ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 1	0.000E+00	3.852E-03	3.852E-03	3.852E-03	3.852E-03	3.852E-03
H 3	0.000E+00	1.681E-02	1.681E-02	1.681E-02	1.681E-02	1.680E-02
HE 3	0.000E+00	2.026E-04	2.027E-04	2.028E-04	2.039E-04	2.051E-04
HE 4	0.000E+00	1.209E+00	1.209E+00	1.209E+00	1.209E+00	1.209E+00
LI 6	6.498E-02	3.083E-02	3.083E-02	3.083E-02	3.083E-02	3.083E-02
LI 7	9.350E-01	1.059E+00	1.059E+00	1.059E+00	1.059E+00	1.059E+00
BE 9	0.000E+00	2.970E-04	2.970E-04	2.970E-04	2.970E-04	2.970E-04
BE 10	0.000E+00	1.783E-05	1.783E-05	1.783E-05	1.783E-05	1.783E-05
B 10	1.852E-01	7.513E-03	7.513E-03	7.513E-03	7.513E-03	7.513E-03
B 11	8.148E-01	8.213E-01	8.213E-01	8.213E-01	8.213E-01	8.213E-01
C 12	8.833E+01	8.833E+01	8.833E+01	8.833E+01	8.833E+01	8.833E+01
C 13	1.074E+00	4.680E+00	4.680E+00	4.680E+00	4.680E+00	4.680E+00
C 14	0.000E+00	5.105E-02	5.105E-02	5.105E-02	5.105E-02	5.105E-02
N 14	2.490E+01	2.485E+01	2.485E+01	2.485E+01	2.485E+01	2.485E+01
N 15	9.801E-02	1.008E-01	1.008E-01	1.008E-01	1.008E-01	1.008E-01
O 16	1.341E+05	1.341E+05	1.341E+05	1.341E+05	1.341E+05	1.341E+05
O 17	5.427E+01	5.428E+01	5.428E+01	5.428E+01	5.428E+01	5.428E+01
O 18	3.085E+02	3.085E+02	3.085E+02	3.085E+02	3.085E+02	3.085E+02
F 19	1.070E+01	1.070E+01	1.070E+01	1.070E+01	1.070E+01	1.070E+01
NE 20	0.000E+00	1.577E-04	1.577E-04	1.577E-04	1.577E-04	1.577E-04
NA 23	1.500E+01	1.499E+01	1.499E+01	1.499E+01	1.499E+01	1.499E+01
NA 24	0.000E+00	2.543E-05	2.428E-05	2.318E-05	1.460E-05	8.387E-06
MG 24	1.559E+00	1.572E+00	1.572E+00	1.572E+00	1.572E+00	1.572E+00
MG 25	2.056E-01	2.056E-01	2.056E-01	2.056E-01	2.056E-01	2.056E-01
MG 26	2.354E-01	2.354E-01	2.354E-01	2.354E-01	2.354E-01	2.354E-01
AL 27	1.670E+01	1.670E+01	1.670E+01	1.670E+01	1.670E+01	1.670E+01
SI 28	1.112E+01	1.112E+01	1.112E+01	1.112E+01	1.112E+01	1.112E+01
SI 29	5.830E-01	5.845E-01	5.845E-01	5.845E-01	5.845E-01	5.845E-01
SI 30	4.003E-01	4.004E-01	4.004E-01	4.004E-01	4.004E-01	4.004E-01
P 31	3.500E+01	3.499E+01	3.499E+01	3.499E+01	3.499E+01	3.499E+01
P 32	0.000E+00	2.409E-04	2.404E-04	2.400E-04	2.352E-04	2.295E-04
S 32	0.000E+00	5.246E-03	5.247E-03	5.247E-03	5.252E-03	5.257E-03
S 35	0.000E+00	4.980E-04	4.978E-04	4.977E-04	4.960E-04	4.941E-04
CL 35	3.961E+00	3.823E+00	3.823E+00	3.823E+00	3.823E+00	3.823E+00

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CL 36      0.000E+00 1.406E-01 1.406E-01 1.406E-01 1.406E-01 1.406E-01
CL 37      1.339E+00 1.339E+00 1.339E+00 1.339E+00 1.339E+00 1.339E+00
AR 38      0.000E+00 5.371E-04 5.371E-04 5.371E-04 5.371E-04 5.371E-04
 K 40      0.000E+00 2.493E-04 2.493E-04 2.493E-04 2.493E-04 2.493E-04
CA 40      1.933E+00 1.932E+00 1.932E+00 1.932E+00 1.932E+00 1.932E+00
CA 41      0.000E+00 6.623E-04 6.623E-04 6.623E-04 6.623E-04 6.623E-04
CA 42      1.354E-02 1.353E-02 1.353E-02 1.353E-02 1.353E-02 1.353E-02
CA 43      2.787E-03 2.778E-03 2.778E-03 2.778E-03 2.778E-03 2.778E-03
CA 44      4.585E-02 4.583E-02 4.583E-02 4.583E-02 4.583E-02 4.583E-02
CA 45      0.000E+00 1.732E-05 1.732E-05 1.732E-05 1.729E-05 1.725E-05
CA 46      8.027E-05 8.034E-05 8.034E-05 8.034E-05 8.034E-05 8.034E-05
CA 48      4.547E-03 4.543E-03 4.543E-03 4.543E-03 4.543E-03 4.543E-03
SC 45      0.000E+00 2.313E-05 2.314E-05 2.314E-05 2.317E-05 2.321E-05
TI 46      7.920E-02 7.915E-02 7.915E-02 7.915E-02 7.915E-02 7.915E-02
TI 47      7.307E-02 7.299E-02 7.299E-02 7.299E-02 7.299E-02 7.299E-02
TI 48      7.383E-01 7.335E-01 7.335E-01 7.335E-01 7.335E-01 7.335E-01
TI 49      5.522E-02 6.005E-02 6.005E-02 6.005E-02 6.005E-02 6.005E-02
□
         OUTPUT UNIT =
6                        PAGE   19
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TI 50      5.426E-02 5.437E-02 5.437E-02 5.437E-02 5.437E-02 5.437E-02
 V 50      7.353E-03 6.878E-03 6.878E-03 6.878E-03 6.878E-03 6.878E-03
 V 51      2.993E+00 2.983E+00 2.983E+00 2.983E+00 2.983E+00 2.983E+00
CR 50      1.671E-01 1.649E-01 1.649E-01 1.649E-01 1.649E-01 1.649E-01
CR 51      0.000E+00 1.925E-04 1.923E-04 1.921E-04 1.901E-04 1.877E-04
CR 52      3.348E+00 3.355E+00 3.355E+00 3.355E+00 3.355E+00 3.355E+00
CR 53      3.869E-01 3.873E-01 3.873E-01 3.873E-01 3.873E-01 3.873E-01
CR 54      9.793E-02 1.040E-01 1.040E-01 1.040E-01 1.040E-01 1.040E-01
MN 54      0.000E+00 1.137E-04 1.137E-04 1.136E-04 1.135E-04 1.134E-04
MN 55      1.700E+00 1.675E+00 1.675E+00 1.675E+00 1.675E+00 1.675E+00
FE 54      1.010E+00 1.008E+00 1.008E+00 1.008E+00 1.008E+00 1.008E+00
FE 55      0.000E+00 1.897E-03 1.897E-03 1.897E-03 1.896E-03 1.896E-03
FE 56      1.654E+01 1.653E+01 1.653E+01 1.653E+01 1.653E+01 1.653E+01
FE 57      3.945E-01 4.319E-01 4.319E-01 4.319E-01 4.319E-01 4.319E-01
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FE 58      5.415E-02 5.729E-02 5.729E-02 5.729E-02 5.730E-02 5.730E-02
CO 58      0.000E+00 5.594E-04 5.592E-04 5.590E-04 5.567E-04 5.540E-04
CO 59      1.000E+00 9.258E-01 9.258E-01 9.258E-01 9.258E-01 9.258E-01
CO 60      0.000E+00 7.063E-02 7.063E-02 7.062E-02 7.061E-02 7.060E-02
NI 58      1.617E+01 1.611E+01 1.611E+01 1.611E+01 1.611E+01 1.611E+01
NI 59      0.000E+00 5.562E-02 5.562E-02 5.562E-02 5.562E-02 5.562E-02
NI 60      6.397E+00 6.391E+00 6.391E+00 6.391E+00 6.391E+00 6.391E+00
NI 61      2.816E-01 2.967E-01 2.967E-01 2.967E-01 2.967E-01 2.967E-01
NI 62      9.092E-01 8.990E-01 8.990E-01 8.990E-01 8.990E-01 8.990E-01
NI 63      0.000E+00 1.087E-02 1.087E-02 1.087E-02 1.087E-02 1.087E-02
NI 64      2.379E-01 2.397E-01 2.397E-01 2.397E-01 2.397E-01 2.397E-01
CU 63      6.853E-01 6.822E-01 6.822E-01 6.822E-01 6.822E-01 6.822E-01
CU 65      3.147E-01 3.227E-01 3.227E-01 3.227E-01 3.227E-01 3.227E-01
ZN 64      1.915E+01 1.913E+01 1.913E+01 1.913E+01 1.913E+01 1.913E+01
ZN 65      0.000E+00 1.002E-02 1.002E-02 1.002E-02 1.001E-02 9.992E-03
ZN 66      1.133E+01 1.133E+01 1.133E+01 1.133E+01 1.133E+01 1.133E+01
ZN 67      1.691E+00 1.683E+00 1.683E+00 1.683E+00 1.683E+00 1.683E+00
ZN 68      7.861E+00 7.866E+00 7.866E+00 7.866E+00 7.866E+00 7.866E+00
ZN 70      2.672E-01 2.671E-01 2.671E-01 2.671E-01 2.671E-01 2.671E-01
GA 69      0.000E+00 1.342E-02 1.343E-02 1.343E-02 1.343E-02 1.343E-02
GA 71      0.000E+00 2.068E-05 2.068E-05 2.068E-05 2.068E-05 2.068E-05
GE 70      0.000E+00 3.795E-05 3.795E-05 3.795E-05 3.795E-05 3.795E-05
ZR 92      0.000E+00 3.901E-05 3.902E-05 3.902E-05 3.904E-05 3.906E-05
MO 92      1.418E+00 1.418E+00 1.418E+00 1.418E+00 1.418E+00 1.418E+00
MO 93      0.000E+00 2.623E-04 2.623E-04 2.623E-04 2.623E-04 2.623E-04
MO 94      9.104E-01 9.099E-01 9.099E-01 9.099E-01 9.099E-01 9.099E-01
MO 95      1.573E+00 1.497E+00 1.497E+00 1.497E+00 1.497E+00 1.497E+00
MO 96      1.670E+00 1.732E+00 1.732E+00 1.732E+00 1.732E+00 1.732E+00
MO 97      9.697E-01 9.764E-01 9.764E-01 9.764E-01 9.764E-01 9.764E-01
MO 98      2.460E+00 2.429E+00 2.429E+00 2.429E+00 2.429E+00 2.429E+00
MO 99      0.000E+00 3.263E-04 3.229E-04 3.196E-04 2.877E-04 2.536E-04
MO100      9.997E-01 9.979E-01 9.979E-01 9.979E-01 9.979E-01 9.979E-01
TC 99      0.000E+00 4.544E-03 4.544E-03 4.544E-03 4.548E-03 4.553E-03
RU100      0.000E+00 2.609E-04 2.609E-04 2.609E-04 2.609E-04 2.609E-04
RU101      0.000E+00 1.860E-03 1.860E-03 1.860E-03 1.860E-03 1.860E-03
RU102      0.000E+00 3.470E-05 3.470E-05 3.470E-05 3.470E-05 3.470E-05
PD108      0.000E+00 7.757E-05 7.757E-05 7.757E-05 7.757E-05 7.757E-05
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         OUTPUT UNIT =
6                        PAGE   20
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC
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5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
PD110	0.000E+00	5.450E-05	5.450E-05	5.450E-05	5.450E-05	5.450E-05
AG107	5.137E-02	4.803E-02	4.803E-02	4.803E-02	4.803E-02	4.803E-02
AG108M	0.000E+00	2.126E-04	2.126E-04	2.126E-04	2.126E-04	2.126E-04
AG109	4.863E-02	2.989E-02	2.989E-02	2.989E-02	2.989E-02	2.989E-02
AG110M	0.000E+00	4.366E-04	4.365E-04	4.365E-04	4.360E-04	4.354E-04
CD106	3.062E-01	3.060E-01	3.060E-01	3.060E-01	3.060E-01	3.060E-01
CD108	2.136E-01	2.163E-01	2.163E-01	2.163E-01	2.163E-01	2.163E-01
CD109	0.000E+00	3.802E-04	3.802E-04	3.802E-04	3.799E-04	3.797E-04
CD110	3.055E+00	2.997E+00	2.997E+00	2.997E+00	2.997E+00	2.997E+00
CD111	3.157E+00	3.117E+00	3.117E+00	3.117E+00	3.117E+00	3.117E+00
CD112	6.000E+00	6.053E+00	6.053E+00	6.053E+00	6.053E+00	6.053E+00
CD113	3.063E+00	1.229E-03	1.229E-03	1.229E-03	1.229E-03	1.229E-03
CD114	7.270E+00	1.031E+01	1.031E+01	1.031E+01	1.031E+01	1.031E+01
CD115	0.000E+00	5.916E-04	5.840E-04	5.765E-04	5.064E-04	4.334E-04
CD115M	0.000E+00	8.777E-04	8.771E-04	8.766E-04	8.709E-04	8.642E-04
CD116	1.933E+00	1.931E+00	1.931E+00	1.931E+00	1.931E+00	1.931E+00
IN113	8.457E-02	7.361E-02	7.361E-02	7.361E-02	7.361E-02	7.361E-02
IN114M	0.000E+00	6.569E-04	6.565E-04	6.561E-04	6.523E-04	6.477E-04
IN115	1.915E+00	2.687E-01	2.687E-01	2.687E-01	2.687E-01	2.687E-01
IN116M	0.000E+00	2.603E-05	1.207E-05	5.601E-06	2.587E-09	2.571E-13
SN112	3.772E-02	3.740E-02	3.740E-02	3.740E-02	3.740E-02	3.740E-02
SN113	0.000E+00	7.240E-05	7.238E-05	7.236E-05	7.218E-05	7.196E-05
SN114	2.572E-02	3.583E-02	3.583E-02	3.583E-02	3.583E-02	3.584E-02
SN115	1.472E-02	1.412E-02	1.412E-02	1.412E-02	1.412E-02	1.412E-02
SN116	5.742E-01	2.229E+00	2.229E+00	2.229E+00	2.229E+00	2.229E+00
SN117	3.053E-01	3.177E-01	3.177E-01	3.177E-01	3.177E-01	3.177E-01
SN117M	0.000E+00	2.991E-04	2.985E-04	2.979E-04	2.918E-04	2.847E-04
SN118	9.656E-01	9.637E-01	9.637E-01	9.637E-01	9.637E-01	9.637E-01
SN119	3.446E-01	3.473E-01	3.473E-01	3.473E-01	3.473E-01	3.473E-01
SN119M	0.000E+00	1.050E-03	1.050E-03	1.050E-03	1.049E-03	1.047E-03
SN120	1.309E+00	1.309E+00	1.309E+00	1.309E+00	1.309E+00	1.309E+00
SN122	1.890E-01	1.889E-01	1.889E-01	1.889E-01	1.889E-01	1.889E-01
SN123	0.000E+00	3.347E-05	3.347E-05	3.346E-05	3.338E-05	3.329E-05
SN124	2.338E-01	2.327E-01	2.327E-01	2.327E-01	2.327E-01	2.327E-01
SN125	0.000E+00	1.975E-05	1.969E-05	1.963E-05	1.905E-05	1.838E-05
SB121	0.000E+00	9.173E-04	9.174E-04	9.175E-04	9.182E-04	9.189E-04
SB123	0.000E+00	5.906E-05	5.907E-05	5.908E-05	5.915E-05	5.924E-05
SB125	0.000E+00	9.433E-04	9.434E-04	9.434E-04	9.437E-04	9.441E-04
TE122	0.000E+00	3.049E-05	3.049E-05	3.050E-05	3.055E-05	3.060E-05
TE125	0.000E+00	1.544E-04	1.545E-04	1.545E-04	1.547E-04	1.551E-04
EU153	0.000E+00	2.456E-04	2.457E-04	2.457E-04	2.461E-04	2.466E-04
EU154	0.000E+00	4.435E-05	4.435E-05	4.435E-05	4.434E-05	4.434E-05

GD152	4.831E-03	4.172E-03	4.172E-03	4.172E-03	4.172E-03	4.172E-03
GD153	0.000E+00	3.535E-04	3.535E-04	3.534E-04	3.530E-04	3.525E-04
GD154	5.139E-02	4.443E-02	4.443E-02	4.443E-02	4.443E-02	4.443E-02
GD155	3.645E-01	2.962E-04	2.962E-04	2.962E-04	2.962E-04	2.962E-04
GD156	5.107E-01	8.442E-01	8.442E-01	8.442E-01	8.442E-01	8.442E-01
GD157	3.917E-01	4.304E-04	4.304E-04	4.304E-04	4.304E-04	4.304E-04
GD158	6.227E-01	1.035E+00	1.035E+00	1.035E+00	1.035E+00	1.035E+00
GD159	0.000E+00	5.527E-05	5.325E-05	5.130E-05	3.534E-05	2.260E-05
GD160	5.543E-01	5.517E-01	5.517E-01	5.517E-01	5.517E-01	5.517E-01

OUTPUT UNIT =
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ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
TB159	0.000E+00	2.073E-02	2.073E-02	2.074E-02	2.075E-02	2.076E-02
TB160	0.000E+00	5.852E-04	5.849E-04	5.847E-04	5.824E-04	5.796E-04
TB161	0.000E+00	6.289E-05	6.264E-05	6.238E-05	5.983E-05	5.691E-05
DY160	0.000E+00	9.771E-04	9.774E-04	9.776E-04	9.799E-04	9.827E-04
DY161	0.000E+00	2.022E-03	2.022E-03	2.022E-03	2.025E-03	2.028E-03
DY162	0.000E+00	6.313E-04	6.313E-04	6.313E-04	6.313E-04	6.313E-04
DY163	0.000E+00	1.811E-04	1.811E-04	1.811E-04	1.811E-04	1.811E-04
DY164	0.000E+00	1.924E-05	1.924E-05	1.924E-05	1.924E-05	1.924E-05
TA181	0.000E+00	8.870E-05	8.871E-05	8.872E-05	8.884E-05	8.898E-05
W180	2.545E-03	2.400E-03	2.400E-03	2.400E-03	2.400E-03	2.400E-03
W181	0.000E+00	4.919E-05	4.918E-05	4.917E-05	4.905E-05	4.891E-05
W182	5.206E-01	4.345E-01	4.345E-01	4.345E-01	4.345E-01	4.345E-01
W183	2.846E-01	3.385E-01	3.385E-01	3.385E-01	3.385E-01	3.385E-01
W184	6.137E-01	6.433E-01	6.433E-01	6.433E-01	6.433E-01	6.433E-01
W185	0.000E+00	7.501E-04	7.499E-04	7.496E-04	7.467E-04	7.432E-04
W186	5.785E-01	4.895E-01	4.895E-01	4.895E-01	4.895E-01	4.895E-01
W187	0.000E+00	2.510E-04	2.438E-04	2.369E-04	1.772E-04	1.251E-04
W188	0.000E+00	4.397E-05	4.395E-05	4.393E-05	4.375E-05	4.353E-05
RE185	0.000E+00	2.022E-03	2.022E-03	2.023E-03	2.025E-03	2.029E-03
RE187	0.000E+00	8.312E-02	8.313E-02	8.314E-02	8.320E-02	8.325E-02
RE188	0.000E+00	2.527E-05	2.466E-05	2.374E-05	1.594E-05	9.936E-06
OS186	0.000E+00	4.812E-04	4.813E-04	4.814E-04	4.823E-04	4.833E-04

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OS188      0.000E+00 6.088E-03 6.089E-03 6.090E-03 6.098E-03 6.104E-03
OS189      0.000E+00 8.189E-05 8.189E-05 8.189E-05 8.189E-05 8.189E-05
PB204      1.378E-02 1.377E-02 1.377E-02 1.377E-02 1.377E-02 1.377E-02
PB206      2.396E-01 2.344E-01 2.344E-01 2.344E-01 2.344E-01 2.344E-01
PB207      2.207E-01 2.258E-01 2.258E-01 2.258E-01 2.258E-01 2.258E-01
PB208      5.259E-01 5.261E-01 5.261E-01 5.261E-01 5.261E-01 5.261E-01
BI209      4.000E-01 4.000E-01 4.000E-01 4.000E-01 4.000E-01 4.000E-01
SUMTOT     1.348E+05 1.348E+05 1.348E+05 1.348E+05 1.348E+05 1.348E+05

TOTAL      1.348E+05 1.348E+05 1.348E+05 1.348E+05 1.348E+05 1.348E+05
□
         OUTPUT UNIT =
6                        PAGE   22
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         0.000E+00 2.066E-02 2.066E-02 2.066E-02 2.066E-02 2.066E-02
HE         0.000E+00 1.209E+00 1.209E+00 1.209E+00 1.209E+00 1.209E+00
LI         1.000E+00 1.090E+00 1.090E+00 1.090E+00 1.090E+00 1.090E+00
BE         0.000E+00 3.149E-04 3.149E-04 3.149E-04 3.149E-04 3.149E-04
 B         1.000E+00 8.288E-01 8.288E-01 8.288E-01 8.288E-01 8.288E-01
 C         8.940E+01 9.306E+01 9.306E+01 9.306E+01 9.306E+01 9.306E+01
 N         2.500E+01 2.495E+01 2.495E+01 2.495E+01 2.495E+01 2.495E+01
 O         1.345E+05 1.344E+05 1.344E+05 1.344E+05 1.344E+05 1.344E+05
 F         1.070E+01 1.070E+01 1.070E+01 1.070E+01 1.070E+01 1.070E+01
NE         0.000E+00 1.719E-04 1.719E-04 1.719E-04 1.719E-04 1.719E-04
NA         1.500E+01 1.499E+01 1.499E+01 1.499E+01 1.499E+01 1.499E+01
MG         2.000E+00 2.013E+00 2.013E+00 2.013E+00 2.013E+00 2.013E+00
AL         1.670E+01 1.670E+01 1.670E+01 1.670E+01 1.670E+01 1.670E+01
SI         1.210E+01 1.210E+01 1.210E+01 1.210E+01 1.210E+01 1.210E+01
 P         3.500E+01 3.499E+01 3.499E+01 3.499E+01 3.499E+01 3.499E+01
 S         0.000E+00 5.749E-03 5.750E-03 5.750E-03 5.753E-03 5.757E-03
CL         5.300E+00 5.303E+00 5.303E+00 5.303E+00 5.303E+00 5.303E+00
AR         0.000E+00 5.428E-04 5.429E-04 5.429E-04 5.428E-04 5.428E-04
 K         0.000E+00 2.525E-04 2.525E-04 2.525E-04 2.525E-04 2.525E-04
CA         2.000E+00 2.000E+00 2.000E+00 2.000E+00 2.000E+00 2.000E+00
SC         0.000E+00 2.398E-05 2.398E-05 2.398E-05 2.400E-05 2.403E-05
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TI	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
V	3.000E+00	2.990E+00	2.990E+00	2.990E+00	2.990E+00	2.990E+00
CR	4.000E+00	4.011E+00	4.011E+00	4.011E+00	4.011E+00	4.011E+00
MN	1.700E+00	1.675E+00	1.675E+00	1.675E+00	1.675E+00	1.675E+00
FE	1.800E+01	1.803E+01	1.803E+01	1.803E+01	1.803E+01	1.803E+01
CO	1.000E+00	9.969E-01	9.969E-01	9.969E-01	9.969E-01	9.969E-01
NI	2.400E+01	2.400E+01	2.400E+01	2.400E+01	2.400E+01	2.400E+01
CU	1.000E+00	1.005E+00	1.005E+00	1.005E+00	1.005E+00	1.005E+00
ZN	4.030E+01	4.028E+01	4.028E+01	4.028E+01	4.028E+01	4.028E+01
GA	0.000E+00	1.345E-02	1.345E-02	1.345E-02	1.345E-02	1.345E-02
GE	0.000E+00	3.808E-05	3.808E-05	3.808E-05	3.808E-05	3.808E-05
ZR	0.000E+00	4.553E-05	4.553E-05	4.554E-05	4.556E-05	4.558E-05
MO	1.000E+01	9.961E+00	9.961E+00	9.961E+00	9.961E+00	9.961E+00
TC	0.000E+00	4.544E-03	4.544E-03	4.544E-03	4.548E-03	4.553E-03
RU	0.000E+00	2.155E-03	2.155E-03	2.155E-03	2.155E-03	2.155E-03
PD	0.000E+00	1.323E-04	1.323E-04	1.323E-04	1.323E-04	1.323E-04
AG	1.000E-01	7.857E-02	7.857E-02	7.857E-02	7.857E-02	7.857E-02
CD	2.500E+01	2.494E+01	2.494E+01	2.494E+01	2.494E+01	2.494E+01
IN	2.000E+00	3.430E-01	3.430E-01	3.430E-01	3.430E-01	3.430E-01
SN	4.000E+00	5.677E+00	5.677E+00	5.677E+00	5.677E+00	5.677E+00
SB	0.000E+00	1.921E-03	1.921E-03	1.921E-03	1.922E-03	1.923E-03
TE	0.000E+00	2.016E-04	2.016E-04	2.017E-04	2.020E-04	2.024E-04
EU	0.000E+00	3.010E-04	3.011E-04	3.011E-04	3.015E-04	3.020E-04
GD	2.500E+00	2.481E+00	2.481E+00	2.481E+00	2.481E+00	2.481E+00
TB	0.000E+00	2.138E-02	2.138E-02	2.138E-02	2.139E-02	2.140E-02
DY	0.000E+00	3.830E-03	3.831E-03	3.831E-03	3.836E-03	3.842E-03
TA	0.000E+00	9.071E-05	9.072E-05	9.073E-05	9.084E-05	9.096E-05
W	2.000E+00	1.909E+00	1.909E+00	1.909E+00	1.909E+00	1.909E+00
RE	0.000E+00	8.518E-02	8.519E-02	8.520E-02	8.525E-02	8.530E-02
OS	0.000E+00	6.655E-03	6.657E-03	6.658E-03	6.667E-03	6.674E-03
PB	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
BI	4.000E-01	4.000E-01	4.000E-01	4.000E-01	4.000E-01	4.000E-01
SUMTOT	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05
TOTAL	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05

CUMULATIVE TABLE TOTALS

AP+FP	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05
ACT+FP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AP+ACT+FP	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05	1.348E+05

OUTPUT UNIT =
6 PAGE 23
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	0.000E+00	1.622E+02	1.622E+02	1.622E+02	1.622E+02	1.622E+02
H 4	0.000E+00	4.359E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HE 6	0.000E+00	2.833E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI 8	0.000E+00	1.841E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 8	0.000E+00	1.849E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 10	0.000E+00	3.987E-07	3.987E-07	3.987E-07	3.987E-07	3.987E-07
BE 11	0.000E+00	5.977E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B 12	0.000E+00	1.298E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 14	0.000E+00	2.276E-01	2.276E-01	2.276E-01	2.276E-01	2.276E-01
C 15	0.000E+00	2.870E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.798E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O 19	0.000E+00	3.331E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F 20	0.000E+00	3.160E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE 23	0.000E+00	1.494E+00	1.185E-29	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	2.214E+02	2.114E+02	2.019E+02	1.272E+02	7.304E+01
NA 24M	0.000E+00	9.140E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 25	0.000E+00	1.832E-02	1.202E-20	0.000E+00	0.000E+00	0.000E+00
MG 27	0.000E+00	2.267E+00	2.795E-02	3.448E-04	2.806E-23	0.000E+00
AL 28	0.000E+00	5.569E+01	4.828E-07	1.433E-09	1.029E-09	6.910E-10
AL 29	0.000E+00	6.083E-02	1.033E-04	1.749E-07	0.000E+00	0.000E+00
AL 30	0.000E+00	5.890E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SI 31	0.000E+00	3.966E+01	3.044E+01	2.337E+01	1.661E+00	6.959E-02
P 32	0.000E+00	6.878E+01	6.864E+01	6.850E+01	6.713E+01	6.552E+01
P 34	0.000E+00	4.850E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S 35	0.000E+00	2.112E+01	2.111E+01	2.111E+01	2.104E+01	2.096E+01
S 37	0.000E+00	9.723E-03	2.620E-06	7.059E-10	0.000E+00	0.000E+00
CL 36	0.000E+00	4.641E-03	4.641E-03	4.641E-03	4.641E-03	4.641E-03
CL 38	0.000E+00	5.670E+00	1.855E+00	6.067E-01	8.507E-06	1.277E-11
CL 38M	0.000E+00	6.778E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AR 37	0.000E+00	4.015E-01	4.012E-01	4.009E-01	3.976E-01	3.937E-01
AR 39	0.000E+00	2.790E-05	2.790E-05	2.790E-05	2.790E-05	2.790E-05
AR 41	0.000E+00	4.495E-05	3.076E-05	2.105E-05	4.736E-07	4.991E-09
K 42	0.000E+00	7.603E-03	7.188E-03	6.796E-03	3.879E-03	1.979E-03
K 43	0.000E+00	2.451E-04	2.377E-04	2.306E-04	1.697E-04	1.174E-04
K 44	0.000E+00	9.293E-05	1.403E-05	2.119E-06	1.307E-14	1.838E-24
CA 41	0.000E+00	7.133E-05	7.133E-05	7.133E-05	7.133E-05	7.133E-05
CA 45	0.000E+00	3.086E-01	3.085E-01	3.085E-01	3.079E-01	3.073E-01
CA 47	0.000E+00	4.112E-04	4.086E-04	4.060E-04	3.810E-04	3.529E-04

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CA 49      0.000E+00 3.489E-02 3.092E-04 2.740E-06 8.183E-27 0.000E+00
SC 46      0.000E+00 2.687E-02 2.686E-02 2.685E-02 2.676E-02 2.665E-02
SC 46M     0.000E+00 1.641E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SC 47      0.000E+00 3.861E-02 3.828E-02 3.796E-02 3.485E-02 3.146E-02
SC 48      0.000E+00 3.813E-03 3.753E-03 3.694E-03 3.153E-03 2.608E-03
SC 49      0.000E+00 3.804E-02 2.146E-02 1.044E-02 7.541E-06 1.282E-09
SC 50      0.000E+00 6.068E-05 1.623E-15 4.341E-26 0.000E+00 0.000E+00
TI 51      0.000E+00 7.649E-02 5.596E-05 4.094E-08 0.000E+00 0.000E+00
 V 50      1.315E-15 1.230E-15 1.230E-15 1.230E-15 1.230E-15 1.230E-15
 V 52      0.000E+00 9.912E+01 1.512E-03 2.307E-08 0.000E+00 0.000E+00
 V 53      0.000E+00 8.094E-04 4.894E-15 2.959E-26 0.000E+00 0.000E+00
 V 54      0.000E+00 8.606E-06 1.702E-25 0.000E+00 0.000E+00 0.000E+00
CR 51      0.000E+00 1.779E+01 1.777E+01 1.776E+01 1.757E+01 1.735E+01
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         OUTPUT UNIT =
6                        PAGE   24
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

CR 55      0.000E+00 2.903E-01 2.370E-06 1.936E-11 0.000E+00 0.000E+00
MN 54      0.000E+00 8.799E-01 8.798E-01 8.797E-01 8.789E-01 8.779E-01
MN 56      0.000E+00 1.861E+02 1.422E+02 1.087E+02 7.394E+00 2.938E-01
MN 57      0.000E+00 3.399E-03 2.055E-14 1.243E-25 0.000E+00 0.000E+00
MN 58      0.000E+00 1.103E-05 2.797E-22 0.000E+00 0.000E+00 0.000E+00
FE 55      0.000E+00 4.744E+00 4.744E+00 4.744E+00 4.742E+00 4.741E+00
FE 59      0.000E+00 4.862E-01 4.858E-01 4.855E-01 4.824E-01 4.787E-01
CO 58      0.000E+00 1.780E+01 1.779E+01 1.779E+01 1.771E+01 1.763E+01
CO 60      0.000E+00 7.989E+01 7.989E+01 7.989E+01 7.987E+01 7.986E+01
CO 60M     0.000E+00 1.614E+02 3.039E+00 5.724E-02 3.211E-19 0.000E+00
CO 61      0.000E+00 1.249E+00 8.206E-01 5.391E-01 8.078E-03 5.224E-05
CO 62      0.000E+00 2.451E-03 2.229E-15 2.028E-27 0.000E+00 0.000E+00
NI 59      0.000E+00 4.214E-03 4.214E-03 4.214E-03 4.214E-03 4.214E-03
NI 63      0.000E+00 6.705E-01 6.705E-01 6.705E-01 6.705E-01 6.705E-01
NI 65      0.000E+00 2.054E+00 1.560E+00 1.185E+00 7.569E-02 2.790E-03
NI 66      0.000E+00 1.346E-05 1.329E-05 1.312E-05 1.155E-05 9.922E-06
CU 64      0.000E+00 1.984E+01 1.879E+01 1.779E+01 1.031E+01 5.354E+00
CU 66      0.000E+00 4.405E+00 1.279E-03 1.351E-05 1.157E-05 9.938E-06
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CU 67      0.000E+00 5.404E-06 5.343E-06 5.284E-06 4.724E-06 4.129E-06
ZN 65      0.000E+00 8.258E+01 8.257E+01 8.256E+01 8.246E+01 8.234E+01
ZN 69      0.000E+00 7.827E+01 4.038E+01 2.198E+01 3.101E+00 1.687E+00
ZN 69M     0.000E+00 5.260E+00 5.001E+00 4.756E+00 2.874E+00 1.570E+00
ZN 71      0.000E+00 1.061E-01 4.715E-06 3.947E-06 6.735E-07 8.069E-08
ZN 71M     0.000E+00 1.113E-02 9.325E-03 7.814E-03 1.333E-03 1.597E-04
GA 70      0.000E+00 4.348E-01 6.057E-02 8.439E-03 2.324E-11 1.242E-21
GA 72      0.000E+00 1.426E-03 1.358E-03 1.292E-03 7.905E-04 4.383E-04
GA 72M     0.000E+00 4.406E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 71      0.000E+00 6.753E-04 6.737E-04 6.720E-04 6.558E-04 6.368E-04
GE 71M     0.000E+00 5.511E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 89M     0.000E+00 5.351E-04 5.304E-04 5.258E-04 4.813E-04 4.329E-04
 Y 90      0.000E+00 6.919E-07 6.845E-07 6.771E-07 6.076E-07 5.336E-07
ZR 89      0.000E+00 5.360E-04 5.313E-04 5.266E-04 4.821E-04 4.336E-04
ZR 95      0.000E+00 1.806E-03 1.805E-03 1.804E-03 1.796E-03 1.786E-03
ZR 97      0.000E+00 4.236E-05 4.066E-05 3.903E-05 2.590E-05 1.583E-05
NB 92      0.000E+00 1.067E-01 1.064E-01 1.061E-01 1.031E-01 9.965E-02
NB 94      0.000E+00 3.847E-07 3.847E-07 3.847E-07 3.847E-07 3.847E-07
NB 95      0.000E+00 4.458E-03 4.456E-03 4.454E-03 4.432E-03 4.406E-03
NB 95M     0.000E+00 1.276E-05 1.275E-05 1.275E-05 1.274E-05 1.272E-05
NB 96      0.000E+00 3.835E-03 3.723E-03 3.614E-03 2.685E-03 1.881E-03
NB 97      0.000E+00 1.505E-03 8.633E-04 5.022E-04 2.927E-05 1.594E-05
NB 97M     0.000E+00 4.009E-05 3.852E-05 3.697E-05 2.453E-05 1.499E-05
NB 98      0.000E+00 2.212E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100      0.000E+00 1.112E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO 93M     0.000E+00 3.099E-02 2.801E-02 2.531E-02 9.201E-03 2.732E-03
MO 93      0.000E+00 2.883E-04 2.883E-04 2.883E-04 2.883E-04 2.883E-04
MO 99      0.000E+00 1.566E+02 1.549E+02 1.533E+02 1.380E+02 1.217E+02
MO101      0.000E+00 7.509E+00 4.367E-01 2.540E-02 1.124E-14 1.681E-29
TC 99      0.000E+00 7.706E-05 7.707E-05 7.707E-05 7.714E-05 7.721E-05
TC100      0.000E+00 2.054E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC101      0.000E+00 7.509E+00 1.628E+00 1.584E-01 2.527E-13 5.097E-28
RU103      0.000E+00 3.204E-04 3.201E-04 3.199E-04 3.175E-04 3.147E-04
□
         OUTPUT UNIT =
6                        PAGE   25
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
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	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
RH104	0.000E+00	5.125E-05	2.181E-11	1.503E-15	0.000E+00	0.000E+00
RH106	0.000E+00	2.646E-05	9.481E-16	9.480E-16	9.473E-16	9.464E-16
PD109	0.000E+00	2.511E-02	2.385E-02	2.266E-02	1.354E-02	7.298E-03
PD109M	0.000E+00	3.726E-04	5.250E-08	7.396E-12	0.000E+00	0.000E+00
PD111	0.000E+00	7.225E-04	1.569E-04	6.586E-05	1.443E-05	3.180E-06
PD111M	0.000E+00	8.985E-05	7.921E-05	6.983E-05	1.980E-05	4.364E-06
AG106	0.000E+00	7.531E-04	7.506E-04	7.480E-04	7.230E-04	6.941E-04
AG108	0.000E+00	1.227E+01	4.937E-04	4.933E-04	4.933E-04	4.933E-04
AG108M	0.000E+00	5.543E-03	5.543E-03	5.543E-03	5.543E-03	5.543E-03
AG109M	0.000E+00	1.007E+00	1.006E+00	1.005E+00	9.949E-01	9.879E-01
AG110	0.000E+00	5.156E+01	2.759E-02	2.759E-02	2.756E-02	2.752E-02
AG110M	0.000E+00	2.075E+00	2.075E+00	2.074E+00	2.072E+00	2.069E+00
AG111	0.000E+00	2.206E-01	2.198E-01	2.189E-01	2.106E-01	2.010E-01
AG111M	0.000E+00	1.098E-01	1.874E-04	8.897E-05	2.067E-05	4.556E-06
AG112	0.000E+00	2.216E-04	1.776E-04	1.423E-04	1.554E-05	1.091E-06
CD107	0.000E+00	9.673E-01	8.693E-01	7.812E-01	2.685E-01	7.450E-02
CD109	0.000E+00	9.821E-01	9.820E-01	9.820E-01	9.813E-01	9.806E-01
CD111M	0.000E+00	1.893E+00	8.059E-01	3.431E-01	6.709E-05	2.377E-09
CD115	0.000E+00	3.016E+02	2.977E+02	2.939E+02	2.582E+02	2.210E+02
CD115M	0.000E+00	2.236E+01	2.234E+01	2.233E+01	2.218E+01	2.201E+01
CD117	0.000E+00	8.957E+00	6.861E+00	5.255E+00	3.654E-01	1.491E-02
CD117M	0.000E+00	2.658E-01	2.168E-01	1.768E-01	2.302E-02	1.994E-03
CD119	0.000E+00	6.915E-07	8.286E-09	9.928E-11	6.056E-30	0.000E+00
IN113M	0.000E+00	7.273E-01	7.272E-01	7.271E-01	7.254E-01	7.232E-01
IN114	0.000E+00	3.661E+01	1.454E+01	1.453E+01	1.445E+01	1.435E+01
IN114M	0.000E+00	1.520E+01	1.519E+01	1.518E+01	1.510E+01	1.499E+01
IN115	1.192E-11	1.672E-12	1.672E-12	1.672E-12	1.672E-12	1.672E-12
IN116	0.000E+00	1.070E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	7.794E+02	3.616E+02	1.677E+02	7.747E-02	7.701E-06
IN117	0.000E+00	4.746E+00	4.642E+00	4.339E+00	5.927E-01	3.135E-02
IN117M	0.000E+00	8.447E+00	8.120E+00	7.376E+00	1.024E+00	5.201E-02
IN118	0.000E+00	1.018E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	0.000E+00	6.520E-05	7.684E-09	8.146E-10	7.644E-20	6.948E-32
IN119M	0.000E+00	6.915E-07	1.345E-07	1.414E-08	1.316E-18	1.197E-30
SN113	0.000E+00	7.271E-01	7.269E-01	7.268E-01	7.249E-01	7.228E-01
SN113M	0.000E+00	3.421E-01	4.277E-02	5.346E-03	4.979E-12	7.245E-23
SN117M	0.000E+00	2.385E+01	2.380E+01	2.375E+01	2.327E+01	2.270E+01
SN119M	0.000E+00	4.705E+00	4.705E+00	4.704E+00	4.698E+00	4.692E+00
SN121	0.000E+00	3.155E+00	3.075E+00	2.996E+00	2.314E+00	1.696E+00
SN121M	0.000E+00	2.864E-04	2.864E-04	2.864E-04	2.864E-04	2.864E-04
SN123	0.000E+00	2.752E-01	2.752E-01	2.751E-01	2.745E-01	2.738E-01
SN123M	0.000E+00	1.013E-03	3.591E-04	1.272E-04	3.968E-09	1.553E-14
SN125	0.000E+00	2.141E+00	2.135E+00	2.128E+00	2.066E+00	1.993E+00
SN125M	0.000E+00	1.484E+00	1.880E-02	2.382E-04	2.538E-23	0.000E+00
SB122	0.000E+00	2.075E-01	2.053E-01	2.032E-01	1.825E-01	1.606E-01
SB122M	0.000E+00	1.621E-03	8.115E-08	4.063E-12	0.000E+00	0.000E+00

