E-03	1.26480E-03
8	0.	0.	0.	0.	1.17520E-02	2.10350E-01	3.35350E-01
9	-2.01050E+00	-6.06430E+00	-6.06530E+00	-6.05970E+00	-4.73856E+00	-3.61383E+00	-8.51240E+00
10	7.41800E+00	5.54640E+00	8.11060E+00	8.11630E+00	8.10500E+00	7.99450E+00	3.25420E+01
11	1.13900E+00	7.34000E-01	2.04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13190E+00
12	1.68500E-01	1.13007E-01	2.70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01
13	2.22000E-02	2.64000E-02	6.56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01
	17	18	19	20	21	22	23
1	1.11340E-01	1.27380E-01	1.56840E-01	2.00290E-01	2.52440E-01	3.04790E-01	3.51030E-01
2	0.	0.	0.	0.	0.	0.	0.
3	1.15137E+01	1.16601E+01	1.32819E+01	1.68287E+01	1.98142E+01	2.13619E+01	2.20461E+01
4	5.99010E-01	6.93550E-01	7.69000E-01	2.08407E+00	4.62618E+00	8.12169E+00	1.08584E+01
5	1.89420E-03	1.86940E-02	4.58720E-01	2.57770E+00	8.02310E+00	0.	0.
6	5.69330E-03	2.99770E-02	5.20500E-01	2.32130E+00	3.96540E+00	5.90800E+00	0.
7	5.24700E-02	9.27280E-02	7.96210E-01	2.69110E+00	4.32580E+00	3.42160E+00	2.35600E+00
8	6.33990E-01	7.12260E-01	1.98510E+00	3.79810E+00	4.89140E+00	3.74260E+00	2.14610E+00
9	-8.56782E+00	-7.99390E+00	-4.89816E+00	-2.18328E+00	9.37317E-01	1.84517E+00	1.82806E+00
10	4.35650E+00	5.63150E+00	8.81910E+00	7.66920E+00	6.64420E+00	4.34240E+00	2.43050E+00
11	3.01730E+00	4.05650E+00	6.21680E+00	4.66170E+00	4.28520E+00	3.53380E+00	2.32730E+00
12	1.55160E+00	3.03560E+00	4.69920E+00	3.37690E+00	2.37260E+00	1.93080E+00	1.69180E+00
13	2.51330E+00	5.37200E+00	7.87560E+00	6.00960E+00	4.14610E+00	2.97960E+00	3.36900E+00
	25						
1	8.75550E-01						
2	0.						
3	2.73123E+01						
4	2.12470E+01						
5	0.						
6	0.						
7	0.						
8	0.						
9	5.18959E+00						
10	2.09830E+00						
11	2.03390E+00						
12	1.85370E+00						
13	1.48220E+00						

3	4	5	6	7	8
0.	0.	0.	0.	6.00000E-04	1.50000E-03
0.	0.	0.	0.	0.	0.
33000E+00	1.83000E+00	3.00000E+00	5.20000E+00	6.45130E+00	6.71940E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
90600E+00	-1.93750E+00	-1.86810E+00	-2.09610E+00	-3.26890E+00	-1.86120E+00
90000E-01	1.79600E+00	2.82700E+00	4.04100E+00	5.85830E+00	8.40200E+00
39000E-01	6.90000E-01	1.07600E+00	7.81000E-01	6.64200E-01	1.24290E+00
0.	2.39000E-01	4.15000E-01	3.00000E-01	1.28100E-01	1.40700E-01
0.	0.	1.93000E-01	1.36000E-01	6.40000E-02	3.14000E-02
11	12	13	14	15	16
42000E-02	2.35000E-02	3.87800E-02	6.35470E-02	8.61950E-02	9.85350E-02
0.	0.	0.	0.	0.	0.
78160E+00	6.79070E+00	7.78633E+00	9.00427E+00	1.05453E+01	1.13340E+01
0.	0.	0.	1.17520E-02	2.10350E-01	3.37500E-01
0.	0.	9.92910E-18	1.18090E-05	1.06680E-04	5.44180E-04
0.	0.	1.49110E-16	8.75850E-05	1.10940E-03	4.15810E-03
0.	0.	5.58630E-15	2.14860E-03	1.26480E-02	5.84410E-02
0.	0.	1.17520E-02	2.10350E-01	3.35350E-01	5.86270E-01
06530E+00	-6.05970E+00	-4.73856E+00	-3.61383E+00	-8.51240E+00	-8.22384E+00
11060E+00	8.11630E+00	8.10500E+00	7.99450E+00	3.25420E+00	4.83270E+00
04000E+00	2.98590E+00	2.98020E+00	2.93810E+00	1.13190E+00	2.36500E+00
70000E-01	7.51000E-01	1.09640E+00	1.08030E+00	4.19700E-01	8.46410E-01
56000E-02	1.57100E-01	4.36400E-01	6.38800E-01	6.55900E-01	1.36410E+00
19	20	21	22	23	24
56840E-01	2.00280E-01	2.52440E-01	3.04790E-01	3.51030E-01	4.62000E-01
0.	0.	0.	0.	0.	0.
32819E+01	1.68287E+01	1.98142E+01	2.13619E+01	2.20461E+01	2.29834E+01
69000E-01	2.08407E+00	4.62618E+00	8.12169E+00	1.08584E+01	1.21108E+01
58720E-01	2.57770E+00	8.02310E+00	0.	0.	0.
20500E-01	2.33130E+00	3.96540E+00	3.90800E+00	0.	0.
96210E-01	2.69110E+00	4.32580E+00	3.42160E+00	2.35600E+00	0.
98510E+00	3.79810E+00	4.89140E+00	3.74260E+00	2.14610E+00	6.95990E+00
89816E+00	-2.18328E+00	9.37317E-01	1.84517E+00	1.82806E+00	8.31228E+00
81910E+00	7.66920E+00	6.64420E+00	4.34240E+00	2.43050E+00	6.97470E+00
21680E+00	4.66170E+00	4.28520E+00	3.53380E+00	2.32730E+00	6.80610E+00
69920E+00	3.37690E+00	2.37260E+00	1.93080E+00	1.69180E+00	5.84620E+00
87560E+00	6.00960E+00	4.14610E+00	2.97960E+00	3.36900E+00	4.85780E+00

2

INCONEL-600

	1	2	3	4	5	6	
1	1.98829E-01	7.41302E-02	8.76520E-03	8.76520E-03	8.76520E-03	1.62556E-02	1.44
2	0.	0.	0.	0.	0.	0.	0.
3	2.31320E+00	2.33997E+00	2.41271E+00	2.45871E+00	3.32385E+00	4.63857E+00	1.33
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20500E+00	1.62839E+00	2.09793E+00	2.32842E+00	3.19181E+00	4.53221E+00	1.29
10	0.	4.61192E-01	3.07456E-01	2.46392E-01	1.21525E-01	1.23270E-01	9.00
11	0.	0.	2.65268E-01	2.07056E-01	5.77760E-02	0.	0.
12	0.	0.	0.	8.23600E-02	1.21168E-01	1.84400E-03	0.
13	0.	0.	0.	0.	1.00548E-01	1.76400E-03	0.
	9	10	11	12	13	14	1
1	5.74082E-02	1.09432E-01	1.79883E-01	2.96766E-01	4.87002E-01	8.01796E-01	1.00
2	0.	0.	0.	0.	0.	0.	0.
3	1.35184E+01	1.45001E+01	1.45705E+01	1.46874E+01	1.48777E+01	1.51925E+01	1.54
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.32353E+01	1.38950E+01	1.38950E+01	1.38950E+01	1.38950E+01	1.38950E+01	1.23
10	2.27104E-01	2.25691E-01	4.95708E-01	4.95708E-01	4.95708E-01	4.95708E-01	4.95
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	2
1	1.39623E+00	1.58522E+00	1.93828E+00	2.48783E+00	3.13599E+00	3.82231E+00	4.39
2	0.	0.	0.	0.	0.	0.	0.
3	1.57500E+01	1.59390E+01	1.62921E+01	1.68416E+01	1.74898E+01	1.79820E+01	1.85
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.23929E+01	1.23929E+01	1.33742E+01	1.33742E+01	1.33742E+01	1.41597E+01	1.41
10	1.96091E+00	1.96091E+00	1.96091E+00	9.79572E-01	9.79572E-01	9.79572E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	1.06000E+01						
2	0.						
3	2.47597E+01						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.41597E+01						
10	0.						
11	0.						
12	0.						
13	0.						

2

INCONEL-718

	1	2	3	4	5	6	7
1	1.48142E-01	5.64972E-02	9.68200E-03	1.11429E-02	1.22404E-02	2.36296E-02	1.85228E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.32201E+00	2.35760E+00	2.40763E+00	2.63347E+00	3.46981E+00	4.40588E+00	1.21416E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.22995E+00	1.63815E+00	2.06896E+00	2.48890E+00	3.32343E+00	4.29859E+00	1.16908E+01
10	0.	4.53131E-01	3.22866E-01	2.46920E-01	1.33360E-01	1.34148E-01	8.36565E-02
11	0.	0.	2.84319E-01	2.11730E-01	7.80055E-02	6.48000E-05	0.
12	0.	0.	0.	8.41199E-02	1.26154E-01	4.06100E-03	0.
13	0.	0.	0.	0.	1.22352E-01	2.21090E-03	0.

	9	10	11	12	13	14	15
1	2.00518E-01	4.64128E-01	2.32404E-01	5.73986E-01	4.40497E-01	7.24608E-01	9.78348E-01
2	0.	0.	0.	0.	0.	0.	0.
3	1.22358E+01	1.31850E+01	1.29241E+01	1.32803E+01	1.31280E+01	1.34105E+01	1.35840E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.18319E+01	1.22846E+01	1.22557E+01	1.22701E+01	1.22516E+01	1.22500E+01	1.08872E+01
10	1.95992E-01	2.03354E-01	4.36323E-01	4.35999E-01	4.36161E-01	4.35955E-01	4.35937E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.26190E+00	1.43245E+00	1.75242E+00	2.24908E+00	2.83504E+00	3.45593E+00	3.97585E+00
2	0.	0.	0.	0.	0.	0.	0.
3	1.38676E+01	1.40381E+01	1.43581E+01	1.48548E+01	1.54407E+01	1.57995E+01	1.63045E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.08872E+01	1.08872E+01	1.17474E+01	1.17474E+01	1.17474E+01	1.23436E+01	1.23286E+01
10	1.71846E+00	1.71846E+00	1.71846E+00	8.58322E-01	8.58322E-01	8.58322E-01	4.05000E-05
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	9.58500E+00
2	0.
3	2.19137E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.23287E+01
10	4.05000E-05
11	0.
12	0.
13	0.