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SB124      0.000E+00 5.935E-03 5.932E-03 5.929E-03 5.901E-03 5.867E-03
SB124M     0.000E+00 2.040E-05 4.538E-17 1.009E-28 0.000E+00 0.000E+00
SB125      0.000E+00 9.744E-01 9.745E-01 9.745E-01 9.748E-01 9.752E-01
SB126      0.000E+00 2.674E-02 2.668E-02 2.662E-02 2.600E-02 2.529E-02
SB126M     0.000E+00 1.938E-03 2.171E-04 2.433E-05 7.584E-15 2.968E-26
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         OUTPUT UNIT =
6                        PAGE   26
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TE123M     0.000E+00 5.021E-04 5.019E-04 5.018E-04 5.006E-04 4.992E-04
TE125M     0.000E+00 1.897E-01 1.897E-01 1.897E-01 1.899E-01 1.901E-01
TE127      0.000E+00 8.870E-05 8.265E-05 7.703E-05 3.880E-05 1.830E-05
TE127M     0.000E+00 4.117E-06 4.116E-06 4.115E-06 4.104E-06 4.091E-06
 I128      0.000E+00 1.759E-06 3.330E-07 6.301E-08 3.714E-15 7.842E-24
SM153      0.000E+00 1.310E-06 1.291E-06 1.272E-06 1.096E-06 9.173E-07
EU154      0.000E+00 1.198E-02 1.198E-02 1.198E-02 1.197E-02 1.197E-02
EU155      0.000E+00 4.448E-03 4.448E-03 4.448E-03 4.447E-03 4.447E-03
EU156      0.000E+00 8.232E-02 8.216E-02 8.201E-02 8.046E-02 7.865E-02
GD152      1.053E-13 9.091E-14 9.091E-14 9.091E-14 9.091E-14 9.091E-14
GD153      0.000E+00 1.247E+00 1.247E+00 1.247E+00 1.245E+00 1.244E+00
GD155M     0.000E+00 8.097E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD159      0.000E+00 5.860E+01 5.645E+01 5.439E+01 3.747E+01 2.396E+01
GD161      0.000E+00 6.331E+00 8.319E-05 1.093E-09 0.000E+00 0.000E+00
GD162      0.000E+00 1.294E-03 2.022E-05 3.159E-07 2.740E-25 0.000E+00
TB160      0.000E+00 6.608E+00 6.605E+00 6.602E+00 6.576E+00 6.545E+00
TB161      0.000E+00 7.373E+00 7.345E+00 7.314E+00 7.015E+00 6.673E+00
TB162      0.000E+00 1.268E-03 6.401E-05 1.169E-06 1.061E-24 0.000E+00
DY165      0.000E+00 9.361E-02 7.009E-02 5.219E-02 2.733E-03 7.933E-05
DY165M     0.000E+00 5.985E-02 2.493E-16 1.038E-30 0.000E+00 0.000E+00
DY166      0.000E+00 2.517E-04 2.495E-04 2.474E-04 2.273E-04 2.052E-04
HO166      0.000E+00 4.978E-03 4.858E-03 4.740E-03 3.714E-03 2.780E-03
ER167M     0.000E+00 2.054E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TA182      0.000E+00 1.147E-02 1.146E-02 1.146E-02 1.143E-02 1.140E-02
TA182M     0.000E+00 2.063E-05 1.659E-06 1.334E-07 1.509E-18 1.104E-31
TA183      0.000E+00 2.477E-02 2.463E-02 2.449E-02 2.314E-02 2.162E-02
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 W181       0.000E+00 2.930E-01 2.929E-01 2.928E-01 2.921E-01 2.913E-01
 W183M      0.000E+00 3.974E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 W185       0.000E+00 7.053E+00 7.050E+00 7.048E+00 7.021E+00 6.988E+00
 W185M      0.000E+00 8.034E-03 1.229E-13 1.879E-24 0.000E+00 0.000E+00
 W187       0.000E+00 1.761E+02 1.711E+02 1.662E+02 1.243E+02 8.779E+01
 W188       0.000E+00 4.402E-01 4.400E-01 4.398E-01 4.380E-01 4.358E-01
RE186       0.000E+00 2.486E+00 2.467E+00 2.448E+00 2.268E+00 2.069E+00
RE188       0.000E+00 2.482E+01 2.422E+01 2.331E+01 1.565E+01 9.758E+00
RE188M      0.000E+00 2.386E+01 2.581E+00 2.792E-01 6.125E-11 1.573E-22
RE189       0.000E+00 9.012E-05 8.759E-05 8.513E-05 6.400E-05 4.545E-05
OS191       0.000E+00 1.763E-04 1.762E-04 1.760E-04 1.744E-04 1.716E-04
OS191M      0.000E+00 1.234E-04 1.170E-04 1.109E-04 6.506E-05 3.431E-05
IR192       0.000E+00 1.849E-05 1.848E-05 1.847E-05 1.840E-05 1.832E-05
IR194       0.000E+00 2.677E-07 2.582E-07 2.490E-07 1.734E-07 1.123E-07
PB204       1.726E-16 1.724E-16 1.724E-16 1.724E-16 1.724E-16 1.724E-16
PB209       0.000E+00 4.249E-04 3.444E-04 2.792E-04 3.417E-05 2.748E-06
BI210       0.000E+00 3.391E-02 3.372E-02 3.353E-02 3.165E-02 2.953E-02
PO210       0.000E+00 2.966E-02 2.966E-02 2.966E-02 2.967E-02 2.967E-02
SUMTOT      1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03

TOTAL       1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03
□
         OUTPUT UNIT =
6                        PAGE   27
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         0.000E+00 1.666E+02 1.622E+02 1.622E+02 1.622E+02 1.622E+02
HE         0.000E+00 2.833E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LI         0.000E+00 1.841E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE         0.000E+00 1.849E+00 3.987E-07 3.987E-07 3.987E-07 3.987E-07
 B         0.000E+00 1.298E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C         0.000E+00 2.893E+01 2.276E-01 2.276E-01 2.276E-01 2.276E-01
 N         0.000E+00 1.798E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 O         0.000E+00 3.331E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 F         0.000E+00 3.160E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NE         0.000E+00 1.494E+00 1.185E-29 0.000E+00 0.000E+00 0.000E+00
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NA	0.000E+00	3.128E+02	2.114E+02	2.019E+02	1.272E+02	7.304E+01
MG	0.000E+00	2.267E+00	2.795E-02	3.448E-04	1.027E-09	6.898E-10
AL	0.000E+00	5.575E+01	1.037E-04	1.763E-07	1.029E-09	6.910E-10
SI	0.000E+00	3.966E+01	3.044E+01	2.337E+01	1.661E+00	6.959E-02
P	0.000E+00	6.882E+01	6.864E+01	6.850E+01	6.713E+01	6.552E+01
S	0.000E+00	2.113E+01	2.111E+01	2.111E+01	2.104E+01	2.096E+01
CL	0.000E+00	5.742E+00	1.859E+00	6.113E-01	4.650E-03	4.641E-03
AR	0.000E+00	4.016E-01	4.013E-01	4.009E-01	3.976E-01	3.937E-01
K	0.000E+00	7.941E-03	7.440E-03	7.029E-03	4.049E-03	2.097E-03
CA	0.000E+00	3.439E-01	3.093E-01	3.089E-01	3.084E-01	3.077E-01
SC	0.000E+00	1.090E-01	9.035E-02	7.894E-02	6.477E-02	6.072E-02
TI	0.000E+00	7.649E-02	5.596E-05	4.094E-08	0.000E+00	0.000E+00
V	1.315E-15	9.912E+01	1.512E-03	2.307E-08	1.230E-15	1.230E-15
CR	0.000E+00	1.808E+01	1.777E+01	1.776E+01	1.757E+01	1.735E+01
MN	0.000E+00	1.870E+02	1.431E+02	1.096E+02	8.273E+00	1.172E+00
FE	0.000E+00	5.230E+00	5.230E+00	5.229E+00	5.225E+00	5.219E+00
CO	0.000E+00	2.603E+02	1.015E+02	9.827E+01	9.760E+01	9.749E+01
NI	0.000E+00	2.728E+00	2.234E+00	1.859E+00	7.504E-01	6.775E-01
CU	0.000E+00	2.425E+01	1.879E+01	1.779E+01	1.031E+01	5.354E+00
ZN	0.000E+00	1.662E+02	1.280E+02	1.093E+02	8.844E+01	8.560E+01
GA	0.000E+00	4.363E-01	6.193E-02	9.731E-03	7.905E-04	4.383E-04
GE	0.000E+00	7.304E-04	6.737E-04	6.720E-04	6.558E-04	6.368E-04
Y	0.000E+00	5.360E-04	5.313E-04	5.266E-04	4.819E-04	4.334E-04
ZR	0.000E+00	2.384E-03	2.377E-03	2.370E-03	2.304E-03	2.235E-03
NB	0.000E+00	1.168E-01	1.155E-01	1.147E-01	1.103E-01	1.060E-01
MO	0.000E+00	1.641E+02	1.554E+02	1.534E+02	1.381E+02	1.217E+02
TC	0.000E+00	9.563E+00	1.628E+00	1.585E-01	7.714E-05	7.721E-05
RU	0.000E+00	3.204E-04	3.201E-04	3.199E-04	3.175E-04	3.147E-04
RH	0.000E+00	7.798E-05	2.351E-09	2.231E-09	1.699E-09	1.317E-09
PD	0.000E+00	2.630E-02	2.409E-02	2.279E-02	1.357E-02	7.306E-03
AG	0.000E+00	6.724E+01	3.335E+00	3.332E+00	3.312E+00	3.292E+00
CD	0.000E+00	3.371E+02	3.298E+02	3.238E+02	2.820E+02	2.441E+02
IN	1.192E-11	1.915E+03	4.048E+02	2.099E+02	3.196E+01	3.014E+01
SN	0.000E+00	3.668E+01	3.478E+01	3.459E+01	3.334E+01	3.207E+01
SB	0.000E+00	1.218E+00	1.213E+00	1.210E+00	1.189E+00	1.167E+00
TE	0.000E+00	1.903E-01	1.903E-01	1.903E-01	1.904E-01	1.906E-01
I	0.000E+00	1.759E-06	3.330E-07	6.301E-08	2.609E-13	1.313E-13
PM	0.000E+00	3.007E-07	2.513E-07	2.130E-07	8.052E-08	5.363E-08
SM	0.000E+00	1.406E-06	1.306E-06	1.274E-06	1.096E-06	9.175E-07
EU	0.000E+00	9.874E-02	9.859E-02	9.843E-02	9.688E-02	9.507E-02
GD	1.053E-13	6.618E+01	5.770E+01	5.563E+01	3.871E+01	2.520E+01
TB	0.000E+00	1.398E+01	1.395E+01	1.392E+01	1.359E+01	1.322E+01
DY	0.000E+00	1.537E-01	7.034E-02	5.243E-02	2.960E-03	2.845E-04
HO	0.000E+00	4.978E-03	4.858E-03	4.740E-03	3.714E-03	2.780E-03
ER	0.000E+00	2.055E-05	1.290E-08	1.286E-08	1.247E-08	1.202E-08
TA	0.000E+00	3.626E-02	3.610E-02	3.595E-02	3.457E-02	3.302E-02
W	0.000E+00	1.843E+02	1.788E+02	1.739E+02	1.321E+02	9.551E+01
RE	0.000E+00	5.116E+01	2.927E+01	2.604E+01	1.792E+01	1.183E+01

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OS          0.000E+00 3.001E-04 2.931E-04 2.869E-04 2.394E-04 2.059E-04
IR          0.000E+00 1.877E-05 1.874E-05 1.872E-05 1.857E-05 1.843E-05
PB          1.726E-16 4.249E-04 3.444E-04 2.792E-04 3.417E-05 2.749E-06
BI          0.000E+00 3.391E-02 3.372E-02 3.353E-02 3.165E-02 2.953E-02
PO          0.000E+00 2.966E-02 2.966E-02 2.966E-02 2.967E-02 2.967E-02
SUMTOT      1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03

TOTAL       1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03

                                          CUMULATIVE TABLE TOTALS

AP+FP       1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03
ACT+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP   1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03
□
         OUTPUT UNIT =
6                        PAGE   28
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
            FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3       0.000E+00 5.463E-03 5.463E-03 5.463E-03 5.462E-03 5.462E-03
HE  6       0.000E+00 2.633E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LI  8       0.000E+00 6.865E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE  8       0.000E+00 1.041E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE 11       0.000E+00 4.078E-08 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 B 12       0.000E+00 1.029E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C 14       0.000E+00 6.675E-05 6.675E-05 6.675E-05 6.675E-05 6.675E-05
 C 15       0.000E+00 4.884E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16       0.000E+00 7.790E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 O 19       0.000E+00 9.515E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 F 20       0.000E+00 1.317E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NE 23       0.000E+00 1.831E-02 1.452E-31 0.000E+00 0.000E+00 0.000E+00
NA 24       0.000E+00 6.136E+00 5.859E+00 5.594E+00 3.524E+00 2.024E+00
NA 24M      0.000E+00 2.557E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 25       0.000E+00 2.103E-04 1.380E-22 0.000E+00 0.000E+00 0.000E+00
MG 27       0.000E+00 2.140E-02 2.640E-04 3.256E-06 2.650E-25 0.000E+00
AL 28       0.000E+00 9.989E-01 8.661E-09 2.570E-11 1.845E-11 1.239E-11
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AL 29      0.000E+00 8.477E-04 1.439E-06 2.437E-09 0.000E+00 0.000E+00
AL 30      0.000E+00 1.998E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SI 31      0.000E+00 1.402E-01 1.076E-01 8.263E-02 5.874E-03 2.460E-04
 P 32      0.000E+00 6.971E-01 6.957E-01 6.943E-01 6.804E-01 6.641E-01
 P 34      0.000E+00 1.466E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 S 35      0.000E+00 2.096E-02 2.095E-02 2.094E-02 2.088E-02 2.079E-02
 S 37      0.000E+00 2.766E-04 7.454E-08 2.009E-11 0.000E+00 0.000E+00
CL 36      0.000E+00 6.845E-06 6.845E-06 6.845E-06 6.845E-06 6.845E-06
CL 38      0.000E+00 1.014E-01 3.316E-02 1.085E-02 1.521E-07 2.282E-13
CL 38M     0.000E+00 2.697E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AR 37      0.000E+00 4.998E-06 4.994E-06 4.990E-06 4.949E-06 4.900E-06
AR 39      0.000E+00 9.345E-08 9.345E-08 9.345E-08 9.345E-08 9.345E-08
AR 41      0.000E+00 4.657E-07 3.187E-07 2.181E-07 4.907E-09 5.171E-11
 K 42      0.000E+00 7.688E-05 7.269E-05 6.873E-05 3.923E-05 2.002E-05
 K 43      0.000E+00 1.859E-06 1.802E-06 1.748E-06 1.286E-06 8.902E-07
 K 44      0.000E+00 2.865E-06 4.326E-07 6.532E-08 4.029E-16 5.666E-26
CA 41      0.000E+00 1.142E-09 1.142E-09 1.142E-09 1.142E-09 1.142E-09
CA 45      0.000E+00 1.412E-04 1.412E-04 1.412E-04 1.409E-04 1.406E-04
CA 47      0.000E+00 3.432E-06 3.410E-06 3.389E-06 3.180E-06 2.946E-06
CA 49      0.000E+00 1.088E-03 9.640E-06 8.542E-08 2.552E-28 0.000E+00
SC 46      0.000E+00 3.380E-04 3.379E-04 3.378E-04 3.366E-04 3.352E-04
SC 46M     0.000E+00 1.335E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SC 47      0.000E+00 6.197E-05 6.145E-05 6.093E-05 5.595E-05 5.051E-05
SC 48      0.000E+00 8.064E-05 7.937E-05 7.813E-05 6.669E-05 5.516E-05
SC 49      0.000E+00 4.528E-04 2.554E-04 1.242E-04 8.975E-08 1.526E-11
SC 50      0.000E+00 1.736E-06 4.644E-17 1.242E-27 0.000E+00 0.000E+00
TI 51      0.000E+00 5.599E-04 4.096E-07 2.997E-10 0.000E+00 0.000E+00
 V 50      1.450E-17 1.356E-17 1.356E-17 1.356E-17 1.356E-17 1.356E-17
 V 52      0.000E+00 1.477E+00 2.253E-05 3.438E-10 0.000E+00 0.000E+00
 V 53      0.000E+00 9.773E-06 5.909E-17 3.573E-28 0.000E+00 0.000E+00
 V 54      0.000E+00 3.724E-07 7.366E-27 0.000E+00 0.000E+00 0.000E+00
CR 51      0.000E+00 3.818E-03 3.814E-03 3.810E-03 3.771E-03 3.724E-03
CR 55      0.000E+00 1.895E-03 1.546E-08 1.263E-13 0.000E+00 0.000E+00
MN 54      0.000E+00 4.380E-03 4.380E-03 4.379E-03 4.375E-03 4.370E-03
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OUTPUT UNIT =
6 PAGE 29
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP

, 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
MN 56	0.000E+00	2.781E+00	2.126E+00	1.625E+00	1.105E-01	4.390E-03
MN 57	0.000E+00	2.359E-05	1.427E-16	8.625E-28	0.000E+00	0.000E+00
MN 58	0.000E+00	2.612E-07	6.625E-24	0.000E+00	0.000E+00	0.000E+00
FE 55	0.000E+00	1.603E-04	1.603E-04	1.603E-04	1.602E-04	1.602E-04
FE 59	0.000E+00	3.764E-03	3.761E-03	3.759E-03	3.735E-03	3.706E-03
CO 58	0.000E+00	1.065E-01	1.064E-01	1.064E-01	1.060E-01	1.054E-01
CO 60	0.000E+00	1.232E+00	1.232E+00	1.232E+00	1.231E+00	1.231E+00
CO 60M	0.000E+00	6.030E-02	1.136E-03	2.139E-05	1.200E-22	0.000E+00
CO 61	0.000E+00	4.043E-03	2.656E-03	1.745E-03	2.614E-05	1.691E-07
CO 62	0.000E+00	4.650E-05	4.229E-17	3.846E-29	0.000E+00	0.000E+00
NI 59	0.000E+00	1.674E-07	1.674E-07	1.674E-07	1.674E-07	1.674E-07
NI 63	0.000E+00	6.757E-05	6.757E-05	6.757E-05	6.757E-05	6.757E-05
NI 65	0.000E+00	1.438E-02	1.092E-02	8.293E-03	5.299E-04	1.953E-05
NI 66	0.000E+00	5.344E-09	5.277E-09	5.210E-09	4.589E-09	3.941E-09
CU 64	0.000E+00	3.681E-02	3.486E-02	3.300E-02	1.912E-02	9.934E-03
CU 66	0.000E+00	3.016E-02	8.759E-06	9.247E-08	7.923E-08	6.804E-08
CU 67	0.000E+00	8.677E-09	8.580E-09	8.485E-09	7.585E-09	6.631E-09
ZN 65	0.000E+00	2.890E-01	2.890E-01	2.889E-01	2.886E-01	2.882E-01
ZN 69	0.000E+00	1.489E-01	7.681E-02	4.182E-02	5.898E-03	3.208E-03
ZN 69M	0.000E+00	1.368E-02	1.301E-02	1.237E-02	7.475E-03	4.084E-03
ZN 71	0.000E+00	1.766E-03	7.842E-08	6.565E-08	1.120E-08	1.342E-09
ZN 71M	0.000E+00	1.955E-04	1.638E-04	1.372E-04	2.342E-05	2.805E-06
GA 70	0.000E+00	1.683E-03	2.345E-04	3.267E-05	8.996E-14	4.808E-24
GA 72	0.000E+00	2.711E-05	2.581E-05	2.457E-05	1.503E-05	8.331E-06
GA 72M	0.000E+00	3.134E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 71	0.000E+00	3.603E-08	3.594E-08	3.585E-08	3.498E-08	3.397E-08
GE 71M	0.000E+00	6.403E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 89M	0.000E+00	2.908E-06	2.883E-06	2.857E-06	2.616E-06	2.353E-06
Y 90	0.000E+00	3.835E-09	3.794E-09	3.753E-09	3.368E-09	2.957E-09
ZR 89	0.000E+00	4.009E-06	3.974E-06	3.939E-06	3.606E-06	3.243E-06
ZR 95	0.000E+00	9.145E-06	9.141E-06	9.137E-06	9.096E-06	9.047E-06
ZR 97	0.000E+00	2.208E-07	2.119E-07	2.034E-07	1.349E-07	8.249E-08
NB 92	0.000E+00	9.550E-04	9.523E-04	9.495E-04	9.229E-04	8.920E-04
NB 94	0.000E+00	3.920E-09	3.920E-09	3.920E-09	3.920E-09	3.920E-09
NB 95	0.000E+00	2.139E-05	2.137E-05	2.136E-05	2.126E-05	2.114E-05
NB 95M	0.000E+00	1.772E-08	1.772E-08	1.772E-08	1.770E-08	1.768E-08
NB 96	0.000E+00	6.376E-05	6.189E-05	6.008E-05	4.465E-05	3.127E-05
NB 97	0.000E+00	1.002E-05	5.746E-06	3.343E-06	1.948E-07	1.061E-07
NB 97M	0.000E+00	1.765E-07	1.696E-07	1.627E-07	1.080E-07	6.601E-08
NB 98	0.000E+00	2.730E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	0.000E+00	2.624E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 93M	0.000E+00	4.335E-04	3.918E-04	3.541E-04	1.287E-04	3.822E-05
MO 93	0.000E+00	2.700E-08	2.700E-08	2.700E-08	2.700E-08	2.700E-08
MO 99	0.000E+00	5.029E-01	4.976E-01	4.924E-01	4.433E-01	3.908E-01
MO101	0.000E+00	8.578E-02	4.988E-03	2.901E-04	1.283E-16	1.920E-31

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TC 99       0.000E+00 3.864E-08 3.865E-08 3.865E-08 3.868E-08 3.872E-08
TC100       0.000E+00 1.808E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC101       0.000E+00 3.604E-02 7.814E-03 7.602E-04 1.213E-15 2.446E-30
RU103       0.000E+00 1.072E-06 1.071E-06 1.070E-06 1.062E-06 1.053E-06
RH104       0.000E+00 3.030E-07 1.289E-13 8.884E-18 0.000E+00 0.000E+00
RH106       0.000E+00 2.538E-07 9.093E-18 9.093E-18 9.085E-18 9.077E-18
□
         OUTPUT UNIT =
6                          PAGE   30
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

PD109      0.000E+00 6.678E-05 6.343E-05 6.025E-05 3.600E-05 1.941E-05
PD109M     0.000E+00 4.152E-07 5.850E-11 8.242E-15 0.000E+00 0.000E+00
PD111      0.000E+00 3.842E-06 8.344E-07 3.502E-07 7.671E-08 1.691E-08
PD111M     0.000E+00 3.132E-07 2.761E-07 2.434E-07 6.902E-08 1.521E-08
AG106      0.000E+00 5.442E-06 5.423E-06 5.405E-06 5.224E-06 5.016E-06
AG108      0.000E+00 4.567E-02 1.838E-06 1.837E-06 1.837E-06 1.837E-06
AG108M     0.000E+00 5.369E-05 5.369E-05 5.369E-05 5.369E-05 5.369E-05
AG109M     0.000E+00 5.192E-04 5.185E-04 5.179E-04 5.128E-04 5.092E-04
AG110      0.000E+00 3.704E-01 1.982E-04 1.982E-04 1.980E-04 1.977E-04
AG110M     0.000E+00 3.465E-02 3.464E-02 3.464E-02 3.460E-02 3.455E-02
AG111      0.000E+00 4.942E-04 4.924E-04 4.904E-04 4.718E-04 4.504E-04
AG111M     0.000E+00 4.231E-05 7.222E-08 3.428E-08 7.964E-09 1.755E-09
AG112      0.000E+00 2.749E-06 2.203E-06 1.765E-06 1.929E-07 1.353E-08
CD107      0.000E+00 6.921E-04 6.220E-04 5.590E-04 1.921E-04 5.330E-05
CD109      0.000E+00 1.141E-04 1.141E-04 1.141E-04 1.140E-04 1.139E-04
CD111M     0.000E+00 4.444E-03 1.892E-03 8.054E-04 1.575E-07 5.580E-12
CD115      0.000E+00 9.574E-01 9.451E-01 9.329E-01 8.195E-01 7.015E-01
CD115M     0.000E+00 8.339E-02 8.333E-02 8.328E-02 8.274E-02 8.210E-02
CD117      0.000E+00 6.451E-02 4.941E-02 3.785E-02 2.632E-03 1.074E-04
CD117M     0.000E+00 2.160E-03 1.762E-03 1.437E-03 1.871E-04 1.620E-05
CD119      0.000E+00 7.583E-09 9.087E-11 1.089E-12 6.641E-32 0.000E+00
IN113M     0.000E+00 1.694E-03 1.694E-03 1.694E-03 1.690E-03 1.685E-03
IN114      0.000E+00 1.744E-01 6.925E-02 6.921E-02 6.881E-02 6.833E-02
IN114M     0.000E+00 2.157E-02 2.156E-02 2.155E-02 2.142E-02 2.127E-02
IN115      1.710E-14 2.399E-15 2.399E-15 2.399E-15 2.399E-15 2.399E-15
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IN116       0.000E+00 8.765E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M      0.000E+00 1.283E+01 5.952E+00 2.761E+00 1.275E-03 1.268E-07
IN117       0.000E+00 2.138E-02 2.091E-02 1.955E-02 2.670E-03 1.412E-04
IN117M      0.000E+00 3.190E-02 3.066E-02 2.785E-02 3.866E-03 1.964E-04
IN118       0.000E+00 1.229E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN119       0.000E+00 5.214E-07 6.144E-11 6.514E-12 6.112E-22 5.556E-34
IN119M      0.000E+00 5.841E-09 1.136E-09 1.194E-10 1.112E-20 1.011E-32
SN113       0.000E+00 1.211E-04 1.211E-04 1.211E-04 1.208E-04 1.204E-04
SN113M      0.000E+00 1.608E-04 2.010E-05 2.513E-06 2.340E-15 3.406E-26
SN117M      0.000E+00 4.423E-02 4.414E-02 4.405E-02 4.315E-02 4.210E-02
SN119M      0.000E+00 2.432E-03 2.432E-03 2.431E-03 2.429E-03 2.425E-03
SN121       0.000E+00 3.816E-03 3.718E-03 3.623E-03 2.798E-03 2.051E-03
SN121M      0.000E+00 5.739E-07 5.739E-07 5.739E-07 5.739E-07 5.739E-07
SN123       0.000E+00 8.596E-04 8.594E-04 8.592E-04 8.573E-04 8.550E-04
SN123M      0.000E+00 3.693E-06 1.309E-06 4.637E-07 1.446E-11 5.661E-17
SN125       0.000E+00 1.419E-02 1.415E-02 1.411E-02 1.369E-02 1.321E-02
SN125M      0.000E+00 9.985E-03 1.265E-04 1.603E-06 1.708E-25 0.000E+00
SB122       0.000E+00 1.238E-03 1.224E-03 1.211E-03 1.089E-03 9.575E-04
SB122M      0.000E+00 1.557E-06 7.793E-11 3.902E-15 0.000E+00 0.000E+00
SB124       0.000E+00 7.880E-05 7.876E-05 7.872E-05 7.835E-05 7.790E-05
SB124M      0.000E+00 5.245E-08 1.167E-19 2.595E-31 0.000E+00 0.000E+00
SB125       0.000E+00 3.046E-03 3.046E-03 3.047E-03 3.048E-03 3.049E-03
SB126       0.000E+00 4.941E-04 4.929E-04 4.918E-04 4.805E-04 4.672E-04
SB126M      0.000E+00 2.468E-05 2.765E-06 3.098E-07 9.656E-17 3.779E-28
TE123M      0.000E+00 7.312E-07 7.311E-07 7.309E-07 7.291E-07 7.270E-07
TE125M      0.000E+00 1.594E-04 1.594E-04 1.594E-04 1.596E-04 1.598E-04
□
         OUTPUT UNIT =
6                        PAGE   31
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TE127       0.000E+00 1.198E-07 1.116E-07 1.040E-07 5.240E-08 2.471E-08
TE127M      0.000E+00 2.214E-09 2.214E-09 2.213E-09 2.207E-09 2.200E-09
 I128       0.000E+00 8.727E-09 1.652E-09 3.126E-10 1.842E-17 3.890E-26
PM150       0.000E+00 2.769E-09 2.138E-09 1.651E-09 1.243E-10 5.578E-12
SM153       0.000E+00 2.570E-09 2.532E-09 2.495E-09 2.151E-09 1.800E-09
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EU152	0.000E+00	8.362E-10	8.362E-10	8.362E-10	8.361E-10	8.361E-10
EU154	0.000E+00	1.071E-04	1.071E-04	1.071E-04	1.071E-04	1.071E-04
EU155	0.000E+00	3.235E-06	3.235E-06	3.235E-06	3.235E-06	3.234E-06
EU156	0.000E+00	8.495E-04	8.479E-04	8.463E-04	8.304E-04	8.116E-04
GD152	1.371E-15	1.184E-15	1.184E-15	1.184E-15	1.184E-15	1.184E-15
GD153	0.000E+00	1.127E-03	1.127E-03	1.126E-03	1.125E-03	1.123E-03
GD155M	0.000E+00	5.832E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	0.000E+00	1.910E-01	1.840E-01	1.773E-01	1.222E-01	7.811E-02
GD161	0.000E+00	4.593E-02	6.036E-07	7.928E-12	0.000E+00	0.000E+00
GD162	0.000E+00	4.701E-06	7.346E-08	1.148E-09	9.956E-28	0.000E+00
TB160	0.000E+00	5.382E-02	5.380E-02	5.377E-02	5.356E-02	5.330E-02
TB161	0.000E+00	1.477E-02	1.472E-02	1.465E-02	1.406E-02	1.337E-02
TB162	0.000E+00	1.264E-05	6.382E-07	1.165E-08	1.058E-26	0.000E+00
DY165	0.000E+00	4.334E-04	3.245E-04	2.416E-04	1.265E-05	3.672E-07
DY165M	0.000E+00	4.470E-05	1.862E-19	7.754E-34	0.000E+00	0.000E+00
DY166	0.000E+00	2.939E-07	2.914E-07	2.889E-07	2.654E-07	2.396E-07
HO166	0.000E+00	2.134E-05	2.082E-05	2.032E-05	1.592E-05	1.192E-05
ER167M	0.000E+00	2.532E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TA182	0.000E+00	1.021E-04	1.021E-04	1.020E-04	1.018E-04	1.015E-04
TA182M	0.000E+00	6.153E-08	4.948E-09	3.979E-10	4.500E-21	3.291E-34
TA183	0.000E+00	1.571E-04	1.562E-04	1.553E-04	1.468E-04	1.371E-04
W181	0.000E+00	8.388E-05	8.386E-05	8.384E-05	8.364E-05	8.341E-05
W183M	0.000E+00	6.125E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W185	0.000E+00	5.310E-03	5.308E-03	5.306E-03	5.285E-03	5.261E-03
W185M	0.000E+00	9.381E-06	1.435E-16	2.195E-27	0.000E+00	0.000E+00
W187	0.000E+00	7.986E-01	7.758E-01	7.536E-01	5.639E-01	3.982E-01
W188	0.000E+00	2.633E-04	2.632E-04	2.631E-04	2.620E-04	2.607E-04
RE186	0.000E+00	5.314E-03	5.274E-03	5.234E-03	4.848E-03	4.423E-03
RE188	0.000E+00	1.231E-01	1.202E-01	1.157E-01	7.766E-02	4.842E-02
RE188M	0.000E+00	2.432E-02	2.631E-03	2.846E-04	6.245E-14	1.604E-25
RE189	0.000E+00	5.396E-07	5.244E-07	5.096E-07	3.832E-07	2.721E-07
OS191	0.000E+00	2.560E-07	2.558E-07	2.557E-07	2.532E-07	2.491E-07
OS191M	0.000E+00	5.411E-08	5.130E-08	4.864E-08	2.854E-08	1.505E-08
IR192	0.000E+00	1.132E-07	1.132E-07	1.131E-07	1.127E-07	1.121E-07
IR194	0.000E+00	1.428E-09	1.378E-09	1.329E-09	9.252E-10	5.992E-10
PB204	2.660E-18	2.657E-18	2.657E-18	2.657E-18	2.657E-18	2.657E-18
PB209	0.000E+00	4.886E-07	3.961E-07	3.210E-07	3.929E-08	3.160E-09
BI210	0.000E+00	7.820E-05	7.775E-05	7.731E-05	7.298E-05	6.810E-05
PO210	0.000E+00	9.508E-04	9.509E-04	9.509E-04	9.511E-04	9.511E-04
PO211	0.000E+00	1.422E-08	9.873E-21	3.271E-29	0.000E+00	0.000E+00
SUMTOT	1.849E-14	4.860E+01	1.959E+01	1.546E+01	8.418E+00	6.347E+00
TOTAL	1.849E-14	4.860E+01	1.959E+01	1.546E+01	8.418E+00	6.347E+00

OUTPUT UNIT =
6 PAGE 32
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

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    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         0.000E+00 5.463E-03 5.463E-03 5.463E-03 5.462E-03 5.462E-03
HE         0.000E+00 2.633E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LI         0.000E+00 6.865E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE         0.000E+00 1.041E-03 4.785E-10 4.785E-10 4.785E-10 4.785E-10
 B         0.000E+00 1.029E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C         0.000E+00 4.885E-01 6.675E-05 6.675E-05 6.675E-05 6.675E-05
 N         0.000E+00 7.790E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 O         0.000E+00 9.515E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 F         0.000E+00 1.317E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NE         0.000E+00 1.831E-02 1.452E-31 0.000E+00 0.000E+00 0.000E+00
NA         0.000E+00 6.392E+00 5.859E+00 5.594E+00 3.524E+00 2.024E+00
MG         0.000E+00 2.140E-02 2.640E-04 3.256E-06 9.330E-12 6.268E-12
AL         0.000E+00 9.998E-01 1.448E-06 2.463E-09 1.845E-11 1.239E-11
SI         0.000E+00 1.402E-01 1.076E-01 8.263E-02 5.874E-03 2.460E-04
 P         0.000E+00 6.986E-01 6.957E-01 6.943E-01 6.804E-01 6.641E-01
 S         0.000E+00 2.124E-02 2.095E-02 2.094E-02 2.088E-02 2.079E-02
CL         0.000E+00 1.016E-01 3.316E-02 1.085E-02 6.997E-06 6.845E-06
AR         0.000E+00 5.557E-06 5.406E-06 5.301E-06 5.047E-06 4.994E-06
 K         0.000E+00 8.161E-05 7.493E-05 7.054E-05 4.051E-05 2.091E-05
CA         0.000E+00 1.232E-03 1.542E-04 1.446E-04 1.441E-04 1.436E-04
SC         0.000E+00 9.364E-04 7.341E-04 6.010E-04 4.593E-04 4.409E-04
TI         0.000E+00 5.599E-04 4.096E-07 2.997E-10 0.000E+00 0.000E+00
 V         1.450E-17 1.477E+00 2.253E-05 3.438E-10 1.356E-17 1.356E-17
CR         0.000E+00 5.713E-03 3.814E-03 3.810E-03 3.771E-03 3.724E-03
MN         0.000E+00 2.786E+00 2.130E+00 1.629E+00 1.149E-01 8.760E-03
FE         0.000E+00 3.924E-03 3.921E-03 3.919E-03 3.895E-03 3.866E-03
CO         0.000E+00 1.403E+00 1.342E+00 1.340E+00 1.337E+00 1.337E+00
NI         0.000E+00 1.444E-02 1.099E-02 8.361E-03 5.976E-04 8.727E-05
CU         0.000E+00 6.697E-02 3.487E-02 3.301E-02 1.912E-02 9.934E-03
ZN         0.000E+00 4.535E-01 3.789E-01 3.433E-01 3.020E-01 2.955E-01
GA         0.000E+00 1.710E-03 2.603E-04 5.724E-05 1.503E-05 8.331E-06
GE         0.000E+00 1.001E-07 3.594E-08 3.585E-08 3.498E-08 3.397E-08
 Y         0.000E+00 2.914E-06 2.888E-06 2.863E-06 2.619E-06 2.356E-06
ZR         0.000E+00 1.338E-05 1.333E-05 1.328E-05 1.284E-05 1.237E-05
NB         0.000E+00 1.053E-03 1.041E-03 1.035E-03 9.892E-04 9.446E-04
MO         0.000E+00 5.891E-01 5.030E-01 4.931E-01 4.435E-01 3.909E-01
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TC          0.000E+00 5.412E-02 7.814E-03 7.602E-04 3.868E-08 3.872E-08
RU          0.000E+00 1.072E-06 1.071E-06 1.070E-06 1.062E-06 1.053E-06
RH          0.000E+00 5.570E-07 3.532E-12 3.186E-12 2.305E-12 1.809E-12
PD          0.000E+00 7.135E-05 6.454E-05 6.084E-05 3.615E-05 1.944E-05
AG          0.000E+00 4.518E-01 3.591E-02 3.591E-02 3.584E-02 3.577E-02
CD          0.000E+00 1.113E+00 1.082E+00 1.057E+00 9.054E-01 7.839E-01
IN          1.710E-14 2.185E+01 6.096E+00 2.901E+00 9.973E-02 9.162E-02
SN          0.000E+00 7.580E-02 6.557E-02 6.520E-02 6.305E-02 6.075E-02
SB          0.000E+00 4.883E-03 4.845E-03 4.829E-03 4.695E-03 4.551E-03
TE          0.000E+00 1.603E-04 1.603E-04 1.603E-04 1.604E-04 1.605E-04
 I          0.000E+00 8.727E-09 1.652E-09 3.126E-10 3.721E-15 1.889E-15
PM          0.000E+00 3.126E-09 2.481E-09 1.986E-09 3.869E-10 2.015E-10
SM          0.000E+00 3.131E-09 2.618E-09 2.508E-09 2.151E-09 1.800E-09
EU          0.000E+00 9.599E-04 9.583E-04 9.567E-04 9.407E-04 9.220E-04
GD          1.371E-15 2.381E-01 1.852E-01 1.784E-01 1.233E-01 7.923E-02
TB          0.000E+00 6.860E-02 6.851E-02 6.843E-02 6.762E-02 6.667E-02
DY          0.000E+00 4.784E-04 3.248E-04 2.419E-04 1.292E-05 6.069E-07
HO          0.000E+00 2.134E-05 2.082E-05 2.032E-05 1.592E-05 1.192E-05
ER          0.000E+00 2.535E-08 2.600E-11 2.592E-11 2.514E-11 2.423E-11
TA          0.000E+00 2.593E-04 2.583E-04 2.574E-04 2.486E-04 2.386E-04
 W          0.000E+00 8.049E-01 7.814E-01 7.593E-01 5.695E-01 4.038E-01
RE          0.000E+00 1.528E-01 1.281E-01 1.212E-01 8.250E-02 5.284E-02
OS          0.000E+00 3.145E-07 3.072E-07 3.043E-07 2.818E-07 2.642E-07
IR          0.000E+00 1.146E-07 1.145E-07 1.144E-07 1.136E-07 1.127E-07
PB          2.660E-18 4.886E-07 3.961E-07 3.210E-07 3.929E-08 3.160E-09
BI          0.000E+00 7.820E-05 7.775E-05 7.731E-05 7.298E-05 6.810E-05
PO          0.000E+00 9.508E-04 9.509E-04 9.509E-04 9.511E-04 9.511E-04
SUMTOT      1.849E-14 4.860E+01 1.959E+01 1.546E+01 8.418E+00 6.347E+00

TOTAL       1.849E-14 4.860E+01 1.959E+01 1.546E+01 8.418E+00 6.347E+00

                                                CUMULATIVE TABLE TOTALS

AP+FP       1.849E-14 4.860E+01 1.959E+01 1.546E+01 8.418E+00 6.347E+00
ACT+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP   1.849E-14 4.860E+01 1.959E+01 1.546E+01 8.418E+00 6.347E+00
□
         OUTPUT UNIT =
6                          PAGE   33
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC
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19 SUMMARY TABLE: NEUTRON ABSORPTION RATE,NEUTRONS PER SECOND

1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP, 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
HE 3	0.000E+00	1.680E-02	1.681E-02	1.682E-02	1.691E-02	1.702E-02
LI 6	3.921E-01	1.860E-01	1.860E-01	1.860E-01	1.860E-01	1.860E-01
B 10	2.881E+00	1.169E-01	1.169E-01	1.169E-01	1.169E-01	1.169E-01
N 14	1.807E-01	1.803E-01	1.803E-01	1.803E-01	1.803E-01	1.803E-01
O 16	1.355E+01	1.355E+01	1.355E+01	1.355E+01	1.355E+01	1.355E+01
O 17	3.042E-02	3.042E-02	3.042E-02	3.042E-02	3.042E-02	3.042E-02
NA 23	2.701E-02	2.699E-02	2.699E-02	2.699E-02	2.699E-02	2.699E-02
CL 35	1.967E-01	1.898E-01	1.898E-01	1.898E-01	1.898E-01	1.898E-01
MN 55	2.257E-02	2.224E-02	2.224E-02	2.224E-02	2.224E-02	2.224E-02
FE 56	3.293E-02	3.291E-02	3.291E-02	3.291E-02	3.291E-02	3.291E-02
CO 59	6.490E-02	6.008E-02	6.008E-02	6.008E-02	6.008E-02	6.008E-02
NI 58	5.247E-02	5.227E-02	5.227E-02	5.227E-02	5.227E-02	5.227E-02
MO 95	3.981E-02	3.790E-02	3.790E-02	3.790E-02	3.790E-02	3.790E-02
MO 98	1.920E-02	1.897E-02	1.897E-02	1.897E-02	1.897E-02	1.897E-02
CD110	3.435E-02	3.369E-02	3.369E-02	3.369E-02	3.369E-02	3.369E-02
CD111	5.215E-02	5.148E-02	5.148E-02	5.148E-02	5.148E-02	5.148E-02
CD112	2.913E-02	2.938E-02	2.938E-02	2.938E-02	2.938E-02	2.938E-02
CD113	4.923E+01	1.976E-02	1.976E-02	1.976E-02	1.976E-02	1.976E-02
CD114	2.769E-02	3.928E-02	3.928E-02	3.928E-02	3.928E-02	3.928E-02
IN115	1.596E+00	2.239E-01	2.239E-01	2.239E-01	2.239E-01	2.239E-01
GD155	2.528E+00	2.054E-03	2.054E-03	2.054E-03	2.054E-03	2.054E-03
GD157	1.135E+01	1.247E-02	1.247E-02	1.247E-02	1.247E-02	1.247E-02
W182	2.511E-02	2.095E-02	2.095E-02	2.095E-02	2.095E-02	2.095E-02
W186	2.525E-02	2.137E-02	2.137E-02	2.137E-02	2.137E-02	2.137E-02
SUMTOT	8.238E+01	1.497E+01	1.497E+01	1.497E+01	1.497E+01	1.497E+01
TOTAL	8.258E+01	1.520E+01	1.520E+01	1.520E+01	1.520E+01	1.520E+01

OUTPUT UNIT = 6

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ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS

POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N/CM**2-SEC

19 SUMMARY TABLE: NEUTRON ABSORPTION RATE,NEUTRONS PER SECOND

1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP

```
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE         0.000E+00 1.680E-02 1.681E-02 1.682E-02 1.691E-02 1.702E-02
LI         3.927E-01 1.868E-01 1.868E-01 1.868E-01 1.868E-01 1.868E-01
 B         2.881E+00 1.169E-01 1.169E-01 1.169E-01 1.169E-01 1.169E-01
 N         1.807E-01 1.803E-01 1.803E-01 1.803E-01 1.803E-01 1.803E-01
 O         1.358E+01 1.358E+01 1.358E+01 1.358E+01 1.358E+01 1.358E+01
NA         2.701E-02 2.699E-02 2.699E-02 2.699E-02 2.699E-02 2.699E-02
CL         1.974E-01 1.921E-01 1.921E-01 1.921E-01 1.921E-01 1.921E-01
MN         2.257E-02 2.224E-02 2.224E-02 2.224E-02 2.224E-02 2.224E-02
FE         3.563E-02 3.567E-02 3.567E-02 3.567E-02 3.567E-02 3.567E-02
CO         6.490E-02 6.176E-02 6.176E-02 6.176E-02 6.176E-02 6.175E-02
NI         7.426E-02 7.936E-02 7.936E-02 7.936E-02 7.936E-02 7.936E-02
ZN         4.302E-02 4.294E-02 4.294E-02 4.294E-02 4.294E-02 4.294E-02
MO         7.160E-02 6.975E-02 6.975E-02 6.975E-02 6.975E-02 6.975E-02
CD         4.937E+01 1.752E-01 1.752E-01 1.752E-01 1.752E-01 1.752E-01
IN         1.601E+00 2.284E-01 2.284E-01 2.284E-01 2.284E-01 2.284E-01
GD         1.389E+01 3.697E-02 3.697E-02 3.697E-02 3.697E-02 3.697E-02
 W         5.911E-02 5.265E-02 5.265E-02 5.265E-02 5.263E-02 5.262E-02
SUMTOT     8.250E+01 1.511E+01 1.511E+01 1.511E+01 1.511E+01 1.511E+01

TOTAL      8.258E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01

                                          CUMULATIVE TABLE TOTALS

AP+FP      8.258E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01
ACT+FP     0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP  8.258E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01
□
         OUTPUT UNIT =
6                         PAGE   35
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
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HE  3       0.000E+00 1.106E-03 1.106E-03 1.107E-03 1.113E-03 1.120E-03
LI  6       4.747E-03 1.224E-02 1.224E-02 1.224E-02 1.224E-02 1.224E-02
 B 10       3.489E-02 7.692E-03 7.692E-03 7.692E-03 7.692E-03 7.692E-03
 N 14       2.188E-03 1.186E-02 1.186E-02 1.186E-02 1.186E-02 1.186E-02
 O 16       1.641E-01 8.915E-01 8.915E-01 8.915E-01 8.915E-01 8.914E-01
 O 17       3.683E-04 2.002E-03 2.002E-03 2.002E-03 2.002E-03 2.002E-03
NA 23       3.271E-04 1.776E-03 1.776E-03 1.776E-03 1.776E-03 1.776E-03
CL 35       2.382E-03 1.249E-02 1.249E-02 1.249E-02 1.249E-02 1.249E-02
MN 55       2.733E-04 1.463E-03 1.463E-03 1.463E-03 1.463E-03 1.463E-03
FE 56       3.988E-04 2.165E-03 2.165E-03 2.165E-03 2.165E-03 2.165E-03
CO 59       7.859E-04 3.953E-03 3.953E-03 3.953E-03 3.953E-03 3.953E-03
NI 58       6.353E-04 3.439E-03 3.439E-03 3.439E-03 3.439E-03 3.439E-03
MO 95       4.821E-04 2.494E-03 2.494E-03 2.494E-03 2.494E-03 2.494E-03
MO 98       2.326E-04 1.248E-03 1.248E-03 1.248E-03 1.248E-03 1.248E-03
CD110       4.159E-04 2.217E-03 2.217E-03 2.217E-03 2.217E-03 2.217E-03
CD111       6.315E-04 3.387E-03 3.387E-03 3.387E-03 3.387E-03 3.387E-03
CD112       3.528E-04 1.934E-03 1.934E-03 1.934E-03 1.934E-03 1.934E-03
CD113       5.961E-01 1.300E-03 1.300E-03 1.300E-03 1.300E-03 1.300E-03
CD114       3.352E-04 2.585E-03 2.585E-03 2.585E-03 2.585E-03 2.584E-03
IN115       1.933E-02 1.473E-02 1.473E-02 1.473E-02 1.473E-02 1.474E-02
GD155       3.062E-02 1.352E-04 1.352E-04 1.352E-04 1.352E-04 1.352E-04
GD157       1.374E-01 8.204E-04 8.204E-04 8.204E-04 8.204E-04 8.204E-04
 W182       3.040E-04 1.379E-03 1.379E-03 1.379E-03 1.379E-03 1.379E-03
 W186       3.058E-04 1.406E-03 1.406E-03 1.406E-03 1.406E-03 1.406E-03
SUMTOT      9.976E-01 9.853E-01 9.853E-01 9.853E-01 9.853E-01 9.853E-01

TOTAL       1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE   36
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE          0.000E+00 1.106E-03 1.106E-03 1.107E-03 1.113E-03 1.120E-03
LI          4.756E-03 1.229E-02 1.229E-02 1.229E-02 1.229E-02 1.229E-02
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 B          3.489E-02 7.693E-03 7.693E-03 7.693E-03 7.693E-03 7.693E-03
 N          2.188E-03 1.186E-02 1.186E-02 1.186E-02 1.186E-02 1.186E-02
 O          1.645E-01 8.937E-01 8.937E-01 8.937E-01 8.937E-01 8.937E-01
NA          3.271E-04 1.776E-03 1.776E-03 1.776E-03 1.776E-03 1.776E-03
CL          2.390E-03 1.264E-02 1.264E-02 1.264E-02 1.264E-02 1.264E-02
MN          2.733E-04 1.463E-03 1.463E-03 1.463E-03 1.463E-03 1.463E-03
FE          4.314E-04 2.347E-03 2.347E-03 2.347E-03 2.347E-03 2.347E-03
CO          7.859E-04 4.064E-03 4.064E-03 4.064E-03 4.064E-03 4.063E-03
NI          8.992E-04 5.222E-03 5.222E-03 5.222E-03 5.222E-03 5.222E-03
ZN          5.209E-04 2.826E-03 2.826E-03 2.826E-03 2.826E-03 2.826E-03
MO          8.670E-04 4.590E-03 4.590E-03 4.590E-03 4.589E-03 4.589E-03
CD          5.979E-01 1.153E-02 1.153E-02 1.153E-02 1.153E-02 1.153E-02
IN          1.939E-02 1.503E-02 1.503E-02 1.503E-02 1.503E-02 1.503E-02
GD          1.682E-01 2.433E-03 2.433E-03 2.433E-03 2.433E-03 2.433E-03
 W          7.157E-04 3.464E-03 3.464E-03 3.464E-03 3.463E-03 3.463E-03
SUMTOT      9.990E-01 9.940E-01 9.940E-01 9.940E-01 9.940E-01 9.940E-01

TOTAL       1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE   37
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE  4      0.000E+00 1.582E-02 1.583E-02 1.583E-02 1.589E-02 1.595E-02
TH230      0.000E+00 1.116E-03 1.116E-03 1.116E-03 1.117E-03 1.118E-03
PA231      0.000E+00 1.653E-04 1.654E-04 1.654E-04 1.657E-04 1.659E-04
 U232      0.000E+00 1.046E-04 1.047E-04 1.047E-04 1.048E-04 1.050E-04
 U233      0.000E+00 1.395E-03 1.395E-03 1.395E-03 1.395E-03 1.395E-03
 U234      3.838E+02 3.020E+02 3.020E+02 3.020E+02 3.020E+02 3.020E+02
 U235      4.236E+04 2.381E+04 2.381E+04 2.381E+04 2.381E+04 2.381E+04
 U236      0.000E+00 3.375E+03 3.375E+03 3.375E+03 3.375E+03 3.375E+03
 U237      0.000E+00 8.362E+00 8.327E+00 8.291E+00 7.944E+00 7.546E+00
 U238      9.573E+05 9.460E+05 9.460E+05 9.460E+05 9.460E+05 9.460E+05
 U239      0.000E+00 5.052E-01 8.628E-02 1.474E-02 3.115E-10 1.921E-19
NP236      0.000E+00 1.291E-04 1.291E-04 1.291E-04 1.291E-04 1.291E-04
NP237      0.000E+00 2.132E+02 2.132E+02 2.133E+02 2.136E+02 2.140E+02
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NP238      0.000E+00 5.180E-01 5.110E-01 5.040E-01 4.398E-01 3.733E-01
NP239      0.000E+00 7.272E+01 7.225E+01 7.144E+01 6.321E+01 5.456E+01
NP240      0.000E+00 1.280E-03 6.751E-04 3.561E-04 5.930E-07 2.745E-10
PU236      0.000E+00 2.423E-04 2.424E-04 2.425E-04 2.429E-04 2.433E-04
PU238      0.000E+00 2.960E+01 2.960E+01 2.961E+01 2.968E+01 2.975E+01
PU239      0.000E+00 4.634E+03 4.635E+03 4.635E+03 4.644E+03 4.652E+03
PU240      0.000E+00 1.035E+03 1.035E+03 1.035E+03 1.035E+03 1.035E+03
PU241      0.000E+00 6.066E+02 6.066E+02 6.066E+02 6.066E+02 6.065E+02
PU242      0.000E+00 7.785E+01 7.785E+01 7.785E+01 7.785E+01 7.785E+01
PU243      0.000E+00 1.955E-02 1.700E-02 1.478E-02 3.649E-03 6.811E-04
PU244      0.000E+00 1.072E-03 1.072E-03 1.072E-03 1.072E-03 1.072E-03
AM241      0.000E+00 1.015E+01 1.015E+01 1.015E+01 1.019E+01 1.023E+01
AM242M     0.000E+00 3.134E-01 3.134E-01 3.134E-01 3.134E-01 3.134E-01
AM242      0.000E+00 1.978E-02 1.894E-02 1.814E-02 1.177E-02 7.005E-03
AM243      0.000E+00 7.184E+00 7.186E+00 7.189E+00 7.200E+00 7.203E+00
AM244M     0.000E+00 2.293E-04 4.632E-05 9.356E-06 1.057E-12 4.876E-21
AM244      0.000E+00 2.807E-04 2.620E-04 2.447E-04 1.232E-04 5.406E-05
CM242      0.000E+00 1.491E+00 1.492E+00 1.492E+00 1.495E+00 1.495E+00
CM243      0.000E+00 1.933E-02 1.933E-02 1.933E-02 1.933E-02 1.933E-02
CM244      0.000E+00 8.622E-01 8.624E-01 8.625E-01 8.626E-01 8.626E-01
CM245      0.000E+00 1.810E-02 1.810E-02 1.810E-02 1.810E-02 1.810E-02
CM246      0.000E+00 6.872E-04 6.872E-04 6.872E-04 6.872E-04 6.872E-04
SUMTOT     1.000E+06 9.801E+05 9.801E+05 9.801E+05 9.801E+05 9.801E+05

TOTAL      1.000E+06 9.801E+05 9.801E+05 9.801E+05 9.801E+05 9.801E+05
□
         OUTPUT UNIT =
6                        PAGE   38
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE         0.000E+00 1.582E-02 1.583E-02 1.583E-02 1.589E-02 1.595E-02
TH         0.000E+00 1.203E-03 1.203E-03 1.203E-03 1.204E-03 1.205E-03
PA         0.000E+00 1.723E-04 1.724E-04 1.724E-04 1.726E-04 1.727E-04
 U         1.000E+06 9.735E+05 9.735E+05 9.735E+05 9.735E+05 9.735E+05
NP         0.000E+00 2.864E+02 2.860E+02 2.852E+02 2.773E+02 2.689E+02
PU         0.000E+00 6.383E+03 6.384E+03 6.385E+03 6.393E+03 6.402E+03
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AM          0.000E+00 1.766E+01 1.767E+01 1.767E+01 1.771E+01 1.775E+01
CM          0.000E+00 2.391E+00 2.392E+00 2.393E+00 2.395E+00 2.396E+00
SUMTOT      1.000E+06 9.801E+05 9.801E+05 9.801E+05 9.801E+05 9.801E+05

TOTAL       1.000E+06 9.801E+05 9.801E+05 9.801E+05 9.801E+05 9.801E+05

                                          CUMULATIVE TABLE TOTALS

AP+FP       1.348E+05 1.348E+05 1.348E+05 1.348E+05 1.348E+05 1.348E+05
ACT+FP      1.000E+06 9.801E+05 9.801E+05 9.801E+05 9.801E+05 9.801E+05
AP+ACT+FP   1.135E+06 1.115E+06 1.115E+06 1.115E+06 1.115E+06 1.115E+06
□
         OUTPUT UNIT =
6                          PAGE   39
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
            FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TH231       0.000E+00 6.001E-01 5.854E-01 5.711E-01 4.475E-01 3.373E-01
TH233       0.000E+00 4.351E-03 6.627E-04 1.009E-04 6.781E-13 1.057E-22
TH234       0.000E+00 3.184E-01 3.184E-01 3.184E-01 3.184E-01 3.184E-01
PA232       0.000E+00 2.157E-01 2.110E-01 2.064E-01 1.656E-01 1.271E-01
PA233       0.000E+00 1.348E-01 1.348E-01 1.349E-01 1.350E-01 1.352E-01
PA234M      0.000E+00 3.200E-01 3.184E-01 3.184E-01 3.184E-01 3.184E-01
 U232       0.000E+00 2.240E-03 2.241E-03 2.241E-03 2.245E-03 2.248E-03
 U234       2.399E+00 1.888E+00 1.888E+00 1.888E+00 1.888E+00 1.888E+00
 U235       9.161E-02 5.148E-02 5.148E-02 5.148E-02 5.148E-02 5.148E-02
 U236       0.000E+00 2.185E-01 2.185E-01 2.185E-01 2.185E-01 2.185E-01
 U237       0.000E+00 6.828E+05 6.799E+05 6.770E+05 6.487E+05 6.162E+05
 U238       3.220E-01 3.182E-01 3.182E-01 3.182E-01 3.182E-01 3.182E-01
 U239       0.000E+00 1.689E+07 2.886E+06 4.929E+05 1.042E-02 6.424E-12
 U240       0.000E+00 1.558E+01 1.483E+01 1.412E+01 8.637E+00 4.788E+00
NP235       0.000E+00 1.826E-03 1.826E-03 1.825E-03 1.824E-03 1.822E-03
NP236M      0.000E+00 2.586E+00 2.508E+00 2.431E+00 1.787E+00 1.235E+00
NP237       0.000E+00 1.503E-01 1.504E-01 1.504E-01 1.506E-01 1.509E-01
NP238       0.000E+00 1.343E+05 1.325E+05 1.307E+05 1.140E+05 9.680E+04
NP239       0.000E+00 1.688E+07 1.677E+07 1.658E+07 1.467E+07 1.266E+07
NP240M      0.000E+00 3.177E+03 2.642E+01 1.429E+01 8.713E+00 4.830E+00
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NP240      0.000E+00 1.544E+04 8.141E+03 4.293E+03 7.150E+00 3.310E-03
PU236      0.000E+00 1.288E-01 1.289E-01 1.289E-01 1.291E-01 1.293E-01
PU237      0.000E+00 4.233E-01 4.231E-01 4.228E-01 4.201E-01 4.170E-01
PU238      0.000E+00 5.069E+02 5.070E+02 5.071E+02 5.083E+02 5.094E+02
PU239      0.000E+00 2.881E+02 2.882E+02 2.883E+02 2.888E+02 2.893E+02
PU240      0.000E+00 2.360E+02 2.360E+02 2.360E+02 2.360E+02 2.360E+02
PU241      0.000E+00 6.252E+04 6.252E+04 6.252E+04 6.252E+04 6.251E+04
PU242      0.000E+00 2.973E-01 2.973E-01 2.973E-01 2.974E-01 2.974E-01
PU243      0.000E+00 5.089E+04 4.425E+04 3.847E+04 9.500E+03 1.773E+03
PU245      0.000E+00 2.339E-02 2.191E-02 2.053E-02 1.067E-02 4.870E-03
AM240      0.000E+00 6.756E-02 6.664E-02 6.574E-02 5.735E-02 4.869E-02
AM241      0.000E+00 3.483E+01 3.485E+01 3.486E+01 3.497E+01 3.511E+01
AM242M     0.000E+00 3.047E+00 3.047E+00 3.047E+00 3.047E+00 3.047E+00
AM242      0.000E+00 1.600E+04 1.532E+04 1.467E+04 9.520E+03 5.665E+03
AM243      0.000E+00 1.433E+00 1.433E+00 1.434E+00 1.436E+00 1.436E+00
AM244M     0.000E+00 6.800E+03 1.374E+03 2.774E+02 3.135E-05 1.446E-13
AM244      0.000E+00 3.571E+02 3.334E+02 3.113E+02 1.567E+02 6.877E+01
AM245      0.000E+00 2.339E-02 2.317E-02 2.260E-02 1.316E-02 6.050E-03
CM242      0.000E+00 4.932E+03 4.934E+03 4.935E+03 4.944E+03 4.946E+03
CM243      0.000E+00 9.983E-01 9.983E-01 9.983E-01 9.983E-01 9.983E-01
CM244      0.000E+00 6.979E+01 6.980E+01 6.981E+01 6.982E+01 6.982E+01
CM245      0.000E+00 3.109E-03 3.109E-03 3.109E-03 3.109E-03 3.109E-03
SUMTOT     2.813E+00 3.475E+07 2.060E+07 1.801E+07 1.552E+07 1.345E+07

TOTAL      2.813E+00 3.475E+07 2.060E+07 1.801E+07 1.552E+07 1.345E+07
□
         OUTPUT UNIT =
6                        PAGE   40
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TH         0.000E+00 9.232E-01 9.048E-01 8.899E-01 7.662E-01 6.561E-01
PA         0.000E+00 6.726E-01 6.661E-01 6.614E-01 6.199E-01 5.813E-01
 U         2.813E+00 1.758E+07 3.566E+06 1.170E+06 6.487E+05 6.162E+05
NP         0.000E+00 1.703E+07 1.691E+07 1.671E+07 1.478E+07 1.276E+07
PU         0.000E+00 1.144E+05 1.078E+05 1.020E+05 7.305E+04 6.532E+04
AM         0.000E+00 2.319E+04 1.707E+04 1.530E+04 9.716E+03 5.774E+03
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CM          0.000E+00 5.003E+03 5.004E+03 5.006E+03 5.014E+03 5.017E+03
SUMTOT      2.813E+00 3.475E+07 2.060E+07 1.801E+07 1.552E+07 1.345E+07

TOTAL       2.813E+00 3.475E+07 2.060E+07 1.801E+07 1.552E+07 1.345E+07

                                          CUMULATIVE TABLE TOTALS

AP+FP       1.203E-11 4.505E+03 2.125E+03 1.835E+03 1.301E+03 1.114E+03
ACT+FP      2.813E+00 3.475E+07 2.060E+07 1.801E+07 1.552E+07 1.345E+07
AP+ACT+FP   2.813E+00 3.475E+07 2.060E+07 1.801E+07 1.552E+07 1.345E+07
□
         OUTPUT UNIT =
6                        PAGE   41
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
            FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

BI212       0.000E+00 5.407E-06 5.409E-06 5.410E-06 5.407E-06 5.666E-06
PO212       0.000E+00 1.080E-05 1.080E-05 1.080E-05 1.079E-05 1.131E-05
PO216       0.000E+00 1.302E-05 1.302E-05 1.302E-05 1.302E-05 1.302E-05
RN220       0.000E+00 1.207E-05 1.207E-05 1.207E-05 1.207E-05 1.208E-05
RA224       0.000E+00 1.091E-05 1.091E-05 1.091E-05 1.091E-05 1.091E-05
TH228       0.000E+00 1.037E-05 1.037E-05 1.038E-05 1.040E-05 1.043E-05
TH231       0.000E+00 3.367E-04 3.285E-04 3.204E-04 2.511E-04 1.893E-04
TH233       0.000E+00 1.101E-05 1.677E-06 2.555E-07 1.716E-15 2.675E-25
TH234       0.000E+00 1.291E-04 1.291E-04 1.291E-04 1.291E-04 1.291E-04
PA232       0.000E+00 1.410E-03 1.379E-03 1.349E-03 1.082E-03 8.308E-04
PA233       0.000E+00 3.060E-04 3.061E-04 3.061E-04 3.065E-04 3.069E-04
PA234M      0.000E+00 1.582E-03 1.574E-03 1.574E-03 1.574E-03 1.574E-03
PA234       0.000E+00 2.938E-05 2.708E-05 2.500E-05 1.271E-05 7.896E-06
 U232       0.000E+00 7.193E-05 7.194E-05 7.195E-05 7.206E-05 7.218E-05
 U234       6.910E-02 5.437E-02 5.437E-02 5.437E-02 5.437E-02 5.437E-02
 U235       2.399E-03 1.348E-03 1.348E-03 1.348E-03 1.348E-03 1.348E-03
 U236       0.000E+00 5.918E-03 5.918E-03 5.918E-03 5.918E-03 5.918E-03
 U237       0.000E+00 1.292E+03 1.286E+03 1.281E+03 1.227E+03 1.166E+03
 U238       8.166E-03 8.070E-03 8.070E-03 8.070E-03 8.070E-03 8.070E-03
 U239       0.000E+00 4.548E+04 7.768E+03 1.327E+03 2.804E-05 1.729E-14
 U240       0.000E+00 1.278E-02 1.217E-02 1.158E-02 7.086E-03 3.928E-03
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NP236M     0.000E+00 2.043E-03 1.981E-03 1.921E-03 1.412E-03 9.755E-04
NP237      0.000E+00 4.595E-03 4.596E-03 4.597E-03 4.604E-03 4.613E-03
NP238      0.000E+00 6.433E+02 6.345E+02 6.259E+02 5.461E+02 4.636E+02
NP239      0.000E+00 4.079E+04 4.053E+04 4.008E+04 3.546E+04 3.061E+04
NP240M     0.000E+00 1.841E+01 1.531E-01 8.279E-02 5.049E-02 2.799E-02
NP240      0.000E+00 1.636E+02 8.628E+01 4.551E+01 7.578E-02 3.508E-05
PU236      0.000E+00 4.483E-03 4.484E-03 4.485E-03 4.494E-03 4.501E-03
PU237      0.000E+00 1.561E-04 1.560E-04 1.559E-04 1.549E-04 1.537E-04
PU238      0.000E+00 1.680E+01 1.680E+01 1.681E+01 1.684E+01 1.688E+01
PU239      0.000E+00 8.880E+00 8.882E+00 8.883E+00 8.899E+00 8.916E+00
PU240      0.000E+00 7.350E+00 7.350E+00 7.350E+00 7.350E+00 7.350E+00
PU241      0.000E+00 1.938E+00 1.938E+00 1.938E+00 1.938E+00 1.938E+00
PU242      0.000E+00 8.781E-03 8.781E-03 8.781E-03 8.781E-03 8.781E-03
PU243      0.000E+00 5.874E+01 5.107E+01 4.440E+01 1.096E+01 2.046E+00
PU245      0.000E+00 5.547E-05 5.196E-05 4.867E-05 2.531E-05 1.155E-05
AM240      0.000E+00 4.421E-04 4.361E-04 4.302E-04 3.753E-04 3.186E-04
AM241      0.000E+00 1.157E+00 1.158E+00 1.158E+00 1.162E+00 1.166E+00
AM242M     0.000E+00 1.204E-03 1.204E-03 1.204E-03 1.204E-03 1.204E-03
AM242      0.000E+00 1.816E+01 1.739E+01 1.665E+01 1.081E+01 6.431E+00
AM243      0.000E+00 4.605E-02 4.607E-02 4.608E-02 4.615E-02 4.617E-02
AM244M     0.000E+00 2.057E+01 4.155E+00 8.392E-01 9.484E-08 4.373E-16
AM244      0.000E+00 1.871E+00 1.747E+00 1.631E+00 8.211E-01 3.604E-01
AM245      0.000E+00 4.341E-05 4.299E-05 4.193E-05 2.442E-05 1.123E-05
CM241      0.000E+00 4.769E-06 4.766E-06 4.762E-06 4.724E-06 4.678E-06
CM242      0.000E+00 1.817E+02 1.818E+02 1.818E+02 1.822E+02 1.822E+02
CM243      0.000E+00 3.663E-02 3.663E-02 3.663E-02 3.662E-02 3.662E-02
CM244      0.000E+00 2.441E+00 2.442E+00 2.442E+00 2.442E+00 2.442E+00
CM245      0.000E+00 1.032E-04 1.032E-04 1.032E-04 1.032E-04 1.032E-04
CM246      0.000E+00 6.913E-06 6.913E-06 6.913E-06 6.913E-06 6.913E-06
SUMTOT     7.967E-02 8.871E+04 5.060E+04 4.364E+04 3.748E+04 3.247E+04

TOTAL      7.967E-02 8.871E+04 5.060E+04 4.364E+04 3.748E+04 3.247E+04
□
         OUTPUT UNIT =
6                        PAGE   42
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
```

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BI          0.000E+00 5.412E-06 5.414E-06 5.415E-06 5.411E-06 5.671E-06
PO          0.000E+00 2.382E-05 2.383E-05 2.383E-05 2.382E-05 2.434E-05
RN          0.000E+00 1.208E-05 1.208E-05 1.208E-05 1.208E-05 1.208E-05
RA          0.000E+00 1.092E-05 1.092E-05 1.092E-05 1.092E-05 1.092E-05
TH          0.000E+00 4.878E-04 4.703E-04 4.608E-04 3.912E-04 3.295E-04
PA          0.000E+00 3.327E-03 3.286E-03 3.254E-03 2.975E-03 2.719E-03
 U          7.967E-02 4.677E+04 9.054E+03 2.608E+03 1.227E+03 1.166E+03
NP          0.000E+00 4.162E+04 4.125E+04 4.075E+04 3.600E+04 3.107E+04
PU          0.000E+00 9.372E+01 8.606E+01 7.940E+01 4.601E+01 3.715E+01
AM          0.000E+00 4.181E+01 2.450E+01 2.033E+01 1.284E+01 8.005E+00
CM          0.000E+00 1.842E+02 1.843E+02 1.843E+02 1.846E+02 1.847E+02
SUMTOT      7.967E-02 8.871E+04 5.060E+04 4.364E+04 3.748E+04 3.247E+04

TOTAL       7.967E-02 8.871E+04 5.060E+04 4.364E+04 3.748E+04 3.247E+04

                                          CUMULATIVE TABLE TOTALS

AP+FP       1.849E-14 4.860E+01 1.959E+01 1.546E+01 8.418E+00 6.347E+00
ACT+FP      7.967E-02 8.871E+04 5.060E+04 4.364E+04 3.748E+04 3.247E+04
AP+ACT+FP   7.967E-02 8.876E+04 5.062E+04 4.365E+04 3.748E+04 3.247E+04
□
         OUTPUT UNIT =
6                        PAGE   43
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234      1.934E+01 1.522E+01 1.522E+01 1.522E+01 1.522E+01 1.522E+01
 U235      5.067E+03 2.847E+03 2.847E+03 2.847E+03 2.847E+03 2.847E+03
 U236      0.000E+00 7.319E+01 7.319E+01 7.319E+01 7.319E+01 7.319E+01
 U238      2.317E+03 2.290E+03 2.290E+03 2.290E+03 2.290E+03 2.290E+03
NP237      0.000E+00 1.670E+01 1.671E+01 1.671E+01 1.674E+01 1.677E+01
PU239      0.000E+00 1.830E+03 1.831E+03 1.831E+03 1.834E+03 1.838E+03
PU240      0.000E+00 5.564E+02 5.564E+02 5.564E+02 5.564E+02 5.564E+02
PU241      0.000E+00 2.046E+02 2.046E+02 2.046E+02 2.046E+02 2.045E+02
SUMTOT     7.403E+03 7.833E+03 7.834E+03 7.834E+03 7.837E+03 7.841E+03
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TOTAL      7.403E+03 7.849E+03 7.849E+03 7.850E+03 7.853E+03 7.856E+03
□
         OUTPUT UNIT =
6                         PAGE   44
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         7.403E+03 5.226E+03 5.226E+03 5.226E+03 5.226E+03 5.226E+03
NP         0.000E+00 1.919E+01 1.918E+01 1.915E+01 1.889E+01 1.863E+01
PU         0.000E+00 2.600E+03 2.600E+03 2.601E+03 2.604E+03 2.607E+03
SUMTOT     7.403E+03 7.845E+03 7.845E+03 7.846E+03 7.849E+03 7.852E+03

TOTAL      7.403E+03 7.849E+03 7.849E+03 7.850E+03 7.853E+03 7.856E+03

                                         CUMULATIVE TABLE TOTALS

AP+FP      8.258E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01 1.520E+01
ACT+FP     7.403E+03 7.849E+03 7.849E+03 7.850E+03 7.853E+03 7.856E+03
AP+ACT+FP  7.485E+03 7.864E+03 7.865E+03 7.865E+03 7.868E+03 7.871E+03
□
         OUTPUT UNIT =
6                         PAGE   45
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
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```
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234      2.613E-03 1.939E-03 1.939E-03 1.939E-03 1.938E-03 1.937E-03
 U235      6.844E-01 3.628E-01 3.627E-01 3.627E-01 3.626E-01 3.624E-01
 U236      0.000E+00 9.325E-03 9.325E-03 9.325E-03 9.321E-03 9.317E-03
 U238      3.130E-01 2.917E-01 2.917E-01 2.917E-01 2.916E-01 2.915E-01
NP237      0.000E+00 2.128E-03 2.128E-03 2.128E-03 2.131E-03 2.134E-03
PU239      0.000E+00 2.332E-01 2.332E-01 2.333E-01 2.336E-01 2.339E-01
PU240      0.000E+00 7.088E-02 7.088E-02 7.088E-02 7.085E-02 7.082E-02
PU241      0.000E+00 2.606E-02 2.606E-02 2.606E-02 2.605E-02 2.604E-02
SUMTOT     1.000E+00 9.980E-01 9.980E-01 9.980E-01 9.980E-01 9.981E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE   46
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         1.000E+00 6.658E-01 6.658E-01 6.658E-01 6.655E-01 6.652E-01
NP         0.000E+00 2.445E-03 2.443E-03 2.440E-03 2.406E-03 2.371E-03
PU         0.000E+00 3.312E-01 3.313E-01 3.313E-01 3.316E-01 3.319E-01
SUMTOT     1.000E+00 9.995E-01 9.995E-01 9.995E-01 9.995E-01 9.995E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE   47
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
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    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    21 SUMMARY TABLE:  FISSION RATE,   FISSIONS PER SE
COND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      4.098E+03 2.303E+03 2.303E+03 2.303E+03 2.303E+03 2.303E+03
 U238      2.346E+02 2.318E+02 2.318E+02 2.318E+02 2.318E+02 2.318E+02
PU239      0.000E+00 1.158E+03 1.159E+03 1.159E+03 1.161E+03 1.163E+03
PU241      0.000E+00 1.536E+02 1.536E+02 1.536E+02 1.535E+02 1.535E+02
SUMTOT     4.333E+03 3.847E+03 3.847E+03 3.847E+03 3.849E+03 3.852E+03

TOTAL      4.333E+03 3.852E+03 3.852E+03 3.852E+03 3.854E+03 3.856E+03
□
         OUTPUT UNIT =
6                        PAGE   48
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    21 SUMMARY TABLE:  FISSION RATE,   FISSIONS PER SE
COND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         4.333E+03 2.537E+03 2.537E+03 2.537E+03 2.537E+03 2.537E+03
PU         0.000E+00 1.314E+03 1.314E+03 1.314E+03 1.316E+03 1.318E+03
SUMTOT     4.333E+03 3.851E+03 3.851E+03 3.851E+03 3.853E+03 3.855E+03

TOTAL      4.333E+03 3.852E+03 3.852E+03 3.852E+03 3.854E+03 3.856E+03

                                         CUMULATIVE TABLE TOTALS

AP+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ACT+FP     4.333E+03 3.852E+03 3.852E+03 3.852E+03 3.854E+03 3.856E+03
AP+ACT+FP  4.333E+03 3.852E+03 3.852E+03 3.852E+03 3.854E+03 3.856E+03
□
         OUTPUT UNIT =
6                        PAGE   49
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ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    22 SUMMARY TABLE:  FISSION RATE,   FRACTIONAL  FIS
SIONS PER SECOND
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      9.458E-01 5.980E-01 5.979E-01 5.979E-01 5.976E-01 5.972E-01
 U238      5.414E-02 6.019E-02 6.018E-02 6.018E-02 6.015E-02 6.012E-02
PU239      0.000E+00 3.008E-01 3.008E-01 3.008E-01 3.012E-01 3.016E-01
PU241      0.000E+00 3.987E-02 3.986E-02 3.986E-02 3.984E-02 3.981E-02
SUMTOT     9.999E-01 9.988E-01 9.988E-01 9.988E-01 9.988E-01 9.988E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE   50
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    22 SUMMARY TABLE:  FISSION RATE,   FRACTIONAL  FIS
SIONS PER SECOND
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         1.000E+00 6.587E-01 6.586E-01 6.586E-01 6.583E-01 6.579E-01
PU         0.000E+00 3.411E-01 3.411E-01 3.412E-01 3.415E-01 3.419E-01
SUMTOT     1.000E+00 9.998E-01 9.998E-01 9.998E-01 9.998E-01 9.998E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE   51
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ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

23 SUMMARY TABLE: ALPHA RADIOACTIVITY CURIES

1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	2.399E+00	1.888E+00	1.888E+00	1.888E+00	1.888E+00	1.888E+00
U235	9.161E-02	5.148E-02	5.148E-02	5.148E-02	5.148E-02	5.148E-02
U238	3.220E-01	3.182E-01	3.182E-01	3.182E-01	3.182E-01	3.182E-01
PU238	0.000E+00	5.069E+02	5.070E+02	5.071E+02	5.083E+02	5.094E+02
PU239	0.000E+00	2.881E+02	2.882E+02	2.883E+02	2.888E+02	2.893E+02
PU240	0.000E+00	2.360E+02	2.360E+02	2.360E+02	2.360E+02	2.360E+02
AM241	0.000E+00	3.483E+01	3.485E+01	3.486E+01	3.497E+01	3.511E+01
CM242	0.000E+00	4.932E+03	4.934E+03	4.935E+03	4.944E+03	4.946E+03
CM244	0.000E+00	6.979E+01	6.980E+01	6.981E+01	6.982E+01	6.982E+01
SUMTOT	2.813E+00	6.070E+03	6.072E+03	6.073E+03	6.084E+03	6.088E+03
TOTAL	2.813E+00	6.075E+03	6.076E+03	6.078E+03	6.088E+03	6.093E+03

OUTPUT UNIT = 6 PAGE 52

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

23 SUMMARY TABLE: ALPHA RADIOACTIVITY CURIES

1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	2.813E+00	2.478E+00	2.478E+00	2.478E+00	2.478E+00	2.478E+00
PU	0.000E+00	1.033E+03	1.033E+03	1.033E+03	1.035E+03	1.037E+03
AM	0.000E+00	3.628E+01	3.629E+01	3.631E+01	3.642E+01	3.656E+01

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CM          0.000E+00 5.003E+03 5.004E+03 5.006E+03 5.014E+03 5.017E+03
SUMTOT      2.813E+00 6.075E+03 6.076E+03 6.078E+03 6.088E+03 6.093E+03

TOTAL       2.813E+00 6.075E+03 6.076E+03 6.078E+03 6.088E+03 6.093E+03

                                          CUMULATIVE TABLE TOTALS

AP+FP       0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ACT+FP      2.813E+00 6.075E+03 6.076E+03 6.078E+03 6.088E+03 6.093E+03
AP+ACT+FP   2.813E+00 6.075E+03 6.076E+03 6.078E+03 6.088E+03 6.093E+03
□
         OUTPUT UNIT =
6                        PAGE   53
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3      0.000E+00 3.151E-02 3.151E-02 3.151E-02 3.151E-02 3.151E-02
LI  6      0.000E+00 1.772E-04 1.772E-04 1.772E-04 1.772E-04 1.772E-04
LI  7      0.000E+00 5.924E-06 5.924E-06 5.924E-06 5.924E-06 5.924E-06
BE  9      0.000E+00 1.142E-05 1.142E-05 1.142E-05 1.142E-05 1.142E-05
BE 10      0.000E+00 7.614E-05 7.614E-05 7.614E-05 7.614E-05 7.614E-05
 C 14      0.000E+00 1.540E-05 1.540E-05 1.540E-05 1.540E-05 1.540E-05
ZN 68      0.000E+00 7.189E-04 7.189E-04 7.189E-04 7.189E-04 7.189E-04
ZN 70      0.000E+00 2.461E-03 2.461E-03 2.461E-03 2.461E-03 2.461E-03
ZN 72      0.000E+00 6.393E-05 6.298E-05 6.205E-05 5.346E-05 4.470E-05
GA 72      0.000E+00 1.944E-05 1.943E-05 1.940E-05 1.862E-05 1.688E-05
GE 72      0.000E+00 1.050E-02 1.050E-02 1.050E-02 1.051E-02 1.052E-02
GA 73      0.000E+00 1.481E-05 1.287E-05 1.116E-05 2.698E-06 4.908E-07
GE 73      0.000E+00 2.433E-02 2.434E-02 2.434E-02 2.435E-02 2.435E-02
GE 74      0.000E+00 5.353E-02 5.353E-02 5.353E-02 5.353E-02 5.353E-02
GE 75      0.000E+00 1.912E-05 1.186E-05 7.178E-06 4.727E-08 1.141E-10
AS 75      0.000E+00 1.169E-01 1.169E-01 1.169E-01 1.169E-01 1.169E-01
GE 76      0.000E+00 3.040E-01 3.040E-01 3.040E-01 3.040E-01 3.040E-01
AS 76      0.000E+00 1.072E-05 1.044E-05 1.017E-05 7.813E-06 5.696E-06
SE 76      0.000E+00 1.598E-03 1.598E-03 1.598E-03 1.601E-03 1.603E-03
GE 77      0.000E+00 3.000E-04 2.824E-04 2.656E-04 1.438E-04 6.888E-05
AS 77      0.000E+00 2.888E-03 2.855E-03 2.822E-03 2.471E-03 2.060E-03
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SE 77       0.000E+00 6.463E-01 6.464E-01 6.464E-01 6.469E-01 6.474E-01
GE 78       0.000E+00 2.305E-04 1.430E-04 8.866E-05 7.442E-07 2.401E-09
AS 78       0.000E+00 2.456E-04 2.243E-04 1.846E-04 5.811E-06 3.921E-08
SE 78       0.000E+00 1.409E+00 1.409E+00 1.409E+00 1.410E+00 1.410E+00
GE 79       0.000E+00 4.064E-06 2.617E-31 0.000E+00 0.000E+00 0.000E+00
AS 79       0.000E+00 6.067E-05 6.417E-07 6.317E-09 5.393E-29 0.000E+00
SE 79       0.000E+00 3.555E+00 3.555E+00 3.555E+00 3.555E+00 3.555E+00
SE 79M      0.000E+00 2.626E-05 4.880E-07 4.820E-09 4.105E-29 0.000E+00
BR 79       0.000E+00 2.890E-05 2.890E-05 2.891E-05 2.895E-05 2.900E-05
GE 80       0.000E+00 4.973E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 80       0.000E+00 4.184E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 80       0.000E+00 8.194E+00 8.194E+00 8.194E+00 8.194E+00 8.194E+00
KR 80       0.000E+00 9.282E-05 9.283E-05 9.284E-05 9.286E-05 9.287E-05
GE 81       0.000E+00 2.645E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 81       0.000E+00 1.310E-05 2.314E-39 0.000E+00 0.000E+00 0.000E+00
SE 81       0.000E+00 4.826E-04 6.052E-05 1.019E-05 3.420E-09 5.643E-13
SE 81M      0.000E+00 4.348E-05 2.104E-05 1.018E-05 7.173E-09 1.183E-12
BR 81       0.000E+00 1.375E+01 1.375E+01 1.375E+01 1.375E+01 1.375E+01
KR 81       0.000E+00 5.795E-06 5.795E-06 5.795E-06 5.795E-06 5.795E-06
AS 82       0.000E+00 8.257E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 82M      0.000E+00 2.014E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 82       0.000E+00 2.141E+01 2.141E+01 2.141E+01 2.141E+01 2.141E+01
BR 82       0.000E+00 2.614E-03 2.566E-03 2.516E-03 2.068E-03 1.634E-03
BR 82M      0.000E+00 2.866E-06 3.242E-09 3.677E-12 0.000E+00 0.000E+00
KR 82       0.000E+00 3.046E-01 3.047E-01 3.047E-01 3.052E-01 3.056E-01
AS 83       0.000E+00 9.935E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 83       0.000E+00 5.416E-04 8.588E-05 1.353E-05 1.270E-13 2.956E-23
SE 83M      0.000E+00 4.399E-05 1.721E-20 5.677E-36 0.000E+00 0.000E+00
BR 83       0.000E+00 8.997E-03 7.152E-03 5.412E-03 2.986E-04 9.196E-06
KR 83       0.000E+00 3.114E+01 3.114E+01 3.115E+01 3.116E+01 3.116E+01
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         OUTPUT UNIT =
6                        PAGE   54
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 83M      0.000E+00 6.890E-03 6.663E-03 6.057E-03 7.111E-04 2.724E-05
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AS 84	0.000E+00	3.376E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	0.000E+00	3.642E-04	1.236E-09	4.156E-15	0.000E+00	0.000E+00
BR 84	0.000E+00	3.609E-03	1.087E-03	2.939E-04	6.143E-10	9.389E-17
BR 84M	0.000E+00	1.959E-05	1.913E-08	1.868E-11	0.000E+00	0.000E+00
KR 84	0.000E+00	6.905E+01	6.905E+01	6.906E+01	6.906E+01	6.906E+01
SE 85	0.000E+00	4.385E-05	7.259E-33	0.000E+00	0.000E+00	0.000E+00
SE 85M	0.000E+00	1.568E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	0.000E+00	4.015E-04	2.385E-10	1.194E-16	0.000E+00	0.000E+00
KR 85	0.000E+00	1.646E+01	1.646E+01	1.646E+01	1.646E+01	1.646E+01
KR 85M	0.000E+00	3.810E-02	3.304E-02	2.831E-02	6.026E-03	9.414E-04
RB 85	0.000E+00	6.399E+01	6.399E+01	6.399E+01	6.401E+01	6.402E+01
SE 86	0.000E+00	3.810E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	0.000E+00	9.521E-05	2.426E-24	0.000E+00	0.000E+00	0.000E+00
BR 86M	0.000E+00	7.841E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 86	0.000E+00	1.271E+02	1.271E+02	1.271E+02	1.271E+02	1.271E+02
RB 86	0.000E+00	1.289E-02	1.287E-02	1.285E-02	1.265E-02	1.242E-02
SR 86	0.000E+00	1.157E-01	1.157E-01	1.158E-01	1.160E-01	1.162E-01
SE 87	0.000E+00	1.010E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 87	0.000E+00	2.226E-04	8.863E-24	3.657E-43	0.000E+00	0.000E+00
KR 87	0.000E+00	2.168E-02	1.271E-02	7.367E-03	3.164E-05	4.562E-08
RB 87	0.000E+00	1.639E+02	1.639E+02	1.639E+02	1.639E+02	1.639E+02
SR 87	0.000E+00	7.945E-04	7.946E-04	7.946E-04	7.947E-04	7.947E-04
BR 88	0.000E+00	7.275E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	0.000E+00	6.907E-02	5.416E-02	4.243E-02	3.692E-03	1.972E-04
RB 88	0.000E+00	7.311E-03	6.247E-03	4.944E-03	4.309E-04	2.301E-05
SR 88	0.000E+00	2.356E+02	2.356E+02	2.356E+02	2.357E+02	2.357E+02
BR 89	0.000E+00	1.473E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	0.000E+00	1.612E-03	3.284E-09	6.586E-15	0.000E+00	0.000E+00
RB 89	0.000E+00	8.158E-03	6.620E-04	4.291E-05	5.621E-17	3.094E-31
SR 89	0.000E+00	4.125E+01	4.124E+01	4.122E+01	4.098E+01	4.070E+01
Y 89	0.000E+00	2.681E+02	2.681E+02	2.682E+02	2.684E+02	2.687E+02
BR 90	0.000E+00	3.479E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 90	0.000E+00	2.745E-04	8.186E-38	0.000E+00	0.000E+00	0.000E+00
RB 90	0.000E+00	1.355E-03	2.381E-09	1.365E-13	0.000E+00	0.000E+00
RB 90M	0.000E+00	5.096E-04	3.456E-08	2.178E-12	0.000E+00	0.000E+00
SR 90	0.000E+00	3.678E+02	3.678E+02	3.678E+02	3.678E+02	3.678E+02
Y 90	0.000E+00	9.525E-02	9.521E-02	9.518E-02	9.488E-02	9.455E-02
ZR 90	0.000E+00	6.834E+00	6.835E+00	6.836E+00	6.846E+00	6.859E+00
KR 91	0.000E+00	5.537E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	0.000E+00	6.347E-04	1.678E-22	4.017E-41	0.000E+00	0.000E+00
SR 91	0.000E+00	3.950E-01	3.678E-01	3.419E-01	1.648E-01	6.868E-02
Y 91	0.000E+00	6.154E+01	6.154E+01	6.153E+01	6.142E+01	6.115E+01
Y 91M	0.000E+00	1.999E-02	1.955E-02	1.859E-02	9.140E-03	3.807E-03
ZR 91	0.000E+00	3.311E+02	3.311E+02	3.312E+02	3.315E+02	3.318E+02
KR 92	0.000E+00	5.518E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	0.000E+00	4.248E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 92	0.000E+00	1.206E-01	9.344E-02	7.235E-02	5.606E-03	2.604E-04
Y 92	0.000E+00	1.581E-01	1.546E-01	1.462E-01	4.025E-02	5.007E-03

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ZR 92      0.000E+00 4.161E+02 4.162E+02 4.162E+02 4.164E+02 4.164E+02
RB 93      0.000E+00 4.172E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE   55
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SR 93      0.000E+00 6.205E-03 2.441E-05 9.536E-08 0.000E+00 0.000E+00
 Y 93      0.000E+00 5.122E-01 4.841E-01 4.520E-01 2.276E-01 9.988E-02
ZR 93      0.000E+00 4.606E+02 4.607E+02 4.607E+02 4.609E+02 4.611E+02
NB 93      0.000E+00 1.442E-05 1.443E-05 1.443E-05 1.445E-05 1.447E-05
NB 93M     0.000E+00 1.390E-04 1.390E-04 1.390E-04 1.392E-04 1.395E-04
RB 94      0.000E+00 1.005E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 94      0.000E+00 9.844E-04 4.598E-18 2.127E-32 0.000E+00 0.000E+00
 Y 94      0.000E+00 1.615E-02 1.951E-03 2.211E-04 7.730E-14 3.471E-25
ZR 94      0.000E+00 4.612E+02 4.613E+02 4.613E+02 4.613E+02 4.613E+02
NB 94      0.000E+00 2.831E-04 2.831E-04 2.831E-04 2.831E-04 2.831E-04
SR 95      0.000E+00 3.168E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 95      0.000E+00 9.475E-03 1.868E-04 3.557E-06 2.236E-23 0.000E+00
ZR 95      0.000E+00 8.696E+01 8.693E+01 8.689E+01 8.650E+01 8.604E+01
NB 95      0.000E+00 4.822E+01 4.822E+01 4.822E+01 4.822E+01 4.821E+01
NB 95M     0.000E+00 3.490E-02 3.490E-02 3.490E-02 3.484E-02 3.477E-02
MO 95      0.000E+00 3.444E+02 3.445E+02 3.445E+02 3.449E+02 3.454E+02
SR 96      0.000E+00 3.404E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 96      0.000E+00 1.979E-03 2.826E-11 3.964E-19 0.000E+00 0.000E+00
ZR 96      0.000E+00 4.877E+02 4.877E+02 4.877E+02 4.877E+02 4.877E+02
NB 96      0.000E+00 1.992E-03 1.933E-03 1.877E-03 1.395E-03 9.767E-04
MO 96      0.000E+00 7.459E+00 7.459E+00 7.459E+00 7.460E+00 7.460E+00
 Y 97      0.000E+00 1.371E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 97      0.000E+00 9.204E-01 8.834E-01 8.479E-01 5.627E-01 3.439E-01
NB 97      0.000E+00 6.593E-02 6.495E-02 6.327E-02 4.299E-02 2.462E-02
NB 97M     0.000E+00 8.606E-04 8.253E-04 7.921E-04 5.256E-04 3.213E-04
MO 97      0.000E+00 4.718E+02 4.718E+02 4.718E+02 4.722E+02 4.724E+02
 Y 98      0.000E+00 2.666E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 98      0.000E+00 4.740E-04 5.265E-39 0.000E+00 0.000E+00 0.000E+00
NB 98      0.000E+00 4.342E-05 5.228E-40 0.000E+00 0.000E+00 0.000E+00
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NB 98M      0.000E+00 3.921E-04 1.749E-04 7.798E-05 2.426E-08 1.501E-12
MO 98       0.000E+00 4.808E+02 4.808E+02 4.808E+02 4.808E+02 4.808E+02
TC 98       0.000E+00 1.367E-03 1.367E-03 1.367E-03 1.367E-03 1.367E-03
 Y 99       0.000E+00 4.062E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 99       0.000E+00 3.655E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99       0.000E+00 2.255E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99M      0.000E+00 8.765E-05 9.906E-12 1.120E-18 0.000E+00 0.000E+00
MO 99       0.000E+00 3.950E+00 3.909E+00 3.868E+00 3.483E+00 3.070E+00
TC 99       0.000E+00 4.757E+02 4.757E+02 4.758E+02 4.762E+02 4.766E+02
TC 99M      0.000E+00 3.154E-01 3.152E-01 3.147E-01 2.980E-01 2.678E-01
RU 99       0.000E+00 1.052E-03 1.052E-03 1.052E-03 1.054E-03 1.056E-03
ZR100       0.000E+00 1.011E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100       0.000E+00 2.104E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100M      0.000E+00 2.113E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO100       0.000E+00 5.389E+02 5.389E+02 5.389E+02 5.389E+02 5.389E+02
TC100       0.000E+00 3.011E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU100       0.000E+00 2.788E+01 2.788E+01 2.788E+01 2.788E+01 2.788E+01
ZR101       0.000E+00 3.049E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB101       0.000E+00 1.006E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101       0.000E+00 1.328E-02 7.801E-04 4.537E-05 2.007E-17 3.003E-32
TC101       0.000E+00 1.290E-02 2.818E-03 2.744E-04 4.384E-16 8.844E-31
RU101       0.000E+00 4.458E+02 4.458E+02 4.459E+02 4.459E+02 4.459E+02
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         OUTPUT UNIT =
6                          PAGE   56
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZR102       0.000E+00 1.451E-04 2.001E-42 0.000E+00 0.000E+00 0.000E+00
NB102       0.000E+00 3.553E-05 2.859E-43 0.000E+00 0.000E+00 0.000E+00
MO102       0.000E+00 9.264E-03 2.230E-04 5.262E-06 2.813E-22 8.433E-42
TC102       0.000E+00 7.351E-05 1.782E-06 4.205E-08 2.248E-24 0.000E+00
TC102M      0.000E+00 3.404E-06 2.398E-10 1.689E-14 0.000E+00 0.000E+00
RU102       0.000E+00 4.129E+02 4.129E+02 4.129E+02 4.129E+02 4.129E+02
RH102       0.000E+00 2.140E-04 2.140E-04 2.140E-04 2.140E-04 2.139E-04
ZR103       0.000E+00 3.094E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB103       0.000E+00 1.221E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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MO103	0.000E+00	7.516E-04	7.990E-22	6.929E-40	0.000E+00	0.000E+00
TC103	0.000E+00	6.349E-04	3.994E-21	3.465E-39	0.000E+00	0.000E+00
RU103	0.000E+00	4.288E+01	4.285E+01	4.282E+01	4.250E+01	4.213E+01
RH103	0.000E+00	2.478E+02	2.478E+02	2.478E+02	2.481E+02	2.485E+02
RH103M	0.000E+00	3.831E-02	3.830E-02	3.829E-02	3.804E-02	3.768E-02
NB104	0.000E+00	3.412E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	0.000E+00	8.869E-04	4.588E-15	2.361E-26	0.000E+00	0.000E+00
TC104	0.000E+00	1.074E-02	1.192E-03	1.213E-04	1.445E-14	1.783E-26
RU104	0.000E+00	2.500E+02	2.500E+02	2.500E+02	2.500E+02	2.500E+02
RH104	0.000E+00	1.749E-04	9.404E-10	6.480E-14	0.000E+00	0.000E+00
RH104M	0.000E+00	7.045E-05	4.855E-09	3.345E-13	0.000E+00	0.000E+00
PD104	0.000E+00	5.450E+01	5.450E+01	5.450E+01	5.450E+01	5.450E+01
MO105	0.000E+00	3.322E-04	2.854E-24	0.000E+00	0.000E+00	0.000E+00
TC105	0.000E+00	3.613E-03	2.204E-05	1.218E-07	0.000E+00	0.000E+00
RU105	0.000E+00	1.219E-01	1.078E-01	9.219E-02	1.934E-02	2.970E-03
RH105	0.000E+00	9.111E-01	9.114E-01	9.091E-01	8.119E-01	6.558E-01
RH105M	0.000E+00	9.610E-05	8.520E-05	7.290E-05	1.530E-05	2.348E-06
PD105	0.000E+00	1.638E+02	1.638E+02	1.638E+02	1.640E+02	1.641E+02
MO106	0.000E+00	2.727E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	0.000E+00	1.786E-04	1.104E-33	0.000E+00	0.000E+00	0.000E+00
RU106	0.000E+00	7.989E+01	7.988E+01	7.988E+01	7.981E+01	7.974E+01
RH106	0.000E+00	8.504E-05	7.509E-05	7.508E-05	7.502E-05	7.495E-05
RH106M	0.000E+00	1.204E-03	8.787E-04	6.412E-04	2.746E-05	6.262E-07
PD106	0.000E+00	4.855E+01	4.856E+01	4.857E+01	4.863E+01	4.871E+01
MO107	0.000E+00	6.661E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	0.000E+00	7.225E-05	3.449E-42	0.000E+00	0.000E+00	0.000E+00
RU107	0.000E+00	9.822E-04	5.365E-08	2.686E-12	0.000E+00	0.000E+00
RH107	0.000E+00	5.102E-03	9.460E-04	1.392E-04	6.610E-13	6.793E-23
PD107	0.000E+00	7.585E+01	7.585E+01	7.586E+01	7.586E+01	7.586E+01
AG107	0.000E+00	4.360E-06	4.361E-06	4.362E-06	4.371E-06	4.382E-06
TC108	0.000E+00	7.656E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU108	0.000E+00	7.130E-04	6.988E-08	6.770E-12	0.000E+00	0.000E+00
RH108	0.000E+00	4.479E-05	4.637E-09	4.492E-13	0.000E+00	0.000E+00
RH108M	0.000E+00	9.062E-06	7.869E-09	6.832E-12	0.000E+00	0.000E+00
PD108	0.000E+00	5.020E+01	5.020E+01	5.020E+01	5.020E+01	5.020E+01
CD108	0.000E+00	5.158E-05	5.158E-05	5.158E-05	5.158E-05	5.158E-05
TC109	0.000E+00	3.674E-05	2.077E-26	0.000E+00	0.000E+00	0.000E+00
RU109	0.000E+00	5.796E-05	4.543E-26	0.000E+00	0.000E+00	0.000E+00
RH109	0.000E+00	1.547E-04	5.746E-16	5.226E-28	0.000E+00	0.000E+00
RH109M	0.000E+00	4.298E-05	1.034E-24	0.000E+00	0.000E+00	0.000E+00
PD109	0.000E+00	9.094E-02	8.698E-02	8.261E-02	4.937E-02	2.661E-02
PD109M	0.000E+00	2.426E-04	6.911E-08	9.737E-12	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 57
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
AG109	0.000E+00	2.843E+01	2.843E+01	2.844E+01	2.847E+01	2.849E+01
AG109M	0.000E+00	7.427E-05	7.110E-05	6.753E-05	4.035E-05	2.175E-05
RU110	0.000E+00	1.191E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	0.000E+00	2.315E-05	2.158E-42	0.000E+00	0.000E+00	0.000E+00
PD110	0.000E+00	1.691E+01	1.691E+01	1.691E+01	1.691E+01	1.691E+01
AG110	0.000E+00	1.175E-05	2.829E-09	2.829E-09	2.825E-09	2.821E-09
AG110M	0.000E+00	1.867E-01	1.867E-01	1.867E-01	1.864E-01	1.862E-01
CD110	0.000E+00	5.637E+00	5.637E+00	5.637E+00	5.637E+00	5.638E+00
RU111	0.000E+00	5.419E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	0.000E+00	2.938E-05	2.306E-22	1.449E-39	0.000E+00	0.000E+00
PD111	0.000E+00	6.274E-04	1.048E-04	1.985E-05	1.374E-06	3.029E-07
PD111M	0.000E+00	1.282E-04	1.132E-04	9.977E-05	2.829E-05	6.235E-06
AG111	0.000E+00	3.076E-01	3.070E-01	3.059E-01	2.944E-01	2.810E-01
AG111M	0.000E+00	3.081E-05	5.497E-06	1.115E-06	9.695E-08	2.137E-08
CD111	0.000E+00	9.964E+00	9.965E+00	9.967E+00	9.978E+00	9.992E+00
PD112	0.000E+00	1.955E-02	1.889E-02	1.825E-02	1.293E-02	8.547E-03
AG112	0.000E+00	3.056E-03	3.043E-03	3.013E-03	2.346E-03	1.574E-03
CD112	0.000E+00	6.549E+00	6.550E+00	6.551E+00	6.557E+00	6.562E+00
PD113	0.000E+00	2.020E-05	1.878E-17	1.708E-29	0.000E+00	0.000E+00
AG113	0.000E+00	3.860E-03	3.404E-03	2.986E-03	8.075E-04	1.681E-04
CD113	0.000E+00	1.680E-01	1.684E-01	1.689E-01	1.710E-01	1.716E-01
CD113M	0.000E+00	1.034E-01	1.034E-01	1.034E-01	1.034E-01	1.034E-01
IN113	0.000E+00	2.878E-03	2.878E-03	2.879E-03	2.884E-03	2.891E-03
PD114	0.000E+00	2.386E-05	7.242E-13	2.158E-20	0.000E+00	0.000E+00
CD114	0.000E+00	9.812E+00	9.812E+00	9.812E+00	9.812E+00	9.812E+00
IN114M	0.000E+00	1.871E-05	1.870E-05	1.869E-05	1.858E-05	1.845E-05
SN114	0.000E+00	1.120E-04	1.120E-04	1.120E-04	1.121E-04	1.123E-04
PD115	0.000E+00	6.224E-06	2.088E-34	0.000E+00	0.000E+00	0.000E+00
AG115	0.000E+00	1.473E-04	1.905E-05	2.381E-06	2.217E-15	3.227E-26
CD115	0.000E+00	3.037E-02	3.011E-02	2.974E-02	2.612E-02	2.236E-02
CD115M	0.000E+00	5.809E-02	5.805E-02	5.801E-02	5.764E-02	5.719E-02
IN115	0.000E+00	1.968E+00	1.968E+00	1.969E+00	1.973E+00	1.977E+00
IN115M	0.000E+00	2.447E-03	2.445E-03	2.439E-03	2.252E-03	1.951E-03
SN115	0.000E+00	1.526E-01	1.526E-01	1.526E-01	1.527E-01	1.529E-01
AG116	0.000E+00	1.161E-05	2.300E-12	4.191E-19	0.000E+00	0.000E+00
CD116	0.000E+00	3.995E+00	3.995E+00	3.995E+00	3.995E+00	3.995E+00
IN116M	0.000E+00	1.906E-04	8.842E-05	4.102E-05	1.894E-08	1.883E-12

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SN116      0.000E+00 2.456E+00 2.456E+00 2.456E+00 2.456E+00 2.456E+00
AG117      0.000E+00 5.280E-06 8.815E-21 1.382E-35 0.000E+00 0.000E+00
CD117      0.000E+00 8.903E-04 6.857E-04 5.252E-04 3.652E-05 1.490E-06
CD117M     0.000E+00 6.319E-04 5.166E-04 4.213E-04 5.486E-05 4.751E-06
IN117      0.000E+00 2.319E-04 2.241E-04 2.056E-04 2.999E-05 2.076E-06
IN117M     0.000E+00 7.765E-04 7.487E-04 6.833E-04 1.039E-04 6.466E-06
SN117      0.000E+00 4.039E+00 4.040E+00 4.040E+00 4.042E+00 4.042E+00
SN117M     0.000E+00 3.295E-04 3.289E-04 3.282E-04 3.215E-04 3.136E-04
CD118      0.000E+00 4.457E-04 1.953E-04 8.545E-05 2.192E-08 1.076E-12
SN118      0.000E+00 4.121E+00 4.121E+00 4.121E+00 4.121E+00 4.121E+00
CD119      0.000E+00 4.151E-05 5.028E-07 6.025E-09 3.675E-28 0.000E+00
CD119M     0.000E+00 1.413E-05 3.314E-11 7.517E-17 0.000E+00 0.000E+00
IN119      0.000E+00 6.362E-06 1.623E-07 1.694E-08 1.585E-18 1.441E-30
IN119M     0.000E+00 1.193E-04 2.038E-05 2.114E-06 1.965E-16 1.787E-28
□
         OUTPUT UNIT =
6                        PAGE   58
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SN119      0.000E+00 4.044E+00 4.045E+00 4.045E+00 4.045E+00 4.045E+00
SN119M     0.000E+00 3.500E-02 3.499E-02 3.499E-02 3.495E-02 3.490E-02
CD120      0.000E+00 7.484E-06 3.588E-27 0.000E+00 0.000E+00 0.000E+00
IN120      0.000E+00 3.335E-06 1.244E-26 0.000E+00 0.000E+00 0.000E+00
SN120      0.000E+00 4.178E+00 4.178E+00 4.178E+00 4.178E+00 4.178E+00
IN121      0.000E+00 3.506E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121M     0.000E+00 6.236E-06 2.231E-11 7.501E-17 0.000E+00 0.000E+00
SN121      0.000E+00 1.514E-02 1.476E-02 1.439E-02 1.111E-02 8.144E-03
SN121M     0.000E+00 1.548E-03 1.548E-03 1.548E-03 1.548E-03 1.548E-03
SB121      0.000E+00 4.211E+00 4.211E+00 4.212E+00 4.215E+00 4.218E+00
SN122      0.000E+00 4.626E+00 4.626E+00 4.626E+00 4.626E+00 4.626E+00
SB122      0.000E+00 2.403E-03 2.377E-03 2.352E-03 2.114E-03 1.859E-03
TE122      0.000E+00 1.386E-01 1.386E-01 1.386E-01 1.389E-01 1.391E-01
IN123M     0.000E+00 2.570E-06 7.668E-29 0.000E+00 0.000E+00 0.000E+00
SN123      0.000E+00 3.895E-01 3.894E-01 3.893E-01 3.885E-01 3.874E-01
SN123M     0.000E+00 3.622E-04 1.294E-04 4.585E-05 1.430E-09 5.598E-15
SB123      0.000E+00 4.794E+00 4.795E+00 4.795E+00 4.796E+00 4.797E+00
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TE123      0.000E+00 1.066E-03 1.066E-03 1.066E-03 1.067E-03 1.068E-03
TE123M     0.000E+00 2.561E-04 2.560E-04 2.559E-04 2.553E-04 2.546E-04
CD124      0.000E+00 2.187E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN124      0.000E+00 6.368E+00 6.368E+00 6.368E+00 6.368E+00 6.368E+00
SB124      0.000E+00 2.980E-02 2.978E-02 2.977E-02 2.963E-02 2.946E-02
TE124      0.000E+00 6.878E-02 6.879E-02 6.880E-02 6.895E-02 6.912E-02
SN125      0.000E+00 1.093E-01 1.089E-01 1.086E-01 1.054E-01 1.017E-01
SN125M     0.000E+00 1.201E-04 1.539E-06 1.949E-08 2.077E-27 0.000E+00
SB125      0.000E+00 7.657E+00 7.658E+00 7.658E+00 7.659E+00 7.660E+00
TE125      0.000E+00 1.205E+00 1.205E+00 1.205E+00 1.207E+00 1.210E+00
TE125M     0.000E+00 8.429E-02 8.429E-02 8.430E-02 8.439E-02 8.448E-02
SN126      0.000E+00 1.343E+01 1.343E+01 1.343E+01 1.343E+01 1.343E+01
SB126      0.000E+00 1.005E-02 1.003E-02 1.000E-02 9.774E-03 9.505E-03
SB126M     0.000E+00 5.061E-06 5.714E-07 6.832E-08 4.850E-09 4.850E-09
TE126      0.000E+00 3.029E-01 3.029E-01 3.029E-01 3.031E-01 3.034E-01
SN127      0.000E+00 5.094E-03 3.663E-03 2.633E-03 9.705E-05 1.849E-06
SN127M     0.000E+00 8.061E-05 3.440E-09 1.468E-13 0.000E+00 0.000E+00
SB127      0.000E+00 3.536E-01 3.525E-01 3.509E-01 3.279E-01 2.998E-01
TE127      0.000E+00 3.521E-02 3.520E-02 3.519E-02 3.449E-02 3.274E-02
TE127M     0.000E+00 1.252E+00 1.253E+00 1.253E+00 1.253E+00 1.253E+00
 I127      0.000E+00 2.574E+01 2.574E+01 2.575E+01 2.577E+01 2.580E+01
SN128      0.000E+00 6.245E-03 3.087E-03 1.525E-03 1.325E-06 2.808E-10
SB128      0.000E+00 4.518E-03 4.183E-03 3.874E-03 1.795E-03 7.132E-04
SB128M     0.000E+00 1.182E-03 6.577E-04 3.264E-04 2.834E-07 6.010E-11
TE128      0.000E+00 5.700E+01 5.700E+01 5.700E+01 5.701E+01 5.701E+01
 I128      0.000E+00 8.326E-05 1.576E-05 2.982E-06 1.758E-13 3.711E-22
XE128      0.000E+00 7.003E-01 7.003E-01 7.003E-01 7.003E-01 7.003E-01
SN129      0.000E+00 5.166E-04 2.018E-06 7.885E-09 0.000E+00 0.000E+00
SN129M     0.000E+00 2.139E-04 1.275E-11 7.602E-19 0.000E+00 0.000E+00
SB129      0.000E+00 5.314E-02 4.590E-02 3.909E-02 7.856E-03 1.145E-03
TE129      0.000E+00 1.405E-02 1.353E-02 1.248E-02 3.866E-03 1.718E-03
TE129M     0.000E+00 1.464E+00 1.464E+00 1.464E+00 1.455E+00 1.441E+00
 I129      0.000E+00 9.461E+01 9.462E+01 9.463E+01 9.468E+01 9.470E+01
XE129      0.000E+00 1.803E-03 1.803E-03 1.803E-03 1.803E-03 1.804E-03
□
         OUTPUT UNIT =
6                        PAGE   59
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
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, 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
XE129M	0.000E+00	8.383E-06	8.353E-06	8.323E-06	8.028E-06	7.687E-06
SN130	0.000E+00	8.856E-04	1.235E-08	1.724E-13	0.000E+00	0.000E+00
SB130	0.000E+00	2.657E-03	9.394E-04	3.321E-04	1.014E-08	3.866E-14
SB130M	0.000E+00	1.988E-03	5.609E-06	7.661E-09	0.000E+00	0.000E+00
TE130	0.000E+00	1.912E+02	1.912E+02	1.912E+02	1.912E+02	1.912E+02
I130	0.000E+00	7.669E-03	7.280E-03	6.883E-03	3.929E-03	2.005E-03
I130M	0.000E+00	3.649E-05	3.592E-07	3.536E-09	3.019E-29	0.000E+00
XE130	0.000E+00	2.582E+00	2.582E+00	2.583E+00	2.586E+00	2.588E+00
SN131	0.000E+00	2.311E-04	1.453E-21	9.129E-39	0.000E+00	0.000E+00
SB131	0.000E+00	1.348E-02	2.250E-03	3.689E-04	5.175E-12	1.952E-21
TE131	0.000E+00	1.534E-02	7.418E-03	2.495E-03	4.149E-04	3.144E-04
TE131M	0.000E+00	1.741E-01	1.709E-01	1.671E-01	1.327E-01	1.006E-01
I131	0.000E+00	7.993E+00	7.987E+00	7.969E+00	7.724E+00	7.429E+00
XE131	0.000E+00	2.820E+02	2.821E+02	2.821E+02	2.824E+02	2.827E+02
XE131M	0.000E+00	1.314E-01	1.314E-01	1.314E-01	1.313E-01	1.311E-01
SN132	0.000E+00	8.316E-05	6.718E-32	0.000E+00	0.000E+00	0.000E+00
SB132	0.000E+00	1.009E-03	3.962E-10	1.404E-16	0.000E+00	0.000E+00
SB132M	0.000E+00	9.840E-04	4.926E-08	2.467E-12	0.000E+00	0.000E+00
TE132	0.000E+00	4.686E+00	4.647E+00	4.606E+00	4.215E+00	3.790E+00
I132	0.000E+00	1.396E-01	1.390E-01	1.382E-01	1.277E-01	1.148E-01
XE132	0.000E+00	5.546E+02	5.547E+02	5.547E+02	5.551E+02	5.555E+02
CS132	0.000E+00	7.681E-04	7.647E-04	7.613E-04	7.280E-04	6.901E-04
BA132	0.000E+00	3.969E-04	3.969E-04	3.970E-04	3.977E-04	3.984E-04
SB133	0.000E+00	1.065E-03	3.176E-11	9.464E-19	0.000E+00	0.000E+00
TE133	0.000E+00	1.074E-02	9.509E-04	2.813E-04	1.470E-07	1.799E-11
TE133M	0.000E+00	3.186E-02	1.505E-02	7.104E-03	3.902E-06	4.775E-10
I133	0.000E+00	1.851E+00	1.817E+00	1.766E+00	1.271E+00	8.523E-01
I133M	0.000E+00	6.022E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	0.000E+00	1.119E+01	1.119E+01	1.119E+01	1.108E+01	1.079E+01
XE133M	0.000E+00	1.433E-01	1.432E-01	1.430E-01	1.389E-01	1.297E-01
CS133	0.000E+00	6.979E+02	6.980E+02	6.980E+02	6.986E+02	6.994E+02
SB134	0.000E+00	1.217E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	0.000E+00	1.103E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	0.000E+00	5.465E-02	2.022E-02	7.475E-03	3.569E-07	2.330E-12
I134	0.000E+00	8.681E-02	6.194E-02	3.634E-02	2.505E-05	2.018E-09
I134M	0.000E+00	5.200E-04	6.828E-09	8.968E-14	0.000E+00	0.000E+00
XE134	0.000E+00	8.632E+02	8.633E+02	8.633E+02	8.634E+02	8.634E+02
CS134	0.000E+00	4.163E+01	4.163E+01	4.162E+01	4.161E+01	4.159E+01
CS134M	0.000E+00	3.086E-03	2.430E-03	1.913E-03	1.753E-04	9.957E-06
BA134	0.000E+00	6.503E+00	6.504E+00	6.506E+00	6.522E+00	6.541E+00
TE135	0.000E+00	2.148E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	5.559E-01	5.007E-01	4.509E-01	1.580E-01	4.491E-02
XE135	0.000E+00	2.453E-01	2.817E-01	3.093E-01	3.368E-01	2.025E-01
XE135M	0.000E+00	4.326E-03	3.150E-03	2.788E-03	9.757E-04	2.773E-04
CS135	0.000E+00	2.343E+02	2.344E+02	2.344E+02	2.346E+02	2.349E+02

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CS135M     0.000E+00 2.857E-04 1.304E-04 5.948E-05 2.325E-08 1.892E-12
BA135      0.000E+00 1.909E-02 1.909E-02 1.909E-02 1.910E-02 1.910E-02
BA135M     0.000E+00 1.539E-05 1.502E-05 1.466E-05 1.152E-05 8.618E-06
TE136      0.000E+00 1.293E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I136      0.000E+00 9.297E-04 9.671E-17 8.487E-30 0.000E+00 0.000E+00
 I136M     0.000E+00 3.136E-04 8.661E-28 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE   60
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

XE136      0.000E+00 1.276E+03 1.276E+03 1.276E+03 1.276E+03 1.276E+03
CS136      0.000E+00 4.361E-01 4.352E-01 4.342E-01 4.248E-01 4.137E-01
BA136      0.000E+00 6.243E+00 6.244E+00 6.245E+00 6.254E+00 6.265E+00
TE137      0.000E+00 5.675E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I137      0.000E+00 2.800E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE137      0.000E+00 5.117E-03 1.042E-07 2.004E-12 0.000E+00 0.000E+00
CS137      0.000E+00 7.031E+02 7.031E+02 7.031E+02 7.031E+02 7.030E+02
BA137      0.000E+00 1.116E+01 1.117E+01 1.117E+01 1.119E+01 1.121E+01
BA137M     0.000E+00 1.079E-04 1.076E-04 1.076E-04 1.076E-04 1.076E-04
 I138      0.000E+00 3.692E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE138      0.000E+00 1.862E-02 9.911E-04 5.266E-05 9.440E-18 4.777E-33
CS138      0.000E+00 4.651E-02 2.021E-02 5.947E-03 1.485E-08 2.759E-15
CS138M     0.000E+00 1.842E-04 1.089E-10 6.439E-17 0.000E+00 0.000E+00
BA138      0.000E+00 7.653E+02 7.653E+02 7.653E+02 7.653E+02 7.653E+02
LA138      0.000E+00 4.852E-03 4.852E-03 4.852E-03 4.852E-03 4.852E-03
 I139      0.000E+00 6.263E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE139      0.000E+00 6.897E-04 2.552E-31 0.000E+00 0.000E+00 0.000E+00
CS139      0.000E+00 1.296E-02 1.642E-04 1.968E-06 1.200E-25 0.000E+00
BA139      0.000E+00 1.169E-01 7.984E-02 4.839E-02 3.168E-04 7.586E-07
LA139      0.000E+00 7.327E+02 7.328E+02 7.328E+02 7.329E+02 7.329E+02
XE140      0.000E+00 1.604E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS140      0.000E+00 1.331E-03 1.586E-20 1.638E-37 0.000E+00 0.000E+00
BA140      0.000E+00 2.526E+01 2.520E+01 2.514E+01 2.458E+01 2.392E+01
LA140      0.000E+00 3.355E+00 3.354E+00 3.353E+00 3.338E+00 3.308E+00
CE140      0.000E+00 6.952E+02 6.952E+02 6.953E+02 6.958E+02 6.965E+02
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XE141      0.000E+00 6.992E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS141      0.000E+00 3.953E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA141      0.000E+00 2.388E-02 2.493E-03 2.558E-04 3.312E-14 4.515E-26
LA141      0.000E+00 3.096E-01 2.789E-01 2.358E-01 4.048E-02 4.878E-03
CE141      0.000E+00 6.252E+01 6.251E+01 6.250E+01 6.214E+01 6.152E+01
PR141      0.000E+00 6.144E+02 6.144E+02 6.145E+02 6.150E+02 6.157E+02
CS142      0.000E+00 1.674E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA142      0.000E+00 1.352E-02 2.776E-04 5.695E-06 7.504E-23 3.980E-43
LA142      0.000E+00 1.197E-01 8.586E-02 5.502E-02 6.196E-04 2.846E-06
CE142      0.000E+00 6.797E+02 6.798E+02 6.798E+02 6.799E+02 6.799E+02
PR142      0.000E+00 2.961E-02 2.862E-02 2.761E-02 1.922E-02 1.244E-02
PR142M     0.000E+00 7.378E-05 4.274E-06 2.476E-07 1.054E-19 1.504E-34
ND142      0.000E+00 5.717E+00 5.719E+00 5.720E+00 5.728E+00 5.735E+00
CS143      0.000E+00 8.576E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA143      0.000E+00 2.563E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA143      0.000E+00 1.766E-02 9.192E-04 4.713E-05 5.916E-18 1.952E-33
CE143      0.000E+00 2.510E+00 2.475E+00 2.424E+00 1.965E+00 1.527E+00
PR143      0.000E+00 2.464E+01 2.464E+01 2.464E+01 2.458E+01 2.439E+01
ND143      0.000E+00 5.673E+02 5.674E+02 5.674E+02 5.679E+02 5.686E+02
BA144      0.000E+00 1.612E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA144      0.000E+00 7.551E-04 7.911E-31 0.000E+00 0.000E+00 0.000E+00
CE144      0.000E+00 3.529E+02 3.529E+02 3.528E+02 3.525E+02 3.521E+02
PR144      0.000E+00 1.502E-02 1.491E-02 1.490E-02 1.488E-02 1.487E-02
PR144M     0.000E+00 7.457E-05 7.449E-05 7.448E-05 7.440E-05 7.431E-05
ND144      0.000E+00 3.476E+02 3.476E+02 3.476E+02 3.480E+02 3.484E+02
BA145      0.000E+00 4.540E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

LA145      0.000E+00 3.913E-04 1.910E-41 0.000E+00 0.000E+00 0.000E+00
CE145      0.000E+00 2.602E-03 2.980E-09 2.842E-15 0.000E+00 0.000E+00
PR145      0.000E+00 3.113E-01 2.800E-01 2.493E-01 7.824E-02 1.947E-02
ND145      0.000E+00 4.351E+02 4.352E+02 4.352E+02 4.354E+02 4.354E+02
BA146      0.000E+00 5.838E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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LA146	0.000E+00	7.231E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	0.000E+00	9.716E-03	5.236E-04	2.799E-05	5.340E-18	2.911E-33
PR146	0.000E+00	1.662E-02	5.963E-03	1.229E-03	4.459E-11	4.932E-20
ND146	0.000E+00	3.829E+02	3.829E+02	3.829E+02	3.829E+02	3.829E+02
PM146	0.000E+00	2.375E-03	2.375E-03	2.375E-03	2.375E-03	2.375E-03
SM146	0.000E+00	8.061E-04	8.061E-04	8.062E-04	8.063E-04	8.064E-04
LA147	0.000E+00	4.205E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	0.000E+00	6.134E-04	2.191E-19	7.230E-35	0.000E+00	0.000E+00
PR147	0.000E+00	6.478E-03	2.252E-04	7.037E-06	6.250E-21	5.421E-39
ND147	0.000E+00	8.565E+00	8.549E+00	8.527E+00	8.308E+00	8.051E+00
PM147	0.000E+00	1.411E+02	1.411E+02	1.412E+02	1.413E+02	1.415E+02
SM147	0.000E+00	2.890E+01	2.890E+01	2.891E+01	2.895E+01	2.900E+01
LA148	0.000E+00	1.996E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	0.000E+00	2.708E-04	1.716E-29	0.000E+00	0.000E+00	0.000E+00
PR148	0.000E+00	9.658E-04	1.912E-11	2.683E-19	0.000E+00	0.000E+00
ND148	0.000E+00	2.157E+02	2.157E+02	2.157E+02	2.157E+02	2.157E+02
PM148	0.000E+00	1.412E+00	1.405E+00	1.397E+00	1.325E+00	1.242E+00
PM148M	0.000E+00	1.440E+00	1.439E+00	1.438E+00	1.427E+00	1.416E+00
SM148	0.000E+00	6.478E+01	6.479E+01	6.480E+01	6.488E+01	6.497E+01
CE149	0.000E+00	3.414E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	0.000E+00	6.570E-04	9.280E-12	1.302E-19	0.000E+00	0.000E+00
ND149	0.000E+00	3.069E-02	2.101E-02	1.407E-02	2.561E-04	2.091E-06
PM149	0.000E+00	1.342E+00	1.335E+00	1.325E+00	1.175E+00	1.005E+00
SM149	0.000E+00	3.201E+00	3.219E+00	3.236E+00	3.400E+00	3.570E+00
PR150	0.000E+00	3.740E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND150	0.000E+00	9.470E+01	9.470E+01	9.470E+01	9.470E+01	9.470E+01
PM150	0.000E+00	6.110E-04	4.717E-04	3.642E-04	2.742E-05	1.231E-06
SM150	0.000E+00	1.695E+02	1.695E+02	1.695E+02	1.695E+02	1.695E+02
PR151	0.000E+00	6.543E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	0.000E+00	1.767E-03	6.201E-05	2.167E-06	5.887E-21	1.953E-38
PM151	0.000E+00	2.432E-01	2.390E-01	2.333E-01	1.828E-01	1.364E-01
SM151	0.000E+00	1.445E+01	1.446E+01	1.446E+01	1.451E+01	1.456E+01
EU151	0.000E+00	1.415E-02	1.417E-02	1.418E-02	1.431E-02	1.446E-02
PR152	0.000E+00	5.893E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	0.000E+00	1.119E-03	3.028E-05	8.139E-07	1.602E-22	2.279E-41
PM152	0.000E+00	4.086E-04	1.677E-05	4.516E-07	8.876E-23	1.257E-41
PM152M	0.000E+00	1.319E-05	5.152E-08	2.013E-10	0.000E+00	0.000E+00
SM152	0.000E+00	7.728E+01	7.728E+01	7.728E+01	7.728E+01	7.728E+01
EU152	0.000E+00	3.699E-02	3.699E-02	3.699E-02	3.699E-02	3.698E-02
EU152M	0.000E+00	4.547E-05	4.221E-05	3.919E-05	1.863E-05	7.630E-06
GD152	0.000E+00	1.823E-02	1.823E-02	1.823E-02	1.825E-02	1.825E-02
ND153	0.000E+00	6.384E-05	5.925E-21	5.336E-37	0.000E+00	0.000E+00
PM153	0.000E+00	3.466E-04	1.942E-07	8.779E-11	0.000E+00	0.000E+00
SM153	0.000E+00	5.858E-01	5.776E-01	5.691E-01	4.906E-01	4.106E-01
EU153	0.000E+00	4.846E+01	4.847E+01	4.848E+01	4.856E+01	4.864E+01
GD153	0.000E+00	7.485E-04	7.484E-04	7.483E-04	7.474E-04	7.464E-04

OUTPUT UNIT =

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
ND154	0.000E+00	1.833E-05	1.487E-32	0.000E+00	0.000E+00	0.000E+00
PM154	0.000E+00	9.432E-05	4.298E-11	1.523E-17	0.000E+00	0.000E+00
PM154M	0.000E+00	1.013E-05	9.360E-16	8.649E-26	0.000E+00	0.000E+00
SM154	0.000E+00	1.643E+01	1.643E+01	1.643E+01	1.643E+01	1.643E+01
EU154	0.000E+00	8.935E+00	8.935E+00	8.935E+00	8.934E+00	8.933E+00
GD154	0.000E+00	2.964E-01	2.965E-01	2.966E-01	2.974E-01	2.984E-01
ND155	0.000E+00	4.478E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	0.000E+00	1.257E-05	6.439E-35	0.000E+00	0.000E+00	0.000E+00
SM155	0.000E+00	5.250E-04	8.335E-05	1.280E-05	9.362E-14	1.615E-23
EU155	0.000E+00	4.768E+00	4.768E+00	4.768E+00	4.768E+00	4.767E+00
GD155	0.000E+00	4.201E-02	4.208E-02	4.216E-02	4.292E-02	4.383E-02
ND156	0.000E+00	3.345E-06	9.919E-25	2.186E-43	0.000E+00	0.000E+00
PM156	0.000E+00	2.349E-06	2.863E-25	0.000E+00	0.000E+00	0.000E+00
SM156	0.000E+00	8.139E-03	7.566E-03	7.028E-03	3.362E-03	1.388E-03
EU156	0.000E+00	1.064E+00	1.063E+00	1.061E+00	1.045E+00	1.023E+00
GD156	0.000E+00	1.286E+01	1.287E+01	1.287E+01	1.289E+01	1.291E+01
PM157	0.000E+00	5.694E-06	6.738E-22	7.876E-38	0.000E+00	0.000E+00
SM157	0.000E+00	7.389E-05	4.452E-07	2.460E-09	0.000E+00	0.000E+00
EU157	0.000E+00	1.020E-02	9.827E-03	9.389E-03	5.951E-03	3.443E-03
GD157	0.000E+00	6.261E-02	6.307E-02	6.350E-02	6.694E-02	6.945E-02
SM158	0.000E+00	2.160E-04	8.396E-05	3.262E-05	2.552E-09	3.014E-14
EU158	0.000E+00	2.418E-04	1.787E-04	1.037E-04	4.163E-08	1.227E-12
GD158	0.000E+00	5.689E+00	5.689E+00	5.689E+00	5.690E+00	5.690E+00
SM159	0.000E+00	6.051E-06	1.266E-12	2.637E-19	0.000E+00	0.000E+00
EU159	0.000E+00	4.943E-05	5.685E-06	5.713E-07	5.997E-17	6.357E-29
GD159	0.000E+00	3.405E-03	3.330E-03	3.213E-03	2.214E-03	1.416E-03
TB159	0.000E+00	8.768E-01	8.769E-01	8.771E-01	8.781E-01	8.789E-01
SM160	0.000E+00	4.866E-06	3.828E-09	3.011E-12	0.000E+00	0.000E+00
GD160	0.000E+00	4.239E-01	4.239E-01	4.239E-01	4.239E-01	4.239E-01
TB160	0.000E+00	2.281E-02	2.280E-02	2.280E-02	2.270E-02	2.260E-02
DY160	0.000E+00	3.201E-02	3.202E-02	3.202E-02	3.212E-02	3.222E-02
GD161	0.000E+00	2.353E-06	3.800E-11	4.991E-16	0.000E+00	0.000E+00
TB161	0.000E+00	6.690E-03	6.665E-03	6.637E-03	6.366E-03	6.055E-03

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DY161      0.000E+00 1.597E-01 1.597E-01 1.598E-01 1.600E-01 1.604E-01
GD162      0.000E+00 3.111E-06 7.041E-08 1.102E-09 9.561E-28 0.000E+00
TB162      0.000E+00 2.302E-06 1.572E-07 3.010E-09 2.767E-27 0.000E+00
DY162      0.000E+00 1.181E-01 1.181E-01 1.181E-01 1.181E-01 1.181E-01
TB163      0.000E+00 2.663E-06 3.421E-07 4.054E-08 2.215E-17 1.700E-28
DY163      0.000E+00 7.452E-02 7.452E-02 7.452E-02 7.452E-02 7.452E-02
DY164      0.000E+00 2.081E-02 2.081E-02 2.081E-02 2.081E-02 2.081E-02
DY165      0.000E+00 1.682E-05 1.262E-05 9.396E-06 4.920E-07 1.428E-08
HO165      0.000E+00 2.649E-02 2.649E-02 2.650E-02 2.651E-02 2.651E-02
DY166      0.000E+00 9.116E-05 9.039E-05 8.962E-05 8.231E-05 7.433E-05
HO166      0.000E+00 5.112E-05 5.058E-05 5.004E-05 4.506E-05 3.989E-05
HO166M     0.000E+00 1.306E-04 1.306E-04 1.306E-04 1.306E-04 1.306E-04
ER166      0.000E+00 8.515E-03 8.516E-03 8.517E-03 8.530E-03 8.543E-03
ER167      0.000E+00 1.943E-03 1.943E-03 1.943E-03 1.943E-03 1.943E-03
ER168      0.000E+00 1.295E-03 1.295E-03 1.295E-03 1.295E-03 1.295E-03
TM169      0.000E+00 4.180E-06 4.182E-06 4.183E-06 4.196E-06 4.211E-06
SUMTOT     0.000E+00 1.987E+04 1.987E+04 1.987E+04 1.987E+04 1.987E+04

TOTAL      0.000E+00 1.987E+04 1.987E+04 1.987E+04 1.987E+04 1.987E+04
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OUTPUT UNIT =
6 PAGE 63
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

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           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         0.000E+00 3.151E-02 3.151E-02 3.151E-02 3.151E-02 3.151E-02
LI         0.000E+00 1.831E-04 1.831E-04 1.831E-04 1.831E-04 1.831E-04
BE         0.000E+00 8.755E-05 8.755E-05 8.755E-05 8.755E-05 8.755E-05
 C         0.000E+00 1.540E-05 1.540E-05 1.540E-05 1.540E-05 1.540E-05
ZN         0.000E+00 3.244E-03 3.243E-03 3.242E-03 3.234E-03 3.225E-03
GA         0.000E+00 3.753E-05 3.349E-05 3.175E-05 2.250E-05 1.855E-05
GE         0.000E+00 3.929E-01 3.928E-01 3.928E-01 3.926E-01 3.925E-01
AS         0.000E+00 1.201E-01 1.200E-01 1.199E-01 1.194E-01 1.190E-01
SE         0.000E+00 3.522E+01 3.522E+01 3.522E+01 3.522E+01 3.522E+01
BR         0.000E+00 1.376E+01 1.376E+01 1.375E+01 1.375E+01 1.375E+01
KR         0.000E+00 2.442E+02 2.442E+02 2.442E+02 2.441E+02 2.441E+02
RB         0.000E+00 2.279E+02 2.279E+02 2.279E+02 2.279E+02 2.279E+02
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SR          0.000E+00 6.453E+02 6.453E+02 6.452E+02 6.448E+02 6.444E+02
 Y          0.000E+00 3.305E+02 3.304E+02 3.304E+02 3.302E+02 3.300E+02
ZR          0.000E+00 2.252E+03 2.252E+03 2.252E+03 2.252E+03 2.251E+03
NB          0.000E+00 4.833E+01 4.833E+01 4.832E+01 4.830E+01 4.827E+01
MO          0.000E+00 1.847E+03 1.847E+03 1.847E+03 1.848E+03 1.848E+03
TC          0.000E+00 4.760E+02 4.761E+02 4.761E+02 4.765E+02 4.769E+02
RU          0.000E+00 1.259E+03 1.259E+03 1.259E+03 1.259E+03 1.258E+03
RH          0.000E+00 2.487E+02 2.488E+02 2.488E+02 2.490E+02 2.492E+02
PD          0.000E+00 4.099E+02 4.099E+02 4.099E+02 4.101E+02 4.103E+02
AG          0.000E+00 2.893E+01 2.893E+01 2.894E+01 2.896E+01 2.896E+01
CD          0.000E+00 3.632E+01 3.632E+01 3.632E+01 3.634E+01 3.635E+01
IN          0.000E+00 1.975E+00 1.975E+00 1.975E+00 1.978E+00 1.982E+00
SN          0.000E+00 4.398E+01 4.397E+01 4.397E+01 4.396E+01 4.395E+01
SB          0.000E+00 1.714E+01 1.711E+01 1.710E+01 1.705E+01 1.702E+01
TE          0.000E+00 2.577E+02 2.576E+02 2.576E+02 2.571E+02 2.566E+02
 I          0.000E+00 1.310E+02 1.309E+02 1.307E+02 1.297E+02 1.289E+02
XE          0.000E+00 2.991E+03 2.991E+03 2.991E+03 2.992E+03 2.992E+03
CS          0.000E+00 1.677E+03 1.677E+03 1.678E+03 1.678E+03 1.679E+03
BA          0.000E+00 8.146E+02 8.145E+02 8.144E+02 8.139E+02 8.133E+02
LA          0.000E+00 7.366E+02 7.365E+02 7.365E+02 7.363E+02 7.362E+02
CE          0.000E+00 1.793E+03 1.793E+03 1.793E+03 1.792E+03 1.791E+03
PR          0.000E+00 6.394E+02 6.394E+02 6.394E+02 6.397E+02 6.401E+02
ND          0.000E+00 2.058E+03 2.058E+03 2.058E+03 2.059E+03 2.060E+03
PM          0.000E+00 1.456E+02 1.456E+02 1.455E+02 1.454E+02 1.453E+02
SM          0.000E+00 3.751E+02 3.752E+02 3.752E+02 3.754E+02 3.757E+02
EU          0.000E+00 6.329E+01 6.330E+01 6.330E+01 6.336E+01 6.341E+01
GD          0.000E+00 1.940E+01 1.940E+01 1.941E+01 1.943E+01 1.946E+01
TB          0.000E+00 9.063E-01 9.064E-01 9.065E-01 9.071E-01 9.075E-01
DY          0.000E+00 4.053E-01 4.053E-01 4.054E-01 4.057E-01 4.061E-01
HO          0.000E+00 2.667E-02 2.668E-02 2.668E-02 2.668E-02 2.668E-02
ER          0.000E+00 1.175E-02 1.175E-02 1.176E-02 1.177E-02 1.178E-02
TM          0.000E+00 4.580E-06 4.581E-06 4.582E-06 4.594E-06 4.609E-06
SUMTOT      0.000E+00 1.987E+04 1.987E+04 1.987E+04 1.987E+04 1.987E+04