3	4	5	6	7	8
.68200E-03	1.11429E-02	1.22404E-02	2.36296E-02	1.85228E-01	1.12095E-01
0.	0.	0.	0.	0.	0.
.40763E+00	2.63347E+00	3.46981E+00	4.40588E+00	1.21416E+01	1.14901E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.06896E+00	2.48890E+00	3.32343E+00	4.29859E+00	1.16908E+01	1.11821E+01
.22866E-01	2.46920E-01	1.33360E-01	1.34148E-01	8.36565E-02	2.65541E-01
.84319E-01	2.11730E-01	7.80055E-02	6.48000E-05	0.	0.
0.	8.41199E-02	1.26154E-01	4.06100E-03	0.	0.
0.	0.	1.22352E-01	2.21090E-03	0.	0.
11	12	13	14	15	16
.32404E-01	5.73986E-01	4.40497E-01	7.24608E-01	9.78348E-01	1.11719E+00
0.	0.	0.	0.	0.	0.
.29241E+01	1.32803E+01	1.31280E+01	1.34105E+01	1.35840E+01	1.37229E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.22557E+01	1.22701E+01	1.22516E+01	1.22500E+01	1.08872E+01	1.08872E+01
.36323E-01	4.35999E-01	4.36161E-01	4.35955E-01	4.35937E-01	1.71846E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
.75242E+00	2.24908E+00	2.83504E+00	3.45593E+00	3.97585E+00	5.14180E+00
0.	0.	0.	0.	0.	0.
.43581E+01	1.48548E+01	1.54407E+01	1.57995E+01	1.63045E+01	1.74704E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.17474E+01	1.17474E+01	1.17474E+01	1.23436E+01	1.23286E+01	1.23286E+01
.71846E+00	8.58322E-01	8.58322E-01	8.58322E-01	4.05000E-05	4.05000E-05
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

INVAR

	1	2	3	4	5	6	7
1	9.87870E-02	3.81550E-02	1.00000E-02	1.00000E-02	1.00000E-02	1.34900E-02	1.774
2	0.	0.	0.	0.	0.	0.	0.
3	2.26201E+00	2.24886E+00	2.15893E+00	2.34584E+00	2.76806E+00	3.25606E+00	9.000
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.36322E+00	1.54561E+00	1.73175E+00	2.22087E+00	2.68392E+00	3.17512E+00	8.643
10	0.	5.00000E-01	3.65100E-01	2.36980E-01	1.14973E-01	7.41410E-02	6.745
11	0.	0.	2.00000E-01	2.00000E-01	1.67180E-01	0.	0.
12	0.	0.	0.	1.00000E-01	1.00000E-01	1.30200E-02	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	7.26710E-02	9.39600E-02	1.41410E-01	2.32350E-01	3.83760E-01	6.30902E-01	8.523
2	0.	0.	0.	0.	0.	0.	0.
3	1.28177E+01	1.32927E+01	1.33401E+01	1.34311E+01	1.35825E+01	1.38296E+01	1.379
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25280E+01	1.27389E+01	1.27389E+01	1.27389E+01	1.27389E+01	1.27389E+01	1.114
10	1.78860E-01	2.17034E-01	4.59800E-01	4.59800E-01	4.59800E-01	4.59800E-01	4.598
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.09951E+00	1.24831E+00	1.52699E+00	1.95927E+00	2.47095E+00	3.00961E+00	3.460
2	0.	0.	0.	0.	0.	0.	0.
3	1.40378E+01	1.41866E+01	1.44653E+01	1.48976E+01	1.54092E+01	1.59479E+01	1.639
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.11451E+01	1.11451E+01	1.20417E+01	1.20417E+01	1.20417E+01	1.29383E+01	1.293
10	1.79316E+00	1.79316E+00	1.79316E+00	8.96580E-01	8.96580E-01	8.96580E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	8.35000E+00
2	0.
3	2.12883E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.29383E+01
10	0.
11	0.
12	0.
13	0.

	4	5	6	7	8
DE-C2	1.00000E-02	1.00000E-02	1.34900E-02	1.77496E-01	4.84830E-02
	0.	0.	0.	0.	0.
3E+00	2.34584E+00	2.76806E+00	3.25606E+00	9.00024E+00	1.02546E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
5E+00	2.22087E+00	2.68392E+00	3.17512E+00	8.64341E+00	1.00272E+01
DE-01	2.36980E-01	1.14973E-01	7.41410E-02	6.74500E-02	1.79330E-01
DE-01	2.00000E-01	1.67180E-01	0.	0.	0.
	1.00000E-01	1.00000E-01	1.30200E-02	0.	0.
	0.	0.	0.	0.	0.
	12	13	14	15	16
DE-01	2.32350E-01	3.83760E-01	6.30902E-01	8.52366E-01	9.73541E-01
	0.	0.	0.	0.	0.
1E+01	1.34311E+01	1.35825E+01	1.38296E+01	1.37907E+01	1.39118E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
DE+01	1.27389E+01	1.27389E+01	1.27389E+01	1.11451E+01	1.11451E+01
DE-01	4.59800E-01	4.59800E-01	4.59800E-01	4.59800E-01	1.79316E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
DE+00	1.95927E+00	2.47095E+00	3.00961E+00	3.46082E+00	4.48100E+00
	0.	0.	0.	0.	0.
3E+01	1.48976E+01	1.54092E+01	1.59479E+01	1.63991E+01	1.74193E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
7E+01	1.20417E+01	1.20417E+01	1.29383E+01	1.29383E+01	1.29383E+01
5E+00	8.96580E-01	8.96580E-01	8.96580E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

IRON

	1	2	3	4	5	6	7
1	7.00000E-03	5.00000E-03	1.00000E-02	1.00000E-02	1.00000E-02	1.00000E-02	2.11000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.24700E+00	2.20000E+00	1.96000E+00	2.29000E+00	2.44000E+00	2.23000E+00	6.15100E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44000E+00	1.49500E+00	1.47000E+00	2.15700E+00	2.35900E+00	2.17000E+00	5.82000E+00
10	0.	5.00000E-01	4.00000E-01	2.30000E-01	1.23000E-01	7.10000E-02	5.00000E-02
11	0.	0.	2.00000E-01	2.00000E-01	2.30000E-01	1.00000E-09	0.
12	0.	0.	0.	1.00000E-01	1.00000E-01	2.00000E-02	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	8.00000E-02	8.00000E-02	1.10000E-01	1.80000E-01	3.00000E-01	4.92000E-01	6.66000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	1.10800E+01	1.10800E+01	1.11100E+01	1.11800E+01	1.13000E+01	1.14920E+01	1.12660E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.08060E+01	1.06100E+01	1.06100E+01	1.06100E+01	1.06100E+01	1.06100E+01	9.10000E+00
10	1.30000E-01	1.94000E-01	3.90000E-01	3.90000E-01	3.90000E-01	3.90000E-01	3.90000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	8.58000E-01	9.74000E-01	1.19300E+00	1.53000E+00	1.93000E+00	2.35000E+00	2.70000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	1.14580E+01	1.15740E+01	1.17930E+01	1.21300E+01	1.25300E+01	1.29500E+01	1.33000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	9.10000E+00	9.10000E+00	9.85000E+00	9.85000E+00	9.85000E+00	1.06000E+01	1.06000E+01
10	1.50000E+00	1.50000E+00	1.50000E+00	7.50000E-01	7.50000E-01	7.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.52000E+00
2	0.
3	1.71200E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.06000E+01
10	0.
11	0.
12	0.
13	0.

	4	5	6	7	8
DE-02	1.00000E-02	1.00000E-02	1.00000E-02	2.11000E-01	6.00000E-02
	0.	0.	0.	0.	0.
DE+00	2.29000E+00	2.44000E+00	2.23000E+00	6.15100E+00	7.16000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
DE+00	2.15700E+00	2.35900E+00	2.17000E+00	5.82000E+00	6.97000E+00
DE-01	2.30000E-01	1.23000E-01	7.10000E-02	5.00000E-02	1.20000E-01
DE-01	2.00000E-01	2.30000E-01	1.00000E-09	0.	0.
	1.00000E-01	1.00000E-01	2.00000E-02	0.	0.
	0.	0.	0.	0.	0.
	12	13	14	15	16
DE-01	1.80000E-01	3.00000E-01	4.92000E-01	6.66000E-01	7.61000E-01
	0.	0.	0.	0.	0.
DE+01	1.11800E+01	1.13000E+01	1.14920E+01	1.12660E+01	1.13610E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
DE+01	1.06100E+01	1.06100E+01	1.06100E+01	9.10000E+00	9.10000E+00
DE-01	3.90000E-01	3.90000E-01	3.90000E-01	3.90000E-01	1.50000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
DE+00	1.53000E+00	1.93000E+00	2.35000E+00	2.70000E+00	3.50000E+00
	0.	0.	0.	0.	0.
DE+01	1.21300E+01	1.25300E+01	1.29500E+01	1.33000E+01	1.41000E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
DE+00	9.85000E+00	9.85000E+00	1.06000E+01	1.06000E+01	1.06000E+01
DE+00	7.50000E-01	7.50000E-01	7.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

MOLYBDENUM

SIGMA P = 8000

	1	2	3	4	5	6	
1	1.00000E-02	2.00000E-02	4.00000E-02	7.00000E-02	9.00000E-02	1.70000E-01	4.00
2	0.	0.	0.	0.	0.	0.	0.
3	2.40000E+00	2.90000E+00	3.90000E+00	6.20000E+00	8.20000E+00	7.90000E+00	7.10
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.39000E+00	2.13000E+00	3.46000E+00	5.93000E+00	7.92000E+00	7.63000E+00	6.610
10	0.	5.00000E-01	4.00000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.000
11	0.	0.	3.00000E-01	2.50000E-01	1.00000E-01	0.	0.
12	0.	0.	0.	2.00000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	9	10	11	12	13	14	15
1	3.26000E+00	1.44900E+01	1.18000E-01	1.93000E-01	3.18000E-01	5.21000E-01	7.050
2	0.	0.	0.	0.	0.	0.	0.
3	9.46000E+00	2.04900E+01	6.11800E+00	6.19300E+00	6.31800E+00	6.52100E+00	6.705
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	6.13600E+00	5.87600E+00	5.87600E+00	5.87600E+00	5.87600E+00	5.87600E+00	5.503
10	6.70000E-02	6.40000E-02	1.24000E-01	1.24000E-01	1.24000E-01	1.24000E-01	1.240
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	9.10000E-01	1.03000E+00	1.26000E+00	1.62000E+00	2.04000E+00	2.49000E+00	2.860
2	0.	0.	0.	0.	0.	0.	0.
3	6.91000E+00	7.03000E+00	7.26000E+00	7.62000E+00	8.04000E+00	8.49000E+00	8.860
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.50300E+00	5.50300E+00	5.75200E+00	5.75200E+00	5.75200E+00	6.00000E+00	6.000
10	4.97000E-01	4.97000E-01	4.97000E-01	2.48000E-01	2.48000E-01	2.48000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	6.90000E+00						
2	0.						
3	1.29000E+01						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	6.00000E+00						
10	0.						
11	0.						
12	0.						
13	0.						

Sigma V = 8000

	4	5	6	7	8
00E-02	7.00000E-02	9.00000E-02	1.70000E-01	4.00000E-01	1.00000E+00
00E+00	0.	0.	0.	0.	0.
	6.20000E+00	8.20000E+00	7.90000E+00	7.10000E+00	7.50000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
00E+00	5.93000E+00	7.98000E+00	7.63000E+00	6.61000E+00	6.40300E+00
00E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01	8.40000E-02
00E-01	2.50000E-01	1.00000E-01	0.	0.	0.
	2.00000E-01	1.00000E-01	0.	0.	0.
	0.	0.	0.	0.	0.
	12	13	14	15	16
00E-01	1.93000E-01	3.18000E-01	5.21000E-01	7.05000E-01	8.06000E-01
00E+00	0.	0.	0.	0.	0.
	6.19300E+00	6.31800E+00	6.52100E+00	6.70500E+00	6.80600E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
00E+00	5.87600E+00	5.87600E+00	5.87600E+00	5.50300E+00	5.50300E+00
00E-01	1.24000E-01	1.24000E-01	1.24000E-01	1.24000E-01	4.97000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
00E+00	1.62600E+00	2.04000E+00	2.49000E+00	2.86000E+00	3.70000E+00
00E+00	0.	0.	0.	0.	0.
	7.62000E+00	8.04000E+00	8.49000E+00	8.86000E+00	9.70000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
00E+00	5.72000E+00	5.75200E+00	6.00000E+00	6.00000E+00	6.00000E+00
00E-01	2.48000E-01	2.48000E-01	2.48000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

NICKEL

	1	2	3	4	5	6	7
1	2.70000E-01	1.00000E-01	1.00000E-02	1.00000E-02	1.00000E-02	2.00000E-02	1.15000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.29000E+00	2.34000E+00	2.51000E+00	2.45000E+00	3.38000E+00	5.17000E+00	1.43150E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.22000E+00	1.64000E+00	2.22000E+00	2.34000E+00	3.29000E+00	5.05000E+00	1.39100E+01
10	0.	5.00000E-01	3.00000E-01	2.50000E-01	1.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	2.00000E-01	2.00000E-01	5.00000E-02	0.	0.
12	0.	0.	0.	1.00000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	5.90000E-02	1.20000E-01	2.00000E-01	3.30000E-01	5.40000E-01	8.90000E-01	1.20000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	1.60590E+01	1.74200E+01	1.75000E+01	1.76300E+01	1.78400E+01	1.81900E+01	1.85000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.57400E+01	1.67100E+01	1.67100E+01	1.67100E+01	1.67100E+01	1.67100E+01	1.49600E+01
10	2.70000E-01	2.60000E-01	5.90000E-01	5.90000E-01	5.90000E-01	5.90000E-01	5.90000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	1.55000E+00	1.76000E+00	2.15000E+00	2.76000E+00	3.48000E+00	4.24000E+00	4.88000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	1.88500E+01	1.90600E+01	1.94500E+01	2.00600E+01	2.07800E+01	2.15400E+01	2.21800E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.49600E+01	1.49600E+01	1.61300E+01	1.61300E+01	1.61300E+01	1.73000E+01	1.73000E+01
10	2.34000E+00	2.34000E+00	2.34000E+00	1.17000E+00	1.17000E+00	1.17000E+00	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.17600E+01
2	0.
3	2.90600E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.73000E+01
10	0.
11	0.
12	0.
13	0.