TOTAL       0.000E+00 1.987E+04 1.987E+04 1.987E+04 1.987E+04 1.987E+04

                                                CUMULATIVE TABLE TOTALS

AP+FP       1.348E+05 1.547E+05 1.547E+05 1.547E+05 1.547E+05 1.547E+05
ACT+FP      1.000E+06 1.000E+06 1.000E+06 1.000E+06 1.000E+06 1.000E+06
AP+ACT+FP   1.135E+06 1.135E+06 1.135E+06 1.135E+06 1.135E+06 1.135E+06
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FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	0.000E+00	3.042E+02	3.042E+02	3.042E+02	3.042E+02	3.042E+02
CO 72	0.000E+00	1.360E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 72	0.000E+00	2.681E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 72	0.000E+00	5.189E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 72	0.000E+00	5.986E+01	5.898E+01	5.811E+01	5.006E+01	4.186E+01
GA 72	0.000E+00	6.002E+01	5.999E+01	5.992E+01	5.749E+01	5.212E+01
CO 73	0.000E+00	4.182E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 73	0.000E+00	2.147E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 73	0.000E+00	7.293E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 73	0.000E+00	1.248E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 73	0.000E+00	1.303E+02	1.132E+02	9.824E+01	2.374E+01	4.319E+00
GE 73M	0.000E+00	1.304E+02	1.132E+02	9.824E+01	2.374E+01	4.319E+00
CO 74	0.000E+00	8.819E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 74	0.000E+00	1.485E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 74	0.000E+00	1.094E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 74	0.000E+00	2.530E+02	9.930E-10	3.886E-21	0.000E+00	0.000E+00
GA 74	0.000E+00	2.673E+02	1.938E+00	1.141E-02	0.000E+00	0.000E+00
NI 75	0.000E+00	6.005E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 75	0.000E+00	1.112E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 75	0.000E+00	4.896E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 75	0.000E+00	5.740E+02	1.923E-07	5.994E-17	0.000E+00	0.000E+00
GE 75	0.000E+00	5.790E+02	3.593E+02	2.174E+02	1.432E+00	3.455E-03
GE 75M	0.000E+00	2.540E+01	1.347E-08	4.199E-18	0.000E+00	0.000E+00
NI 76	0.000E+00	1.617E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 76	0.000E+00	9.002E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 76	0.000E+00	9.297E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 76	0.000E+00	1.355E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 76	0.000E+00	1.680E+01	1.636E+01	1.594E+01	1.225E+01	8.928E+00
NI 77	0.000E+00	2.659E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 77	0.000E+00	4.083E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 77	0.000E+00	1.050E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 77	0.000E+00	2.544E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 77	0.000E+00	1.081E+03	1.017E+03	9.569E+02	5.182E+02	2.482E+02
GE 77M	0.000E+00	2.457E+03	3.520E-17	0.000E+00	0.000E+00	0.000E+00
AS 77	0.000E+00	3.030E+03	2.996E+03	2.960E+03	2.592E+03	2.162E+03
SE 77M	0.000E+00	7.675E+00	7.431E+00	7.343E+00	6.429E+00	5.362E+00
NI 78	0.000E+00	3.058E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 78	0.000E+00	1.482E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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ZN 78       0.000E+00 1.094E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 78       0.000E+00 4.709E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 78       0.000E+00 6.389E+03 3.964E+03 2.458E+03 2.063E+01 6.656E-02
AS 78       0.000E+00 6.530E+03 5.964E+03 4.909E+03 1.545E+02 1.043E+00
CU 79       0.000E+00 3.530E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 79       0.000E+00 5.965E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 79       0.000E+00 4.904E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 79       0.000E+00 1.350E+04 8.694E-22 0.000E+00 0.000E+00 0.000E+00
AS 79       0.000E+00 1.605E+04 1.698E+02 1.671E+00 1.427E-20 0.000E+00
SE 79       0.000E+00 2.477E-01 2.477E-01 2.477E-01 2.477E-01 2.477E-01
SE 79M      0.000E+00 1.608E+04 2.987E+02 2.950E+00 2.513E-20 0.000E+00
CU 80       0.000E+00 3.887E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 80       0.000E+00 2.321E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                          PAGE   65
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

GA 80       0.000E+00 5.471E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 80       0.000E+00 2.923E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 80       0.000E+00 3.578E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 80       0.000E+00 6.531E-01 4.001E-01 3.275E-01 6.788E-02 1.034E-02
BR 80M      0.000E+00 4.166E-01 3.561E-01 3.044E-01 6.343E-02 9.659E-03
CU 81       0.000E+00 2.718E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 81       0.000E+00 4.917E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 81       0.000E+00 3.103E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 81       0.000E+00 3.649E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 81       0.000E+00 5.706E+04 1.008E-29 0.000E+00 0.000E+00 0.000E+00
SE 81       0.000E+00 6.058E+04 7.598E+03 1.279E+03 4.294E-01 7.083E-05
SE 81M      0.000E+00 1.762E+03 8.528E+02 4.127E+02 2.907E-01 4.796E-05
KR 81M      0.000E+00 1.923E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 82       0.000E+00 5.996E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 82       0.000E+00 1.098E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 82       0.000E+00 3.270E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 82       0.000E+00 5.412E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 82M      0.000E+00 2.133E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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BR 82       0.000E+00 2.831E+03 2.779E+03 2.725E+03 2.239E+03 1.769E+03
BR 82M      0.000E+00 1.073E+03 1.213E+00 1.376E-03 0.000E+00 0.000E+00
ZN 83       0.000E+00 5.388E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 83       0.000E+00 2.933E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 83       0.000E+00 2.375E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 83       0.000E+00 1.001E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 83       0.000E+00 5.455E+04 8.650E+03 1.362E+03 1.279E-05 2.978E-15
SE 83M      0.000E+00 8.546E+04 3.342E-11 1.103E-26 0.000E+00 0.000E+00
BR 83       0.000E+00 1.422E+05 1.130E+05 8.553E+04 4.719E+03 1.453E+02
KR 83M      0.000E+00 1.422E+05 1.375E+05 1.250E+05 1.468E+04 5.622E+02
GA 84       0.000E+00 3.041E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 84       0.000E+00 6.233E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 84       0.000E+00 7.821E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 84       0.000E+00 2.471E+05 8.386E-01 2.820E-06 0.000E+00 0.000E+00
BR 84       0.000E+00 2.542E+05 7.654E+04 2.070E+04 4.326E-02 6.612E-09
BR 84M      0.000E+00 7.312E+03 7.141E+00 6.974E-03 0.000E+00 0.000E+00
GE 85       0.000E+00 1.753E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 85       0.000E+00 4.844E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 85       0.000E+00 1.493E+05 2.471E-23 0.000E+00 0.000E+00 0.000E+00
SE 85M      0.000E+00 1.096E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 85       0.000E+00 3.099E+05 1.841E-01 9.215E-08 0.000E+00 0.000E+00
KR 85       0.000E+00 6.460E+03 6.461E+03 6.461E+03 6.462E+03 6.462E+03
KR 85M      0.000E+00 3.137E+05 2.720E+05 2.330E+05 4.960E+04 7.750E+03
GE 86       0.000E+00 3.254E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 86       0.000E+00 2.630E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 86       0.000E+00 3.012E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 86       0.000E+00 2.272E+05 5.789E-15 0.000E+00 0.000E+00 0.000E+00
BR 86M      0.000E+00 2.287E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 86       0.000E+00 1.049E+03 1.048E+03 1.046E+03 1.030E+03 1.011E+03
RB 86M      0.000E+00 1.319E+02 2.387E-16 5.179E-34 0.000E+00 0.000E+00
GE 87       0.000E+00 4.817E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 87       0.000E+00 1.398E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 87       0.000E+00 2.340E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE   66
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                       7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                              1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
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	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 87	0.000E+00	5.174E+05	2.060E-14	8.503E-34	0.000E+00	0.000E+00
KR 87	0.000E+00	6.144E+05	3.601E+05	2.088E+05	8.965E+02	1.293E+00
SR 87M	0.000E+00	2.460E+00	1.922E+00	1.501E+00	1.269E-01	6.543E-03
GE 88	0.000E+00	1.347E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 88	0.000E+00	8.566E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 88	0.000E+00	8.772E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 88	0.000E+00	5.724E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	0.000E+00	8.668E+05	6.797E+05	5.325E+05	4.634E+04	2.474E+03
RB 88	0.000E+00	8.779E+05	7.503E+05	5.938E+05	5.174E+04	2.763E+03
AS 89	0.000E+00	8.344E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 89	0.000E+00	2.437E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 89	0.000E+00	4.152E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	0.000E+00	1.075E+06	2.189E+00	4.391E-06	0.000E+00	0.000E+00
RB 89	0.000E+00	1.134E+06	9.206E+04	5.967E+03	7.817E-09	4.302E-23
SR 89	0.000E+00	1.199E+06	1.199E+06	1.198E+06	1.191E+06	1.183E+06
Y 89M	0.000E+00	3.927E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 90	0.000E+00	7.893E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 90	0.000E+00	2.726E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 90	0.000E+00	1.065E+06	3.176E-28	0.000E+00	0.000E+00	0.000E+00
RB 90	0.000E+00	1.110E+06	1.952E+00	1.119E-04	0.000E+00	0.000E+00
RB 90M	0.000E+00	2.477E+05	1.680E+01	1.059E-03	0.000E+00	0.000E+00
SR 90	0.000E+00	5.019E+04	5.019E+04	5.019E+04	5.019E+04	5.019E+04
Y 90	0.000E+00	5.184E+04	5.182E+04	5.181E+04	5.164E+04	5.147E+04
Y 90M	0.000E+00	1.265E+01	1.011E+01	8.088E+00	8.645E-01	5.909E-02
SE 91	0.000E+00	1.012E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 91	0.000E+00	8.999E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 91	0.000E+00	7.894E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	0.000E+00	1.353E+06	3.577E-13	8.560E-32	0.000E+00	0.000E+00
SR 91	0.000E+00	1.432E+06	1.334E+06	1.240E+06	5.978E+05	2.491E+05
Y 91	0.000E+00	1.510E+06	1.510E+06	1.510E+06	1.507E+06	1.500E+06
Y 91M	0.000E+00	8.311E+05	8.127E+05	7.728E+05	3.800E+05	1.583E+05
SE 92	0.000E+00	4.125E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 92	0.000E+00	7.235E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 92	0.000E+00	3.679E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	0.000E+00	1.163E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 92	0.000E+00	1.517E+06	1.175E+06	9.098E+05	7.049E+04	3.275E+03
Y 92	0.000E+00	1.522E+06	1.488E+06	1.407E+06	3.876E+05	4.821E+04
BR 93	0.000E+00	1.437E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 93	0.000E+00	1.307E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 93	0.000E+00	8.729E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 93	0.000E+00	1.673E+06	6.583E+03	2.572E+01	0.000E+00	0.000E+00
Y 93	0.000E+00	1.710E+06	1.616E+06	1.509E+06	7.596E+05	3.334E+05
ZR 93	0.000E+00	1.158E+00	1.158E+00	1.158E+00	1.159E+00	1.159E+00
NB 93M	0.000E+00	3.930E-02	3.930E-02	3.931E-02	3.937E-02	3.945E-02
BR 94	0.000E+00	1.139E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 94	0.000E+00	5.198E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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RB 94       0.000E+00 4.486E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 94       0.000E+00 1.563E+06 7.302E-09 3.378E-23 0.000E+00 0.000E+00
 Y 94       0.000E+00 1.692E+06 2.044E+05 2.317E+04 8.099E-06 3.636E-17
NB 94M      0.000E+00 8.515E-01 1.109E-03 1.444E-06 0.000E+00 0.000E+00
BR 95       0.000E+00 7.360E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE   67
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 95       0.000E+00 4.868E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 95       0.000E+00 2.282E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 95       0.000E+00 1.448E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 95       0.000E+00 1.787E+06 3.522E+04 6.708E+02 4.216E-15 0.000E+00
ZR 95       0.000E+00 1.869E+06 1.868E+06 1.867E+06 1.859E+06 1.849E+06
NB 95       0.000E+00 1.886E+06 1.886E+06 1.886E+06 1.886E+06 1.886E+06
NB 95M      0.000E+00 1.330E+04 1.330E+04 1.330E+04 1.328E+04 1.325E+04
BR 96       0.000E+00 3.877E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 96       0.000E+00 7.717E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 96       0.000E+00 5.962E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 96       0.000E+00 1.001E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 96       0.000E+00 1.686E+06 2.407E-02 3.377E-10 0.000E+00 0.000E+00
NB 96       0.000E+00 2.785E+03 2.704E+03 2.625E+03 1.951E+03 1.366E+03
KR 97       0.000E+00 3.971E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 97       0.000E+00 1.119E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 97       0.000E+00 5.229E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 97       0.000E+00 1.437E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 97       0.000E+00 1.760E+06 1.690E+06 1.622E+06 1.076E+06 6.578E+05
NB 97       0.000E+00 1.773E+06 1.747E+06 1.702E+06 1.156E+06 6.623E+05
NB 97M      0.000E+00 1.669E+06 1.600E+06 1.536E+06 1.019E+06 6.231E+05
KR 98       0.000E+00 4.683E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 98       0.000E+00 2.258E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 98       0.000E+00 2.018E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 98       0.000E+00 1.023E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 98       0.000E+00 1.761E+06 1.956E-29 0.000E+00 0.000E+00 0.000E+00
NB 98       0.000E+00 1.786E+06 2.150E-29 0.000E+00 0.000E+00 0.000E+00
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NB 98M     0.000E+00 1.461E+04 6.517E+03 2.906E+03 9.041E-01 5.593E-05
RB 99      0.000E+00 2.126E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 99      0.000E+00 5.190E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 99      0.000E+00 5.789E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 99      0.000E+00 1.736E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99      0.000E+00 1.798E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99M     0.000E+00 6.405E+04 7.239E-03 8.182E-10 0.000E+00 0.000E+00
MO 99      0.000E+00 1.895E+06 1.876E+06 1.856E+06 1.671E+06 1.473E+06
TC 99      0.000E+00 8.068E+00 8.069E+00 8.069E+00 8.076E+00 8.084E+00
TC 99M     0.000E+00 1.659E+06 1.658E+06 1.656E+06 1.568E+06 1.409E+06
RB100      0.000E+00 1.691E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR100      0.000E+00 9.584E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y100      0.000E+00 2.582E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR100      0.000E+00 1.608E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100      0.000E+00 9.895E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100M     0.000E+00 9.895E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC100      0.000E+00 2.151E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR101      0.000E+00 1.327E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y101      0.000E+00 8.290E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR101      0.000E+00 1.032E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB101      0.000E+00 1.606E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101      0.000E+00 1.692E+06 9.938E+04 5.780E+03 2.557E-09 3.826E-24
TC101      0.000E+00 1.692E+06 3.696E+05 3.600E+04 5.750E-08 1.160E-22
SR102      0.000E+00 1.143E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y102      0.000E+00 1.904E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE   68
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZR102      0.000E+00 5.611E+05 7.737E-33 0.000E+00 0.000E+00 0.000E+00
NB102      0.000E+00 1.310E+06 1.054E-32 0.000E+00 0.000E+00 0.000E+00
MO102      0.000E+00 1.539E+06 3.705E+04 8.742E+02 4.674E-14 1.401E-33
TC102      0.000E+00 1.541E+06 3.735E+04 8.812E+02 4.712E-14 0.000E+00
TC102M     0.000E+00 1.443E+03 1.016E-01 7.161E-06 0.000E+00 0.000E+00
RH102      0.000E+00 2.588E-01 2.588E-01 2.588E-01 2.587E-01 2.586E-01
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SR103	0.000E+00	3.559E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y103	0.000E+00	2.473E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR103	0.000E+00	1.916E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB103	0.000E+00	8.537E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	0.000E+00	1.373E+06	1.459E-12	1.266E-30	0.000E+00	0.000E+00
TC103	0.000E+00	1.391E+06	8.753E-12	7.594E-30	0.000E+00	0.000E+00
RU103	0.000E+00	1.384E+06	1.383E+06	1.382E+06	1.372E+06	1.360E+06
RH103M	0.000E+00	1.247E+06	1.247E+06	1.246E+06	1.238E+06	1.226E+06
SR104	0.000E+00	1.310E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y104	0.000E+00	1.905E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR104	0.000E+00	3.875E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB104	0.000E+00	3.703E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	0.000E+00	1.003E+06	5.187E-06	2.668E-17	0.000E+00	0.000E+00
TC104	0.000E+00	1.067E+06	1.185E+05	1.206E+04	1.436E-06	1.772E-18
RH104	0.000E+00	4.487E+05	2.413E+00	1.662E-04	0.000E+00	0.000E+00
RH104M	0.000E+00	2.936E+04	2.023E+00	1.394E-04	0.000E+00	0.000E+00
Y105	0.000E+00	1.073E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR105	0.000E+00	5.121E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB105	0.000E+00	1.157E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO105	0.000E+00	6.613E+05	5.681E-15	0.000E+00	0.000E+00	0.000E+00
TC105	0.000E+00	8.090E+05	4.935E+03	2.727E+01	0.000E+00	0.000E+00
RU105	0.000E+00	8.198E+05	7.248E+05	6.202E+05	1.301E+05	1.998E+04
RH105	0.000E+00	7.694E+05	7.696E+05	7.677E+05	6.855E+05	5.538E+05
RH105M	0.000E+00	2.296E+05	2.035E+05	1.741E+05	3.654E+04	5.609E+03
ZR106	0.000E+00	7.348E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB106	0.000E+00	3.125E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO106	0.000E+00	3.227E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	0.000E+00	5.140E+05	3.176E-24	0.000E+00	0.000E+00	0.000E+00
RU106	0.000E+00	2.674E+05	2.674E+05	2.674E+05	2.672E+05	2.669E+05
RH106	0.000E+00	3.028E+05	2.674E+05	2.674E+05	2.672E+05	2.669E+05
RH106M	0.000E+00	1.619E+04	1.181E+04	8.621E+03	3.692E+02	8.418E+00
ZR107	0.000E+00	3.458E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB107	0.000E+00	4.678E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO107	0.000E+00	1.099E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	0.000E+00	2.628E+05	1.254E-32	0.000E+00	0.000E+00	0.000E+00
RU107	0.000E+00	4.111E+05	2.246E+01	1.124E-03	0.000E+00	0.000E+00
RH107	0.000E+00	4.133E+05	7.664E+04	1.128E+04	5.355E-05	5.504E-15
PD107	0.000E+00	3.903E-02	3.903E-02	3.903E-02	3.903E-02	3.903E-02
PD107M	0.000E+00	1.584E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR108	0.000E+00	7.999E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB108	0.000E+00	1.064E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO108	0.000E+00	3.475E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC108	0.000E+00	1.539E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU108	0.000E+00	2.760E+05	2.705E+01	2.621E-03	0.000E+00	0.000E+00
RH108	0.000E+00	2.786E+05	2.884E+01	2.794E-03	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 69

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
RH108M	0.000E+00	2.675E+03	2.323E+00	2.017E-03	0.000E+00	0.000E+00
AG108	0.000E+00	4.690E-01	8.108E-07	7.995E-07	7.994E-07	7.994E-07
ZR109	0.000E+00	5.695E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB109	0.000E+00	1.977E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO109	0.000E+00	1.150E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC109	0.000E+00	7.460E+04	4.216E-17	0.000E+00	0.000E+00	0.000E+00
RU109	0.000E+00	1.715E+05	1.344E-16	0.000E+00	0.000E+00	0.000E+00
RH109	0.000E+00	1.780E+05	6.610E-07	6.012E-19	0.000E+00	0.000E+00
RH109M	0.000E+00	8.901E+04	2.141E-15	0.000E+00	0.000E+00	0.000E+00
PD109	0.000E+00	1.943E+05	1.859E+05	1.765E+05	1.055E+05	5.686E+04
PD109M	0.000E+00	8.928E+04	2.543E+01	3.583E-03	0.000E+00	0.000E+00
AG109M	0.000E+00	1.942E+05	1.859E+05	1.766E+05	1.055E+05	5.688E+04
NB110	0.000E+00	2.259E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO110	0.000E+00	2.455E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC110	0.000E+00	1.974E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU110	0.000E+00	7.637E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	0.000E+00	8.192E+04	7.635E-33	0.000E+00	0.000E+00	0.000E+00
RH110M	0.000E+00	5.553E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110	0.000E+00	4.902E+04	1.180E+01	1.180E+01	1.178E+01	1.177E+01
AG110M	0.000E+00	8.873E+02	8.872E+02	8.871E+02	8.861E+02	8.848E+02
NB111	0.000E+00	1.916E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO111	0.000E+00	5.098E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC111	0.000E+00	6.905E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU111	0.000E+00	3.573E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	0.000E+00	4.742E+04	3.721E-13	2.338E-30	0.000E+00	0.000E+00
PD111	0.000E+00	4.833E+04	8.075E+03	1.529E+03	1.059E+02	2.333E+01
PD111M	0.000E+00	6.585E+02	5.812E+02	5.123E+02	1.453E+02	3.202E+01
AG111	0.000E+00	4.859E+04	4.850E+04	4.832E+04	4.650E+04	4.439E+04
AG111M	0.000E+00	4.820E+04	8.599E+03	1.744E+03	1.517E+02	3.342E+01
CD111M	0.000E+00	3.561E+00	1.516E+00	6.454E-01	1.262E-04	4.472E-09
MO112	0.000E+00	9.342E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	0.000E+00	2.414E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	0.000E+00	1.669E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	0.000E+00	2.560E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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PD112       0.000E+00 2.723E+04 2.631E+04 2.542E+04 1.801E+04 1.190E+04
AG112       0.000E+00 2.732E+04 2.721E+04 2.694E+04 2.098E+04 1.408E+04
MO113       0.000E+00 6.641E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC113       0.000E+00 6.446E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU113       0.000E+00 9.408E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH113       0.000E+00 1.892E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD113       0.000E+00 2.242E+04 2.084E-08 1.896E-20 0.000E+00 0.000E+00
AG113       0.000E+00 2.021E+04 1.782E+04 1.563E+04 4.227E+03 8.800E+02
AG113M      0.000E+00 2.271E+03 7.816E-09 7.109E-21 0.000E+00 0.000E+00
CD113M      0.000E+00 2.243E+01 2.243E+01 2.243E+01 2.244E+01 2.244E+01
MO114       0.000E+00 6.792E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC114       0.000E+00 1.457E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU114       0.000E+00 4.387E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH114       0.000E+00 1.161E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD114       0.000E+00 1.641E+04 4.979E-04 1.484E-11 0.000E+00 0.000E+00
AG114       0.000E+00 1.661E+04 5.140E-04 1.532E-11 0.000E+00 0.000E+00
IN114       0.000E+00 1.277E+00 4.142E-01 4.140E-01 4.115E-01 4.087E-01
□
         OUTPUT UNIT =
6                        PAGE   70
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN114M      0.000E+00 4.331E-01 4.328E-01 4.325E-01 4.300E-01 4.270E-01
MO115       0.000E+00 4.545E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC115       0.000E+00 3.064E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU115       0.000E+00 2.056E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH115       0.000E+00 8.920E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD115       0.000E+00 1.608E+04 5.393E-25 0.000E+00 0.000E+00 0.000E+00
AG115       0.000E+00 1.204E+04 1.558E+03 1.947E+02 1.813E-07 2.639E-18
AG115M      0.000E+00 4.624E+03 2.635E-25 0.000E+00 0.000E+00 0.000E+00
CD115       0.000E+00 1.548E+04 1.535E+04 1.516E+04 1.332E+04 1.140E+04
CD115M      0.000E+00 1.480E+03 1.479E+03 1.478E+03 1.468E+03 1.457E+03
IN115M      0.000E+00 1.551E+04 1.550E+04 1.546E+04 1.428E+04 1.237E+04
TC116       0.000E+00 1.900E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU116       0.000E+00 4.594E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH116       0.000E+00 4.301E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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PD116       0.000E+00 1.262E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG116       0.000E+00 7.023E+03 1.392E-03 2.536E-10 0.000E+00 0.000E+00
AG116M      0.000E+00 7.023E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116       0.000E+00 7.836E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M      0.000E+00 5.707E+03 2.648E+03 1.228E+03 5.673E-01 5.639E-05
TC117       0.000E+00 8.168E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU117       0.000E+00 7.238E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH117       0.000E+00 2.904E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD117       0.000E+00 1.168E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG117       0.000E+00 6.959E+03 1.162E-11 1.821E-26 0.000E+00 0.000E+00
AG117M      0.000E+00 6.957E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD117       0.000E+00 9.176E+03 7.067E+03 5.413E+03 3.764E+02 1.536E+01
CD117M      0.000E+00 4.980E+03 4.071E+03 3.321E+03 4.323E+02 3.744E+01
IN117       0.000E+00 8.473E+03 8.189E+03 7.513E+03 1.096E+03 7.585E+01
IN117M      0.000E+00 1.073E+04 1.034E+04 9.438E+03 1.435E+03 8.930E+01
SN117M      0.000E+00 2.627E+01 2.622E+01 2.616E+01 2.563E+01 2.500E+01
RU118       0.000E+00 4.463E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH118       0.000E+00 3.495E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD118       0.000E+00 9.110E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG118       0.000E+00 9.448E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG118M      0.000E+00 6.295E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD118       0.000E+00 1.413E+04 6.191E+03 2.708E+03 6.948E-01 3.411E-05
IN118       0.000E+00 1.413E+04 6.201E+03 2.713E+03 6.959E-01 3.417E-05
IN118M      0.000E+00 5.150E+00 4.498E-04 3.928E-08 0.000E+00 0.000E+00
RH119       0.000E+00 2.677E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD119       0.000E+00 6.327E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG119       0.000E+00 1.248E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD119       0.000E+00 6.980E+03 8.456E+01 1.013E+00 6.180E-20 0.000E+00
CD119M      0.000E+00 6.980E+03 1.637E-02 3.713E-08 0.000E+00 0.000E+00
IN119       0.000E+00 4.023E+03 1.026E+02 1.071E+01 1.002E-09 9.112E-22
IN119M      0.000E+00 1.048E+04 1.790E+03 1.856E+02 1.726E-08 1.569E-20
SN119M      0.000E+00 1.568E+02 1.568E+02 1.568E+02 1.566E+02 1.564E+02
RU120       0.000E+00 9.327E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH120       0.000E+00 4.257E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD120       0.000E+00 2.469E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG120       0.000E+00 8.792E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD120       0.000E+00 1.386E+04 6.643E-18 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE   71
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC
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7 SUMMARY TABLE: RADIOACTIVITY, CURIES
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
IN120	0.000E+00	7.065E+03	2.635E-17	0.000E+00	0.000E+00	0.000E+00
IN120M	0.000E+00	7.065E+03	3.536E-18	0.000E+00	0.000E+00	0.000E+00
RH121	0.000E+00	6.702E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD121	0.000E+00	9.550E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG121	0.000E+00	6.070E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD121	0.000E+00	1.374E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121	0.000E+00	1.168E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121M	0.000E+00	2.938E+03	1.051E-02	3.534E-08	0.000E+00	0.000E+00
SN121	0.000E+00	1.464E+04	1.427E+04	1.391E+04	1.074E+04	7.874E+03
SN121M	0.000E+00	9.155E-02	9.155E-02	9.155E-02	9.155E-02	9.154E-02
RH122	0.000E+00	8.115E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD122	0.000E+00	2.920E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG122	0.000E+00	3.739E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD122	0.000E+00	1.325E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122	0.000E+00	1.424E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122M	0.000E+00	9.956E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB122	0.000E+00	9.529E+02	9.427E+02	9.327E+02	8.381E+02	7.371E+02
SB122M	0.000E+00	7.538E+00	3.775E-04	1.890E-08	0.000E+00	0.000E+00
RH123	0.000E+00	6.953E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD123	0.000E+00	6.643E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG123	0.000E+00	1.960E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD123	0.000E+00	1.261E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123	0.000E+00	1.174E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123M	0.000E+00	4.912E+03	1.466E-19	0.000E+00	0.000E+00	0.000E+00
SN123	0.000E+00	3.203E+03	3.202E+03	3.201E+03	3.194E+03	3.185E+03
SN123M	0.000E+00	1.382E+04	4.938E+03	1.750E+03	5.456E-02	2.136E-07
TE123M	0.000E+00	2.272E+00	2.272E+00	2.271E+00	2.266E+00	2.259E+00
PD124	0.000E+00	1.225E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG124	0.000E+00	8.841E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD124	0.000E+00	1.160E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN124	0.000E+00	1.927E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	0.000E+00	5.215E+02	5.212E+02	5.210E+02	5.185E+02	5.155E+02
SB124M	0.000E+00	7.326E+00	1.630E-11	3.625E-23	0.000E+00	0.000E+00
AG125	0.000E+00	2.649E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD125	0.000E+00	7.913E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125	0.000E+00	1.164E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125M	0.000E+00	8.526E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN125	0.000E+00	1.184E+04	1.181E+04	1.177E+04	1.143E+04	1.102E+04
SN125M	0.000E+00	1.898E+04	2.432E+02	3.081E+00	3.283E-19	0.000E+00
SB125	0.000E+00	7.910E+03	7.910E+03	7.910E+03	7.911E+03	7.912E+03
TE125M	0.000E+00	1.519E+03	1.519E+03	1.519E+03	1.521E+03	1.522E+03
PD126	0.000E+00	1.742E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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AG126       0.000E+00 8.149E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD126       0.000E+00 6.064E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN126       0.000E+00 2.771E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN126       0.000E+00 3.811E-01 3.811E-01 3.811E-01 3.811E-01 3.811E-01
SB126       0.000E+00 8.406E+02 8.387E+02 8.368E+02 8.175E+02 7.950E+02
SB126M      0.000E+00 3.977E+02 4.490E+01 5.369E+00 3.811E-01 3.811E-01
CD127       0.000E+00 3.139E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127       0.000E+00 1.564E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127M      0.000E+00 1.566E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                          PAGE   72
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SN127       0.000E+00 5.989E+04 4.306E+04 3.095E+04 1.141E+03 2.173E+01
SN127M      0.000E+00 2.889E+04 1.233E+00 5.261E-05 0.000E+00 0.000E+00
SB127       0.000E+00 9.449E+04 9.419E+04 9.376E+04 8.763E+04 8.010E+04
TE127       0.000E+00 9.296E+04 9.295E+04 9.291E+04 9.107E+04 8.645E+04
TE127M      0.000E+00 1.182E+04 1.182E+04 1.182E+04 1.182E+04 1.182E+04
XE127       0.000E+00 7.753E-03 7.747E-03 7.741E-03 7.680E-03 7.607E-03
AG128       0.000E+00 3.102E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD128       0.000E+00 1.212E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN128       0.000E+00 2.754E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN128       0.000E+00 1.556E+05 7.689E+04 3.800E+04 3.299E+01 6.996E-03
SB128       0.000E+00 1.228E+04 1.137E+04 1.053E+04 4.879E+03 1.938E+03
SB128M      0.000E+00 1.671E+05 9.294E+04 4.612E+04 4.005E+01 8.492E-03
 I128       0.000E+00 4.897E+03 9.269E+02 1.754E+02 1.034E-05 2.183E-14
CD129       0.000E+00 4.741E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN129       0.000E+00 2.149E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN129       0.000E+00 1.004E+05 3.924E+02 1.533E+00 0.000E+00 0.000E+00
SN129M      0.000E+00 1.248E+05 7.440E-03 4.434E-10 0.000E+00 0.000E+00
SB129       0.000E+00 2.990E+05 2.582E+05 2.200E+05 4.420E+04 6.444E+03
TE129       0.000E+00 2.945E+05 2.834E+05 2.614E+05 8.100E+04 3.599E+04
TE129M      0.000E+00 4.413E+04 4.412E+04 4.411E+04 4.386E+04 4.343E+04
 I129       0.000E+00 1.671E-02 1.671E-02 1.671E-02 1.672E-02 1.672E-02
XE129M      0.000E+00 1.061E+00 1.057E+00 1.053E+00 1.016E+00 9.731E-01
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CD130       0.000E+00 5.037E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN130       0.000E+00 2.706E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN130       0.000E+00 3.445E+05 4.805E+00 6.705E-05 0.000E+00 0.000E+00
SB130       0.000E+00 9.612E+04 3.398E+04 1.201E+04 3.667E-01 1.399E-06
SB130M      0.000E+00 4.567E+05 1.288E+03 1.760E+00 0.000E+00 0.000E+00
 I130       0.000E+00 1.496E+04 1.420E+04 1.343E+04 7.665E+03 3.911E+03
 I130M      0.000E+00 5.867E+03 5.775E+01 5.684E-01 4.853E-21 0.000E+00
CD131       0.000E+00 7.618E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN131       0.000E+00 9.645E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN131       0.000E+00 3.161E+05 1.987E-12 1.248E-29 0.000E+00 0.000E+00
SB131       0.000E+00 8.417E+05 1.405E+05 2.303E+04 3.231E-04 1.218E-13
TE131       0.000E+00 8.814E+05 4.260E+05 1.433E+05 2.383E+04 1.806E+04
TE131M      0.000E+00 1.389E+05 1.364E+05 1.333E+05 1.058E+05 8.022E+04
 I131       0.000E+00 9.913E+05 9.905E+05 9.883E+05 9.579E+05 9.214E+05
XE131M      0.000E+00 1.101E+04 1.101E+04 1.101E+04 1.101E+04 1.099E+04
CD132       0.000E+00 6.926E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN132       0.000E+00 2.553E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN132       0.000E+00 1.778E+05 1.436E-22 0.000E+00 0.000E+00 0.000E+00
SB132       0.000E+00 5.135E+05 2.016E-01 7.143E-08 0.000E+00 0.000E+00
SB132M      0.000E+00 3.339E+05 1.671E+01 8.369E-04 0.000E+00 0.000E+00
TE132       0.000E+00 1.423E+06 1.411E+06 1.399E+06 1.280E+06 1.151E+06
 I132       0.000E+00 1.442E+06 1.435E+06 1.427E+06 1.318E+06 1.186E+06
CS132       0.000E+00 1.174E+02 1.169E+02 1.164E+02 1.113E+02 1.055E+02
IN133       0.000E+00 2.566E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN133       0.000E+00 5.322E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB133       0.000E+00 6.274E+05 1.872E-02 5.578E-10 0.000E+00 0.000E+00
TE133       0.000E+00 1.221E+06 1.080E+05 3.196E+04 1.670E+01 2.044E-03
TE133M      0.000E+00 8.133E+05 3.842E+05 1.814E+05 9.961E+01 1.219E-02
 I133       0.000E+00 2.097E+06 2.060E+06 2.002E+06 1.441E+06 9.659E+05
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         OUTPUT UNIT =
6                          PAGE   73
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 I133M     0.000E+00 5.678E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE133      0.000E+00 2.096E+06 2.096E+06 2.096E+06 2.076E+06 2.020E+06
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XE133M	0.000E+00	6.429E+04	6.423E+04	6.416E+04	6.230E+04	5.816E+04
IN134	0.000E+00	1.327E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN134	0.000E+00	6.310E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134	0.000E+00	9.317E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	0.000E+00	8.686E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	0.000E+00	1.835E+06	6.790E+05	2.510E+05	1.199E+01	7.826E-05
I134	0.000E+00	2.317E+06	1.653E+06	9.699E+05	6.687E+02	5.387E-02
I134M	0.000E+00	1.973E+05	2.591E+00	3.403E-05	0.000E+00	0.000E+00
XE134M	0.000E+00	1.311E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	0.000E+00	5.388E+04	5.388E+04	5.388E+04	5.386E+04	5.384E+04
CS134M	0.000E+00	2.490E+04	1.961E+04	1.544E+04	1.414E+03	8.033E+01
SN135	0.000E+00	7.203E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB135	0.000E+00	5.799E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE135	0.000E+00	9.353E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	1.953E+06	1.759E+06	1.584E+06	5.551E+05	1.578E+05
XE135	0.000E+00	6.269E+05	7.198E+05	7.904E+05	8.605E+05	5.174E+05
XE135M	0.000E+00	3.942E+05	2.871E+05	2.541E+05	8.892E+04	2.527E+04
CS135	0.000E+00	2.699E-01	2.699E-01	2.700E-01	2.703E-01	2.706E-01
CS135M	0.000E+00	7.512E+03	3.427E+03	1.564E+03	6.113E-01	4.975E-05
BA135M	0.000E+00	1.245E+01	1.216E+01	1.187E+01	9.321E+00	6.975E+00
SN136	0.000E+00	5.866E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB136	0.000E+00	1.064E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE136	0.000E+00	5.110E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	9.296E+05	9.669E-08	8.485E-21	0.000E+00	0.000E+00
I136M	0.000E+00	5.659E+05	1.563E-18	0.000E+00	0.000E+00	0.000E+00
CS136	0.000E+00	3.197E+04	3.190E+04	3.183E+04	3.114E+04	3.033E+04
BA136M	0.000E+00	5.269E+03	5.258E+03	5.246E+03	5.132E+03	4.998E+03
SB137	0.000E+00	1.384E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE137	0.000E+00	1.336E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I137	0.000E+00	9.379E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.834E+06	3.736E+01	7.186E-04	0.000E+00	0.000E+00
CS137	0.000E+00	6.118E+04	6.118E+04	6.118E+04	6.118E+04	6.118E+04
BA137M	0.000E+00	5.806E+04	5.790E+04	5.788E+04	5.788E+04	5.788E+04
SB138	0.000E+00	1.623E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE138	0.000E+00	3.215E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I138	0.000E+00	4.718E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	0.000E+00	1.791E+06	9.534E+04	5.066E+03	9.081E-10	4.596E-25
CS138	0.000E+00	1.969E+06	8.556E+05	2.517E+05	6.288E-01	1.168E-07
CS138M	0.000E+00	8.658E+04	5.119E-02	3.027E-08	0.000E+00	0.000E+00
SB139	0.000E+00	1.168E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE139	0.000E+00	5.959E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I139	0.000E+00	2.119E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE139	0.000E+00	1.418E+06	5.246E-22	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.865E+06	2.364E+04	2.833E+02	1.728E-17	0.000E+00
BA139	0.000E+00	1.912E+06	1.306E+06	7.919E+05	5.184E+03	1.241E+01
TE140	0.000E+00	7.039E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I140	0.000E+00	6.123E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE140	0.000E+00	9.511E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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CS140      0.000E+00 1.682E+06 2.004E-11 2.069E-28 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE   74
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

BA140      0.000E+00 1.843E+06 1.839E+06 1.834E+06 1.793E+06 1.745E+06
LA140      0.000E+00 1.868E+06 1.868E+06 1.867E+06 1.858E+06 1.842E+06
PR140      0.000E+00 9.243E+00 4.345E-05 2.042E-10 0.000E+00 0.000E+00
TE141      0.000E+00 3.081E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I141      0.000E+00 9.735E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE141      0.000E+00 3.254E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS141      0.000E+00 1.266E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA141      0.000E+00 1.744E+06 1.820E+05 1.868E+04 2.419E-06 3.297E-18
LA141      0.000E+00 1.752E+06 1.578E+06 1.334E+06 2.290E+05 2.759E+04
CE141      0.000E+00 1.781E+06 1.781E+06 1.781E+06 1.771E+06 1.753E+06
TE142      0.000E+00 2.955E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I142      0.000E+00 1.200E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE142      0.000E+00 1.113E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS142      0.000E+00 7.828E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA142      0.000E+00 1.674E+06 3.437E+04 7.050E+02 9.290E-15 4.927E-35
LA142      0.000E+00 1.710E+06 1.227E+06 7.862E+05 8.855E+03 4.067E+01
PR142      0.000E+00 3.417E+04 3.303E+04 3.186E+04 2.218E+04 1.436E+04
PR142M     0.000E+00 6.695E+03 3.878E+02 2.246E+01 9.559E-12 1.365E-26
 I143      0.000E+00 7.324E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE143      0.000E+00 1.740E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS143      0.000E+00 3.982E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA143      0.000E+00 1.488E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA143      0.000E+00 1.659E+06 8.637E+04 4.428E+03 5.558E-10 1.834E-25
CE143      0.000E+00 1.668E+06 1.644E+06 1.611E+06 1.306E+06 1.015E+06
PR143      0.000E+00 1.660E+06 1.659E+06 1.659E+06 1.655E+06 1.642E+06
 I144      0.000E+00 5.665E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE144      0.000E+00 2.861E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS144      0.000E+00 1.015E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA144      0.000E+00 1.148E+06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA144      0.000E+00 1.480E+06 1.550E-21 0.000E+00 0.000E+00 0.000E+00
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CE144       0.000E+00 1.126E+06 1.126E+06 1.126E+06 1.125E+06 1.124E+06
PR144       0.000E+00 1.135E+06 1.127E+06 1.126E+06 1.125E+06 1.124E+06
PR144M      0.000E+00 1.353E+04 1.351E+04 1.351E+04 1.350E+04 1.348E+04
XE145       0.000E+00 2.589E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS145       0.000E+00 2.506E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA145       0.000E+00 5.700E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA145       0.000E+00 1.050E+06 5.126E-32 0.000E+00 0.000E+00 0.000E+00
CE145       0.000E+00 1.125E+06 1.289E+00 1.229E-06 0.000E+00 0.000E+00
PR145       0.000E+00 1.125E+06 1.012E+06 9.014E+05 2.829E+05 7.040E+04
XE146       0.000E+00 1.741E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS146       0.000E+00 3.458E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA146       0.000E+00 2.051E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA146       0.000E+00 6.735E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE146       0.000E+00 8.816E+05 4.751E+04 2.540E+03 4.845E-10 2.641E-25
PR146       0.000E+00 8.847E+05 3.175E+05 6.543E+04 2.374E-03 2.626E-12
PM146       0.000E+00 1.058E+00 1.058E+00 1.058E+00 1.058E+00 1.058E+00
XE147       0.000E+00 1.467E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS147       0.000E+00 5.167E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA147       0.000E+00 4.527E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA147       0.000E+00 3.229E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE147       0.000E+00 6.728E+05 2.403E-10 7.930E-26 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE   75
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

PR147       0.000E+00 6.908E+05 2.401E+04 7.504E+02 6.665E-13 5.781E-31
ND147       0.000E+00 6.881E+05 6.869E+05 6.851E+05 6.675E+05 6.469E+05
PM147       0.000E+00 1.309E+05 1.309E+05 1.309E+05 1.311E+05 1.313E+05
CS148       0.000E+00 3.180E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA148       0.000E+00 7.333E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA148       0.000E+00 1.171E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE148       0.000E+00 4.802E+05 3.043E-20 0.000E+00 0.000E+00 0.000E+00
PR148       0.000E+00 5.337E+05 1.057E-02 1.483E-10 0.000E+00 0.000E+00
PM148       0.000E+00 2.321E+05 2.309E+05 2.296E+05 2.177E+05 2.042E+05
PM148M      0.000E+00 3.077E+04 3.075E+04 3.072E+04 3.051E+04 3.026E+04
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BA149      0.000E+00 7.644E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA149      0.000E+00 2.742E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE149      0.000E+00 2.586E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR149      0.000E+00 3.606E+05 5.094E-03 7.147E-11 0.000E+00 0.000E+00
ND149      0.000E+00 3.732E+05 2.555E+05 1.712E+05 3.115E+03 2.543E+01
PM149      0.000E+00 5.321E+05 5.293E+05 5.252E+05 4.658E+05 3.984E+05
CS150      0.000E+00 2.888E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA150      0.000E+00 5.525E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA150      0.000E+00 4.936E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE150      0.000E+00 1.123E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR150      0.000E+00 2.269E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM150      0.000E+00 4.765E+03 3.679E+03 2.841E+03 2.139E+02 9.600E+00
LA151      0.000E+00 5.963E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE151      0.000E+00 3.230E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR151      0.000E+00 1.223E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND151      0.000E+00 1.776E+05 6.230E+03 2.177E+02 5.914E-13 1.962E-30
PM151      0.000E+00 1.779E+05 1.748E+05 1.706E+05 1.337E+05 9.973E+04
SM151      0.000E+00 3.803E+02 3.805E+02 3.807E+02 3.820E+02 3.832E+02
BA152      0.000E+00 1.405E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA152      0.000E+00 6.397E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE152      0.000E+00 6.846E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR152      0.000E+00 5.260E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND152      0.000E+00 1.204E+05 3.259E+03 8.759E+01 1.724E-14 2.453E-33
PM152      0.000E+00 1.233E+05 5.061E+03 1.363E+02 2.679E-14 3.793E-33
PM152M     0.000E+00 2.176E+03 8.501E+00 3.321E-02 0.000E+00 0.000E+00
EU152      0.000E+00 6.399E+00 6.399E+00 6.399E+00 6.399E+00 6.398E+00
EU152M     0.000E+00 1.006E+02 9.343E+01 8.673E+01 4.122E+01 1.689E+01
LA153      0.000E+00 6.442E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE153      0.000E+00 1.132E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR153      0.000E+00 1.611E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND153      0.000E+00 6.973E+04 6.471E-12 5.828E-28 0.000E+00 0.000E+00
PM153      0.000E+00 7.892E+04 4.421E+01 1.999E-02 0.000E+00 0.000E+00
SM153      0.000E+00 2.571E+05 2.535E+05 2.498E+05 2.153E+05 1.802E+05
GD153      0.000E+00 2.641E+00 2.640E+00 2.640E+00 2.637E+00 2.633E+00
LA154      0.000E+00 2.964E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE154      0.000E+00 1.266E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR154      0.000E+00 3.626E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND154      0.000E+00 3.358E+04 2.724E-23 0.000E+00 0.000E+00 0.000E+00
PM154      0.000E+00 4.114E+04 1.875E-02 6.642E-09 0.000E+00 0.000E+00
PM154M     0.000E+00 6.874E+03 6.352E-07 5.869E-17 0.000E+00 0.000E+00
EU154      0.000E+00 2.413E+03 2.413E+03 2.413E+03 2.413E+03 2.412E+03
□
         OUTPUT UNIT =
6                        PAGE   76
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
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FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CE155	0.000E+00	1.436E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR155	0.000E+00	6.948E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND155	0.000E+00	1.251E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	0.000E+00	2.504E+04	1.283E-25	0.000E+00	0.000E+00	0.000E+00
SM155	0.000E+00	2.870E+04	4.556E+03	6.999E+02	5.118E-06	8.830E-16
EU155	0.000E+00	2.218E+03	2.219E+03	2.219E+03	2.218E+03	2.218E+03
GD155M	0.000E+00	5.402E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE156	0.000E+00	1.347E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR156	0.000E+00	1.237E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND156	0.000E+00	4.138E+03	1.227E-15	2.704E-34	0.000E+00	0.000E+00
PM156	0.000E+00	1.297E+04	1.581E-15	0.000E+00	0.000E+00	0.000E+00
SM156	0.000E+00	1.740E+04	1.618E+04	1.503E+04	7.188E+03	2.967E+03
EU156	0.000E+00	5.867E+04	5.859E+04	5.851E+04	5.761E+04	5.642E+04
CE157	0.000E+00	1.058E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR157	0.000E+00	1.914E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND157	0.000E+00	1.123E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	0.000E+00	6.018E+03	7.121E-13	8.324E-29	0.000E+00	0.000E+00
SM157	0.000E+00	1.107E+04	6.668E+01	3.684E-01	0.000E+00	0.000E+00
EU157	0.000E+00	1.341E+04	1.291E+04	1.234E+04	7.818E+03	4.523E+03
PR158	0.000E+00	1.433E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	0.000E+00	1.687E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM158	0.000E+00	1.895E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	0.000E+00	5.847E+03	2.273E+03	8.828E+02	6.908E-02	8.158E-07
EU158	0.000E+00	6.272E+03	4.635E+03	2.689E+03	1.080E+00	3.183E-05
PR159	0.000E+00	5.665E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	0.000E+00	1.676E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	0.000E+00	4.178E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	0.000E+00	2.648E+03	5.540E-04	1.154E-10	0.000E+00	0.000E+00
EU159	0.000E+00	3.231E+03	3.716E+02	3.734E+01	3.920E-09	4.155E-21
GD159	0.000E+00	3.610E+03	3.530E+03	3.406E+03	2.347E+03	1.501E+03
ND160	0.000E+00	1.435E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM160	0.000E+00	7.478E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	0.000E+00	9.833E+02	7.735E-01	6.084E-04	0.000E+00	0.000E+00
EU160	0.000E+00	1.493E+03	9.059E-01	7.125E-04	0.000E+00	0.000E+00
TB160	0.000E+00	2.576E+02	2.575E+02	2.574E+02	2.564E+02	2.552E+02
ND161	0.000E+00	1.003E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	0.000E+00	8.541E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	0.000E+00	2.640E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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EU161      0.000E+00 6.415E+02 1.301E-23 0.000E+00 0.000E+00 0.000E+00
GD161      0.000E+00 7.429E+02 1.200E-02 1.576E-07 0.000E+00 0.000E+00
TB161      0.000E+00 7.844E+02 7.814E+02 7.782E+02 7.464E+02 7.099E+02
PM162      0.000E+00 3.930E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SM162      0.000E+00 3.583E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU162      0.000E+00 1.967E+02 1.919E-02 1.847E-06 0.000E+00 0.000E+00
GD162      0.000E+00 3.613E+02 8.176E+00 1.280E-01 1.110E-19 0.000E+00
TB162      0.000E+00 3.579E+02 2.444E+01 4.680E-01 4.300E-19 0.000E+00
TB162M     0.000E+00 1.105E+01 8.620E+00 6.327E+00 2.827E-01 6.783E-03
SM163      0.000E+00 4.161E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU163      0.000E+00 4.655E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD163      0.000E+00 1.458E+02 3.222E-10 6.707E-22 0.000E+00 0.000E+00
TB163      0.000E+00 1.576E+02 2.024E+01 2.399E+00 1.311E-09 1.006E-20
□
         OUTPUT UNIT =
6                        PAGE   77
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SM164      0.000E+00 3.798E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU164      0.000E+00 9.701E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD164      0.000E+00 5.897E+01 8.665E+00 1.273E+00 5.957E-09 6.015E-19
TB164      0.000E+00 7.309E+01 1.008E+01 1.477E+00 6.913E-09 6.981E-19
SM165      0.000E+00 2.436E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU165      0.000E+00 1.574E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD165      0.000E+00 2.027E+01 3.106E-10 4.751E-21 0.000E+00 0.000E+00
TB165      0.000E+00 3.278E+01 4.615E-10 7.058E-21 0.000E+00 0.000E+00
DY165      0.000E+00 1.360E+02 1.020E+02 7.597E+01 3.978E+00 1.155E-01
DY165M     0.000E+00 8.205E+01 9.308E-10 1.424E-20 0.000E+00 0.000E+00
DY166      0.000E+00 2.112E+01 2.095E+01 2.077E+01 1.907E+01 1.722E+01
HO166      0.000E+00 3.603E+01 3.564E+01 3.526E+01 3.176E+01 2.811E+01
ER167M     0.000E+00 4.667E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ER169      0.000E+00 3.552E-02 3.541E-02 3.530E-02 3.424E-02 3.300E-02
SUMTOT     0.000E+00 1.794E+08 6.657E+07 5.899E+07 4.230E+07 3.585E+07

TOTAL      0.000E+00 1.794E+08 6.657E+07 5.899E+07 4.230E+07 3.585E+07
□
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         OUTPUT UNIT =
6                        PAGE   78
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         0.000E+00 3.042E+02 3.042E+02 3.042E+02 3.042E+02 3.042E+02
CO         0.000E+00 1.878E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI         0.000E+00 7.105E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU         0.000E+00 4.950E+02 3.351E-08 1.489E-10 1.245E-10 1.088E-10
ZN         0.000E+00 4.885E+03 5.898E+01 5.811E+01 5.006E+01 4.186E+01
GA         0.000E+00 2.454E+04 1.752E+02 1.582E+02 8.123E+01 5.644E+01
GE         0.000E+00 1.547E+05 5.454E+03 3.730E+03 5.640E+02 2.526E+02
AS         0.000E+00 4.618E+05 9.146E+03 7.887E+03 2.759E+03 2.172E+03
SE         0.000E+00 1.381E+06 1.741E+04 3.064E+03 7.397E+00 5.610E+00
BR         0.000E+00 3.050E+06 1.924E+05 1.090E+05 6.958E+03 1.914E+03
KR         0.000E+00 5.429E+06 1.456E+06 1.106E+06 1.180E+05 1.725E+04
RB         0.000E+00 7.510E+06 8.434E+05 6.008E+05 5.277E+04 3.774E+03
SR         0.000E+00 1.067E+07 3.764E+06 3.398E+06 1.910E+06 1.486E+06
 Y         0.000E+00 1.419E+07 5.718E+06 5.274E+06 3.086E+06 2.092E+06
ZR         0.000E+00 1.056E+07 3.558E+06 3.489E+06 2.935E+06 2.507E+06
NB         0.000E+00 1.528E+07 5.256E+06 5.143E+06 4.077E+06 3.186E+06
MO         0.000E+00 8.645E+06 2.012E+06 1.863E+06 1.671E+06 1.473E+06
TC         0.000E+00 9.412E+06 2.189E+06 1.705E+06 1.568E+06 1.409E+06
RU         0.000E+00 3.476E+06 2.376E+06 2.270E+06 1.770E+06 1.647E+06
RH         0.000E+00 4.215E+06 2.576E+06 2.475E+06 2.227E+06 2.053E+06
PD         0.000E+00 4.583E+05 2.208E+05 2.040E+05 1.237E+05 6.882E+04
AG         0.000E+00 5.020E+05 2.905E+05 2.703E+05 1.783E+05 1.172E+05
CD         0.000E+00 1.437E+05 3.427E+04 2.810E+04 1.562E+04 1.293E+04
IN         0.000E+00 3.245E+05 4.477E+04 3.655E+04 1.681E+04 1.253E+04
SN         0.000E+00 1.431E+06 1.550E+05 9.977E+04 2.672E+04 2.229E+04
SB         0.000E+00 3.703E+06 6.428E+05 4.156E+05 1.468E+05 9.845E+04
TE         0.000E+00 8.377E+06 3.579E+06 2.552E+06 1.639E+06 1.429E+06
 I         0.000E+00 1.227E+07 7.913E+06 6.985E+06 4.281E+06 3.235E+06
XE         0.000E+00 9.657E+06 3.274E+06 3.220E+06 3.098E+06 2.632E+06
CS         0.000E+00 8.360E+06 1.049E+06 4.160E+05 1.477E+05 1.455E+05
BA         0.000E+00 1.070E+07 3.425E+06 2.709E+06 1.862E+06 1.808E+06
LA         0.000E+00 1.067E+07 4.759E+06 3.992E+06 2.096E+06 1.869E+06
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CE          0.000E+00 8.147E+06 4.599E+06 4.520E+06 4.201E+06 3.891E+06
PR          0.000E+00 6.867E+06 4.187E+06 3.799E+06 3.099E+06 2.864E+06
ND          0.000E+00 1.481E+06 9.519E+05 8.566E+05 6.706E+05 6.469E+05
PM          0.000E+00 1.407E+06 1.105E+06 1.090E+06 9.790E+05 8.638E+05
SM          0.000E+00 3.244E+05 2.769E+05 2.667E+05 2.229E+05 1.835E+05
EU          0.000E+00 8.871E+04 8.124E+04 7.830E+04 7.011E+04 6.559E+04
GD          0.000E+00 4.942E+03 3.550E+03 3.410E+03 2.350E+03 1.503E+03
TB          0.000E+00 1.674E+03 1.102E+03 1.046E+03 1.003E+03 9.651E+02
DY          0.000E+00 2.391E+02 1.230E+02 9.674E+01 2.305E+01 1.734E+01
HO          0.000E+00 3.603E+01 3.564E+01 3.527E+01 3.176E+01 2.811E+01
ER          0.000E+00 5.022E-01 3.541E-02 3.530E-02 3.424E-02 3.300E-02
SUMTOT      0.000E+00 1.794E+08 6.657E+07 5.899E+07 4.230E+07 3.585E+07

TOTAL       0.000E+00 1.794E+08 6.657E+07 5.899E+07 4.230E+07 3.585E+07

                                          CUMULATIVE TABLE TOTALS

AP+FP       1.203E-11 1.794E+08 6.657E+07 5.899E+07 4.230E+07 3.585E+07
ACT+FP      2.813E+00 2.141E+08 8.717E+07 7.700E+07 5.782E+07 4.930E+07
AP+ACT+FP   2.813E+00 2.141E+08 8.717E+07 7.700E+07 5.782E+07 4.930E+07
□
         OUTPUT UNIT =
6                          PAGE   79
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
            FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3       0.000E+00 1.024E-02 1.024E-02 1.024E-02 1.024E-02 1.024E-02
CO 72       0.000E+00 6.917E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 72       0.000E+00 5.097E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 72       0.000E+00 1.443E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 72       0.000E+00 9.059E-02 8.925E-02 8.793E-02 7.575E-02 6.335E-02
GA 72       0.000E+00 1.141E+00 1.140E+00 1.139E+00 1.093E+00 9.908E-01
CO 73       0.000E+00 1.890E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 73       0.000E+00 6.840E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 73       0.000E+00 1.495E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 73       0.000E+00 1.816E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 73       0.000E+00 5.894E-01 5.121E-01 4.443E-01 1.074E-01 1.953E-02
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GE 73M     0.000E+00 5.179E-02 4.497E-02 3.902E-02 9.429E-03 1.715E-03
CO 74      0.000E+00 4.986E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 74      0.000E+00 3.741E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 74      0.000E+00 3.636E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 74      0.000E+00 1.626E+00 6.381E-12 2.497E-23 0.000E+00 0.000E+00
GA 74      0.000E+00 6.879E+00 4.986E-02 2.937E-04 0.000E+00 0.000E+00
CO 75      0.000E+00 5.910E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 75      0.000E+00 2.285E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 75      0.000E+00 2.969E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 75      0.000E+00 9.514E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 75      0.000E+00 4.699E+00 1.574E-09 4.907E-19 0.000E+00 0.000E+00
GE 75      0.000E+00 1.599E+00 9.924E-01 6.006E-01 3.956E-03 9.544E-06
GE 75M     0.000E+00 2.093E-02 1.110E-11 3.460E-21 0.000E+00 0.000E+00
NI 76      0.000E+00 5.054E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 76      0.000E+00 3.537E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 76      0.000E+00 1.212E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 76      0.000E+00 3.910E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 76      0.000E+00 1.488E-01 1.449E-01 1.411E-01 1.085E-01 7.906E-02
NI 77      0.000E+00 1.165E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 77      0.000E+00 1.337E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 77      0.000E+00 2.631E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 77      0.000E+00 3.858E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 77      0.000E+00 1.110E+01 1.045E+01 9.830E+00 5.323E+00 2.550E+00
GE 77M     0.000E+00 1.506E+01 2.157E-19 0.000E+00 0.000E+00 0.000E+00
AS 77      0.000E+00 4.268E+00 4.220E+00 4.170E+00 3.651E+00 3.045E+00
SE 77M     0.000E+00 1.137E-02 1.101E-02 1.088E-02 9.528E-03 7.946E-03
NI 78      0.000E+00 1.142E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 78      0.000E+00 6.668E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 78      0.000E+00 2.006E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 78      0.000E+00 1.280E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 78      0.000E+00 1.950E+01 1.210E+01 7.503E+00 6.297E-02 2.032E-04
AS 78      0.000E+00 1.021E+02 9.323E+01 7.673E+01 2.415E+00 1.630E-02
CU 79      0.000E+00 1.368E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 79      0.000E+00 1.860E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 79      0.000E+00 1.018E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 79      0.000E+00 1.716E+02 1.105E-23 0.000E+00 0.000E+00 0.000E+00
AS 79      0.000E+00 8.363E+01 8.846E-01 8.708E-03 7.434E-23 0.000E+00
SE 79      0.000E+00 6.167E-05 6.168E-05 6.168E-05 6.168E-05 6.168E-05
SE 79M     0.000E+00 9.053E+00 1.682E-01 1.661E-03 1.415E-23 0.000E+00
CU 80      0.000E+00 2.197E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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OUTPUT UNIT =
6 PAGE 80
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
ZN 80	0.000E+00	5.592E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 80	0.000E+00	1.824E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 80	0.000E+00	1.783E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 80	0.000E+00	6.636E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 80	0.000E+00	3.103E-03	1.901E-03	1.556E-03	3.225E-04	4.911E-05
BR 80M	0.000E+00	2.087E-04	1.784E-04	1.525E-04	3.178E-05	4.840E-06
CU 81	0.000E+00	1.468E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 81	0.000E+00	2.118E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 81	0.000E+00	8.240E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 81	0.000E+00	7.023E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 81	0.000E+00	5.645E+02	9.969E-32	0.000E+00	0.000E+00	0.000E+00
SE 81	0.000E+00	2.201E+02	2.761E+01	4.647E+00	1.560E-03	2.574E-07
SE 81M	0.000E+00	1.076E+00	5.207E-01	2.520E-01	1.775E-04	2.928E-08
ZN 82	0.000E+00	2.392E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 82	0.000E+00	4.942E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 82	0.000E+00	4.001E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82	0.000E+00	1.119E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82M	0.000E+00	7.211E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 82	0.000E+00	4.663E+01	4.578E+01	4.489E+01	3.688E+01	2.914E+01
BR 82M	0.000E+00	4.967E-01	5.619E-04	6.373E-07	0.000E+00	0.000E+00
ZN 83	0.000E+00	2.627E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 83	0.000E+00	1.241E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 83	0.000E+00	7.097E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 83	0.000E+00	1.578E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	0.000E+00	9.704E+02	1.539E+02	2.423E+01	2.275E-07	5.297E-17
SE 83M	0.000E+00	1.120E+03	4.380E-13	1.445E-28	0.000E+00	0.000E+00
BR 83	0.000E+00	2.770E+02	2.202E+02	1.666E+02	9.192E+00	2.831E-01
KR 83M	0.000E+00	3.436E+01	3.323E+01	3.021E+01	3.546E+00	1.358E-01
GA 84	0.000E+00	1.540E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 84	0.000E+00	1.602E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 84	0.000E+00	2.719E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	0.000E+00	1.375E+03	4.668E-03	1.570E-08	0.000E+00	0.000E+00
BR 84	0.000E+00	4.574E+03	1.377E+03	3.725E+02	7.786E-04	1.190E-10
BR 84M	0.000E+00	1.588E+02	1.551E-01	1.515E-04	0.000E+00	0.000E+00
GE 85	0.000E+00	6.307E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 85	0.000E+00	1.446E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 85	0.000E+00	2.968E+03	4.913E-25	0.000E+00	0.000E+00	0.000E+00
SE 85M	0.000E+00	2.269E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	0.000E+00	1.912E+03	1.136E-03	5.686E-10	0.000E+00	0.000E+00

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KR 85       0.000E+00 9.677E+00 9.678E+00 9.678E+00 9.680E+00 9.680E+00
KR 85M      0.000E+00 7.681E+02 6.660E+02 5.706E+02 1.215E+02 1.898E+01
GE 86       0.000E+00 1.072E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 86       0.000E+00 1.061E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 86       0.000E+00 4.355E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 86       0.000E+00 6.859E+03 1.748E-16 0.000E+00 0.000E+00 0.000E+00
BR 86M      0.000E+00 6.442E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 86       0.000E+00 4.741E+00 4.734E+00 4.726E+00 4.654E+00 4.568E+00
RB 86M      0.000E+00 4.378E-01 7.922E-19 1.719E-36 0.000E+00 0.000E+00
GE 87       0.000E+00 2.035E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 87       0.000E+00 4.886E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 87       0.000E+00 5.880E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE   81
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

BR 87       0.000E+00 1.185E+04 4.717E-16 1.947E-35 0.000E+00 0.000E+00
KR 87       0.000E+00 7.721E+03 4.525E+03 2.624E+03 1.127E+01 1.624E-02
SR 87M      0.000E+00 5.642E-03 4.407E-03 3.442E-03 2.910E-04 1.501E-05
GE 88       0.000E+00 5.191E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 88       0.000E+00 4.014E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 88       0.000E+00 1.938E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 88       0.000E+00 8.581E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 88       0.000E+00 1.192E+04 9.344E+03 7.320E+03 6.370E+02 3.401E+01
RB 88       0.000E+00 1.397E+04 1.194E+04 9.447E+03 8.232E+02 4.396E+01
AS 89       0.000E+00 3.627E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 89       0.000E+00 7.361E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 89       0.000E+00 1.181E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 89       0.000E+00 2.038E+04 4.150E-02 8.325E-08 0.000E+00 0.000E+00
RB 89       0.000E+00 2.084E+04 1.691E+03 1.096E+02 1.436E-10 7.903E-25
SR 89       0.000E+00 4.145E+03 4.144E+03 4.141E+03 4.118E+03 4.090E+03
 Y 89M      0.000E+00 2.134E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 90       0.000E+00 2.148E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 90       0.000E+00 9.170E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 90       0.000E+00 1.636E+04 4.878E-30 0.000E+00 0.000E+00 0.000E+00
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RB 90       0.000E+00 2.647E+04 4.652E-02 2.667E-06 0.000E+00 0.000E+00
RB 90M      0.000E+00 6.566E+03 4.453E-01 2.807E-05 0.000E+00 0.000E+00
SR 90       0.000E+00 5.826E+01 5.826E+01 5.826E+01 5.826E+01 5.825E+01
 Y 90       0.000E+00 2.873E+02 2.872E+02 2.871E+02 2.862E+02 2.852E+02
 Y 90M      0.000E+00 5.121E-02 4.095E-02 3.275E-02 3.500E-03 2.392E-04
SE 91       0.000E+00 3.924E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 91       0.000E+00 2.876E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 91       0.000E+00 1.545E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 91       0.000E+00 3.261E+04 8.622E-15 2.064E-33 0.000E+00 0.000E+00
SR 91       0.000E+00 1.148E+04 1.069E+04 9.938E+03 4.791E+03 1.996E+03
 Y 91       0.000E+00 5.423E+03 5.423E+03 5.422E+03 5.412E+03 5.389E+03
 Y 91M      0.000E+00 2.747E+03 2.686E+03 2.554E+03 1.256E+03 5.231E+02
SE 92       0.000E+00 1.362E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 92       0.000E+00 2.869E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 92       0.000E+00 6.954E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 92       0.000E+00 2.575E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 92       0.000E+00 1.380E+04 1.069E+04 8.278E+03 6.414E+02 2.979E+01
 Y 92       0.000E+00 1.532E+04 1.498E+04 1.417E+04 3.901E+03 4.853E+02
BR 93       0.000E+00 5.589E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 93       0.000E+00 3.717E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 93       0.000E+00 1.781E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 93       0.000E+00 2.535E+04 9.974E+01 3.897E-01 0.000E+00 0.000E+00
 Y 93       0.000E+00 1.279E+04 1.209E+04 1.129E+04 5.682E+03 2.494E+03
ZR 93       0.000E+00 1.345E-04 1.345E-04 1.345E-04 1.346E-04 1.347E-04
BR 94       0.000E+00 5.711E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 94       0.000E+00 1.192E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 94       0.000E+00 1.259E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 94       0.000E+00 1.957E+04 9.142E-11 4.229E-25 0.000E+00 0.000E+00
 Y 94       0.000E+00 2.820E+04 3.406E+03 3.860E+02 1.349E-07 6.059E-19
NB 94M      0.000E+00 2.377E-04 3.096E-07 4.032E-10 0.000E+00 0.000E+00
BR 95       0.000E+00 3.271E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 95       0.000E+00 1.699E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE   82
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
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RB 95	0.000E+00	6.117E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 95	0.000E+00	2.832E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	0.000E+00	2.366E+04	4.664E+02	8.884E+00	5.583E-17	0.000E+00
ZR 95	0.000E+00	9.467E+03	9.463E+03	9.459E+03	9.417E+03	9.366E+03
NB 95	0.000E+00	9.049E+03	9.049E+03	9.048E+03	9.048E+03	9.046E+03
NB 95M	0.000E+00	1.848E+01	1.848E+01	1.847E+01	1.845E+01	1.841E+01
BR 96	0.000E+00	2.153E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 96	0.000E+00	2.220E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 96	0.000E+00	2.181E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 96	0.000E+00	1.466E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	0.000E+00	3.867E+04	5.521E-04	7.746E-12	0.000E+00	0.000E+00
NB 96	0.000E+00	4.631E+01	4.496E+01	4.364E+01	3.243E+01	2.271E+01
KR 97	0.000E+00	1.647E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 97	0.000E+00	3.469E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 97	0.000E+00	1.298E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 97	0.000E+00	2.639E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	9.173E+03	8.804E+03	8.451E+03	5.607E+03	3.428E+03
NB 97	0.000E+00	1.180E+04	1.163E+04	1.133E+04	7.697E+03	4.409E+03
NB 97M	0.000E+00	7.347E+03	7.046E+03	6.763E+03	4.487E+03	2.743E+03
KR 98	0.000E+00	1.584E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 98	0.000E+00	9.108E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 98	0.000E+00	3.811E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 98	0.000E+00	2.904E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 98	0.000E+00	9.425E+03	1.047E-31	0.000E+00	0.000E+00	0.000E+00
NB 98	0.000E+00	2.204E+04	2.654E-31	0.000E+00	0.000E+00	0.000E+00
NB 98M	0.000E+00	2.811E+02	1.254E+02	5.591E+01	1.739E-02	1.076E-06
RB 99	0.000E+00	7.589E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 99	0.000E+00	1.601E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 99	0.000E+00	1.283E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 99	0.000E+00	2.485E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	1.660E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	0.000E+00	8.235E+02	9.307E-05	1.052E-11	0.000E+00	0.000E+00
MO 99	0.000E+00	6.087E+03	6.024E+03	5.961E+03	5.367E+03	4.731E+03
TC 99	0.000E+00	4.046E-03	4.046E-03	4.047E-03	4.050E-03	4.054E-03
TC 99M	0.000E+00	1.399E+03	1.398E+03	1.396E+03	1.322E+03	1.187E+03
RB100	0.000E+00	8.480E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR100	0.000E+00	2.252E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y100	0.000E+00	8.916E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR100	0.000E+00	1.305E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	0.000E+00	2.335E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	0.000E+00	2.044E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC100	0.000E+00	1.893E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR101	0.000E+00	4.794E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y101	0.000E+00	2.267E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	0.000E+00	1.911E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB101	0.000E+00	2.124E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	1.933E+04	1.135E+03	6.602E+01	2.921E-11	4.370E-26

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TC101      0.000E+00 8.123E+03 1.774E+03 1.728E+02 2.760E-10 5.567E-25
SR102      0.000E+00 3.306E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y102      0.000E+00 7.600E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR102      0.000E+00 7.217E+03 9.952E-35 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE   83
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

NB102      0.000E+00 3.243E+04 2.609E-34 0.000E+00 0.000E+00 0.000E+00
MO102      0.000E+00 2.837E+03 6.831E+01 1.612E+00 8.617E-17 2.583E-36
TC102      0.000E+00 1.589E+04 3.852E+02 9.089E+00 4.860E-16 0.000E+00
TC102M     0.000E+00 2.739E+01 1.929E-03 1.359E-07 0.000E+00 0.000E+00
RH102      0.000E+00 3.301E-03 3.301E-03 3.301E-03 3.300E-03 3.299E-03
SR103      0.000E+00 1.482E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y103      0.000E+00 8.118E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR103      0.000E+00 4.698E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB103      0.000E+00 1.578E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO103      0.000E+00 1.867E+04 1.984E-14 1.721E-32 0.000E+00 0.000E+00
TC103      0.000E+00 1.012E+04 6.366E-14 5.523E-32 0.000E+00 0.000E+00
RU103      0.000E+00 4.632E+03 4.628E+03 4.625E+03 4.591E+03 4.551E+03
RH103M     0.000E+00 2.870E+02 2.869E+02 2.868E+02 2.849E+02 2.823E+02
SR104      0.000E+00 4.636E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y104      0.000E+00 8.613E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR104      0.000E+00 6.838E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB104      0.000E+00 1.118E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO104      0.000E+00 6.151E+03 3.182E-08 1.637E-19 0.000E+00 0.000E+00
TC104      0.000E+00 2.321E+04 2.577E+03 2.622E+02 3.123E-08 3.852E-20
RH104      0.000E+00 2.653E+03 1.426E-02 9.829E-07 0.000E+00 0.000E+00
RH104M     0.000E+00 2.437E+01 1.679E-03 1.157E-07 0.000E+00 0.000E+00
 Y105      0.000E+00 4.228E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR105      0.000E+00 1.521E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB105      0.000E+00 2.714E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO105      0.000E+00 1.221E+04 1.049E-16 0.000E+00 0.000E+00 0.000E+00
TC105      0.000E+00 8.924E+03 5.444E+01 3.008E-01 0.000E+00 0.000E+00
RU105      0.000E+00 5.754E+03 5.087E+03 4.352E+03 9.132E+02 1.402E+02
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RH105      0.000E+00 1.053E+03 1.053E+03 1.051E+03 9.383E+02 7.579E+02
RH105M     0.000E+00 1.754E+02 1.555E+02 1.331E+02 2.792E+01 4.286E+00
ZR106      0.000E+00 1.725E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB106      0.000E+00 1.112E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO106      0.000E+00 3.433E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC106      0.000E+00 1.185E+04 7.319E-26 0.000E+00 0.000E+00 0.000E+00
RU106      0.000E+00 1.590E+01 1.590E+01 1.590E+01 1.588E+01 1.587E+01
RH106      0.000E+00 2.904E+03 2.565E+03 2.564E+03 2.562E+03 2.560E+03
RH106M     0.000E+00 3.085E+02 2.251E+02 1.643E+02 7.035E+00 1.604E-01
 Y107      0.000E+00 4.206E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR107      0.000E+00 1.230E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB107      0.000E+00 1.378E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO107      0.000E+00 2.407E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC107      0.000E+00 4.363E+03 2.083E-34 0.000E+00 0.000E+00 0.000E+00
RU107      0.000E+00 3.538E+03 1.933E-01 9.677E-06 0.000E+00 0.000E+00
RH107      0.000E+00 1.977E+03 3.666E+02 5.393E+01 2.561E-07 2.632E-17
PD107M     0.000E+00 1.972E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR108      0.000E+00 2.302E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB108      0.000E+00 4.423E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO108      0.000E+00 5.543E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC108      0.000E+00 4.215E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU108      0.000E+00 8.441E+02 8.273E-02 8.015E-06 0.000E+00 0.000E+00
RH108      0.000E+00 3.852E+03 3.987E-01 3.863E-05 0.000E+00 0.000E+00
RH108M     0.000E+00 5.041E+01 4.377E-02 3.801E-05 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE   84
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

AG108      0.000E+00 1.746E-03 3.019E-09 2.976E-09 2.976E-09 2.976E-09
ZR109      0.000E+00 2.316E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB109      0.000E+00 6.911E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO109      0.000E+00 3.131E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC109      0.000E+00 1.646E+03 9.305E-19 0.000E+00 0.000E+00 0.000E+00
RU109      0.000E+00 2.421E+03 1.898E-18 0.000E+00 0.000E+00 0.000E+00
RH109      0.000E+00 1.345E+03 4.996E-09 4.544E-21 0.000E+00 0.000E+00
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RH109M	0.000E+00	1.319E+02	3.173E-18	0.000E+00	0.000E+00	0.000E+00
PD109	0.000E+00	5.167E+02	4.942E+02	4.694E+02	2.805E+02	1.512E+02
PD109M	0.000E+00	9.949E+01	2.834E-02	3.993E-06	0.000E+00	0.000E+00
AG109M	0.000E+00	1.001E+02	9.583E+01	9.102E+01	5.439E+01	2.932E+01
NB110	0.000E+00	1.049E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO110	0.000E+00	5.104E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC110	0.000E+00	6.598E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU110	0.000E+00	6.967E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	0.000E+00	1.754E+03	1.635E-34	0.000E+00	0.000E+00	0.000E+00
RH110M	0.000E+00	8.350E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110	0.000E+00	3.522E+02	8.477E-02	8.476E-02	8.466E-02	8.455E-02
AG110M	0.000E+00	1.482E+01	1.481E+01	1.481E+01	1.480E+01	1.478E+01
NB111	0.000E+00	7.692E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO111	0.000E+00	1.656E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC111	0.000E+00	1.870E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU111	0.000E+00	6.867E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	0.000E+00	6.395E+02	5.018E-15	3.154E-32	0.000E+00	0.000E+00
PD111	0.000E+00	2.570E+02	4.293E+01	8.128E+00	5.628E-01	1.240E-01
PD111M	0.000E+00	2.295E+00	2.026E+00	1.786E+00	5.064E-01	1.116E-01
AG111	0.000E+00	1.088E+02	1.086E+02	1.082E+02	1.042E+02	9.944E+01
AG111M	0.000E+00	1.857E+01	3.313E+00	6.718E-01	5.843E-02	1.288E-02
CD111M	0.000E+00	8.359E-03	3.559E-03	1.515E-03	2.962E-07	1.050E-11
MO112	0.000E+00	2.400E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	0.000E+00	9.372E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	0.000E+00	2.182E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	0.000E+00	6.181E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD112	0.000E+00	2.502E+01	2.417E+01	2.335E+01	1.654E+01	1.094E+01
AG112	0.000E+00	3.390E+02	3.376E+02	3.342E+02	2.603E+02	1.746E+02
MO113	0.000E+00	2.524E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC113	0.000E+00	2.074E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU113	0.000E+00	2.255E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH113	0.000E+00	3.380E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD113	0.000E+00	2.640E+02	2.454E-10	2.232E-22	0.000E+00	0.000E+00
AG113	0.000E+00	1.261E+02	1.112E+02	9.758E+01	2.639E+01	5.493E+00
AG113M	0.000E+00	1.590E+01	5.472E-11	4.977E-23	0.000E+00	0.000E+00
CD113M	0.000E+00	3.776E-02	3.776E-02	3.776E-02	3.777E-02	3.777E-02
MO114	0.000E+00	2.092E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC114	0.000E+00	6.459E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU114	0.000E+00	7.661E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH114	0.000E+00	3.343E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD114	0.000E+00	1.141E+02	3.462E-06	1.032E-13	0.000E+00	0.000E+00
AG114	0.000E+00	2.019E+02	6.247E-06	1.862E-13	0.000E+00	0.000E+00
IN114	0.000E+00	6.082E-03	1.973E-03	1.972E-03	1.960E-03	1.946E-03
IN114M	0.000E+00	6.145E-04	6.142E-04	6.138E-04	6.102E-04	6.060E-04

OUTPUT UNIT =
6 PAGE 85
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

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    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