	4	5	6	7	8
000E-02	1.00300E-02	1.00000E-02	2.00000E-02	1.15000E-01	2.70000E-02
	0.	0.	0.	0.	0.
000E+00	2.45000E+00	3.38000E+00	5.17000E+00	1.43150E+01	1.60270E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	2.34000E+00	3.29000E+00	5.05000E+00	1.39100E+01	1.57300E+01
000E-01	2.50000E-01	1.00000E-01	8.00000E-02	1.00000E-01	2.90000E-01
000E-01	2.00000E-01	5.00000E-02	0.	0.	0.
	1.00000E-01	1.00000E-01	0.	0.	0.
	0.	0.	0.	0.	0.
	12	13	14	15	16
000E-01	3.30000E-01	5.40000E-01	8.90000E-01	1.20000E+00	1.37000E+00
	0.	0.	0.	0.	0.
000E+01	1.76300E+01	1.78400E+01	1.81900E+01	1.85000E+01	1.86700E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+01	1.67100E+01	1.67100E+01	1.67100E+01	1.49600E+01	1.49600E+01
000E-01	5.90000E-01	5.90000E-01	5.90000E-01	5.90000E-01	2.34000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
000E+00	2.76000E+00	3.48000E+00	4.24000E+00	4.88000E+00	6.31000E+00
	0.	0.	0.	0.	0.
000E+01	2.00600E+01	2.07800E+01	2.15400E+01	2.21800E+01	2.36100E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+01	1.61300E+01	1.61300E+01	1.73000E+01	1.73000E+01	1.73000E+01
000E+00	1.17000E+00	1.17000E+00	1.17000E+00	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

NIOBIUM

.025 EV

SIGMA P = 155

	1	2	3	4	5	6	7
1	1.20000E-02	2.00000E-02	2.70000E-02	5.50000E-02	7.50000E-02	2.03000E-01	6.83000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.40200E+00	2.90000E+00	3.88700E+00	6.20500E+00	8.20000E+00	7.80300E+00	7.00300E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.39000E+00	2.13000E+00	3.46000E+00	5.95000E+00	7.99500E+00	7.50000E+00	6.31000E+00
10	0.	5.00000E-01	4.00000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01
11	0.	0.	3.00000E-01	2.50000E-01	1.00000E-01	0.	0.
12	0.	0.	0.	2.00000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	1.33500E+00	4.02000E-01	5.00000E-02	8.30000E-02	1.37000E-01	2.24000E-01	3.03000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	7.73500E+00	6.80200E+00	6.45000E+00	6.48300E+00	6.53700E+00	6.62400E+00	6.70300E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	6.33000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	5.85000E+00
10	7.00000E-02	7.00000E-02	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.90000E-01	4.40000E-01	5.42000E-01	6.96000E-01	8.77000E-01	1.07000E+00	1.23000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	6.79000E+00	6.84000E+00	6.94200E+00	7.09600E+00	7.27700E+00	6.57000E+00	6.23000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.85000E+00	5.85000E+00	6.12000E+00	6.12000E+00	6.12000E+00	5.50000E+00	5.00000E+00
10	5.50000E-01	5.50000E-01	5.50000E-01	2.80000E-01	2.80000E-01	2.80000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	2.97000E+00
2	0.
3	7.97000E+00
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.00000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
000E-02	5.50000E-02	7.90060E-02	2.03000E-01	6.83000E-01	1.53500E+00
	0.	0.	0.	0.	0.
700E+00	6.20500E+C0	8.20000E+00	7.80300E+00	7.08300E+00	7.93500E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	5.95000E+C0	7.99500E+00	7.50000E+00	6.31000E+00	6.33000E+00
000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01	9.00000E-02
000E-C1	2.50000E-01	1.00000E-01	0.	0.	0.
	2.00000E-01	1.00000E-01	0.	0.	0.
	0.	0.	0.	0.	0.
1	12	13	14	15	16
000E-02	8.30000E-02	1.37000E-01	2.24000E-01	3.03000E-01	3.46000E-01
	0.	0.	0.	0.	0.
000E+00	6.48300E+C0	6.53700E+00	6.62400E+00	6.70300E+00	6.74600E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	6.26000E+00	6.26000E+00	6.26000E+00	5.85000E+00	5.85000E+00
000E-01	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	5.50000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E-01	20	21	22	23	24
	6.96000E-01	8.77000E-01	1.07000E+00	1.23000E+00	1.59000E+00
	0.	0.	0.	0.	0.
000E+00	7.09600E+00	7.27700E+00	6.57000E+00	6.23000E+00	6.59000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	6.12000E+00	6.12000E+00	5.50000E+00	5.00000E+00	5.00000E+00
000E-01	2.80000E-01	2.80000E-01	2.80000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

NI0BIUM

.050 EV

SICMA P = 155

	1	2	3	4	5	6	7
1	1.20000E-02	2.00000E-02	2.70000E-02	5.50000E-02	7.50000E-02	2.04000E-01	6.92000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.40200E+00	2.90000E+00	3.88700E+00	6.20500E+00	8.20000E+00	7.80400E+00	7.09200E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.39000E+00	2.13000E+00	3.46000E+00	5.95000E+00	7.99500E+00	7.50000E+00	6.31000E+00
10	0.	5.00000E-01	4.00000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01
11	0.	0.	3.00000E-01	2.50000E-01	1.00000E-01	0.	0.
12	0.	0.	0.	2.00000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	1.41100E+00	4.04000E-01	5.00000E-02	8.30000E-02	1.37000E-01	2.24000E-01	3.03000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	7.81100E+00	6.60400E+00	6.45000E+00	6.48300E+00	6.53700E+00	6.62400E+00	6.70300E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	6.33000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	5.85000E+00
10	7.00000E-02	7.00000E-02	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.90000E-01	4.40000E-01	5.42000E-01	6.96000E-01	8.77000E-01	1.07000E+00	1.23000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	6.79000E+00	6.84000E+00	6.94200E+00	7.09600E+00	7.27700E+00	6.57000E+00	6.23000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.85000E+00	5.85000E+00	6.12000E+00	6.12000E+00	6.12000E+00	5.50000E+00	5.00000E+00
10	5.50000E-01	5.50000E-01	5.50000E-01	2.80000E-01	2.80000E-01	2.80000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	2.97000E+00
2	0.
3	7.97000E+00
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.00000E+00
10	0.
11	0.
12	0.
13	0.

NIORIUM

.100 EV

SIGMA P = 155

	1	2	3	4	5	6	7
1	1.20000E-02	2.00000E-02	2.70000E-02	5.50000E-02	7.50000E-02	2.04000E-01	6.99000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.40200E+00	2.90000E+00	3.88700E+00	6.20500E+00	8.20000E+00	7.80400E+00	7.09900E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.39000E+00	2.13000E+00	3.46000E+00	5.95000E+00	7.99500E+00	7.50000E+00	6.31000E+00
10	0.	5.00000E-01	4.00000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01
11	0.	0.	3.00000E-01	2.50000E-01	1.00000E-01	0.	0.
12	0.	0.	0.	2.00000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	1.50300E+00	4.07000E-01	5.00000E-02	8.30000E-02	1.37000E-01	2.24000E-01	3.03000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	7.90300E+00	6.80700E+00	6.45000E+00	6.48300E+00	6.53700E+00	6.62400E+00	6.70300E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	6.33000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.25000E+00	5.85000E+00
10	7.00000E-02	7.00000E-02	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.90000E-01	4.40000E-01	5.42000E-01	6.96000E-01	8.77000E-01	1.07000E+00	1.23000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	6.79000E+00	6.84000E+00	6.94200E+00	7.09600E+00	7.27700E+00	6.57000E+00	6.23000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.85000E+00	5.85000E+00	6.12000E+00	6.12000E+00	6.12000E+00	5.50000E+00	5.00000E+00
10	5.50000E-01	5.50000E-01	5.50000E-01	2.80000E-01	2.80000E-01	2.80000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	2.97000E+00
2	0.
3	7.97000E+00
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.00000E+00
10	0.
11	0.
12	0.
13	0.

[illegible]

 

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451 - 4 44315

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
1.2000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.0000E-02	2.000

SIEM P = 155

	3	4	5	6	7	8
02	2.70000E-02	1.50000E-02	7.50000E-02	2.05000E-01	7.02000E-01	1.72100E+00
00	0.	0.	0.	0.	0.	0.
	3.48700E+00	6.20500E+00	8.70000E+00	7.40500E+00	7.10200E+00	8.12100E+00
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
00	3.46300E+00	5.95000E+00	7.99500E+00	7.50000E+00	6.31000E+00	6.33000E+00
01	4.00000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01	9.00000E-02
	3.00000E-01	2.50000E-01	1.00000E-01	0.	0.	0.
	0.	2.00000E-01	1.00000E-01	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	11	12	13	14	15	16
01	5.00000E-02	3.30000E-02	1.37000E-01	2.24000E-01	3.03000E-01	3.46000E-01
00	0.	0.	0.	0.	0.	0.
	6.45000E+00	6.46300E+00	6.53700E+00	6.62400E+00	6.70300E+00	6.74600E+00
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	5.85000E+00	5.85000E+00
02	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	5.50000E-01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	19	20	21	22	23	24
01	5.42000E-01	6.96000E-01	8.77000E-01	1.07000E+00	1.23000E+00	1.59000E+00
00	0.	0.	0.	0.	0.	0.
	6.54200E+00	7.09600E+00	7.27700E+00	6.57000E+00	6.23000E+00	6.59000E+00
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
00	6.12000E+00	6.12000E+00	6.12000E+00	5.50000E+00	5.00000E+00	5.00000E+00
01	5.50000E-01	2.80000E-01	2.80000E-01	2.80000E-01	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.

2

NIGHTLY

.200 EV

SIGMA P = 155

	1	2	3	4	5	6	
1	1.20000E-02	2.00000E-02	2.70000E-02	5.50000E-02	7.50000E-02	2.05000E-01	7.04000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.40200E+00	2.90000E+00	3.28700E+00	6.20500E+00	8.20000E+00	7.20500E+00	7.10000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.39000E+00	2.13000E+00	3.46000E+00	5.95000E+00	7.99500E+00	7.50000E+00	6.31000E+00
10	0.	5.00000E-01	4.00000E-01	3.00000E-01	2.00000E-01	1.30000E-01	1.00000E-01
11	0.	0.	3.00000E-01	2.50000E-01	1.00000E-01	0.	0.
12	0.	0.	0.	2.00000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	1.60500E+00	4.10000E-01	5.00000E-02	8.30000E-02	1.37000E-01	2.24000E-01	3.03000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	8.00500E+00	6.81000E+00	6.45000E+00	6.48300E+00	6.53700E+00	6.62400E+00	6.70900E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	6.33000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	6.26000E+00	5.85000E+00
10	7.00000E-02	7.00000E-02	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01	1.40000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	3.90000E-01	4.40000E-01	5.42000E-01	6.96000E-01	8.77000E-01	1.07000E+00	1.23000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	6.70000E+00	6.84000E+00	6.94200E+00	7.09600E+00	7.27700E+00	6.57000E+00	6.23000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.85000E+00	5.85000E+00	6.12000E+00	6.12000E+00	6.12000E+00	5.50000E+00	5.00000E+00
10	5.50000E-01	5.50000E-01	5.50000E-01	2.80000E-01	2.80000E-01	2.80000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	2.97000E+00
2	0.
3	7.97000E+00
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.00000E+00
10	0.
11	0.
12	0.
13	0.

2

SAMARIUM-149

	1	2	3	4	5	6	7
1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	7.20000E+01	1.73000E+02	2.34000E+02	2.24000E+02	5.70000E+01	2.40000E+03	1.15000E+04
2	0.	0.	0.	0.	0.	0.	0.
3	7.20000E+01	1.73000E+02	2.34000E+02	2.24000E+02	5.70000E+01	2.40000E+03	1.15000E+04
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	5.50000E+03	1.48400E+04	7.39000E+04	8.97000E+04	5.00000E+04	4.20500E+04	4.12000E+04
2	0.	0.	0.	0.	0.	0.	0.
3	5.50000E+03	1.48400E+04	7.39000E+04	8.97000E+04	5.00000E+04	4.20500E+04	4.12000E+04
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.74000E+04
2	0.
3	6.74000E+04
4	0.
5	0.
6	0.
7	0.
8	0.
9	0.
10	0.
11	0.
12	0.
13	0.

[illegible]

STAINLESS STEEL

	1	2	3	4	5	6	
1	3.27600E-02	1.41400E-02	8.74000E-03	8.74000E-03	8.74000E-03	9.92000E-03	2.0
2	0.	0.	0.	0.	0.	0.	0.
3	2.28676E+00	2.25234E+00	2.05354E+00	2.35874E+00	2.73434E+00	2.78752E+00	8.2
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.34240E+00	1.53740E+00	1.62600E+00	2.21344E+00	2.60708E+00	2.71900E+00	7.0
10	0.	4.60400E-01	3.70200E-01	2.33800E-01	1.36360E-01	1.18520E-01	5.0
11	0.	0.	2.66600E-01	2.07200E-01	1.70600E-01	0.	0.
12	0.	0.	0.	8.20000E-02	1.21600E-01	1.44000E-02	0.
13	0.	0.	0.	0.	1.02600E-01	1.80000E-03	0.

	9	10	11	12	13	14	
1	7.05200E-02	8.41800E-02	1.23140E-01	2.02200E-01	3.35700E-01	5.50880E-01	7.4
2	0.	0.	0.	0.	0.	0.	0.
3	1.03501E+01	1.04722E+01	1.05111E+01	1.05902E+01	1.07237E+01	1.09389E+01	1.6
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.00959E+01	1.00194E+01	1.00194E+01	1.00194E+01	1.00194E+01	1.00194E+01	8.6
10	1.39600E-01	1.83680E-01	3.68600E-01	3.68600E-01	3.68600E-01	3.68600E-01	3.6
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	
1	9.59960E-01	1.08968E+00	1.33496E+00	1.71240E+00	2.15880E+00	2.63080E+00	3.0
2	0.	0.	0.	0.	0.	0.	0.
3	1.10600E+01	1.11897E+01	1.14350E+01	1.18124E+01	1.22588E+01	1.25328E+01	1.2
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.67260E+00	8.67260E+00	9.48720E+00	9.38720E+00	9.38720E+00	9.90200E+00	9.9
10	1.42740E+00	1.42740E+00	1.42740E+00	7.12800E-01	7.12800E-01	7.12800E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	7.29800E+00
2	0.
3	1.77000E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	9.90200E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
8.74000E-03	8.74000E-03	8.74000E-03	9.92000E-03	2.05000E-01	4.86000E-02
0.	0.	0.	0.	0.	0.
2.05354E+00	2.35874E+00	2.73434E+00	2.78752E+00	8.26340E+00	7.62460E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.62600E+00	2.21364E+00	2.60708E+00	2.71900E+00	7.87460E+00	7.43740E+00
3.70200E-01	2.33800E-01	1.36360E-01	1.18520E-01	5.86000E-02	1.83860E-01
2.66600E-01	2.07200E-01	1.70600E-01	0.	0.	0.
0.	8.20000E-02	1.21600E-01	1.44000E-02	0.	0.
0.	0.	1.02600E-01	1.80000E-03	0.	0.

11	12	13	14	15	16
1.23140E-01	2.02200E-01	3.35700E-01	5.50880E-01	7.45140E-01	8.51420E-01
0.	0.	0.	0.	0.	0.
1.05111E+01	1.05902E+01	1.07237E+01	1.09389E+01	1.08451E+01	1.09514E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.00194E+01	1.00194E+01	1.00194E+01	1.00194E+01	8.67260E+00	8.67260E+00
3.68600E-01	3.68600E-01	3.68600E-01	3.68600E-01	3.68600E-01	1.42740E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

19	20	21	22	23	24
1.33496E+00	1.71240E+00	2.15880E+00	2.63080E+00	3.02420E+00	3.91700E+00
0.	0.	0.	0.	0.	0.
1.14350E+01	1.18124E+01	1.22588E+01	1.25328E+01	1.29262E+01	1.38190E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
9.38720E+00	9.38720E+00	9.38720E+00	9.90200E+00	9.90200E+00	9.90200E+00
1.42740E+00	7.12800E-01	7.12800E-01	7.12800E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

TANTALUM

.025 EV

SIGMA P = 2000

	1	2	3	4	5	6	7
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	2.61000E+01	5.62000E+01	5.58000E+01	1.33000E+02	2.50000E+00	4.07999E+00	5.70999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	5.61000E+01	1.05200E+02	6.88000E+01	1.64000E+02	1.03000E+01	9.87999E+00	1.07600E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

SIGMA P = 2000

3	4	5	6	7	8
1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
5.58000E+01	1.33000E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
0.	0.	0.	0.	0.	0.
6.88000E+01	1.64000E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

TA TALUM

.025 EV

SIGMA P = 4500

	1	2	3	4	5	6
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01
2	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02

	9	10	11	12	13	14
1	2.87000E+01	7.10000E+01	6.76000E+01	1.87600E+02	2.50000E+00	4.07999E+00
2	0.	0.	0.	0.	0.	0.
3	5.87000E+01	1.20000E+02	8.06000E+01	2.18600E+02	1.03000E+01	9.87999E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02
11	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01
2	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

P = 4500

	4	5	6	7	8
000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
	0.	0.	0.	0.	0.
000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
	12	13	14	15	16
000E+01	1.87600E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
	0.	0.	0.	0.	0.
000E+01	2.18600E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
999E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
	0.	0.	0.	0.	0.
000E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

TANTALUM

.050 EV

SIGMA P = 2000

	1	2	3	4	5	6	7
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	2.71000E+01	6.05000E+01	5.89000E+01	1.40000E+02	2.50000E+00	4.07999E+00	5.70999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	5.71000E+01	1.09500E+02	7.19000E+01	1.71000E+02	1.03000E+01	9.87999E+00	1.07600E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

SIGMA P = 2000

3	4	5	6	7	8
1.30000E-01	2.00000E-01	3.49999E-01	3.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
5.89000E+01	1.40000E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
0.	0.	0.	0.	0.	0.
7.19000E+01	1.71000E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

TANTALUM

.050 EV

SIGMA P = 4500

	1	2	3	4	5	6
1	3.44999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01
2	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02

	9	10	11	12	13	14
1	2.93800E+01	7.47900E+01	7.01700E+01	1.97630E+02	2.50000E+00	4.07999E+00
2	0.	0.	0.	0.	0.	0.
3	5.93800E+01	1.23790E+02	8.31700E+01	2.28630E+02	1.03000E+01	9.87999E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02
11	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01
2	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

3	4	5	6	7	8
0000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0000E+00	0.	0.	0.	0.	0.
	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
1	12	13	14	15	16
700E+01	1.97630E+C2	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
	0.	0.	0.	0.	0.
700E+01	2.28630E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
17	20	21	22	23	24
999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
	0.	0.	0.	0.	0.
500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

TANTALUM

.100 EV

SIGMA P = 2000

	1	2	3	4	5	6	7
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	2.81000E+01	6.57000E+01	6.27000E+01	1.51100E+02	2.50000E+00	4.07999E+00	5.70999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	5.81000E+01	1.14700E+02	7.57000E+01	1.82100E+02	1.03000E+01	9.87599E+00	1.07600E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.17499E+01	2.45499E+01	2.71499E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

SIGMA P = 2000

	3	4	5	6	7	8
02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
	0.	0.	0.	0.	0.	0.
00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
	0.	0.	6.00000E-01	9.00000E-02	0.	0.
	11	12	13	14	15	16
01	6.27000E+01	1.51100E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
	0.	0.	0.	0.	0.	0.
02	7.57000E+01	1.82100E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	19	20	21	22	23	24
00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
	0.	0.	0.	0.	0.	0.
01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.

2

TANTALUM

.100 EV

SIGMA P = 4500

	1	2	3	4	5	6	
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.9
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.4
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.0
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.0
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	
1	3.00000E+01	7.89100E+01	7.31000E+01	2.12120E+02	2.50000E+00	4.07999E+00	5.7
2	0.	0.	0.	0.	0.	0.	0.
3	6.00000E+01	1.27910E+02	3.61000E+01	2.43120E+02	1.03000E+01	9.87999E+00	1.0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.0
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.4
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.2
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.7
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.0
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25	
1	5.37000E+01	
2	0.	
3	5.87500E+01	
4	0.	
5	0.	
6	0.	
7	0.	
8	0.	
9	5.04999E+00	
10	5.00000E-02	
11	0.	
12	0.	
13	0.	

MA P = 4500

3	4	5	6	7	8
30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
32000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
99999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
99999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
11000E+01	2.12120E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
0.	0.	0.	0.	0.	0.
11000E+01	2.43120E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
85999E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
99999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
99999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
7500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
0000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

TANTALUM

.150 EV

SIGMA P = 2000

	1	2	3	4	5	6	7
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+0
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+0
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-0
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	2.87000E+01	6.89000E+01	6.51000E+01	1.59900E+02	2.50000E+00	4.07999E+00	5.70999E+0
2	0.	0.	0.	0.	0.	0.	0.
3	5.87000E+01	1.17900E+02	7.81000E+01	1.90900E+02	1.03000E+01	9.87999E+00	1.07600E+0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+0
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+0
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+0
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

SIGMA P = 2000

3	4	5	6	7	8
1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
4.50999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
6.51000E+01	1.59900E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.25000E+00
0.	0.	0.	0.	0.	0.
7.81000E+01	1.90900E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

TANTALUM

.150 EV

SIGMA P = 4500

	1	2	3	4	5	6
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01
2	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02

	9	10	11	12	13	14
1	3.03300E+01	8.13300E+01	7.48500E+01	2.22530E+02	2.50000E+00	4.07999E+00
2	0.	0.	0.	0.	0.	0.
3	6.03300E+01	1.30330E+02	8.78500E+01	2.53530E+02	1.03000E+01	9.87999E+00
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02
11	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01
2	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01
4	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

ICMA P = 4500

3	4	5	6	7	8
.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
.48500E+01	2.22530E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
0.	0.	0.	0.	0.	0.
.78500E+01	2.53530E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
0.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

TANTALUM

.200 EV

SIGMA P = 2000

	1	2	3	4	5	6	7
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	2.91000E+01	7.12000E+01	6.69000E+01	1.67200E+02	2.50000E+00	4.07999E+00	5.70999E+00
2	0.	0.	0.	0.	0.	0.	0.
3	5.91000E+01	1.20200E+02	7.99000E+01	1.98200E+02	1.03000E+01	9.87999E+00	1.07600E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	5.37000E+01
2	0.
3	5.87500E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.04999E+00
10	5.00000E-02
11	0.
12	0.
13	0.

SIEMA P = 2000

3	4	5	6	7	8
1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
6.69000E+01	1.67200E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
0.	0.	0.	0.	0.	0.
7.99000E+01	1.98200E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

TANTALUM

.200 EV

SIGMA P = 4500

	1	2	3	4	5	6	
1	3.99999E-02	7.99999E-02	1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.3
2	0.	0.	0.	0.	0.	0.	0.
3	3.29999E+00	3.70000E+00	4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.4
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.07999E+00	1.57999E+00	2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.04
10	0.	3.30000E-01	3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.04
11	0.	0.	4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.
12	0.	0.	0.	7.89999E-01	6.39999E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.
	9	10	11	12	13	14	
1	3.05500E+01	8.30000E+01	7.60700E+01	2.30680E+02	2.50000E+00	4.07999E+00	5.76
2	0.	0.	0.	0.	0.	0.	0.
3	6.05500E+01	1.32000E+02	8.90700E+01	2.61680E+02	1.03000E+01	9.87999E+00	1.07
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	2.98349E+01	4.84599E+01	1.28599E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.06
10	8.49999E-02	1.65000E-01	5.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.46
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	
1	7.07999E+00	8.00000E+00	9.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21
2	0.	0.	0.	0.	0.	0.	0.
3	1.21299E+01	1.30499E+01	1.47500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	5.37000E+01						
2	0.						
3	5.87500E+01						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	5.04999E+00						
10	5.00000E-02						
11	0.						
12	0.						
13	0.						