MO115      0.000E+00 1.945E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC115      0.000E+00 1.148E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU115      0.000E+00 5.961E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH115      0.000E+00 2.001E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD115      0.000E+00 2.458E+02 8.245E-27 0.000E+00 0.000E+00 0.000E+00
AG115      0.000E+00 1.231E+02 1.593E+01 1.991E+00 1.854E-09 2.698E-20
AG115M     0.000E+00 5.230E+01 2.980E-27 0.000E+00 0.000E+00 0.000E+00
CD115      0.000E+00 4.914E+01 4.872E+01 4.812E+01 4.227E+01 3.618E+01
CD115M     0.000E+00 5.518E+00 5.515E+00 5.512E+00 5.476E+00 5.434E+00
IN115M     0.000E+00 3.093E+01 3.091E+01 3.083E+01 2.847E+01 2.466E+01
TC116      0.000E+00 9.305E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU116      0.000E+00 1.016E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH116      0.000E+00 1.462E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD116      0.000E+00 1.174E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG116      0.000E+00 1.425E+02 2.825E-05 5.147E-12 0.000E+00 0.000E+00
AG116M     0.000E+00 1.669E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116      0.000E+00 6.419E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 9.395E+01 4.359E+01 2.022E+01 9.338E-03 9.282E-07
TC117      0.000E+00 3.400E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU117      0.000E+00 2.497E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH117      0.000E+00 7.897E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD117      0.000E+00 2.333E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG117      0.000E+00 1.023E+02 1.707E-13 2.676E-28 0.000E+00 0.000E+00
AG117M     0.000E+00 1.072E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD117      0.000E+00 6.609E+01 5.090E+01 3.899E+01 2.711E+00 1.106E-01
CD117M     0.000E+00 4.048E+01 3.309E+01 2.699E+01 3.514E+00 3.043E-01
IN117      0.000E+00 3.817E+01 3.689E+01 3.385E+01 4.937E+00 3.417E-01
IN117M     0.000E+00 4.050E+01 3.905E+01 3.564E+01 5.417E+00 3.372E-01
SN117M     0.000E+00 4.873E-02 4.863E-02 4.853E-02 4.754E-02 4.638E-02
RU118      0.000E+00 1.172E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH118      0.000E+00 1.386E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD118      0.000E+00 1.218E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG118      0.000E+00 1.783E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG118M     0.000E+00 7.922E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD118      0.000E+00 3.676E+01 1.611E+01 7.047E+00 1.808E-03 8.876E-08
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IN118       0.000E+00 1.706E+02 7.488E+01 3.275E+01 8.403E-03 4.125E-07
IN118M      0.000E+00 1.009E-01 8.809E-06 7.693E-10 0.000E+00 0.000E+00
RH119       0.000E+00 8.435E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD119       0.000E+00 1.606E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG119       0.000E+00 2.353E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD119       0.000E+00 7.655E+01 9.273E-01 1.111E-02 6.777E-22 0.000E+00
CD119M      0.000E+00 8.540E+01 2.003E-04 4.543E-10 0.000E+00 0.000E+00
IN119       0.000E+00 3.217E+01 8.207E-01 8.567E-02 8.012E-12 7.287E-24
IN119M      0.000E+00 8.852E+01 1.512E+01 1.568E+00 1.458E-10 1.326E-22
SN119M      0.000E+00 8.104E-02 8.104E-02 8.103E-02 8.093E-02 8.082E-02
RU120       0.000E+00 2.942E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH120       0.000E+00 1.863E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD120       0.000E+00 4.319E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG120       0.000E+00 1.339E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD120       0.000E+00 7.787E+01 3.733E-20 0.000E+00 0.000E+00 0.000E+00
IN120       0.000E+00 1.636E+02 6.100E-19 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE   86
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN120M      0.000E+00 1.132E+02 5.666E-20 0.000E+00 0.000E+00 0.000E+00
RH121       0.000E+00 2.476E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD121       0.000E+00 2.807E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG121       0.000E+00 1.390E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD121       0.000E+00 2.276E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121       0.000E+00 1.407E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121M      0.000E+00 3.784E+01 1.354E-04 4.552E-10 0.000E+00 0.000E+00
SN121       0.000E+00 1.770E+01 1.726E+01 1.682E+01 1.299E+01 9.521E+00
SN121M      0.000E+00 1.834E-04 1.834E-04 1.834E-04 1.834E-04 1.834E-04
RH122       0.000E+00 3.834E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD122       0.000E+00 6.519E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG122       0.000E+00 1.303E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD122       0.000E+00 1.138E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN122       0.000E+00 3.924E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN122M      0.000E+00 1.953E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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SB122      0.000E+00 5.682E+00 5.622E+00 5.562E+00 4.998E+00 4.396E+00
SB122M     0.000E+00 7.239E-03 3.625E-07 1.815E-11 0.000E+00 0.000E+00
RH123      0.000E+00 2.851E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD123      0.000E+00 2.241E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG123      0.000E+00 5.461E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD123      0.000E+00 2.517E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN123      0.000E+00 1.628E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN123M     0.000E+00 7.917E+01 2.363E-21 0.000E+00 0.000E+00 0.000E+00
SN123      0.000E+00 1.000E+01 1.000E+01 9.998E+00 9.976E+00 9.949E+00
SN123M     0.000E+00 5.036E+01 1.799E+01 6.376E+00 1.988E-04 7.784E-10
TE123M     0.000E+00 3.310E-03 3.309E-03 3.308E-03 3.300E-03 3.290E-03
PD124      0.000E+00 3.280E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG124      0.000E+00 3.476E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD124      0.000E+00 1.572E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN124      0.000E+00 5.088E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB124      0.000E+00 6.924E+00 6.921E+00 6.918E+00 6.885E+00 6.845E+00
SB124M     0.000E+00 1.883E-02 4.190E-14 9.320E-26 0.000E+00 0.000E+00
AG125      0.000E+00 8.603E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD125      0.000E+00 1.895E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN125      0.000E+00 2.230E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN125M     0.000E+00 1.694E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN125      0.000E+00 7.850E+01 7.826E+01 7.803E+01 7.572E+01 7.305E+01
SN125M     0.000E+00 1.277E+02 1.636E+00 2.073E-02 2.209E-21 0.000E+00
SB125      0.000E+00 2.473E+01 2.473E+01 2.473E+01 2.473E+01 2.474E+01
TE125M     0.000E+00 1.277E+00 1.277E+00 1.277E+00 1.278E+00 1.280E+00
PD126      0.000E+00 5.506E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG126      0.000E+00 3.510E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD126      0.000E+00 1.064E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN126      0.000E+00 8.428E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN126      0.000E+00 4.753E-04 4.753E-04 4.753E-04 4.753E-04 4.753E-04
SB126      0.000E+00 1.553E+01 1.550E+01 1.546E+01 1.510E+01 1.469E+01
SB126M     0.000E+00 5.064E+00 5.716E-01 6.836E-02 4.852E-03 4.852E-03
CD127      0.000E+00 8.668E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127      0.000E+00 3.770E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127M     0.000E+00 3.944E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN127      0.000E+00 8.669E+02 6.233E+02 4.481E+02 1.651E+01 3.146E-01
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         OUTPUT UNIT =
6                          PAGE   87
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC
```

9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SN127M	0.000E+00	2.788E+02	1.190E-02	5.077E-07	0.000E+00	0.000E+00
SB127	0.000E+00	5.607E+02	5.589E+02	5.563E+02	5.199E+02	4.753E+02
TE127	0.000E+00	1.255E+02	1.255E+02	1.255E+02	1.230E+02	1.167E+02
TE127M	0.000E+00	6.357E+00	6.357E+00	6.357E+00	6.358E+00	6.358E+00
AG128	0.000E+00	1.451E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD128	0.000E+00	2.654E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN128	0.000E+00	9.581E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN128	0.000E+00	7.506E+02	3.710E+02	1.833E+02	1.592E-01	3.375E-05
SB128	0.000E+00	2.535E+02	2.347E+02	2.173E+02	1.007E+02	4.001E+01
SB128M	0.000E+00	2.931E+03	1.631E+03	8.092E+02	7.027E-01	1.490E-04
I128	0.000E+00	2.429E+01	4.598E+00	8.701E-01	5.129E-08	1.083E-16
CD129	0.000E+00	1.525E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN129	0.000E+00	5.884E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN129	0.000E+00	1.506E+03	5.885E+00	2.299E-02	0.000E+00	0.000E+00
SN129M	0.000E+00	1.987E+03	1.185E-04	7.063E-12	0.000E+00	0.000E+00
SB129	0.000E+00	3.341E+03	2.886E+03	2.458E+03	4.939E+02	7.200E+01
TE129	0.000E+00	1.052E+03	1.012E+03	9.338E+02	2.894E+02	1.286E+02
TE129M	0.000E+00	7.738E+01	7.737E+01	7.735E+01	7.690E+01	7.616E+01
XE129M	0.000E+00	1.484E-03	1.479E-03	1.474E-03	1.422E-03	1.361E-03
CD130	0.000E+00	1.367E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN130	0.000E+00	8.617E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN130	0.000E+00	2.685E+03	3.746E-02	5.226E-07	0.000E+00	0.000E+00
SB130	0.000E+00	2.250E+03	7.955E+02	2.812E+02	8.583E-03	3.274E-08
SB130M	0.000E+00	1.006E+04	2.838E+01	3.876E-02	0.000E+00	0.000E+00
I130	0.000E+00	2.154E+02	2.045E+02	1.934E+02	1.104E+02	5.631E+01
I130M	0.000E+00	1.070E+01	1.053E-01	1.036E-03	8.849E-24	0.000E+00
CD131	0.000E+00	3.344E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN131	0.000E+00	3.098E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN131	0.000E+00	5.643E+03	3.547E-14	2.229E-31	0.000E+00	0.000E+00
SB131	0.000E+00	1.218E+04	2.033E+03	3.334E+02	4.677E-06	1.764E-15
TE131	0.000E+00	5.951E+03	2.877E+03	9.677E+02	1.609E+02	1.219E+02
TE131M	0.000E+00	1.336E+03	1.311E+03	1.282E+03	1.018E+03	7.713E+02
I131	0.000E+00	3.367E+03	3.364E+03	3.357E+03	3.254E+03	3.130E+03
XE131M	0.000E+00	1.059E+01	1.059E+01	1.059E+01	1.059E+01	1.057E+01
CD132	0.000E+00	2.746E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN132	0.000E+00	1.284E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN132	0.000E+00	2.173E+03	1.755E-24	0.000E+00	0.000E+00	0.000E+00
SB132	0.000E+00	1.198E+04	4.704E-03	1.667E-09	0.000E+00	0.000E+00
SB132M	0.000E+00	7.780E+03	3.895E-01	1.950E-05	0.000E+00	0.000E+00
TE132	0.000E+00	2.820E+03	2.796E+03	2.771E+03	2.536E+03	2.280E+03
I132	0.000E+00	2.370E+04	2.359E+04	2.346E+04	2.167E+04	1.949E+04
CS132	0.000E+00	5.068E-01	5.046E-01	5.023E-01	4.804E-01	4.554E-01
IN133	0.000E+00	1.187E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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SN133       0.000E+00 1.542E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB133       0.000E+00 1.376E+04 4.105E-04 1.223E-11 0.000E+00 0.000E+00
TE133       0.000E+00 1.263E+04 1.118E+03 3.307E+02 1.729E-01 2.115E-05
TE133M      0.000E+00 1.438E+04 6.791E+03 3.206E+03 1.761E+00 2.155E-04
 I133       0.000E+00 1.259E+04 1.237E+04 1.202E+04 8.651E+03 5.800E+03
 I133M      0.000E+00 5.490E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE133       0.000E+00 2.245E+03 2.245E+03 2.245E+03 2.223E+03 2.164E+03
XE133M      0.000E+00 8.830E+01 8.822E+01 8.812E+01 8.556E+01 7.988E+01
□
         OUTPUT UNIT =
6                        PAGE   88
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN134       0.000E+00 7.196E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN134       0.000E+00 1.547E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB134       0.000E+00 2.723E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB134M      0.000E+00 2.599E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE134       0.000E+00 1.286E+04 4.757E+03 1.759E+03 8.399E-02 5.483E-07
 I134       0.000E+00 4.460E+04 3.182E+04 1.867E+04 1.287E+01 1.037E-03
 I134M      0.000E+00 4.055E+02 5.325E-03 6.995E-08 0.000E+00 0.000E+00
XE134M      0.000E+00 1.480E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS134       0.000E+00 5.484E+02 5.484E+02 5.484E+02 5.482E+02 5.479E+02
CS134M      0.000E+00 1.995E+01 1.571E+01 1.237E+01 1.133E+00 6.438E-02
SN135       0.000E+00 2.408E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB135       0.000E+00 1.675E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE135       0.000E+00 1.722E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I135       0.000E+00 2.241E+04 2.019E+04 1.818E+04 6.371E+03 1.810E+03
XE135       0.000E+00 2.098E+03 2.409E+03 2.645E+03 2.879E+03 1.731E+03
XE135M      0.000E+00 1.231E+03 8.964E+02 7.932E+02 2.776E+02 7.889E+01
CS135       0.000E+00 9.008E-05 9.009E-05 9.010E-05 9.020E-05 9.030E-05
CS135M      0.000E+00 7.209E+01 3.289E+01 1.501E+01 5.867E-03 4.775E-07
BA135M      0.000E+00 1.968E-02 1.921E-02 1.875E-02 1.473E-02 1.102E-02
SN136       0.000E+00 1.703E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB136       0.000E+00 4.148E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE136       0.000E+00 8.605E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I136       0.000E+00 2.345E+04 2.439E-09 2.141E-22 0.000E+00 0.000E+00
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 I136M     0.000E+00 1.283E+04 3.542E-20 0.000E+00 0.000E+00 0.000E+00
CS136      0.000E+00 4.359E+02 4.350E+02 4.340E+02 4.245E+02 4.135E+02
BA136M     0.000E+00 6.372E+01 6.358E+01 6.344E+01 6.206E+01 6.044E+01
SB137      0.000E+00 4.795E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE137      0.000E+00 3.399E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I137      0.000E+00 1.970E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE137      0.000E+00 2.135E+04 4.347E-01 8.362E-06 0.000E+00 0.000E+00
CS137      0.000E+00 6.767E+01 6.768E+01 6.767E+01 6.767E+01 6.767E+01
BA137M     0.000E+00 2.280E+02 2.273E+02 2.273E+02 2.273E+02 2.272E+02
SB138      0.000E+00 7.166E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE138      0.000E+00 6.837E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I138      0.000E+00 1.119E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE138      0.000E+00 1.912E+04 1.018E+03 5.408E+01 9.695E-12 4.906E-27
CS138      0.000E+00 4.152E+04 1.804E+04 5.310E+03 1.326E-02 2.463E-09
CS138M     0.000E+00 4.793E+02 2.834E-04 1.676E-10 0.000E+00 0.000E+00
SB139      0.000E+00 4.498E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE139      0.000E+00 1.854E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I139      0.000E+00 5.305E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE139      0.000E+00 2.245E+04 8.309E-24 0.000E+00 0.000E+00 0.000E+00
CS139      0.000E+00 2.208E+04 2.799E+02 3.353E+00 2.046E-19 0.000E+00
BA139      0.000E+00 1.065E+04 7.275E+03 4.410E+03 2.887E+01 6.913E-02
TE140      0.000E+00 1.770E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I140      0.000E+00 1.822E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE140      0.000E+00 1.265E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS140      0.000E+00 4.050E+04 4.825E-13 4.983E-30 0.000E+00 0.000E+00
BA140      0.000E+00 5.141E+03 5.130E+03 5.118E+03 5.004E+03 4.870E+03
LA140      0.000E+00 3.131E+04 3.131E+04 3.130E+04 3.115E+04 3.087E+04
PR140      0.000E+00 3.835E-02 1.803E-07 8.472E-13 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE   89
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TE141      0.000E+00 1.097E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I141      0.000E+00 2.790E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE141      0.000E+00 7.408E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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CS141	0.000E+00	2.403E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	0.000E+00	1.787E+04	1.866E+03	1.915E+02	2.479E-08	3.379E-20
LA141	0.000E+00	1.029E+04	9.267E+03	7.835E+03	1.345E+03	1.620E+02
CE141	0.000E+00	2.608E+03	2.608E+03	2.608E+03	2.593E+03	2.567E+03
TE142	0.000E+00	8.112E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I142	0.000E+00	4.861E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE142	0.000E+00	1.889E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS142	0.000E+00	2.129E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	0.000E+00	1.457E+04	2.993E+02	6.139E+00	8.090E-17	4.290E-37
LA142	0.000E+00	3.621E+04	2.598E+04	1.665E+04	1.875E+02	8.610E-01
PR142	0.000E+00	1.756E+02	1.698E+02	1.638E+02	1.140E+02	7.380E+01
PR142M	0.000E+00	9.921E+00	5.747E-01	3.329E-02	1.417E-14	2.023E-29
I143	0.000E+00	2.393E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE143	0.000E+00	4.628E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS143	0.000E+00	8.811E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	0.000E+00	2.345E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	0.000E+00	1.940E+04	1.010E+03	5.176E+01	6.497E-12	2.144E-27
CE143	0.000E+00	7.024E+03	6.925E+03	6.784E+03	5.499E+03	4.274E+03
PR143	0.000E+00	3.092E+03	3.092E+03	3.092E+03	3.083E+03	3.060E+03
I144	0.000E+00	2.423E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE144	0.000E+00	5.434E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS144	0.000E+00	3.245E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA144	0.000E+00	1.153E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	0.000E+00	3.023E+04	3.167E-23	0.000E+00	0.000E+00	0.000E+00
CE144	0.000E+00	7.470E+02	7.470E+02	7.469E+02	7.461E+02	7.452E+02
PR144	0.000E+00	8.343E+03	8.284E+03	8.277E+03	8.269E+03	8.258E+03
PR144M	0.000E+00	4.629E+00	4.624E+00	4.623E+00	4.619E+00	4.613E+00
XE145	0.000E+00	7.728E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS145	0.000E+00	5.974E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA145	0.000E+00	1.084E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	0.000E+00	1.605E+04	7.834E-34	0.000E+00	0.000E+00	0.000E+00
CE145	0.000E+00	9.904E+03	1.134E-02	1.082E-08	0.000E+00	0.000E+00
PR145	0.000E+00	4.613E+03	4.149E+03	3.695E+03	1.159E+03	2.886E+02
XE146	0.000E+00	4.080E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS146	0.000E+00	1.189E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA146	0.000E+00	2.359E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA146	0.000E+00	1.647E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	0.000E+00	2.295E+03	1.237E+02	6.611E+00	1.261E-12	6.874E-28
PR146	0.000E+00	1.344E+04	4.824E+03	9.940E+02	3.607E-05	3.989E-14
PM146	0.000E+00	5.336E-03	5.336E-03	5.336E-03	5.335E-03	5.334E-03
XE147	0.000E+00	4.971E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS147	0.000E+00	1.503E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA147	0.000E+00	9.817E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA147	0.000E+00	5.503E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	0.000E+00	8.467E+03	3.025E-12	9.980E-28	0.000E+00	0.000E+00
PR147	0.000E+00	6.420E+03	2.232E+02	6.975E+00	6.195E-15	5.373E-33
ND147	0.000E+00	1.660E+03	1.657E+03	1.653E+03	1.610E+03	1.561E+03
PM147	0.000E+00	4.694E+01	4.695E+01	4.695E+01	4.701E+01	4.708E+01

OUTPUT UNIT =
6 PAGE 90
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CS148	0.000E+00	1.238E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA148	0.000E+00	1.139E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA148	0.000E+00	3.193E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	0.000E+00	2.807E+03	1.779E-22	0.000E+00	0.000E+00	0.000E+00
PR148	0.000E+00	8.925E+03	1.767E-04	2.479E-12	0.000E+00	0.000E+00
PM148	0.000E+00	1.787E+03	1.778E+03	1.768E+03	1.676E+03	1.572E+03
PM148M	0.000E+00	3.901E+02	3.898E+02	3.896E+02	3.868E+02	3.836E+02
BA149	0.000E+00	1.952E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA149	0.000E+00	5.822E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE149	0.000E+00	3.854E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	0.000E+00	3.012E+03	4.255E-05	5.969E-13	0.000E+00	0.000E+00
ND149	0.000E+00	1.969E+03	1.348E+03	9.031E+02	1.643E+01	1.341E-01
PM149	0.000E+00	1.189E+03	1.182E+03	1.173E+03	1.041E+03	8.900E+02
CS150	0.000E+00	1.243E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA150	0.000E+00	1.117E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA150	0.000E+00	1.542E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE150	0.000E+00	1.012E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR150	0.000E+00	4.321E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM150	0.000E+00	6.448E+01	4.979E+01	3.844E+01	2.894E+00	1.299E-01
LA151	0.000E+00	1.555E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE151	0.000E+00	5.931E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR151	0.000E+00	1.723E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	0.000E+00	1.561E+03	5.476E+01	1.914E+00	5.199E-15	1.725E-32
PM151	0.000E+00	6.548E+02	6.435E+02	6.281E+02	4.921E+02	3.671E+02
SM151	0.000E+00	4.460E-02	4.461E-02	4.463E-02	4.479E-02	4.493E-02
BA152	0.000E+00	3.492E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA152	0.000E+00	2.303E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE152	0.000E+00	9.074E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR152	0.000E+00	1.243E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	0.000E+00	4.013E+02	1.086E+01	2.918E-01	5.743E-17	8.170E-36
PM152	0.000E+00	1.262E+03	5.181E+01	1.395E+00	2.743E-16	3.883E-35

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PM152M     0.000E+00 2.202E+01 8.602E-02 3.360E-04 0.000E+00 0.000E+00
EU152      0.000E+00 4.840E-02 4.840E-02 4.840E-02 4.840E-02 4.840E-02
EU152M     0.000E+00 4.834E-01 4.488E-01 4.166E-01 1.980E-01 8.112E-02
LA153      0.000E+00 1.989E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE153      0.000E+00 2.557E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR153      0.000E+00 3.001E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND153      0.000E+00 8.630E+02 8.009E-14 7.214E-30 0.000E+00 0.000E+00
PM153      0.000E+00 3.509E+02 1.966E-01 8.886E-05 0.000E+00 0.000E+00
SM153      0.000E+00 5.044E+02 4.974E+02 4.900E+02 4.224E+02 3.535E+02
GD153      0.000E+00 2.386E-03 2.385E-03 2.385E-03 2.382E-03 2.379E-03
LA154      0.000E+00 1.201E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE154      0.000E+00 2.214E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR154      0.000E+00 1.015E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND154      0.000E+00 2.148E+02 1.742E-25 0.000E+00 0.000E+00 0.000E+00
PM154      0.000E+00 6.451E+02 2.939E-04 1.041E-10 0.000E+00 0.000E+00
PM154M     0.000E+00 1.042E+02 9.624E-09 8.892E-19 0.000E+00 0.000E+00
EU154      0.000E+00 2.158E+01 2.158E+01 2.158E+01 2.158E+01 2.158E+01
CE155      0.000E+00 3.890E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR155      0.000E+00 1.600E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND155      0.000E+00 1.893E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                          PAGE   91
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                             1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

PM155      0.000E+00 2.911E+02 1.491E-27 0.000E+00 0.000E+00 0.000E+00
SM155      0.000E+00 1.674E+02 2.658E+01 4.082E+00 2.985E-08 5.150E-18
EU155      0.000E+00 1.614E+00 1.614E+00 1.614E+00 1.613E+00 1.613E+00
CE156      0.000E+00 3.060E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR156      0.000E+00 4.038E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND156      0.000E+00 4.231E+01 1.255E-17 2.765E-36 0.000E+00 0.000E+00
PM156      0.000E+00 2.472E+02 3.013E-17 0.000E+00 0.000E+00 0.000E+00
SM156      0.000E+00 4.405E+01 4.094E+01 3.803E+01 1.819E+01 7.510E+00
EU156      0.000E+00 6.055E+02 6.047E+02 6.039E+02 5.945E+02 5.822E+02
CE157      0.000E+00 3.358E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR157      0.000E+00 5.433E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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ND157	0.000E+00	2.160E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	0.000E+00	9.368E+01	1.108E-14	1.296E-30	0.000E+00	0.000E+00
SM157	0.000E+00	9.977E+01	6.012E-01	3.322E-03	0.000E+00	0.000E+00
EU157	0.000E+00	5.976E+01	5.755E+01	5.499E+01	3.485E+01	2.016E+01
PR158	0.000E+00	5.366E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	0.000E+00	2.536E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM158	0.000E+00	4.655E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	0.000E+00	2.450E+01	9.524E+00	3.700E+00	2.895E-04	3.419E-09
EU158	0.000E+00	7.919E+01	5.852E+01	3.395E+01	1.363E-02	4.018E-07
PR159	0.000E+00	1.923E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	0.000E+00	3.934E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	0.000E+00	8.556E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	0.000E+00	3.104E+01	6.492E-06	1.352E-12	0.000E+00	0.000E+00
EU159	0.000E+00	3.030E+01	3.485E+00	3.501E-01	3.676E-11	3.897E-23
GD159	0.000E+00	1.177E+01	1.151E+01	1.111E+01	7.652E+00	4.893E+00
ND160	0.000E+00	2.869E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM160	0.000E+00	2.169E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	0.000E+00	1.044E+01	8.212E-03	6.459E-06	0.000E+00	0.000E+00
EU160	0.000E+00	2.008E+01	1.218E-02	9.583E-06	0.000E+00	0.000E+00
TB160	0.000E+00	2.098E+00	2.097E+00	2.096E+00	2.088E+00	2.078E+00
ND161	0.000E+00	2.893E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	0.000E+00	2.188E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	0.000E+00	4.298E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU161	0.000E+00	7.898E+00	1.601E-25	0.000E+00	0.000E+00	0.000E+00
GD161	0.000E+00	5.390E+00	8.706E-05	1.144E-09	0.000E+00	0.000E+00
TB161	0.000E+00	1.572E+00	1.566E+00	1.559E+00	1.495E+00	1.422E+00
PM162	0.000E+00	1.355E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM162	0.000E+00	4.627E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU162	0.000E+00	3.904E+00	3.810E-04	3.667E-08	0.000E+00	0.000E+00
GD162	0.000E+00	1.313E+00	2.971E-02	4.651E-04	4.034E-22	0.000E+00
TB162	0.000E+00	3.568E+00	2.437E-01	4.666E-03	4.288E-21	0.000E+00
TB162M	0.000E+00	1.200E-01	9.361E-02	6.870E-02	3.070E-03	7.366E-05
SM163	0.000E+00	8.828E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU163	0.000E+00	8.300E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD163	0.000E+00	1.441E+00	3.184E-12	6.627E-24	0.000E+00	0.000E+00
TB163	0.000E+00	9.511E-01	1.222E-01	1.448E-02	7.911E-12	6.071E-23
SM164	0.000E+00	6.613E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU164	0.000E+00	2.536E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD164	0.000E+00	3.758E-01	5.522E-02	8.111E-03	3.796E-11	3.833E-21
TB164	0.000E+00	1.024E+00	1.412E-01	2.069E-02	9.683E-11	9.778E-21

OUTPUT UNIT =
6 PAGE 92
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SM165	0.000E+00	6.338E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU165	0.000E+00	3.528E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD165	0.000E+00	2.796E-01	4.285E-12	6.554E-23	0.000E+00	0.000E+00
TB165	0.000E+00	3.309E-01	4.658E-12	7.125E-23	0.000E+00	0.000E+00
DY165	0.000E+00	6.294E-01	4.724E-01	3.517E-01	1.842E-02	5.346E-04
DY165M	0.000E+00	6.128E-02	6.952E-13	1.063E-23	0.000E+00	0.000E+00
DY166	0.000E+00	2.467E-02	2.446E-02	2.425E-02	2.227E-02	2.011E-02
HO166	0.000E+00	1.544E-01	1.528E-01	1.512E-01	1.361E-01	1.205E-01
ER167M	0.000E+00	5.754E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	0.000E+00	7.159E-05	7.137E-05	7.115E-05	6.900E-05	6.650E-05
SUMTOT	0.000E+00	2.193E+06	4.408E+05	3.502E+05	1.989E+05	1.602E+05
TOTAL	0.000E+00	2.193E+06	4.408E+05	3.502E+05	1.989E+05	1.602E+05

OUTPUT UNIT = 6 PAGE 93
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP , 1 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	0.000E+00	1.024E-02	1.024E-02	1.024E-02	1.024E-02	1.024E-02
CO	0.000E+00	9.365E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI	0.000E+00	1.860E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU	0.000E+00	1.524E+01	2.287E-10	2.893E-13	1.999E-13	1.748E-13
ZN	0.000E+00	9.811E+01	8.926E-02	8.794E-02	7.576E-02	6.335E-02
GA	0.000E+00	6.489E+02	1.702E+00	1.584E+00	1.200E+00	1.010E+00
GE	0.000E+00	2.445E+03	2.359E+01	1.797E+01	5.399E+00	2.552E+00
AS	0.000E+00	1.060E+04	9.848E+01	8.105E+01	6.174E+00	3.140E+00
SE	0.000E+00	2.210E+04	1.822E+02	2.915E+01	1.133E-02	8.008E-03

BR	0.000E+00	6.490E+04	1.644E+03	5.840E+02	4.608E+01	2.943E+01
KR	0.000E+00	8.469E+04	1.458E+04	1.055E+04	7.829E+02	6.282E+01
RB	0.000E+00	1.653E+05	1.363E+04	9.561E+03	8.279E+02	4.853E+01
SR	0.000E+00	1.361E+05	2.568E+04	2.242E+04	9.608E+03	6.174E+03
Y	0.000E+00	2.074E+05	3.934E+04	3.411E+04	1.654E+04	9.176E+03
ZR	0.000E+00	9.784E+04	1.827E+04	1.791E+04	1.502E+04	1.279E+04
NB	0.000E+00	1.964E+05	2.791E+04	2.726E+04	2.128E+04	1.624E+04
MO	0.000E+00	7.206E+04	7.227E+03	6.028E+03	5.367E+03	4.731E+03
TC	0.000E+00	9.262E+04	6.188E+03	1.840E+03	1.322E+03	1.187E+03
RU	0.000E+00	1.919E+04	9.732E+03	8.993E+03	5.520E+03	4.707E+03
RH	0.000E+00	1.910E+04	4.652E+03	4.253E+03	3.820E+03	3.605E+03
PD	0.000E+00	2.238E+03	5.634E+02	5.027E+02	2.981E+02	1.624E+02
AG	0.000E+00	2.969E+03	6.874E+02	6.486E+02	4.602E+02	3.237E+02
CD	0.000E+00	1.630E+03	1.553E+02	1.267E+02	5.401E+01	4.207E+01
IN	0.000E+00	7.025E+03	2.413E+02	1.550E+02	3.885E+01	2.534E+01
SN	0.000E+00	1.790E+04	1.126E+03	7.428E+02	1.155E+02	9.296E+01
SB	0.000E+00	7.263E+04	8.221E+03	4.708E+03	1.167E+03	6.380E+02
TE	0.000E+00	8.135E+04	2.087E+04	1.146E+04	4.214E+03	3.503E+03
I	0.000E+00	1.825E+05	9.155E+04	7.588E+04	4.007E+04	3.029E+04
XE	0.000E+00	9.121E+04	6.667E+03	5.835E+03	5.476E+03	4.065E+03
CS	0.000E+00	1.638E+05	1.942E+04	6.391E+03	1.042E+03	1.030E+03
BA	0.000E+00	9.782E+04	1.486E+04	1.002E+04	5.322E+03	5.158E+03
LA	0.000E+00	1.694E+05	6.756E+04	5.583E+04	3.269E+04	3.104E+04
CE	0.000E+00	3.943E+04	1.040E+04	1.014E+04	8.838E+03	7.586E+03
PR	0.000E+00	5.575E+04	2.075E+04	1.623E+04	1.263E+04	1.169E+04
ND	0.000E+00	6.925E+03	3.071E+03	2.558E+03	1.627E+03	1.561E+03
PM	0.000E+00	7.206E+03	4.142E+03	4.046E+03	3.646E+03	3.260E+03
SM	0.000E+00	8.865E+02	5.751E+02	5.359E+02	4.407E+02	3.611E+02
EU	0.000E+00	8.315E+02	7.480E+02	7.168E+02	6.529E+02	6.257E+02
GD	0.000E+00	2.057E+01	1.160E+01	1.112E+01	7.654E+00	4.895E+00
TB	0.000E+00	9.664E+00	4.264E+00	3.764E+00	3.587E+00	3.501E+00
DY	0.000E+00	7.154E-01	4.968E-01	3.760E-01	4.069E-02	2.065E-02
HO	0.000E+00	1.544E-01	1.528E-01	1.512E-01	1.361E-01	1.205E-01
ER	0.000E+00	6.470E-04	7.137E-05	7.115E-05	6.900E-05	6.650E-05
SUMTOT	0.000E+00	2.193E+06	4.408E+05	3.502E+05	1.989E+05	1.602E+05
TOTAL	0.000E+00	2.193E+06	4.408E+05	3.502E+05	1.989E+05	1.602E+05

CUMULATIVE TABLE TOTALS

AP+FP	1.849E-14	2.193E+06	4.408E+05	3.502E+05	1.989E+05	1.602E+05
ACT+FP	7.967E-02	2.282E+06	4.914E+05	3.938E+05	2.364E+05	1.927E+05
AP+ACT+FP	7.967E-02	2.282E+06	4.914E+05	3.938E+05	2.364E+05	1.927E+05

OUTPUT UNIT =
6 PAGE 94
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

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    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                          1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 83      0.000E+00 3.761E+00 3.761E+00 3.761E+00 3.763E+00 3.763E+00
ZR 93      0.000E+00 3.013E+00 3.013E+00 3.014E+00 3.015E+00 3.016E+00
MO 95      0.000E+00 8.717E+00 8.718E+00 8.719E+00 8.729E+00 8.741E+00
MO 97      0.000E+00 1.970E+00 1.970E+00 1.970E+00 1.972E+00 1.973E+00
MO 98      0.000E+00 3.754E+00 3.754E+00 3.754E+00 3.754E+00 3.754E+00
TC 99      0.000E+00 2.604E+01 2.604E+01 2.604E+01 2.607E+01 2.609E+01
RU101      0.000E+00 7.877E+00 7.878E+00 7.878E+00 7.878E+00 7.878E+00
RH103      0.000E+00 5.434E+01 5.434E+01 5.435E+01 5.442E+01 5.450E+01
RH105      0.000E+00 6.233E+00 6.235E+00 6.219E+00 5.554E+00 4.486E+00
PD105      0.000E+00 3.351E+00 3.352E+00 3.352E+00 3.356E+00 3.359E+00
PD107      0.000E+00 1.131E+00 1.131E+00 1.131E+00 1.131E+00 1.131E+00
PD108      0.000E+00 1.965E+00 1.965E+00 1.965E+00 1.965E+00 1.965E+00
AG109      0.000E+00 6.224E+00 6.225E+00 6.226E+00 6.233E+00 6.238E+00
CD113      0.000E+00 2.699E+00 2.707E+00 2.714E+00 2.748E+00 2.758E+00
IN115      0.000E+00 1.640E+00 1.640E+00 1.641E+00 1.644E+00 1.648E+00
 I129      0.000E+00 1.867E+00 1.867E+00 1.867E+00 1.868E+00 1.869E+00
XE131      0.000E+00 3.717E+01 3.717E+01 3.718E+01 3.722E+01 3.726E+01
XE133      0.000E+00 1.023E+00 1.023E+00 1.023E+00 1.014E+00 9.865E-01
CS133      0.000E+00 3.495E+01 3.495E+01 3.495E+01 3.498E+01 3.502E+01
CS134      0.000E+00 2.495E+00 2.495E+00 2.495E+00 2.494E+00 2.493E+00
XE135      0.000E+00 1.795E+02 2.061E+02 2.263E+02 2.464E+02 1.482E+02
CS135      0.000E+00 2.425E+00 2.426E+00 2.426E+00 2.429E+00 2.431E+00
LA139      0.000E+00 2.707E+00 2.707E+00 2.707E+00 2.707E+00 2.707E+00
PR141      0.000E+00 4.139E+00 4.140E+00 4.140E+00 4.144E+00 4.148E+00
PR143      0.000E+00 1.061E+00 1.061E+00 1.061E+00 1.058E+00 1.050E+00
ND143      0.000E+00 5.110E+01 5.111E+01 5.111E+01 5.116E+01 5.122E+01
ND145      0.000E+00 1.531E+01 1.531E+01 1.531E+01 1.532E+01 1.532E+01
PM147      0.000E+00 5.071E+01 5.072E+01 5.073E+01 5.079E+01 5.086E+01
SM147      0.000E+00 2.729E+00 2.729E+00 2.729E+00 2.733E+00 2.738E+00
ND148      0.000E+00 7.381E-01 7.381E-01 7.381E-01 7.381E-01 7.381E-01
PM148      0.000E+00 6.902E+00 6.866E+00 6.829E+00 6.474E+00 6.072E+00
PM148M     0.000E+00 1.288E+01 1.287E+01 1.286E+01 1.277E+01 1.267E+01
SM149      0.000E+00 6.473E+01 6.508E+01 6.544E+01 6.874E+01 7.219E+01
SM150      0.000E+00 8.895E+00 8.895E+00 8.895E+00 8.895E+00 8.895E+00
SM151      0.000E+00 2.882E+01 2.883E+01 2.884E+01 2.894E+01 2.903E+01
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SM152      0.000E+00 2.168E+01 2.168E+01 2.168E+01 2.168E+01 2.168E+01
EU153      0.000E+00 9.769E+00 9.771E+00 9.773E+00 9.789E+00 9.805E+00
EU154      0.000E+00 3.785E+00 3.785E+00 3.785E+00 3.784E+00 3.784E+00
EU155      0.000E+00 5.073E+00 5.073E+00 5.073E+00 5.072E+00 5.071E+00
GD157      0.000E+00 1.814E+00 1.827E+00 1.840E+00 1.939E+00 2.012E+00
SUMTOT     0.000E+00 6.850E+02 7.120E+02 7.326E+02 7.554E+02 6.595E+02

TOTAL      0.000E+00 6.981E+02 7.250E+02 7.456E+02 7.683E+02 6.723E+02
□
         OUTPUT UNIT =
6                        PAGE   95
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR         0.000E+00 3.902E+00 3.900E+00 3.899E+00 3.898E+00 3.898E+00
ZR         0.000E+00 4.630E+00 4.630E+00 4.631E+00 4.632E+00 4.633E+00
MO         0.000E+00 1.499E+01 1.499E+01 1.499E+01 1.500E+01 1.501E+01
TC         0.000E+00 2.604E+01 2.604E+01 2.604E+01 2.607E+01 2.609E+01
RU         0.000E+00 9.642E+00 9.642E+00 9.641E+00 9.636E+00 9.631E+00
RH         0.000E+00 6.057E+01 6.058E+01 6.057E+01 5.997E+01 5.899E+01
PD         0.000E+00 6.767E+00 6.767E+00 6.767E+00 6.771E+00 6.775E+00
AG         0.000E+00 6.241E+00 6.242E+00 6.243E+00 6.250E+00 6.255E+00
CD         0.000E+00 3.001E+00 3.009E+00 3.015E+00 3.050E+00 3.060E+00
IN         0.000E+00 1.640E+00 1.640E+00 1.641E+00 1.644E+00 1.648E+00
 I         0.000E+00 2.471E+00 2.471E+00 2.471E+00 2.472E+00 2.473E+00
XE         0.000E+00 2.182E+02 2.448E+02 2.650E+02 2.851E+02 1.869E+02
CS         0.000E+00 3.995E+01 3.995E+01 3.995E+01 3.998E+01 4.002E+01
LA         0.000E+00 2.740E+00 2.740E+00 2.740E+00 2.740E+00 2.740E+00
CE         0.000E+00 1.230E+00 1.230E+00 1.230E+00 1.223E+00 1.213E+00
PR         0.000E+00 5.201E+00 5.201E+00 5.202E+00 5.202E+00 5.199E+00
ND         0.000E+00 6.902E+01 6.902E+01 6.903E+01 6.906E+01 6.910E+01
PM         0.000E+00 7.113E+01 7.109E+01 7.104E+01 7.058E+01 7.006E+01
SM         0.000E+00 1.274E+02 1.278E+02 1.282E+02 1.315E+02 1.351E+02
EU         0.000E+00 1.896E+01 1.896E+01 1.896E+01 1.897E+01 1.898E+01
GD         0.000E+00 2.348E+00 2.362E+00 2.375E+00 2.481E+00 2.560E+00
SUMTOT     0.000E+00 6.961E+02 7.231E+02 7.436E+02 7.663E+02 6.703E+02
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TOTAL      0.000E+00 6.981E+02 7.250E+02 7.456E+02 7.683E+02 6.723E+02

                                          CUMULATIVE TABLE TOTALS

AP+FP      8.258E+01 7.133E+02 7.402E+02 7.608E+02 7.835E+02 6.875E+02
ACT+FP     7.403E+03 8.547E+03 8.574E+03 8.595E+03 8.621E+03 8.528E+03
AP+ACT+FP  7.485E+03 8.562E+03 8.590E+03 8.611E+03 8.636E+03 8.543E+03
□
         OUTPUT UNIT =
6                        PAGE   96
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 83      0.000E+00 5.387E-03 5.187E-03 5.045E-03 4.897E-03 5.597E-03
ZR 93      0.000E+00 4.316E-03 4.156E-03 4.042E-03 3.924E-03 4.486E-03
MO 95      0.000E+00 1.249E-02 1.202E-02 1.169E-02 1.136E-02 1.300E-02
MO 97      0.000E+00 2.822E-03 2.717E-03 2.643E-03 2.566E-03 2.934E-03
MO 98      0.000E+00 5.378E-03 5.178E-03 5.035E-03 4.886E-03 5.584E-03
TC 99      0.000E+00 3.730E-02 3.592E-02 3.493E-02 3.393E-02 3.881E-02
RU101      0.000E+00 1.128E-02 1.087E-02 1.057E-02 1.025E-02 1.172E-02
RH103      0.000E+00 7.784E-02 7.495E-02 7.290E-02 7.083E-02 8.107E-02
RH105      0.000E+00 8.929E-03 8.599E-03 8.341E-03 7.229E-03 6.673E-03
PD105      0.000E+00 4.801E-03 4.623E-03 4.496E-03 4.368E-03 4.997E-03
PD107      0.000E+00 1.620E-03 1.559E-03 1.516E-03 1.472E-03 1.682E-03
PD108      0.000E+00 2.815E-03 2.711E-03 2.636E-03 2.558E-03 2.923E-03
AG109      0.000E+00 8.916E-03 8.585E-03 8.350E-03 8.113E-03 9.279E-03
CD113      0.000E+00 3.867E-03 3.733E-03 3.639E-03 3.577E-03 4.103E-03
IN115      0.000E+00 2.349E-03 2.262E-03 2.200E-03 2.140E-03 2.451E-03
 I129      0.000E+00 2.674E-03 2.575E-03 2.504E-03 2.431E-03 2.779E-03
XE131      0.000E+00 5.325E-02 5.127E-02 4.986E-02 4.844E-02 5.542E-02
XE133      0.000E+00 1.466E-03 1.412E-03 1.372E-03 1.319E-03 1.467E-03
CS133      0.000E+00 5.006E-02 4.820E-02 4.688E-02 4.554E-02 5.209E-02
CS134      0.000E+00 3.574E-03 3.441E-03 3.346E-03 3.246E-03 3.708E-03
XE135      0.000E+00 2.572E-01 2.843E-01 3.036E-01 3.207E-01 2.204E-01
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CS135      0.000E+00 3.475E-03 3.346E-03 3.254E-03 3.161E-03 3.617E-03
LA139      0.000E+00 3.877E-03 3.733E-03 3.631E-03 3.524E-03 4.027E-03
PR141      0.000E+00 5.930E-03 5.710E-03 5.553E-03 5.394E-03 6.171E-03
PR143      0.000E+00 1.520E-03 1.463E-03 1.423E-03 1.377E-03 1.562E-03
ND143      0.000E+00 7.321E-02 7.049E-02 6.855E-02 6.659E-02 7.618E-02
ND145      0.000E+00 2.193E-02 2.112E-02 2.054E-02 1.994E-02 2.279E-02
PM147      0.000E+00 7.265E-02 6.996E-02 6.804E-02 6.611E-02 7.566E-02
SM147      0.000E+00 3.909E-03 3.764E-03 3.661E-03 3.558E-03 4.073E-03
ND148      0.000E+00 1.057E-03 1.018E-03 9.900E-04 9.608E-04 1.098E-03
PM148      0.000E+00 9.888E-03 9.469E-03 9.159E-03 8.426E-03 9.032E-03
PM148M     0.000E+00 1.845E-02 1.776E-02 1.725E-02 1.663E-02 1.884E-02
SM149      0.000E+00 9.273E-02 8.977E-02 8.776E-02 8.947E-02 1.074E-01
SM150      0.000E+00 1.274E-02 1.227E-02 1.193E-02 1.158E-02 1.323E-02
SM151      0.000E+00 4.128E-02 3.976E-02 3.868E-02 3.767E-02 4.319E-02
SM152      0.000E+00 3.106E-02 2.990E-02 2.908E-02 2.822E-02 3.225E-02
EU153      0.000E+00 1.399E-02 1.348E-02 1.311E-02 1.274E-02 1.458E-02
EU154      0.000E+00 5.422E-03 5.220E-03 5.076E-03 4.926E-03 5.629E-03
EU155      0.000E+00 7.267E-03 6.997E-03 6.804E-03 6.602E-03 7.544E-03
GD157      0.000E+00 2.598E-03 2.520E-03 2.467E-03 2.524E-03 2.993E-03
SUMTOT     0.000E+00 9.813E-01 9.820E-01 9.825E-01 9.832E-01 9.810E-01

TOTAL      0.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE   97