ICMA P = 4500

3	4	5	6	7	8
1.30000E-01	2.00000E-01	3.49999E-01	8.00000E-01	3.57999E+00	8.28000E+00
0.	0.	0.	0.	0.	0.
4.40000E+00	5.19999E+00	6.59999E+00	8.80000E+00	1.44799E+01	2.37799E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.82000E+00	4.42000E+00	6.16999E+00	7.94999E+00	1.08249E+01	1.54149E+01
3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	5.00000E-02	7.50000E-02
5.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
6.0700E+01	2.30680E+02	2.50000E+00	4.07999E+00	5.70999E+00	6.26000E+00
0.	0.	0.	0.	0.	0.
9.0700E+01	2.61680E+02	1.03000E+01	9.87999E+00	1.07600E+01	1.13099E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.85999E+01	3.06600E+01	7.71400E+00	5.73599E+00	5.00000E+00	5.00000E+00
3.39999E-01	1.39999E-01	3.39999E-01	8.59999E-02	6.40000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
6.69999E+00	1.24499E+01	1.60000E+01	1.95000E+01	2.21000E+01	2.88100E+01
0.	0.	0.	0.	0.	0.
4.7500E+01	1.75000E+01	2.10499E+01	2.45499E+01	2.71499E+01	3.38600E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00	5.00000E+00
0.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

TUNGSTEN

.025 EV

SIGMA P = 100

	1	2	3	4	5	6	7
1	3.30000E-02	7.40000E-02	1.14000E-01	1.40000E-01	2.10000E-01	7.20000E-01	1.95000E+0
2	0.	0.	0.	0.	0.	0.	0.
3	3.11000E+00	4.83400E+00	4.60000E+00	5.10000E+00	7.00000E+00	9.15000E+00	1.22000E+0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.23000E-01	0.	2.21600E+00	4.28000E+00	6.65700E+00	8.28200E+00	1.02000E+0
10	0.	7.34000E-01	1.53000E+00	1.18000E+00	6.80000E-01	1.33000E-01	1.48000E-0
11	0.	0.	7.00000E-01	1.23000E+00	5.70000E-01	0.	0.
12	0.	0.	0.	5.80000E-01	2.00000E+00	5.20000E-01	0.
13	0.	0.	0.	0.	6.40000E-01	0.	0.

	9	10	11	12	13	14	15
1	2.08600E+00	6.24000E+00	1.22270E+01	1.93400E+01	2.20600E+00	3.65200E+00	4.99800E+0
2	0.	0.	0.	0.	0.	0.	0.
3	7.08600E+00	1.12400E+01	1.72270E+01	2.43400E+01	7.20600E+00	8.65200E+00	9.99800E+0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+0
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	6.45700E+00	7.30200E+00	8.81200E+00	1.13130E+01	1.45240E+01	1.77440E+01	2.01540E+0
2	0.	0.	0.	0.	0.	0.	0.
3	1.14570E+01	1.23020E+01	1.38120E+01	1.63130E+01	1.95240E+01	2.27440E+01	2.51540E+0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+0
10	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	5.76000E+01
2	0.
3	6.26000E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	5.00000E+00
10	5.00000E-02
11	0.
12	0.
13	0.

SIGMA P = 100

	3	4	5	6	7	8
E-02	1.14000E-01	1.40000E-01	2.10000E-01	7.20000E-01	1.95000E+00	2.29000E-01
	0.	0.	0.	0.	0.	0.
E+00	4.60000E+00	5.10000E+00	7.00000E+00	9.15000E+00	1.22000E+01	1.47290E+01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
E-01	2.21600E+00	4.28000E+00	6.65700E+00	8.28200E+00	1.02000E+01	1.44500E+01
	1.53000E+00	1.18000E+00	6.80000E-01	1.33000E-01	1.48000E-01	5.00000E-02
	7.00000E-01	1.23000E+00	5.70000E-01	0.	0.	0.
	0.	5.80000E-01	2.00000E+00	5.20000E-01	0.	0.
	0.	0.	6.40000E-01	0.	0.	0.
	11	12	13	14	15	16
E+00	1.22270E+01	1.93400E+01	2.20600E+00	3.65200E+00	4.99800E+00	5.70500E+00
	0.	0.	0.	0.	0.	0.
E+01	1.72270E+01	2.43400E+01	7.20600E+00	8.65200E+00	9.99800E+00	1.07050E+01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00
E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	19	20	21	22	23	24
E+00	8.81200E+00	1.13130E+01	1.45240E+01	1.77440E+01	2.01540E+01	3.08380E+01
	0.	0.	0.	0.	0.	0.
E+01	1.38120E+01	1.63130E+01	1.95240E+01	2.27440E+01	2.51540E+01	3.58380E+01
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00	4.95000E+00
E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02	5.00000E-02
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.

2

URANIUM-235

.025 EV

SIGMA P = 600

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	4.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	7.40110E+01	7.40680E+01	4.02240E+01	3.04940E+01	8.05200E+01	1.60800E+02
2	4.31100E+01	1.15310E+02	7.70200E+01	5.21500E+01	5.62200E+01	1.70700E+02	3.28800E+02
3	3.75000E+01	8.60110E+01	8.60680E+01	5.42240E+01	4.54940E+01	9.55200E+01	1.75800E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49200E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 600

3	4	5	6	7	8
33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
40680E+01	4.02240E+01	3.04940E+01	8.05200E+01	1.60810E+02	2.32100E+02
70200E+01	5.21500E+01	5.62200E+01	1.70700E+02	3.28820E+02	4.53300E+02
60680E+01	5.42240E+01	4.54940E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
90000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
55000E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
40000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
74000E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
00000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

URANIUM-235

.025 EV

SIGMA P = 820

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.60000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	7.73150E+01	7.87640E+01	4.15150E+01	3.07770E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.20330E+02	1.03020E+02	5.35100E+01	5.67200E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	8.93150E+01	9.07640E+01	5.55150E+01	4.57770E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 820

3	4	5	6	7	8
1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
7.87640E+01	4.15150E+01	3.07770E+01	8.05200E+01	1.60810E+02	2.32100E+02
1.03020E+02	5.35100E+01	5.67200E+01	1.70700E+02	3.28820E+02	4.53300E+02
9.07640E+01	5.55150E+01	4.57770E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-235

.025 EV

SIGMA P = 1050

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.500
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.035
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.74000E+01	1.750
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.194
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.000
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	7.96840E+01	8.23750E+01	4.24070E+01	3.09570E+01	8.05200E+01	1.608
2	4.31100E+01	1.23930E+02	1.07670E+02	5.44600E+01	5.70300E+01	1.70700E+02	3.288
3	3.75000E+01	9.16840E+01	9.43750E+01	5.64070E+01	4.59570E+01	9.55200E+01	1.758
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.448
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.300
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.231
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.492
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.381
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.500
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 1050

3	4	5	6	7	8
000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	5.00000E-01	5.00000E-01	7.00000E-02	0.	0.

11	12	13	14	15	16
750E+01	4.24070E+01	3.09570E+01	8.05200E+01	1.60810E+02	2.32100E+02
570E+02	5.44600E+01	5.70300E+01	1.70700E+02	3.28820E+02	4.53300E+02
750E+01	5.64070E+01	4.59570E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

19	20	21	22	23	24
000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
000E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

URANIUM-235

.025 EV

SIGMA P = 2130

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.51030E+01	9.15630E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.32210E+02	1.19660E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.71030E+01	1.03563E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 2130

3	4	5	6	7	8
33000E+00	1.35000E+00	1.60000E+00	3.15000E+00	5.50000E+00	1.11000E+01
08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
15630E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02	2.32100E+02
19660E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02	4.53300E+02
03563E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

GRAVITY-235

.050 EV

SIGMA P = 600

	1	2	3	4	5	6	
1	1.24000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.46000E+00	3.15000E+00	5.50
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.02
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00
11	0.	0.	3.70000E-01	5.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.
	9	10	11	12	13	14	15
1	2.55000E+01	7.72000E+01	7.95400E+01	4.06100E+01	3.04940E+01	8.05200E+01	1.60
2	4.31100E+01	1.20090E+02	1.01610E+02	5.25300E+01	5.62200E+01	1.70700E+02	3.20
3	3.75000E+01	8.92000E+01	9.15400E+01	5.46100E+01	4.54940E+01	9.55200E+01	1.75
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38900E+01	1.48700E+01	1.48700E+01	1.44
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.38500E+02	6.15400E+02	7.231
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.492
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.381
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.500
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	1.88160E+03						
2	3.89510E+03						
3	1.89660E+03						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.80000E+01						
10	0.						
11	0.						
12	0.						
13	0.						

P = 600

4	5	6	7	8
1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
2.98799E+00	1.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	5.00000E-01	7.00000E-02	0.	0.
12	13	14	15	16
4.06100E+01	3.04940E+01	8.05200E+01	1.60810E+02	2.32100E+02
5.25300E+01	5.82200E+01	1.70700E+02	3.28820E+02	4.53300E+02
5.46100E+01	4.54940E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
20	21	22	23	24
3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

2

URANIUM-235

.050 EV

SIGMA P = 820

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	1.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.01300E+01	8.44300E+01	4.17900E+01	3.07770E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.24550E+02	1.07560E+02	5.37900E+01	5.67200E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.21300E+01	9.64300E+01	5.57900E+01	4.57770E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38000E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 820

3	4	5	6	7	8
1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
8.44300E+01	4.17900E+01	3.07770E+01	8.05200E+01	1.60810E+02	2.32100E+02
1.07560E+02	5.37900E+01	5.67200E+01	1.70700E+02	3.28820E+02	4.53300E+02
9.64300E+01	5.57900E+01	4.57770E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
2.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-235

.050 EV

SIGMA P = 1050

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	1.08700E+00	2.98790E+00	3.51799E+00	6.12500E+00	1.03000E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19000E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.21900E+01	8.81200E+01	4.26000E+01	3.09570E+01	8.05200E+01	1.60000E+02
2	4.31100E+01	1.27710E+02	1.12090E+02	5.46500E+01	5.70300E+01	1.70700E+02	3.20000E+02
3	3.75000E+01	9.41900E+01	1.00120E+02	5.66000E+01	4.59570E+01	9.55200E+01	1.75000E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44000E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.36000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49200E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 1050

	4	5	6	7	8
OE+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
OE+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
OE+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75600E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
OE+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
OE-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
OE-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
	12	13	14	15	16
OE+01	4.26000E+01	3.09570E+01	8.05200E+01	1.60810E+02	2.32100E+02
OE+02	5.46500E+01	5.70300E+01	1.70700E+02	3.28820E+02	4.53300E+02
OE+02	5.66000E+01	4.59570E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
OE+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
OE-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
	20	21	22	23	24
OE+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
OE+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
OE+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
OE+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
OE-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

URANIUM-235

.050 EV

SIGMA P = 2130

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.67800E+01	9.72200E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02
2	4.51100E+01	1.34760E+02	1.23430E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.87800E+01	1.09220E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 2130

3	4	5	6	7	8
3000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
55000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
00000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
00000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
2200E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02	2.32100E+02
3430E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02	4.53300E+02
9220E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
9000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
0000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
9000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
5500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
4000E+02	3.83700E+02	5.73500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
7400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
0000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

CHANILP-235

.100 EV

SIGMA P = 400

	1	2	3	4	5	6	7
1	1.24000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	1.55700E+00	1.19000E+00	1.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03000E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	4.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19000E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	7.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.
	9	10	11	12	13	14	15
1	2.55000E+01	7.72000E+01	7.95400E+01	4.06100E+01	3.64940E+01	8.05200E+01	1.60000E+02
2	4.31100E+01	1.20090E+02	1.01630E+02	5.25300E+01	5.62200E+01	1.70700E+02	3.28000E+02
3	3.75000E+01	8.92000E+01	9.15400E+01	5.46100E+01	4.54940E+01	9.55200E+01	1.75000E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00500E-02	1.06000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	2.17900E+02	2.21200E+02	2.65000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49200E+03
3	2.74900E+02	2.35200E+02	2.84000E+02	3.81700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.40000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	1.88160E+03						
2	3.98510E+03						
3	1.89860E+03						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.50000E+01						
10	0.						
11	0.						
12	0.						
13	0.						

A P = 600

	4	5	6	7	8
00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
00	2.98799E+00	3.51749E+00	6.12500E+00	1.03500E+01	1.94700E+01
00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
	12	13	14	15	16
01	4.06100E+01	3.04940E+01	8.05200E+01	1.60810E+02	2.32100E+02
02	5.25300E+01	5.62200E+01	1.70700E+02	3.28620E+02	4.53300E+02
01	5.46100E+01	4.54940E+01	9.55200E+01	1.75810E+02	2.47100E+02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
01	1.09000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

URANIUM-235

.100 EV

SIGMA P = 820

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.20900E+01	8.78500E+01	4.21600E+01	3.07770E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.27590E+02	1.11720E+02	5.42800E+01	5.67200E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.40900E+01	9.98500E+01	5.61600E+01	4.57770E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19500E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 820

3	4	5	6	7	8
33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	1.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
78500E+01	4.21600E+01	3.07770E+01	8.05200E+01	1.60810E+02	2.32100E+02
11720E+02	5.42800E+01	5.67200E+01	1.70700E+02	3.28820E+02	4.53300E+02
98500E+01	5.61600E+01	4.57770E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-235

.100 EV

SIGMA P = 1050

	1	2	3	4	5	6	
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	2.0
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.0
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.0
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.0
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.
	9	10	11	12	13	14	
1	2.55000E+01	8.38000E+01	9.11400E+01	4.28400E+01	3.09570E+01	8.05200E+01	1.0
2	4.31100E+01	1.30210E+02	1.15840E+02	5.50100E+01	5.70300E+01	1.70700E+02	3.0
3	3.75000E+01	9.58000E+01	1.03140E+02	5.68400E+01	4.59570E+01	9.55200E+01	1.0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.0
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.0
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.0
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.0
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.0
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	1.88160E+03						
2	3.88510E+03						
3	1.89660E+03						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.50000E+01						
10	0.						
11	0.						
12	0.						
13	0.						

SIGMA P = 1050

3	4	5	6	7	8
3000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
8700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
5000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
0000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
7000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
11400E+01	4.28400E+01	3.09570E+01	8.05200E+01	1.50810E+02	2.32100E+02
5840E+02	5.50100E+01	5.70300E+01	1.70700E+02	3.28820E+02	4.53300E+02
3140E+02	5.68400E+01	4.59570E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
9000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
0000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
9000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
5500E+02	7.65300E+02	1.01360E+03	1.27400E+03	1.49210E+03	1.97900E+03
4000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
7400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
0000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

URANIUM-235

.100 EV

SIGMA P = 2130

	1	2	3	4	5	6	7
1	1.26000E+00	1.30900E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30900E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.67800E+01	9.72200E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60910E+02
2	4.31100E+01	1.34750E+02	1.23430E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.87800E+01	1.09220E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 2130

3	4	5	6	7	8
33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
72200E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02	2.32100E+02
23430E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02	4.53300E+02
09220E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19000E+01	1.38800E+01	1.46700E+01	1.48700E+01	1.44800E+01	1.44800E+01
00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-235

.150 EV

SIGMA P = 600

	1	2	3	4	5	6	
1	1.26000E+00	1.29999E+00	1.32999E+00	1.34999E+00	1.66000E+00	3.14999E+00	5.
2	3.55700E+00	3.19600E+00	3.08699E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.
3	4.25000E+00	4.50000E+00	4.65000E+00	5.19999E+00	7.89999E+00	1.23999E+01	1.
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.76999E+00	2.29999E+00	3.41999E+00	6.15999E+00	9.19999E+00	1.
10	0.	2.69999E-01	2.40000E-01	5.50000E-01	3.49999E-01	7.99999E-02	5.
11	0.	0.	3.70000E-01	6.69999E-01	4.00000E-01	7.99999E-02	0.
12	0.	0.	0.	6.49999E-01	4.49999E-01	6.99999E-02	0.
13	0.	0.	0.	0.	5.00000E-01	6.99999E-02	0.

	9	10	11	12	13	14	
1	2.55000E+01	8.11500E+01	8.55150E+01	4.13500E+01	3.04940E+01	8.05200E+01	1.
2	4.31100E+01	1.26040E+02	1.08770E+02	5.33600E+01	5.62200E+01	1.70700E+02	3.
3	3.75000E+01	9.31500E+01	9.75150E+01	5.53500E+01	4.54940E+01	9.55200E+01	1.
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 600

3	4	5	6	7	8
2999E+00	1.34999E+00	1.66000E+00	3.14999E+00	5.50000E+00	1.11000E+01
8699E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
5000E+00	5.19999E+00	7.89999E+00	1.23999E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
9999E+00	3.41999E+00	6.15999E+00	9.19999E+00	1.19400E+01	1.19500E+01
0000E-01	5.50000E-01	3.49999E-01	7.99999E-02	5.00000E-02	6.00000E-02
0000E-01	6.69999E-01	4.00000E-01	7.99999E-02	0.	0.
0.	6.49999E-01	4.49999E-01	6.99999E-02	0.	0.
0.	0.	5.00000E-01	6.99999E-02	0.	0.
1	12	13	14	15	16
150E+01	4.13500E+01	3.04940E+01	8.05200E+01	1.60810E+02	2.32100E+02
770E+02	5.33600E+01	5.62200E+01	1.70700E+02	3.28820E+02	4.53300E+02
150E+01	5.53500E+01	4.54940E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44600E+01	1.44800E+01
000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
20	21	22	23	24	
000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	
000E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	
000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	
0.	0.	0.	0.	0.	
0.	0.	0.	0.	0.	
0.	0.	0.	0.	0.	
0.	0.	0.	0.	0.	
0.	0.	0.	0.	0.	
000E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	
000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	
0.	0.	0.	0.	0.	
0.	0.	0.	0.	0.	
0.	0.	0.	0.	0.	

2

URANIUM-235

.150 EV

SIGMA P = 820

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.34000E+01	8.97100E+01	4.22600E+01	3.07770E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.29500E+02	1.14020E+02	5.43400E+01	5.67200E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.54000E+01	1.01710E+02	5.62600E+01	4.57770E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 820

	4	5	6	7	8
00E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
00E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
00E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
00E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
00E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
00E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
	12	13	14	15	16
00E+01	4.22600E+01	3.07770E+01	8.05200E+01	1.60810E+02	2.32100E+02
20E+02	5.43400E+01	5.67200E+01	1.70700E+02	3.28820E+02	4.53300E+02
10E+02	5.62600E+01	4.57770E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
00E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
00E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
	20	21	22	23	24
00E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
00E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
00E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
00E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
00E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-235

.150 EV

SIGMA P = 1050

	1	2	3	4	5	6	7
1	1.26000E+00	1.29999E+00	1.32999E+00	1.34999E+00	1.66000E+00	3.14999E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08699E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.19999E+00	7.89999E+00	1.23999E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.76999E+00	2.29999E+00	3.41999E+00	5.15999E+00	9.19999E+00	1.19400E+01
10	0.	2.69999E-01	2.40000E-01	5.50000E-01	3.49999E-01	7.99999E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.69999E-01	4.00000E-01	7.99999E-02	0.
12	0.	0.	0.	6.49999E-01	4.49999E-01	6.99999E-02	0.
13	0.	0.	0.	0.	5.00000E-01	6.99999E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.49550E+01	9.27600E+01	4.28400E+01	3.09570E+01	8.05200E+01	1.60000E+02
2	4.31100E+01	1.31890E+02	1.17880E+02	5.50100E+01	5.70300E+01	1.70700E+02	3.28000E+02
3	3.75000E+01	9.69550E+01	1.04760E+02	5.68400E+01	4.59570E+01	9.55200E+01	1.75000E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49200E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 1050

	4	5	6	7	8
999E+00	1.34999E+00	1.66000E+00	3.14999E+00	5.50000E+00	1.11000E+01
999E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
000E+00	5.19999E+00	7.89999E+00	1.23999E+01	1.75000E+01	2.31000E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
999E+00	3.41999E+00	6.15999E+00	9.19999E+00	1.19400E+01	1.19500E+01
000E-01	5.50000E-01	3.49999E-01	7.99999E-02	5.00000E-02	6.00000E-02
000E-01	6.69999E-01	4.00000E-01	7.99999E-02	0.	0.
	6.49999E-01	4.49999E-01	6.99999E-02	0.	0.
	0.	5.00000E-01	6.99999E-02	0.	0.
	12	13	14	15	16
000E+01	4.28400E+01	3.09570E+01	8.05200E+01	1.60810E+02	2.32100E+02
080E+02	5.50100E+01	5.70300E+01	1.70700E+02	3.28820E+02	4.53300E+02
760E+02	5.68400E+01	4.59570E+01	9.55200E+01	1.75810E+02	2.47100E+02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
000E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

URANIUM-235

.150 EV

SIGMA P = 2130

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.35700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.82650E+01	9.98850E+01	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.37025E+02	1.27025E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	1.00265E+02	1.11885E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

SIGMA P = 2130

3	4	5	6	7	8
1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
9.98850E+01	4.43390E+01	3.13090E+01	8.05200E+01	1.60810E+02	2.32100E+02
1.27025E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02	4.53300E+02
1.11885E+02	5.83390E+01	4.63090E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.500
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.035
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.750
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.194
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.000
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.26600E+01	8.76500E+01	4.15600E+01	3.04940E+01	8.05200E+01	1.608
2	4.31100E+01	1.28240E+02	1.11360E+02	5.35300E+01	5.62200E+01	1.70700E+02	3.288
3	3.75000E+01	9.46600E+01	9.96500E+01	5.55600E+01	4.54940E+01	9.55200E+01	1.758
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.448
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.300
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.231
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.492
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.381
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.500
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
000E+01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
500E+01	4.15600E+01	3.04940E+01	8.05200E+01	1.60810E+02	2.32100E+02
060E+02	5.35300E+01	5.62200E+01	1.70700E+02	3.28820E+02	4.53300E+02
500E+01	5.55600E+01	4.54940E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
000E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
000E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.47100E+01	9.15700E+01	4.23600E+01	3.07770E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.31410E+02	1.16320E+02	5.44000E+01	5.67200E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	9.67100E+01	1.03570E+02	5.63600E+01	4.57770E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

	4	5	6	7	8
00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
	12	13	14	15	16
01	4.23600E+01	3.07770E+01	8.05200E+01	1.60810E+02	2.32100E+02
02	5.44000E+01	5.67200E+01	1.70700E+02	3.28820E+02	4.53300E+02
02	5.63600E+01	4.57770E+01	9.55200E+01	1.75810E+02	2.47100E+02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	20	21	22	23	24
02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

URANIUM-235

.200 EV

SIGMA P = 1050

	1	2	3	4	5	6	
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.5
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.6
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.7
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.1
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.0
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.
	9	10	11	12	13	14	
1	2.55000E+01	8.61100E+01	9.43800E+01	4.28400E+01	3.09570E+01	8.05200E+01	1.6
2	4.31100E+01	1.33570E+02	1.19920E+02	5.50100E+01	5.70300E+01	1.70700E+02	3.2
3	3.75000E+01	9.81100E+01	1.06380E+02	5.68400E+01	4.59570E+01	9.55200E+01	1.7
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19000E+01	1.38900E+01	1.48700E+01	1.48700E+01	1.4
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.3
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	1.88160E+03						
2	3.88510E+03						
3	1.89660E+03						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	1.50000E+01						
10	0.						
11	0.						
12	0.						
13	0.						

SIGMA P = 1050

3	4	5	6	7	8
3000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
8700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
5000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
0000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
0000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
3800E+01	4.28400E+01	3.09570E+01	8.05200E+01	1.60810E+02	2.32100E+02
9920E+02	5.50100E+01	5.70300E+01	1.70700E+02	3.28820E+02	4.53300E+02
6380E+02	5.68400E+01	4.59570E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
9000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
0000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
0000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
5500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
5000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
7400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
0000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-235

.200 EV

SIGMA P = 2130

	1	2	3	4	5	6	7
1	1.26000E+00	1.30000E+00	1.33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00
2	3.55700E+00	3.19600E+00	3.08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01
3	4.25000E+00	4.50000E+00	4.65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.20000E+00	1.77000E+00	2.30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01
10	0.	2.70000E-01	2.40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02
11	0.	0.	3.70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.
12	0.	0.	0.	6.50000E-01	4.50000E-01	7.00000E-02	0.
13	0.	0.	0.	0.	5.00000E-01	7.00000E-02	0.

	9	10	11	12	13	14	15
1	2.55000E+01	8.90600E+01	1.00790E+02	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02
2	4.31100E+01	1.38170E+02	1.28240E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02
3	3.75000E+01	1.01060E+02	1.12790E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.19500E+01	1.19000E+01	1.19700E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01
10	5.00000E-02	5.00000E-02	1.00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	2.19900E+02	2.21200E+02	2.69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02
2	4.31300E+02	4.48700E+02	5.55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03
3	2.34900E+02	2.36200E+02	2.84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.44800E+01	1.44800E+01	1.47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01
10	5.20000E-01	5.20000E-01	5.20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	1.88160E+03
2	3.88510E+03
3	1.89660E+03
4	0.
5	0.
6	0.
7	0.
8	0.
9	1.50000E+01
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
33000E+00	1.35000E+00	1.66000E+00	3.15000E+00	5.50000E+00	1.11000E+01
08700E+00	2.98799E+00	3.51799E+00	6.12500E+00	1.03500E+01	1.94700E+01
65000E+00	5.20000E+00	7.90000E+00	1.24000E+01	1.75000E+01	2.31000E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
30000E+00	3.42000E+00	6.16000E+00	9.20000E+00	1.19400E+01	1.19500E+01
40000E-01	5.50000E-01	3.50000E-01	8.00000E-02	5.00000E-02	6.00000E-02
70000E-01	6.70000E-01	4.00000E-01	8.00000E-02	0.	0.
0.	6.50000E-01	4.50000E-01	7.00000E-02	0.	0.
0.	0.	5.00000E-01	7.00000E-02	0.	0.
11	12	13	14	15	16
00790E+02	4.43380E+01	3.13090E+01	8.05200E+01	1.60810E+02	2.32100E+02
28240E+02	5.65000E+01	5.76500E+01	1.70700E+02	3.28820E+02	4.53300E+02
12790E+02	5.83380E+01	4.63090E+01	9.55200E+01	1.75810E+02	2.47100E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19000E+01	1.38800E+01	1.48700E+01	1.48700E+01	1.44800E+01	1.44800E+01
00000E-01	1.00000E-01	1.20000E-01	1.30000E-01	1.30000E-01	5.20000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
69000E+02	3.68700E+02	4.88500E+02	6.15400E+02	7.23100E+02	9.58750E+02
55500E+02	7.65300E+02	1.01360E+03	1.27420E+03	1.49210E+03	1.97900E+03
84000E+02	3.83700E+02	5.03500E+02	6.30400E+02	7.38100E+02	9.73750E+02
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
47400E+01	1.47400E+01	1.47400E+01	1.50000E+01	1.50000E+01	1.50000E+01
20000E-01	2.60000E-01	2.60000E-01	2.60000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

URANIUM-238

.025 EV

SIGMA P = 7970

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.000
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.500
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.750
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.000
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.21900E+01	2.38700E+01	3.78000E+01	8.66700E+01	4.00000E-01	6.35000E-01	7.100
2	0.	0.	0.	0.	0.	0.	0.
3	2.09900E+01	3.26700E+01	4.66000E+01	9.54700E+01	9.20000E+00	9.43500E+00	9.510
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.500
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.000
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.890
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.169
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.800
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

2

URANIUM-238

.025 EV

SIGMA P = 1.0890

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.28500E+01	2.67500E+01	4.15900E+01	9.47100E+01	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.16500E+01	3.55500E+01	5.03900E+01	1.03510E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.01000E+00
000E-01	0.	0.	0.	0.	0.
000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08100E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
1	12	13	14	15	16
900E+01	9.47100E+01	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
	0.	0.	0.	0.	0.
900E+01	1.03510E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
9	20	21	22	23	24
000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
	0.	0.	0.	0.	0.
000E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

SIGMA P = 13950

[illegible]

3	4	5	6	7	8
1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.01000E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08100E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
4.43700E+01	1.00500E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
5.31700E+01	1.09300E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
5.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72494E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.39000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.42500E+01	3.44500E+01	5.07800E+01	1.13870E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.30500E+01	4.32500E+01	5.95800E+01	1.22670E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.03000E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08300E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
5.07800E+01	1.13870E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
5.95800E+01	1.22670E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.08000E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
3.08000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.27700E+01	2.61300E+01	4.10400E+01	9.28600E+01	4.00000E-01	6.35000E-01	7.10
2	0.	0.	0.	0.	0.	0.	0.
3	2.15700E+01	3.49300E+01	4.98400E+01	1.01660E+02	9.20000E+00	9.43500E+00	9.51
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

[illegible]

URAVIUN-238

050 EV

SIGMA P = 10890

1	5.64000E-01	0.0
2	1.72499E+00	0.0
3	4.00000E+00	0.0
4	0.0	0.0
5	0.0	0.0
6	0.0	0.0
7	0.0	0.0
8	0.0	0.0
9	1.25400E+00	0.0
10	0.0	0.0
11	0.0	0.0
12	0.0	0.0
13	0.0	0.0

[illegible]

1.4400E-01
1.8000E-01
4.5000E+00
0.0
0.0
0.0
0.0
2.9060E+00
3.5000E-01
4.6000E-01
0.0

0.
1.4000E-01
0.
5.2500E+00
0.
0.
0.
0.
0.
4.
5.3000E+00
8.0000E-01
9.6000E-01
7.9000E-01
0.

[illegible]

4.5000E-01
0.
1.2000E+01
0.
0.
0.
0.
0.
0.
1.1450E+01
8.0000E-02
3.0000E-02
1.0000E-02
9.0000E-02

0.000000E+00
0.000000E+00
0.000000E+00
1.875000E+00
1.000000E-01
0.000000E+00
0.000000E+00
0.000000E+00
0.000000E+00
0.000000E+00
9.500000E+00
7.000000E-01

1	1.33400E+01	0.	2
2	0.	2.	3
3	2.21400E+01	0.	4
4	0.	0.	5
5	0.	0.	6
6	0.	0.	7
8	0.	0.	8
9	8.76000E+00	4.00000E-02	10
11	0.	0.	12
13	0.	0.	13

10
2.89600E+01
3.77600E+01
0.0
0.0
0.0
0.0
0.0
0.0
0.0
8.73000E+00
4.00000E-02
0.0
0.0
0.0

11
4.45800E+01
5.33800E+01
0.0
0.0
0.0
0.0
0.0
0.0
0.0
8.73000E+00
7.00000E-02
0.0
0.0
0.0

**0.
0
0
8.7300E+00
0
0
0
0
0
0
1.09190E+02
0
1.00390E+02**

0.
0.
0.
8.7300E+00
0.
0.
0.
0.
9.2000E+00
0.
4.0000E-01

13

[illegible]

0
0
0
7.0000E-02
8.5000E+00
0
0
0
0
0
0
6.5100E+00
7.1000E-01

15

Year	Value
1970	9.2000E-01
1971	0.0
1972	9.7200E+00
1973	0.0
1974	0.0
1975	0.0
1976	0.0
1977	0.0
1978	0.0
1979	8.5000E+00
1980	3.0000E-01
1981	0.0
1982	0.0
1983	0.0

18
1.04000E+00
9.84000E+00
0.0
0.0
0.0
0.0
0.0
0.0
0.0
8.50000E+00
3.00000E-01
0.0
0.0
0.0

0
0
0
3.0000E+01
8.5000E+00
0
0
0
0
0
0
1.0000E+01
0
1.2800E+00
61

[illegible]

0
0
0
1
8
0
0
0
0
0
1
0
2
12
00+300090
10+300980

0.
0
0
1-50000E+00
8-80000E+00
0
0
0
0
0
0
1-13100E+01
0
2-51000E+00

22

0

0

9

0

8+00E000000

0

0

0

0

0

1-16900691E+10

0

2-8900003E+00

23

3	4	5	6	7	8
44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02000E+00
08000E-01	0.	0.	0.	0.	0.
50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08200E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
45800E+01	1.00390E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
	0.	0.	0.	0.	0.
33800E+01	1.09190E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
19	20	21	22	23	24
8000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
	0.	0.	0.	0.	0.
0800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
5000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
0000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.37200E+01	3.10600E+01	4.70900E+01	1.05670E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.25200E+01	3.98600E+01	5.58900E+01	1.14470E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.98100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02000E+00
08000E-01	0.	0.	0.	0.	0.
50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08200E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
70900E+01	1.05670E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
	0.	0.	0.	0.	0.
58900E+01	1.14470E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
90000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
19	20	21	22	23	24
8000E+00	1.64090E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
	0.	0.	0.	0.	0.
0800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
5000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
0000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

URANIUM-238

.050 EV

SIGMA P = 28309

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.45000E+01	3.60100E+01	5.26400E+01	1.17270E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.33300E+01	4.48100E+01	6.14400E+01	1.26070E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.33200E+01	2.86800E+01	4.44100E+01	9.95500E+01	4.00000E-01	6.35000E-01	7.10
2	0.	0.	0.	0.	0.	0.	0.
3	2.21200E+01	3.74800E+01	5.32100E+01	1.08350E+02	9.20000E+00	9.43500E+00	9.50
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.98100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02000E+00
08000E-01	0.	0.	0.	0.	0.
50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08200E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
00600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
50000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
4100E+01	9.95500E+01	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
	0.	0.	0.	0.	0.
2100E+01	1.08350E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
3000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
0000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
19	20	21	22	23	24
0000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
	0.	0.	0.	0.	0.
0800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
0000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
0000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

URANIUM-238

.100 EV

SIGMA P = 10890

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.38000E+01	3.13300E+01	4.75600E+01	1.06230E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.26000E+01	4.01300E+01	5.63600E+01	1.15030E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
0000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02500E+00
0000E-01	0.	0.	0.	0.	0.
0000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08250E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
0600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
0000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
0000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.

11	12	13	14	15	16
0600E+01	1.06230E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
	0.	0.	0.	0.	0.
0600E+01	1.15030E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
0000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
0000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

19	20	21	22	23	24
0000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
	0.	0.	0.	0.	0.
0000E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
0000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
0000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

2

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.0
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.3
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.7
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.30000E-01	8.00000E-02	1.0
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.
	9	10	11	12	13	14	15
1	1.41000E+01	3.32400E+01	4.97200E+01	1.10810E+02	4.00000E-01	6.35000E-01	7.1
2	0.	0.	0.	0.	0.	0.	0.
3	2.29000E+01	4.20400E+01	5.85200E+01	1.19610E+02	9.20000E+00	9.43500E+00	9.9
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.9
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.0
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.66000E+00	2.51000E+00	2.8
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.1
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.8
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	6.58100E+00						
2	0.						
3	1.57810E+01						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	8.80000E+00						
10	0.						
11	0.						
12	0.						
13	0.						

[illegible]

URANIUM-238

.100 EV

SIGMA P = 28300

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.47200E+01	3.75500E+01	5.42800E+01	1.20410E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.35200E+01	4.63500E+01	6.30800E+01	1.29210E+02	9.20000E+00	0.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.93000E+00
.60000E-01	0.	0.	0.	0.	0.
.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08300E+01
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.90600E+00	4.53000E+00	7.56000E+00	1.14500E+01	8.75000E+00	8.76000E+00
.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
.42000E+01	1.20410E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
.	0.	0.	0.	0.	0.
.30000E+01	1.29210E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
19	20	21	22	23	24
.28000E+00	1.84000E+00	2.06000E+00	2.71000E+00	2.89000E+00	3.74600E+00
.	0.	0.	0.	0.	0.
.00000E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.

URANIUM-238

.150 EV

SIGMA P = 7970

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.000
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.500
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.750
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.000
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.36100E+01	3.02100E+01	4.63000E+01	1.03410E+02	4.00000E-01	6.35000E-01	7.100
2	0.	0.	0.	0.	0.	0.	0.
3	2.24100E+01	3.90100E+01	5.51000E+01	1.12210E+02	9.20000E+00	9.43500E+00	9.510
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.500
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.000
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.890
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.160
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	3.900
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02000E+00
.08000E-01	0.	0.	0.	0.	0.
.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08200E+01
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
63000E+01	1.03410E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
.	0.	0.	0.	0.	0.
51700E+01	1.12210E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
19	20	21	22	23	24
29000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
.	0.	0.	0.	0.	0.
00800E-01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.23460E+01
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
50000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.
.	0.	0.	0.	0.	0.

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.40300E+01	3.27200E+01	4.91900E+01	1.09550E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.28300E+01	4.15200E+01	5.79900E+01	1.18350E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73600E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

3	4	5	6	7	8
1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02800E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08280E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.

11	12	13	14	15	16
4.91900E+01	1.09550E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
5.79900E+01	1.18350E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

SIGMA P - 13950

E

5

24

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1-20000+
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4-9999E-01

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6.3500E-01
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9.4350E+00
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9.7300E+00
7.0000E-02

6

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1

0.
0.
0.
1-350000+00
8-800000+00
0.
0.
0.
0.
0.
1-131000+00
2-510000+00

1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00

0.0	13
0.0	12
0.0	11
0.0	10

3	4	5	6	7	8
1.43999E-01	1.39999E-01	1.59999E-01	4.49999E-01	7.00000E-01	2.03000E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.19999E+00	1.20000E+01	9.50000E+00	1.08300E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90599E+00	4.53000E+00	7.95999E+00	1.14499E+01	8.75000E+00	8.78000E+00
3.49999E-01	8.00000E-01	5.00000E-01	7.99999E-02	1.00000E-01	5.00000E-02
4.59999E-01	9.60000E-01	5.50000E-01	7.99999E-02	0.	0.
0.	7.89999E-01	6.39999E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
5.11300E+01	1.13670E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.28000E-01
0.	0.	0.	0.	0.	0.
5.99300E+01	1.22470E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	3.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.00800E+01	1.04400E+01	1.09600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

CRANIUM-238

.150 EV

SIGMA P = 28300

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.48300E+01	3.83600E+01	5.51400E+01	1.22150E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.36300E+01	4.71600E+01	6.39400E+01	1.30450E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

SIGMA P = 28300

3	4	5	6	7	8
1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.03000E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08300E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.

11	12	13	14	15	16
5.51400E+01	1.22150E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
6.39400E+01	1.30950E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25400E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-238

.200 EV

SIGMA P = 7970

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.38000E+01	3.12800E+01	4.75700E+01	1.06080E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.26000E+01	4.00800E+01	5.63700E+01	1.14880E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

SIGMA P = 7970

3	4	5	6	7	8
.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02000E+00
.08000E-01	0.	0.	0.	0.	0.
.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08200E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
.75700E+01	1.06080E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
.63700E+01	1.14880E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

URANIUM-238

.200 EV

SIGMA P = 10890

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.41800E+01	3.36800E+01	5.02600E+01	1.11790E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.29800E+01	4.24800E+01	5.90600E+01	1.20590E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

SIGMA P = 10890

3	4	5	6	7	8
1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.02900E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08290E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
5.02600E+01	1.11790E+02	4.00000E-01	6.35000E-01	7.10300E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
5.90600E+01	1.20590E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

URANIUM-238

200 EV

SIGMA P = 13950

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.72499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.79000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.40000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.44200E+01	3.53400E+01	5.20500E+01	1.15570E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.32200E+01	4.41400E+01	6.08500E+01	1.24370E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

SIGMA P = 12950

3	4	5	6	7	8
44000E-01	1.40000E-01	1.40000E-01	4.50000E-01	7.00000E-01	2.03000E+00
08000E-01	0.	0.	0.	0.	0.
50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08300E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
20600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
30000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
20500E+01	1.15570E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
	0.	0.	0.	0.	0.
28500E+01	1.24370E+02	9.20000E+00	9.43500E+00	9.51000E+00	9.62000E+00
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
19	20	21	22	23	24
28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
	0.	0.	0.	0.	0.
08000E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
50000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.

URANIUM-238

.200 EV

SIGMA P = 28300

	1	2	3	4	5	6	7
1	5.66000E-01	5.35000E-01	1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01
2	1.77499E+00	1.21300E+00	1.08000E-01	0.	0.	0.	0.
3	4.00000E+00	4.40000E+00	4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.25400E+00	1.82500E+00	2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00
10	0.	3.30000E-01	3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01
11	0.	0.	4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.
12	0.	0.	0.	7.90000E-01	6.40000E-01	1.00000E-01	0.
13	0.	0.	0.	0.	6.00000E-01	9.00000E-02	0.

	9	10	11	12	13	14	15
1	1.49000E+01	3.88900E+01	5.56800E+01	1.23310E+02	4.00000E-01	6.35000E-01	7.10000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	2.37000E+01	4.76900E+01	6.44800E+01	1.32110E+02	9.20000E+00	9.43500E+00	9.51000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.76000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00
10	4.00000E-02	4.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	9.20000E-01	1.04000E+00	1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00
2	0.	0.	0.	0.	0.	0.	0.
3	9.72000E+00	9.84000E+00	1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	8.50000E+00	8.50000E+00	8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00
10	3.00000E-01	3.00000E-01	3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	6.58100E+00
2	0.
3	1.57810E+01
4	0.
5	0.
6	0.
7	0.
8	0.
9	8.80000E+00
10	0.
11	0.
12	0.
13	0.

SIGMA P = 28300

3	4	5	6	7	8
1.44000E-01	1.40000E-01	1.60000E-01	4.50000E-01	7.00000E-01	2.03000E+00
1.08000E-01	0.	0.	0.	0.	0.
4.50000E+00	5.25000E+00	8.20000E+00	1.20000E+01	9.50000E+00	1.08300E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
2.90600E+00	4.53000E+00	7.96000E+00	1.14500E+01	8.75000E+00	8.76000E+00
3.50000E-01	8.00000E-01	5.00000E-01	8.00000E-02	1.00000E-01	5.00000E-02
4.60000E-01	9.60000E-01	5.50000E-01	8.00000E-02	0.	0.
0.	7.90000E-01	6.40000E-01	1.00000E-01	0.	0.
0.	0.	6.00000E-01	9.00000E-02	0.	0.
11	12	13	14	15	16
5.56800E+01	1.23310E+02	4.00000E-01	6.35000E-01	7.10000E-01	8.20000E-01
0.	0.	0.	0.	0.	0.
6.44800E+01	1.32110E+02	9.20000E+00	9.43000E+00	9.51000E+00	9.62000E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.73000E+00	8.73000E+00	8.73000E+00	8.73000E+00	8.50000E+00	8.50000E+00
7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	7.00000E-02	3.00000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
1.28000E+00	1.64000E+00	2.06000E+00	2.51000E+00	2.89000E+00	3.74600E+00
0.	0.	0.	0.	0.	0.
1.00800E+01	1.04400E+01	1.08600E+01	1.13100E+01	1.16900E+01	1.25460E+01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
8.65000E+00	8.65000E+00	8.65000E+00	8.80000E+00	8.80000E+00	8.80000E+00
3.00000E-01	1.50000E-01	1.50000E-01	1.50000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2

XENON-135

	1	2	3	4	5	6	
1	0.	0.	0.	0.	0.	0.	0.
2	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	0.	0.	0.	0.
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	9	10	11	12	13	14	15
1	0.	0.	0.	6.20000E+01	8.11000E+02	1.14400E+04	5.134
2	0.	0.	0.	0.	0.	0.	0.
3	0.	0.	0.	2.98000E+02	1.63900E+03	1.78850E+04	7.384
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	0.	0.	0.	1.29000E+02	7.83000E+02	6.07000E+03	2.077
10	0.	0.	0.	0.	7.00000E+00	4.50000E+01	3.750
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	17	18	19	20	21	22	23
1	2.44400E+05	5.59900E+05	1.68300E+06	2.82900E+06	2.73700E+06	2.64400E+06	2.690
2	0.	0.	0.	0.	0.	0.	0.
3	3.26400E+05	7.23640E+05	2.08040E+06	3.35910E+06	3.14310E+06	2.96700E+06	2.975
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	7.47000E+04	1.51700E+05	3.80000E+05	5.14000E+05	3.93000E+05	3.23000E+05	2.850
10	3.45000E+03	7.30000E+03	1.20400E+04	1.74000E+04	1.61000E+04	1.31000E+04	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.
	25						
1	6.00000E+06						
2	0.						
3	6.27500E+06						
4	0.						
5	0.						
6	0.						
7	0.						
8	0.						
9	2.75000E+05						
10	0.						
11	0.						
12	0.						
13	0.						

[illegible]

ZIRCONIUM

SIGMA P = 50

	1	2	3	4	5	6	7
1	3.00000E-03	5.00000E-03	7.00000E-03	1.00000E-02	1.30000E-02	2.50000E-02	3.10000E-02
2	0.	0.	0.	0.	0.	0.	0.
3	2.60000E+00	3.10000E+00	3.84000E+00	6.20800E+00	7.20800E+00	7.92000E+00	7.66000E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	1.49700E+00	2.39500E+00	3.34300E+00	5.97800E+00	7.06000E+00	7.78800E+00	7.52600E+00
10	0.	6.00000E-01	4.00000E-01	3.00000E-01	2.20000E-01	1.35000E-01	1.07000E-01
11	0.	0.	3.00000E-01	2.00000E-01	1.50000E-01	1.00000E-01	0.
12	0.	0.	0.	2.00000E-01	1.00000E-01	4.00000E-02	0.
13	0.	0.	0.	0.	0.	0.	0.

	9	10	11	12	13	14	15
1	1.56000E-01	5.00000E-03	8.00000E-03	1.30000E-02	2.21000E-02	3.62000E-02	4.91000E-02
2	0.	0.	0.	0.	0.	0.	0.
3	6.69300E+00	6.20500E+00	6.20800E+00	6.21300E+00	6.22210E+00	6.23620E+00	6.24910E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	6.46900E+00	6.06400E+00	6.06400E+00	6.06400E+00	6.06400E+00	6.06400E+00	5.65600E+00
10	7.20000E-02	6.80000E-02	1.36000E-01	1.36000E-01	1.36000E-01	1.36000E-01	1.36000E-01
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	17	18	19	20	21	22	23
1	6.33000E-02	7.18000E-02	8.79000E-02	1.13000E-01	1.42000E-01	1.73000E-01	1.99000E-01
2	0.	0.	0.	0.	0.	0.	0.
3	6.26330E+00	6.27180E+00	6.28790E+00	6.31300E+00	6.34200E+00	6.37300E+00	6.39900E+00
4	0.	0.	0.	0.	0.	0.	0.
5	0.	0.	0.	0.	0.	0.	0.
6	0.	0.	0.	0.	0.	0.	0.
7	0.	0.	0.	0.	0.	0.	0.
8	0.	0.	0.	0.	0.	0.	0.
9	5.65600E+00	5.65600E+00	5.92600E+00	5.92800E+00	5.92800E+00	6.20000E+00	6.20000E+00
10	5.44000E-01	5.44000E-01	5.44000E-01	2.72000E-01	2.72000E-01	2.72000E-01	0.
11	0.	0.	0.	0.	0.	0.	0.
12	0.	0.	0.	0.	0.	0.	0.
13	0.	0.	0.	0.	0.	0.	0.

	25
1	4.81000E-01
2	0.
3	6.68100E+00
4	0.
5	0.
6	0.
7	0.
8	0.
9	6.20000E+00
10	0.
11	0.
12	0.
13	0.

SIGMA P = 50

3	4	5	6	7	8
7.00000E-03	1.00000E-02	1.30000E-02	2.50000E-02	3.10000E-02	7.80000E-02
0.	0.	0.	0.	0.	0.
3.84000E+00	6.20800E+00	7.20800E+00	7.92000E+00	7.66000E+00	6.61500E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
3.34300E+00	5.97800E+00	7.06000E+00	7.78800E+00	7.52600E+00	6.46500E+00
4.00000E-01	3.00000E-01	2.20000E-01	1.35000E-01	1.07000E-01	1.03000E-01
3.00000E-01	2.00000E-01	1.50000E-01	1.00000E-01	0.	0.
0.	2.00000E-01	1.00000E-01	4.00000E-02	0.	0.
0.	0.	0.	0.	0.	0.
11	12	13	14	15	16
8.00000E-03	1.30000E-02	2.21000E-02	3.62000E-02	4.91000E-02	5.61000E-02
0.	0.	0.	0.	0.	0.
6.20800E+00	6.21300E+00	6.22210E+00	6.23620E+00	6.24910E+00	6.25610E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
6.06400E+00	6.06400E+00	6.06400E+00	6.06400E+00	5.65600E+00	5.65600E+00
1.36000E-01	1.36000E-01	1.36000E-01	1.36000E-01	1.36000E-01	5.44000E-01
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
19	20	21	22	23	24
8.79000E-02	1.13000E-01	1.42000E-01	1.73000E-01	1.99000E-01	2.58000E-01
0.	0.	0.	0.	0.	0.
6.28790E+00	6.31300E+00	6.34200E+00	6.37300E+00	6.39900E+00	6.45800E+00
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
5.92800E+00	5.92800E+00	5.92800E+00	6.20000E+00	6.20000E+00	6.20000E+00
5.44000E-01	2.72000E-01	2.72000E-01	2.72000E-01	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.

2