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP
, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR         0.000E+00 5.590E-03 5.379E-03 5.229E-03 5.073E-03 5.798E-03
ZR         0.000E+00 6.633E-03 6.386E-03 6.211E-03 6.029E-03 6.891E-03
MO         0.000E+00 2.147E-02 2.067E-02 2.011E-02 1.952E-02 2.233E-02
TC         0.000E+00 3.730E-02 3.592E-02 3.493E-02 3.393E-02 3.881E-02
RU         0.000E+00 1.381E-02 1.330E-02 1.293E-02 1.254E-02 1.433E-02
RH         0.000E+00 8.677E-02 8.355E-02 8.124E-02 7.806E-02 8.775E-02
PD         0.000E+00 9.693E-03 9.333E-03 9.077E-03 8.813E-03 1.008E-02
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AG          0.000E+00 8.940E-03 8.609E-03 8.373E-03 8.135E-03 9.304E-03
CD          0.000E+00 4.299E-03 4.150E-03 4.044E-03 3.970E-03 4.552E-03
IN          0.000E+00 2.350E-03 2.263E-03 2.201E-03 2.140E-03 2.451E-03
 I          0.000E+00 3.539E-03 3.408E-03 3.314E-03 3.218E-03 3.678E-03
XE          0.000E+00 3.126E-01 3.377E-01 3.555E-01 3.711E-01 2.780E-01
CS          0.000E+00 5.722E-02 5.510E-02 5.358E-02 5.204E-02 5.953E-02
LA          0.000E+00 3.925E-03 3.779E-03 3.675E-03 3.566E-03 4.075E-03
CE          0.000E+00 1.763E-03 1.697E-03 1.649E-03 1.592E-03 1.805E-03
PR          0.000E+00 7.450E-03 7.174E-03 6.976E-03 6.771E-03 7.733E-03
ND          0.000E+00 9.887E-02 9.520E-02 9.258E-02 8.989E-02 1.028E-01
PM          0.000E+00 1.019E-01 9.805E-02 9.528E-02 9.187E-02 1.042E-01
SM          0.000E+00 1.825E-01 1.763E-01 1.719E-01 1.712E-01 2.009E-01
EU          0.000E+00 2.715E-02 2.615E-02 2.543E-02 2.469E-02 2.823E-02
GD          0.000E+00 3.364E-03 3.258E-03 3.186E-03 3.229E-03 3.808E-03
SUMTOT      0.000E+00 9.972E-01 9.973E-01 9.974E-01 9.974E-01 9.971E-01

TOTAL       0.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE   98
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
                                ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BU
RNUP (PWRUE)
                              (ALPHA,N) NEUTRON SOURCE, NEUTRONS/SEC
BASIS=1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP, 1 CYCLE

            FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234       1.333E+03 1.048E+03 1.048E+03 1.048E+03 1.048E+03 1.048E+03
 U235       3.349E+01 1.882E+01 1.882E+01 1.882E+01 1.882E+01 1.882E+01
 U238       1.013E+02 1.001E+02 1.001E+02 1.001E+02 1.001E+02 1.001E+02
PU238       0.000E+00 4.822E+05 4.824E+05 4.825E+05 4.836E+05 4.847E+05
PU239       0.000E+00 2.099E+05 2.099E+05 2.100E+05 2.103E+05 2.107E+05
PU240       0.000E+00 1.789E+05 1.789E+05 1.789E+05 1.789E+05 1.789E+05
AM241       0.000E+00 3.341E+04 3.342E+04 3.343E+04 3.354E+04 3.367E+04
CM242       0.000E+00 6.621E+06 6.623E+06 6.625E+06 6.636E+06 6.640E+06
CM244       0.000E+00 7.964E+04 7.966E+04 7.966E+04 7.967E+04 7.967E+04

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TOTALS
TABLE       1.467E+03 7.609E+06 7.611E+06 7.613E+06 7.627E+06 7.632E+06
ACTUAL      1.467E+03 7.609E+06 7.611E+06 7.613E+06 7.627E+06 7.632E+06
□
         OUTPUT UNIT =
6                        PAGE   99
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
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                                ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BU
RNUP (PWRUE)
                                 SPONTANEOUS FISSION NEUTRON SOURCE, NEUTRO
NS/SEC
                               BASIS=1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BU
RNUP, 1 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      1.493E+01 8.391E+00 8.391E+00 8.391E+00 8.391E+00 8.391E+00
 U238      1.215E+04 1.200E+04 1.200E+04 1.200E+04 1.200E+04 1.200E+04
PU238      0.000E+00 7.865E+04 7.866E+04 7.868E+04 7.886E+04 7.904E+04
PU240      0.000E+00 9.428E+05 9.428E+05 9.428E+05 9.428E+05 9.428E+05
PU242      0.000E+00 1.312E+05 1.312E+05 1.312E+05 1.312E+05 1.312E+05
CM242      0.000E+00 3.213E+07 3.214E+07 3.214E+07 3.220E+07 3.222E+07
CM244      0.000E+00 9.589E+06 9.591E+06 9.591E+06 9.592E+06 9.593E+06

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TOTALS
TABLE      1.216E+04 4.289E+07 4.290E+07 4.291E+07 4.296E+07 4.298E+07
ACTUAL     1.216E+04 4.289E+07 4.290E+07 4.291E+07 4.296E+07 4.298E+07

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OVERALL
TOTALS
TABLE      1.363E+04 5.050E+07 5.051E+07 5.052E+07 5.059E+07 5.061E+07
ACTUAL     1.363E+04 5.050E+07 5.051E+07 5.052E+07 5.059E+07 5.061E+07
□
         OUTPUT UNIT =
6                        PAGE  100
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
               PHOTON SPECTRUM FOR ACTIVATION PRODUCTS

                                ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BU
RNUP (PWRUE)
                                   POWER=   1.00 MW, BURNUP=      1. M
WD, FLUX= 1.00E+00
N/CM**2-SEC

                                 18 GROUP PHOTON RELEASE RATES, PHOTON
S/SECOND
                                 BASIS=1 MTIHM 4.236% UO2, 19157 MWD/M
TIHM BURNUP, 1 CYCLE
 EMEAN
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
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1.000E-02	3.854E-02	7.396E+13	1.756E+13	1.509E+13	9.695E+12	7.887E+12
2.500E-02	7.143E-03	1.678E+13	4.664E+12	4.110E+12	2.908E+12	2.498E+12
3.750E-02	4.312E-03	1.025E+13	2.205E+12	1.887E+12	1.176E+12	9.458E+11
5.750E-02	5.379E-03	1.700E+13	4.814E+12	4.305E+12	2.835E+12	2.130E+12
8.500E-02	2.562E-03	1.008E+13	2.373E+12	2.095E+12	1.345E+12	1.028E+12
1.250E-01	1.270E-03	8.416E+12	2.520E+12	2.071E+12	1.275E+12	9.911E+11
2.250E-01	8.334E-04	1.098E+13	2.888E+12	2.635E+12	2.000E+12	1.744E+12
3.750E-01	4.850E-05	1.494E+13	5.347E+12	2.827E+12	4.750E+11	3.641E+11
5.750E-01	1.878E-09	1.297E+13	9.684E+12	9.364E+12	7.521E+12	5.967E+12
8.500E-01	1.302E-11	1.377E+13	9.009E+12	6.895E+12	2.266E+12	1.841E+12
1.250E+00	7.409E-12	6.148E+13	3.432E+13	2.410E+13	1.255E+13	1.035E+13
1.750E+00	3.712E-12	7.640E+12	2.994E+12	1.839E+12	9.197E+10	1.709E+10
2.250E+00	1.860E-12	5.352E+12	2.696E+12	1.461E+12	3.950E+10	3.552E+09
2.750E+00	9.320E-13	8.420E+12	7.920E+12	7.543E+12	4.709E+12	2.702E+12
3.500E+00	6.863E-13	9.539E+10	1.394E+10	1.165E+10	3.665E+09	1.868E+09
5.000E+00	2.043E-13	2.925E+10	5.574E+07	5.319E+07	3.349E+07	1.924E+07
7.000E+00	1.326E-14	4.362E+12	3.730E-03	3.730E-03	3.731E-03	3.732E-03
9.500E+00	8.384E-16	4.546E+09	2.359E-04	2.359E-04	2.359E-04	2.360E-04
TOTAL	6.009E-02	2.765E+14	1.090E+14	8.622E+13	4.889E+13	3.847E+13
MEV/SEC	1.617E-03	1.881E+14	9.309E+13	7.132E+13	3.643E+13	2.645E+13

18 GROUP SPECIFIC ENERGY RELEASE RATES, MEV/WATT-SEC

BASIS=1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP, 1 CYCLE

EMEAN	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	3.854E-10	7.396E+05	1.756E+05	1.509E+05	9.695E+04	7.887E+04
2.500E-02	1.786E-10	4.196E+05	1.166E+05	1.027E+05	7.270E+04	6.246E+04
3.750E-02	1.617E-10	3.844E+05	8.268E+04	7.078E+04	4.410E+04	3.547E+04
5.750E-02	3.093E-10	9.777E+05	2.768E+05	2.475E+05	1.630E+05	1.224E+05
8.500E-02	2.178E-10	8.565E+05	2.017E+05	1.781E+05	1.143E+05	8.738E+04
1.250E-01	1.587E-10	1.052E+06	3.151E+05	2.588E+05	1.593E+05	1.239E+05
2.250E-01	1.875E-10	2.470E+06	6.497E+05	5.928E+05	4.499E+05	3.924E+05
3.750E-01	1.819E-11	5.601E+06	2.005E+06	1.060E+06	1.781E+05	1.366E+05
5.750E-01	1.080E-15	7.457E+06	5.568E+06	5.384E+06	4.324E+06	3.431E+06
8.500E-01	1.107E-17	1.170E+07	7.657E+06	5.861E+06	1.926E+06	1.565E+06
1.250E+00	9.261E-18	7.685E+07	4.290E+07	3.012E+07	1.569E+07	1.294E+07
1.750E+00	6.497E-18	1.337E+07	5.240E+06	3.218E+06	1.609E+05	2.990E+04
2.250E+00	4.185E-18	1.204E+07	6.066E+06	3.286E+06	8.888E+04	7.992E+03
2.750E+00	2.563E-18	2.315E+07	2.178E+07	2.074E+07	1.295E+07	7.430E+06
3.500E+00	2.402E-18	3.339E+05	4.878E+04	4.077E+04	1.283E+04	6.539E+03
5.000E+00	1.022E-18	1.463E+05	2.787E+02	2.659E+02	1.675E+02	9.618E+01
7.000E+00	9.281E-20	3.054E+07	2.611E-08	2.611E-08	2.612E-08	2.612E-08

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9.500E+00  7.965E-21 4.318E+04 2.241E-09 2.241E-09 2.241E-09 2.242E-09

  TOTAL    1.617E-09 1.881E+08 9.309E+07 7.132E+07 3.643E+07 2.645E+07

 GAM POW   2.592E-16 3.016E+01 1.492E+01 1.143E+01 5.839E+00 4.240E+00
□
         OUTPUT UNIT =
6                        PAGE  101
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP  1,PHOTONS/SEC
                     MEAN ENERGY= 0.010MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 1.741E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 1.017E+13 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 2.654E+12 2.534E+12 2.419E+12 1.524E+12 8.754E+11
AL 28      0.000E+00 1.514E+12 1.313E+04 3.895E+01 2.796E+01 1.879E+01
SI 31      0.000E+00 5.134E+11 3.941E+11 3.026E+11 2.151E+10 9.009E+08
 P 32      0.000E+00 1.040E+12 1.038E+12 1.036E+12 1.016E+12 9.913E+11
 V 52      0.000E+00 2.321E+12 3.540E+07 5.402E+02 0.000E+00 0.000E+00
MN 56      0.000E+00 3.380E+12 2.583E+12 1.974E+12 1.343E+11 5.335E+09
CO 58      0.000E+00 1.488E+11 1.488E+11 1.487E+11 1.481E+11 1.474E+11
CO 60      0.000E+00 1.566E+11 1.566E+11 1.566E+11 1.566E+11 1.566E+11
CO 60M     0.000E+00 1.325E+12 2.496E+10 4.700E+08 2.637E-09 0.000E+00
ZN 65      0.000E+00 9.805E+11 9.804E+11 9.803E+11 9.791E+11 9.777E+11
ZN 69      0.000E+00 5.443E+11 2.808E+11 1.529E+11 2.156E+10 1.173E+10
MO 99      0.000E+00 1.680E+12 1.662E+12 1.645E+12 1.481E+12 1.305E+12
AG110      0.000E+00 1.335E+12 7.144E+08 7.143E+08 7.135E+08 7.125E+08
CD115      0.000E+00 1.997E+12 1.971E+12 1.946E+12 1.709E+12 1.463E+12
CD115M     0.000E+00 2.985E+11 2.983E+11 2.982E+11 2.962E+11 2.939E+11
IN114      0.000E+00 6.189E+11 2.458E+11 2.456E+11 2.442E+11 2.425E+11
IN115      3.854E-02 5.406E-03 5.406E-03 5.406E-03 5.406E-03 5.406E-03
IN116      0.000E+00 3.202E+13 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 5.160E+12 2.394E+12 1.111E+12 5.129E+08 5.099E+04
GD159      0.000E+00 3.793E+11 3.654E+11 3.521E+11 2.425E+11 1.551E+11
 W187      0.000E+00 1.498E+12 1.455E+12 1.414E+12 1.058E+12 7.469E+11
RE188      0.000E+00 4.434E+11 4.328E+11 4.165E+11 2.796E+11 1.743E+11

                    PRINCIPAL PHOTON SOURCES IN GROUP  2,PHOTONS/SEC
                     MEAN ENERGY= 0.025MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 3.928E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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 N 16      0.000E+00 2.301E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 5.512E+11 5.263E+11 5.025E+11 3.166E+11 1.818E+11
AL 28      0.000E+00 3.296E+11 2.858E+03 8.480E+00 6.087E+00 4.090E+00
SI 31      0.000E+00 1.071E+11 8.220E+10 6.310E+10 4.486E+09 1.879E+08
 P 32      0.000E+00 2.195E+11 2.191E+11 2.187E+11 2.143E+11 2.092E+11
 V 52      0.000E+00 5.023E+11 7.662E+06 1.169E+02 0.000E+00 0.000E+00
MN 56      0.000E+00 7.228E+11 5.525E+11 4.222E+11 2.872E+10 1.141E+09
CO 60      0.000E+00 2.707E+10 2.707E+10 2.707E+10 2.706E+10 2.706E+10
ZN 69      0.000E+00 1.091E+11 5.631E+10 3.066E+10 4.324E+09 2.352E+09
MO 99      0.000E+00 3.018E+11 2.986E+11 2.955E+11 2.660E+11 2.345E+11
AG110      0.000E+00 2.937E+11 1.572E+08 1.572E+08 1.570E+08 1.568E+08
CD109      0.000E+00 3.349E+10 3.349E+10 3.349E+10 3.347E+10 3.344E+10
CD115      0.000E+00 7.933E+11 7.831E+11 7.730E+11 6.790E+11 5.812E+11
CD115M     0.000E+00 6.252E+10 6.248E+10 6.244E+10 6.204E+10 6.156E+10
IN114      0.000E+00 1.408E+11 5.593E+10 5.590E+10 5.558E+10 5.519E+10
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IN114M     0.000E+00 2.036E+11 2.034E+11 2.033E+11 2.021E+11 2.007E+11
IN115      7.143E-03 1.002E-03 1.002E-03 1.002E-03 1.002E-03 1.002E-03
IN116      0.000E+00 7.005E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 1.248E+12 5.791E+11 2.687E+11 1.241E+08 1.233E+04
SN117M     0.000E+00 5.981E+11 5.969E+11 5.956E+11 5.835E+11 5.692E+11
SN119M     0.000E+00 7.623E+10 7.622E+10 7.621E+10 7.612E+10 7.601E+10
GD159      0.000E+00 7.543E+10 7.267E+10 7.001E+10 4.823E+10 3.084E+10
 W187      0.000E+00 2.013E+11 1.955E+11 1.899E+11 1.421E+11 1.003E+11
RE188      0.000E+00 8.896E+10 8.682E+10 8.356E+10 5.609E+10 3.498E+10
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PRINCIPAL PHOTON SOURCES IN GROUP 3,PHOTONS/SEC
MEAN ENERGY= 0.038MEV

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NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 2.686E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 1.569E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 3.579E+11 3.418E+11 3.263E+11 2.056E+11 1.181E+11
AL 28      0.000E+00 2.204E+11 1.911E+03 5.671E+00 4.071E+00 2.735E+00
SI 31      0.000E+00 6.982E+10 5.360E+10 4.115E+10 2.925E+09 1.225E+08
 P 32      0.000E+00 1.440E+11 1.437E+11 1.434E+11 1.405E+11 1.372E+11
 V 52      0.000E+00 3.340E+11 5.095E+06 7.774E+01 0.000E+00 0.000E+00
MN 56      0.000E+00 4.805E+11 3.672E+11 2.807E+11 1.909E+10 7.584E+08
CO 60      0.000E+00 1.545E+10 1.545E+10 1.545E+10 1.545E+10 1.545E+10
ZN 69      0.000E+00 6.919E+10 3.570E+10 1.943E+10 2.741E+09 1.491E+09
MO 99      0.000E+00 2.456E+11 2.430E+11 2.405E+11 2.165E+11 1.909E+11
AG110      0.000E+00 1.945E+11 1.041E+08 1.041E+08 1.040E+08 1.038E+08
CD115      0.000E+00 3.001E+11 2.963E+11 2.924E+11 2.569E+11 2.199E+11
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CD115M     0.000E+00 4.085E+10 4.083E+10 4.080E+10 4.054E+10 4.022E+10
IN114      0.000E+00 8.653E+10 3.437E+10 3.435E+10 3.415E+10 3.391E+10
IN115      4.312E-03 6.049E-04 6.049E-04 6.049E-04 6.050E-04 6.050E-04
IN116      0.000E+00 4.710E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 6.515E+11 3.023E+11 1.402E+11 6.476E+07 6.437E+03
GD153      0.000E+00 4.936E+10 4.936E+10 4.935E+10 4.929E+10 4.922E+10
GD159      0.000E+00 4.768E+10 4.594E+10 4.426E+10 3.049E+10 1.950E+10
 W187      0.000E+00 1.270E+11 1.234E+11 1.199E+11 8.968E+10 6.332E+10
RE188      0.000E+00 5.857E+10 5.716E+10 5.502E+10 3.693E+10 2.303E+10

                    PRINCIPAL PHOTON SOURCES IN GROUP  4,PHOTONS/SEC
                     MEAN ENERGY= 0.058MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 4.140E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 2.414E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 5.086E+11 4.856E+11 4.637E+11 2.921E+11 1.678E+11
AL 28      0.000E+00 3.275E+11 2.840E+03 8.427E+00 6.049E+00 4.064E+00
SI 31      0.000E+00 9.974E+10 7.657E+10 5.878E+10 4.178E+09 1.750E+08
 P 32      0.000E+00 2.076E+11 2.072E+11 2.068E+11 2.026E+11 1.978E+11
 V 52      0.000E+00 4.913E+11 7.494E+06 1.144E+02 0.000E+00 0.000E+00
MN 56      0.000E+00 7.022E+11 5.367E+11 4.102E+11 2.790E+10 1.108E+09
ZN 69      0.000E+00 9.438E+10 4.869E+10 2.651E+10 3.739E+09 2.034E+09
□
         OUTPUT UNIT =
6                        PAGE  103
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
MO 99      0.000E+00 2.421E+11 2.396E+11 2.371E+11 2.134E+11 1.882E+11
AG110      0.000E+00 2.880E+11 1.541E+08 1.541E+08 1.539E+08 1.537E+08
CD115      0.000E+00 3.436E+11 3.392E+11 3.348E+11 2.941E+11 2.518E+11
CD115M     0.000E+00 5.847E+10 5.843E+10 5.839E+10 5.801E+10 5.757E+10
IN114      0.000E+00 1.257E+11 4.991E+10 4.988E+10 4.959E+10 4.924E+10
IN115      5.379E-03 7.546E-04 7.546E-04 7.546E-04 7.546E-04 7.547E-04
IN116      0.000E+00 7.005E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 8.879E+11 4.119E+11 1.911E+11 8.826E+07 8.773E+03
GD159      0.000E+00 6.481E+10 6.244E+10 6.015E+10 4.144E+10 2.650E+10
TB160      0.000E+00 4.644E+10 4.642E+10 4.640E+10 4.622E+10 4.600E+10
 W187      0.000E+00 2.058E+12 1.999E+12 1.942E+12 1.453E+12 1.026E+12
RE188      0.000E+00 1.221E+11 1.192E+11 1.147E+11 7.699E+10 4.801E+10

                    PRINCIPAL PHOTON SOURCES IN GROUP  5,PHOTONS/SEC
                     MEAN ENERGY= 0.085MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
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 C 15      0.000E+00 2.750E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 1.602E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 3.022E+11 2.886E+11 2.755E+11 1.736E+11 9.970E+10
AL 28      0.000E+00 2.081E+11 1.804E+03 5.353E+00 3.843E+00 2.582E+00
SI 31      0.000E+00 5.955E+10 4.572E+10 3.510E+10 2.495E+09 1.045E+08
 P 32      0.000E+00 1.259E+11 1.257E+11 1.254E+11 1.229E+11 1.200E+11
 V 52      0.000E+00 3.094E+11 4.720E+06 7.203E+01 0.000E+00 0.000E+00
MN 56      0.000E+00 4.392E+11 3.357E+11 2.566E+11 1.745E+10 6.932E+08
ZN 69      0.000E+00 5.240E+10 2.703E+10 1.472E+10 2.076E+09 1.129E+09
MO 99      0.000E+00 1.396E+11 1.381E+11 1.367E+11 1.231E+11 1.085E+11
AG110      0.000E+00 1.819E+11 9.737E+07 9.735E+07 9.724E+07 9.711E+07
CD115      0.000E+00 1.908E+11 1.883E+11 1.859E+11 1.633E+11 1.398E+11
CD115M     0.000E+00 3.515E+10 3.512E+10 3.510E+10 3.487E+10 3.460E+10
IN114      0.000E+00 7.705E+10 3.060E+10 3.058E+10 3.041E+10 3.019E+10
IN115      2.562E-03 3.594E-04 3.594E-04 3.594E-04 3.594E-04 3.594E-04
IN116      0.000E+00 4.472E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 4.987E+11 2.314E+11 1.073E+11 4.957E+07 4.928E+03
GD153      0.000E+00 1.578E+10 1.578E+10 1.577E+10 1.575E+10 1.573E+10
GD159      0.000E+00 3.576E+10 3.445E+10 3.319E+10 2.287E+10 1.462E+10
TB160      0.000E+00 3.544E+10 3.543E+10 3.541E+10 3.527E+10 3.510E+10
 W187      0.000E+00 7.556E+11 7.340E+11 7.130E+11 5.335E+11 3.767E+11
RE188      0.000E+00 5.995E+10 5.851E+10 5.631E+10 3.780E+10 2.357E+10

                    PRINCIPAL PHOTON SOURCES IN GROUP  6,PHOTONS/SEC
                     MEAN ENERGY= 0.125MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 1.964E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 1.144E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 1.925E+11 1.838E+11 1.755E+11 1.105E+11 6.349E+10
AL 28      0.000E+00 1.417E+11 1.229E+03 3.646E+00 2.618E+00 1.759E+00
SI 31      0.000E+00 3.828E+10 2.939E+10 2.256E+10 1.604E+09 6.718E+07
 P 32      0.000E+00 8.192E+10 8.175E+10 8.159E+10 7.996E+10 7.804E+10
□
         OUTPUT UNIT =
6                        PAGE  104
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
 V 52      0.000E+00 2.090E+11 3.188E+06 4.864E+01 0.000E+00 0.000E+00
MN 56      0.000E+00 2.946E+11 2.252E+11 1.721E+11 1.171E+10 4.651E+08
MO 99      0.000E+00 4.078E+11 4.035E+11 3.993E+11 3.595E+11 3.169E+11
AG110      0.000E+00 1.240E+11 6.634E+07 6.633E+07 6.625E+07 6.616E+07
CD115      0.000E+00 1.138E+11 1.123E+11 1.109E+11 9.741E+10 8.338E+10
CD115M     0.000E+00 2.266E+10 2.264E+10 2.263E+10 2.248E+10 2.231E+10
IN114      0.000E+00 5.092E+10 2.022E+10 2.021E+10 2.009E+10 1.995E+10
IN115      1.270E-03 1.781E-04 1.781E-04 1.781E-04 1.781E-04 1.782E-04
IN116      0.000E+00 3.083E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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IN116M     0.000E+00 1.361E+12 6.313E+11 2.929E+11 1.353E+08 1.344E+04
GD159      0.000E+00 2.113E+10 2.036E+10 1.961E+10 1.351E+10 8.640E+09
 W187      0.000E+00 7.230E+11 7.023E+11 6.823E+11 5.105E+11 3.605E+11
RE188      0.000E+00 3.443E+10 3.360E+10 3.234E+10 2.171E+10 1.354E+10

                    PRINCIPAL PHOTON SOURCES IN GROUP  7,PHOTONS/SEC
                     MEAN ENERGY= 0.225MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 3.174E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 1.842E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 2.408E+11 2.299E+11 2.195E+11 1.383E+11 7.943E+10
AL 28      0.000E+00 2.060E+11 1.786E+03 5.300E+00 3.805E+00 2.556E+00
SI 31      0.000E+00 4.885E+10 3.750E+10 2.879E+10 2.046E+09 8.571E+07
 P 32      0.000E+00 1.084E+11 1.082E+11 1.079E+11 1.058E+11 1.032E+11
 V 52      0.000E+00 2.992E+11 4.564E+06 6.964E+01 0.000E+00 0.000E+00
MN 56      0.000E+00 4.172E+11 3.188E+11 2.437E+11 1.657E+10 6.585E+08
MO 99      0.000E+00 3.846E+11 3.806E+11 3.766E+11 3.390E+11 2.989E+11
AG110      0.000E+00 1.806E+11 9.665E+07 9.664E+07 9.653E+07 9.639E+07
CD115      0.000E+00 5.155E+11 5.088E+11 5.023E+11 4.412E+11 3.776E+11
CD115M     0.000E+00 2.944E+10 2.942E+10 2.940E+10 2.921E+10 2.899E+10
IN114      0.000E+00 6.906E+10 2.743E+10 2.741E+10 2.725E+10 2.706E+10
IN114M     0.000E+00 7.310E+10 7.306E+10 7.301E+10 7.259E+10 7.208E+10
IN115      8.334E-04 1.169E-04 1.169E-04 1.169E-04 1.169E-04 1.169E-04
IN116      0.000E+00 4.591E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 4.699E+11 2.180E+11 1.011E+11 4.671E+07 4.643E+03
SN117M     0.000E+00 5.496E+11 5.484E+11 5.473E+11 5.361E+11 5.230E+11
TB160      0.000E+00 1.090E+11 1.090E+11 1.089E+11 1.085E+11 1.080E+11
 W187      0.000E+00 8.272E+10 8.036E+10 7.806E+10 5.841E+10 4.124E+10
RE188      0.000E+00 1.414E+11 1.380E+11 1.328E+11 8.915E+10 5.559E+10

                    PRINCIPAL PHOTON SOURCES IN GROUP  8,PHOTONS/SEC
                     MEAN ENERGY= 0.375MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 C 15      0.000E+00 1.858E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 1.070E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 8.682E+10 8.290E+10 7.915E+10 4.986E+10 2.864E+10
 P 32      0.000E+00 4.401E+10 4.392E+10 4.383E+10 4.296E+10 4.193E+10
CR 51      0.000E+00 5.502E+10 5.496E+10 5.491E+10 5.434E+10 5.366E+10
MN 56      0.000E+00 1.962E+11 1.500E+11 1.146E+11 7.795E+09 3.097E+08
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ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

ZN 69M	0.000E+00	2.160E+11	2.053E+11	1.953E+11	1.180E+11	6.447E+10
MO 99	0.000E+00	1.014E+11	1.003E+11	9.925E+10	8.936E+10	7.878E+10
TC101	0.000E+00	2.033E+11	4.408E+10	4.288E+09	6.842E-03	1.380E-17
CD115	0.000E+00	3.347E+10	3.304E+10	3.261E+10	2.865E+10	2.452E+10
CD115M	0.000E+00	1.150E+10	1.149E+10	1.148E+10	1.141E+10	1.132E+10
IN114	0.000E+00	2.966E+10	1.178E+10	1.177E+10	1.170E+10	1.162E+10
IN115	4.850E-05	6.804E-06	6.804E-06	6.804E-06	6.804E-06	6.804E-06
IN116	0.000E+00	2.379E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	9.715E+12	4.507E+12	2.091E+12	9.657E+08	9.599E+04
SB125	0.000E+00	1.301E+10	1.301E+10	1.301E+10	1.302E+10	1.302E+10
TB160	0.000E+00	6.184E+09	6.181E+09	6.179E+09	6.154E+09	6.125E+09
W187	0.000E+00	1.596E+10	1.550E+10	1.506E+10	1.127E+10	7.956E+09
RE188	0.000E+00	2.047E+10	1.998E+10	1.923E+10	1.291E+10	8.049E+09

PRINCIPAL PHOTON SOURCES IN GROUP 9,PHOTONS/SEC
MEAN ENERGY= 0.575MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
C 15	0.000E+00	1.380E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	7.912E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CO 58	0.000E+00	1.758E+11	1.757E+11	1.757E+11	1.750E+11	1.741E+11
CU 64	0.000E+00	2.341E+11	2.217E+11	2.099E+11	1.216E+11	6.318E+10
ZN 65	0.000E+00	7.942E+10	7.941E+10	7.940E+10	7.930E+10	7.919E+10
AG110	0.000E+00	1.497E+11	8.012E+07	8.011E+07	8.002E+07	7.990E+07
AG110M	0.000E+00	1.013E+11	1.013E+11	1.013E+11	1.012E+11	1.010E+11
CD115	0.000E+00	4.351E+12	4.295E+12	4.240E+12	3.724E+12	3.188E+12
IN115	1.878E-09	2.635E-10	2.635E-10	2.635E-10	2.635E-10	2.635E-10
IN116	0.000E+00	1.425E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	3.604E+11	1.672E+11	7.756E+10	3.582E+07	3.561E+03
W187	0.000E+00	4.501E+12	4.372E+12	4.247E+12	3.178E+12	2.244E+12

PRINCIPAL PHOTON SOURCES IN GROUP 10,PHOTONS/SEC
MEAN ENERGY= 0.850MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
N 16	0.000E+00	4.043E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MN 54	0.000E+00	3.196E+10	3.196E+10	3.195E+10	3.192E+10	3.189E+10
MN 56	0.000E+00	6.822E+12	5.214E+12	3.985E+12	2.710E+11	1.077E+10
CO 58	0.000E+00	6.289E+11	6.286E+11	6.283E+11	6.258E+11	6.227E+11
MO 99	0.000E+00	8.572E+11	8.483E+11	8.394E+11	7.557E+11	6.662E+11
AG110M	0.000E+00	1.220E+11	1.220E+11	1.220E+11	1.219E+11	1.217E+11
IN114M	0.000E+00	2.075E+10	2.074E+10	2.072E+10	2.060E+10	2.046E+10
IN116	0.000E+00	5.976E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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IN116M     0.000E+00 3.459E+12 1.605E+12 7.446E+11 3.439E+08 3.418E+04
GD152      1.300E-11 1.123E-11 1.123E-11 1.123E-11 1.123E-11 1.123E-11
TB160      0.000E+00 1.762E+11 1.762E+11 1.761E+11 1.754E+11 1.745E+11
 W187      0.000E+00 3.166E+11 3.075E+11 2.987E+11 2.235E+11 1.578E+11
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6                        PAGE  106
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP 11,PHOTONS/SEC
                     MEAN ENERGY= 1.250MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

NA 24      0.000E+00 8.927E+12 8.524E+12 8.139E+12 5.127E+12 2.945E+12
 V 52      0.000E+00 4.253E+12 6.488E+07 9.899E+02 0.000E+00 0.000E+00
CO 60      0.000E+00 5.910E+12 5.910E+12 5.910E+12 5.909E+12 5.908E+12
ZN 65      0.000E+00 1.384E+12 1.384E+12 1.383E+12 1.382E+12 1.380E+12
IN116      0.000E+00 7.797E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 3.950E+13 1.832E+13 8.501E+12 3.926E+09 3.902E+05
GD152      7.397E-12 6.389E-12 6.389E-12 6.389E-12 6.389E-12 6.389E-12

                    PRINCIPAL PHOTON SOURCES IN GROUP 12,PHOTONS/SEC
                     MEAN ENERGY= 1.750MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N 16      0.000E+00 1.862E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AL 28      0.000E+00 2.101E+12 1.822E+04 5.406E+01 3.881E+01 2.607E+01
MN 56      0.000E+00 1.941E+12 1.484E+12 1.134E+12 7.713E+10 3.064E+09
CO 58      0.000E+00 3.259E+09 3.258E+09 3.257E+09 3.244E+09 3.228E+09
AG110M     0.000E+00 9.516E+09 9.515E+09 9.514E+09 9.503E+09 9.490E+09
IN116      0.000E+00 7.678E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     0.000E+00 3.171E+12 1.471E+12 6.825E+11 3.152E+08 3.133E+04
SN125      0.000E+00 2.059E+08 2.053E+08 2.047E+08 1.987E+08 1.916E+08
EU156      0.000E+00 2.914E+08 2.908E+08 2.903E+08 2.848E+08 2.784E+08
GD152      3.706E-12 3.201E-12 3.201E-12 3.201E-12 3.201E-12 3.201E-12
RE188      0.000E+00 1.781E+09 1.738E+09 1.673E+09 1.123E+09 7.003E+08

                    PRINCIPAL PHOTON SOURCES IN GROUP 13,PHOTONS/SEC
                     MEAN ENERGY= 2.250MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N 16      0.000E+00 6.376E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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CL 38      0.000E+00 8.934E+10 2.922E+10 9.560E+09 1.341E+05 2.011E-01
MN 56      0.000E+00 9.293E+11 7.103E+11 5.429E+11 3.692E+10 1.467E+09
IN116M     0.000E+00 4.209E+12 1.953E+12 9.059E+11 4.184E+08 4.159E+04
SN125      0.000E+00 1.687E+09 1.682E+09 1.677E+09 1.627E+09 1.570E+09
EU156      0.000E+00 4.811E+08 4.802E+08 4.793E+08 4.702E+08 4.596E+08
GD152      1.857E-12 1.604E-12 1.604E-12 1.604E-12 1.604E-12 1.604E-12
□
         OUTPUT UNIT =
6                        PAGE  107
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP 14,PHOTONS/SEC
                     MEAN ENERGY= 2.750MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N 16      0.000E+00 8.910E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 8.190E+12 7.820E+12 7.467E+12 4.704E+12 2.702E+12
MN 56      0.000E+00 1.301E+11 9.944E+10 7.600E+10 5.169E+09 2.054E+08
GD152      9.305E-13 8.037E-13 8.037E-13 8.037E-13 8.037E-13 8.037E-13

                    PRINCIPAL PHOTON SOURCES IN GROUP 15,PHOTONS/SEC
                     MEAN ENERGY= 3.500MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

LI  8      0.000E+00 4.393E+09 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C 15      0.000E+00 1.000E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 6.403E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 5.610E+09 5.357E+09 5.115E+09 3.222E+09 1.851E+09
MN 56      0.000E+00 1.115E+10 8.524E+09 6.514E+09 4.431E+08 1.760E+07
GD152      6.852E-13 5.918E-13 5.918E-13 5.918E-13 5.918E-13 5.918E-13

                    PRINCIPAL PHOTON SOURCES IN GROUP 16,PHOTONS/SEC
                     MEAN ENERGY= 5.000MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

LI  8      0.000E+00 2.064E+09 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C 15      0.000E+00 3.195E+09 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      0.000E+00 2.394E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 5.831E+07 5.568E+07 5.317E+07 3.349E+07 1.924E+07
GD152      2.040E-13 1.762E-13 1.762E-13 1.762E-13 1.762E-13 1.762E-13

                    PRINCIPAL PHOTON SOURCES IN GROUP 17,PHOTONS/SEC
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MEAN ENERGY= 7.000MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
N 16	0.000E+00	4.362E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD152	1.324E-14	1.143E-14	1.143E-14	1.143E-14	1.143E-14	1.143E-14
PO210	0.000E+00	3.730E-03	3.730E-03	3.730E-03	3.731E-03	3.732E-03

PRINCIPAL PHOTON SOURCES IN GROUP 18,PHOTONS/SEC
MEAN ENERGY= 9.500MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
LI 8	0.000E+00	7.356E+07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	4.468E+09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD152	8.370E-16	7.230E-16	7.230E-16	7.230E-16	7.230E-16	7.230E-16
PO210	0.000E+00	2.359E-04	2.359E-04	2.359E-04	2.359E-04	2.360E-04

OUTPUT UNIT =
6 PAGE 108
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12
PHOTON SPECTRUM FOR ACTINIDES + DAUGHTERS

ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BURNUP (PWRUE)
POWER= 1.00 MW, BURNUP= 1. MWD, FLUX= 1.00E+00 N/CM**2-SEC

18 GROUP PHOTON RELEASE RATES, PHOTONS/SECOND
BASIS=1 MTIHM 4.236% UO2, 19157 MWD/MTIHM BURNUP, 1 CYCLE

EMEAN	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	1.545E+10	8.858E+17	6.480E+17	6.013E+17	5.256E+17	4.553E+17
2.500E-02	0.000E+00	3.892E+16	1.365E+16	9.248E+15	7.431E+15	6.471E+15
3.750E-02	3.094E+06	5.721E+16	1.419E+16	6.785E+15	4.650E+15	4.017E+15
5.750E-02	1.045E+08	5.107E+16	2.841E+16	2.436E+16	2.156E+16	1.942E+16
8.500E-02	2.643E+08	3.988E+17	1.571E+17	1.147E+17	9.405E+16	8.150E+16
1.250E-01	5.562E+08	3.160E+17	3.052E+17	3.003E+17	2.660E+17	2.302E+17
2.250E-01	1.847E+09	2.238E+17	2.128E+17	2.088E+17	1.848E+17	1.600E+17
3.750E-01	4.608E+06	2.430E+16	2.085E+16	2.004E+16	1.761E+16	1.523E+16
5.750E-01	2.671E+05	4.183E+15	9.166E+14	3.061E+14	8.980E+13	7.712E+13
8.500E-01	5.853E+04	7.550E+15	2.789E+15	1.887E+15	1.405E+15	1.192E+15

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1.250E+00  1.183E+04 1.151E+15 1.059E+15 1.025E+15 8.815E+14 7.484E+14
1.750E+00  5.789E+03 1.257E+12 1.049E+10 5.685E+09 3.477E+09 1.940E+09
2.250E+00  3.348E+03 9.023E+06 9.026E+06 9.028E+06 9.040E+06 9.043E+06
2.750E+00  1.942E+03 9.225E+06 9.227E+06 9.337E+06 9.234E+06 9.428E+06
3.500E+00  1.734E+03 4.684E+06 4.686E+06 4.687E+06 4.693E+06 4.695E+06
5.000E+00  7.432E+02 2.003E+06 2.004E+06 2.004E+06 2.007E+06 2.008E+06
7.000E+00  8.536E+01 2.302E+05 2.302E+05 2.303E+05 2.306E+05 2.307E+05
9.500E+00  9.801E+00 2.653E+04 2.654E+04 2.654E+04 2.658E+04 2.659E+04

  TOTAL    1.823E+10 2.009E+18 1.405E+18 1.289E+18 1.124E+18 9.742E+17

MEV/SEC    6.702E+08 1.581E+17 1.204E+17 1.127E+17 9.863E+16 8.540E+16

                                  18 GROUP SPECIFIC ENERGY RELEASE RATE
S, MEV/WATT-SEC
                                  BASIS=1 MTIHM 4.236% UO2, 19157 MWD/M
TIHM BURNUP, 1 CYCLE
 EMEAN
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

1.000E-02  1.545E+02 8.858E+09 6.480E+09 6.013E+09 5.256E+09 4.553E+09
2.500E-02  0.000E+00 9.730E+08 3.412E+08 2.312E+08 1.858E+08 1.618E+08
3.750E-02  1.160E-01 2.145E+09 5.321E+08 2.544E+08 1.744E+08 1.506E+08
5.750E-02  6.010E+00 2.936E+09 1.634E+09 1.401E+09 1.239E+09 1.116E+09
8.500E-02  2.247E+01 3.390E+10 1.335E+10 9.747E+09 7.994E+09 6.927E+09
1.250E-01  6.952E+01 3.949E+10 3.815E+10 3.754E+10 3.324E+10 2.878E+10
2.250E-01  4.155E+02 5.036E+10 4.788E+10 4.698E+10 4.159E+10 3.601E+10
3.750E-01  1.728E+00 9.113E+09 7.819E+09 7.514E+09 6.604E+09 5.711E+09
5.750E-01  1.536E-01 2.405E+09 5.271E+08 1.760E+08 5.164E+07 4.435E+07
8.500E-01  4.975E-02 6.417E+09 2.371E+09 1.604E+09 1.194E+09 1.014E+09
1.250E+00  1.479E-02 1.438E+09 1.324E+09 1.281E+09 1.102E+09 9.355E+08
1.750E+00  1.013E-02 2.201E+06 1.835E+04 9.949E+03 6.085E+03 3.394E+03
2.250E+00  7.533E-03 2.030E+01 2.031E+01 2.031E+01 2.034E+01 2.035E+01
2.750E+00  5.342E-03 2.537E+01 2.538E+01 2.568E+01 2.539E+01 2.593E+01
3.500E+00  6.068E-03 1.639E+01 1.640E+01 1.640E+01 1.643E+01 1.643E+01
5.000E+00  3.716E-03 1.002E+01 1.002E+01 1.002E+01 1.004E+01 1.004E+01
7.000E+00  5.975E-04 1.611E+00 1.612E+00 1.612E+00 1.614E+00 1.615E+00
9.500E+00  9.311E-05 2.520E-01 2.521E-01 2.522E-01 2.525E-01 2.526E-01

  TOTAL    6.702E+02 1.581E+11 1.204E+11 1.127E+11 9.863E+10 8.540E+10

 GAM POW   1.074E-04 2.534E+04 1.930E+04 1.807E+04 1.581E+04 1.369E+04
□
         OUTPUT UNIT =
6                        PAGE  109
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP  1,PHOTONS/SEC
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MEAN ENERGY= 0.010MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	1.207E+10	9.496E+09	9.496E+09	9.496E+09	9.496E+09	9.496E+09
U235	2.026E+09	1.139E+09	1.139E+09	1.139E+09	1.139E+09	1.139E+09
U237	0.000E+00	2.109E+16	2.100E+16	2.091E+16	2.003E+16	1.903E+16
U238	1.358E+09	1.342E+09	1.342E+09	1.342E+09	1.342E+09	1.342E+09
U239	0.000E+00	2.812E+17	4.803E+16	8.204E+15	1.734E+08	1.069E-01
NP239	0.000E+00	5.780E+17	5.743E+17	5.679E+17	5.024E+17	4.337E+17

PRINCIPAL PHOTON SOURCES IN GROUP 2,PHOTONS/SEC

MEAN ENERGY= 0.025MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U237	0.000E+00	7.830E+14	7.796E+14	7.763E+14	7.438E+14	7.066E+14
U239	0.000E+00	3.037E+16	5.188E+15	8.861E+14	1.873E+07	1.155E-02
NP238	0.000E+00	1.297E+14	1.279E+14	1.262E+14	1.101E+14	9.345E+13
NP239	0.000E+00	7.553E+15	7.504E+15	7.420E+15	6.565E+15	5.667E+15

PRINCIPAL PHOTON SOURCES IN GROUP 3,PHOTONS/SEC

MEAN ENERGY= 0.038MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	3.094E+06	1.739E+06	1.739E+06	1.739E+06	1.739E+06	1.739E+06
U237	0.000E+00	1.111E+14	1.107E+14	1.102E+14	1.056E+14	1.003E+14
U239	0.000E+00	5.181E+16	8.849E+15	1.511E+15	3.194E+07	1.970E-02
NP238	0.000E+00	8.743E+13	8.625E+13	8.508E+13	7.423E+13	6.302E+13
NP239	0.000E+00	5.131E+15	5.098E+15	5.041E+15	4.460E+15	3.850E+15

PRINCIPAL PHOTON SOURCES IN GROUP 4,PHOTONS/SEC

MEAN ENERGY= 0.058MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	9.673E+07	7.610E+07	7.610E+07	7.610E+07	7.610E+07	7.610E+07
U237	0.000E+00	9.901E+15	9.859E+15	9.817E+15	9.406E+15	8.935E+15
U238	7.181E+06	7.096E+06	7.096E+06	7.096E+06	7.096E+06	7.096E+06
U239	0.000E+00	2.712E+16	4.633E+15	7.913E+14	1.672E+07	1.031E-02
NP239	0.000E+00	1.386E+16	1.377E+16	1.361E+16	1.205E+16	1.040E+16

OUTPUT UNIT =

PRINCIPAL PHOTON SOURCES IN GROUP 5,PHOTONS/SEC
MEAN ENERGY= 0.085MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	2.643E+08	1.485E+08	1.485E+08	1.485E+08	1.485E+08	1.485E+08
U237	0.000E+00	4.597E+15	4.577E+15	4.558E+15	4.367E+15	4.148E+15
U239	0.000E+00	2.906E+17	4.963E+16	8.478E+15	1.792E+08	1.105E-01
NP239	0.000E+00	1.030E+17	1.023E+17	1.012E+17	8.953E+16	7.728E+16

PRINCIPAL PHOTON SOURCES IN GROUP 6,PHOTONS/SEC
MEAN ENERGY= 0.125MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	3.434E+07	2.702E+07	2.702E+07	2.702E+07	2.702E+07	2.702E+07
U235	5.218E+08	2.933E+08	2.933E+08	2.933E+08	2.933E+08	2.933E+08
U237	0.000E+00	8.007E+15	7.973E+15	7.938E+15	7.606E+15	7.225E+15
U239	0.000E+00	1.056E+16	1.804E+15	3.081E+14	6.512E+06	4.016E-03
NP239	0.000E+00	2.971E+17	2.952E+17	2.919E+17	2.583E+17	2.229E+17

PRINCIPAL PHOTON SOURCES IN GROUP 7,PHOTONS/SEC
MEAN ENERGY= 0.225MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	1.847E+09	1.038E+09	1.038E+09	1.038E+09	1.038E+09	1.038E+09
U237	0.000E+00	6.037E+15	6.011E+15	5.985E+15	5.734E+15	5.447E+15
U239	0.000E+00	1.156E+16	1.975E+15	3.373E+14	7.129E+06	4.396E-03
NP239	0.000E+00	2.060E+17	2.047E+17	2.024E+17	1.791E+17	1.546E+17

PRINCIPAL PHOTON SOURCES IN GROUP 8,PHOTONS/SEC
MEAN ENERGY= 0.375MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	4.608E+06	2.590E+06	2.590E+06	2.590E+06	2.590E+06	2.590E+06
U237	0.000E+00	3.561E+14	3.546E+14	3.531E+14	3.383E+14	3.214E+14
U239	0.000E+00	3.918E+15	6.693E+14	1.143E+14	2.416E+06	1.490E-03
NP239	0.000E+00	1.985E+16	1.972E+16	1.950E+16	1.725E+16	1.489E+16

PRINCIPAL PHOTON SOURCES IN GROUP 9,PHOTONS/SEC
MEAN ENERGY= 0.575MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	4.038E+04	3.177E+04	3.177E+04	3.177E+04	3.177E+04	3.177E+04
U235	2.267E+05	1.274E+05	1.274E+05	1.274E+05	1.274E+05	1.274E+05
U239	0.000E+00	3.687E+15	6.298E+14	1.076E+14	2.274E+06	1.402E-03
NP238	0.000E+00	1.788E+13	1.764E+13	1.740E+13	1.518E+13	1.289E+13
NP239	0.000E+00	8.552E+13	8.497E+13	8.401E+13	7.433E+13	6.416E+13
NP240M	0.000E+00	4.325E+13	3.596E+11	1.945E+11	1.186E+11	6.575E+10
NP240	0.000E+00	3.483E+14	1.837E+14	9.688E+13	1.613E+11	7.469E+07

OUTPUT UNIT =
6 PAGE 111
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

PRINCIPAL PHOTON SOURCES IN GROUP 10,PHOTONS/SEC
MEAN ENERGY= 0.850MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	2.618E+03	2.060E+03	2.060E+03	2.060E+03	2.060E+03	2.060E+03
U235	3.090E+04	1.737E+04	1.737E+04	1.737E+04	1.737E+04	1.737E+04
U238	2.501E+04	2.471E+04	2.471E+04	2.471E+04	2.471E+04	2.471E+04
U239	0.000E+00	5.462E+15	9.329E+14	1.593E+14	3.368E+06	2.077E-03
NP238	0.000E+00	1.654E+15	1.632E+15	1.610E+15	1.404E+15	1.192E+15
NP240	0.000E+00	4.254E+14	2.243E+14	1.183E+14	1.970E+11	9.122E+07

PRINCIPAL PHOTON SOURCES IN GROUP 11,PHOTONS/SEC
MEAN ENERGY= 1.250MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	1.704E+02	1.341E+02	1.341E+02	1.341E+02	1.341E+02	1.341E+02
U238	1.163E+04	1.150E+04	1.150E+04	1.150E+04	1.150E+04	1.150E+04
U239	0.000E+00	6.437E+13	1.099E+13	1.878E+12	3.969E+04	2.447E-05
NP238	0.000E+00	1.038E+15	1.024E+15	1.010E+15	8.815E+14	7.484E+14
NP240	0.000E+00	4.482E+13	2.364E+13	1.247E+13	2.076E+10	9.611E+06

PRINCIPAL PHOTON SOURCES IN GROUP 12,PHOTONS/SEC
MEAN ENERGY= 1.750MEV

NUCLIDE FUEL CHG FUEL DIS 1.0HR 2.0HR 12.0HR 24.0HR

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 U234      8.528E+01 6.710E+01 6.710E+01 6.710E+01 6.710E+01 6.710E+01
 U238      5.692E+03 5.625E+03 5.625E+03 5.625E+03 5.625E+03 5.625E+03
NP240M     0.000E+00 1.257E+12 1.046E+10 5.655E+09 3.449E+09 1.912E+09

                    PRINCIPAL PHOTON SOURCES IN GROUP 13,PHOTONS/SEC
                     MEAN ENERGY= 2.250MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234      4.286E+01 3.372E+01 3.372E+01 3.372E+01 3.372E+01 3.372E+01
 U238      3.299E+03 3.260E+03 3.260E+03 3.260E+03 3.260E+03 3.260E+03
PU240      0.000E+00 2.410E+05 2.410E+05 2.410E+05 2.410E+05 2.410E+05
CM242      0.000E+00 6.823E+06 6.825E+06 6.827E+06 6.839E+06 6.842E+06
CM244      0.000E+00 1.884E+06 1.885E+06 1.885E+06 1.885E+06 1.885E+06

                    PRINCIPAL PHOTON SOURCES IN GROUP 14,PHOTONS/SEC
                     MEAN ENERGY= 2.750MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TL208      0.000E+00 4.010E+06 4.012E+06 4.120E+06 4.010E+06 4.202E+06
 U234      2.156E+01 1.697E+01 1.697E+01 1.697E+01 1.697E+01 1.697E+01
 U238      1.917E+03 1.895E+03 1.895E+03 1.895E+03 1.895E+03 1.895E+03
PU240      0.000E+00 1.397E+05 1.397E+05 1.397E+05 1.397E+05 1.397E+05
CM242      0.000E+00 3.941E+06 3.942E+06 3.943E+06 3.950E+06 3.952E+06
CM244      0.000E+00 1.092E+06 1.092E+06 1.092E+06 1.092E+06 1.092E+06
□
         OUTPUT UNIT =
6                        PAGE  112
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP 15,PHOTONS/SEC
                     MEAN ENERGY= 3.500MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U238      1.715E+03 1.695E+03 1.695E+03 1.695E+03 1.695E+03 1.695E+03
PU240      0.000E+00 1.249E+05 1.249E+05 1.249E+05 1.249E+05 1.249E+05
CM242      0.000E+00 3.539E+06 3.540E+06 3.541E+06 3.547E+06 3.549E+06
CM244      0.000E+00 9.835E+05 9.838E+05 9.838E+05 9.839E+05 9.839E+05

                    PRINCIPAL PHOTON SOURCES IN GROUP 16,PHOTONS/SEC
                     MEAN ENERGY= 5.000MEV
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NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U238      7.372E+02 7.285E+02 7.285E+02 7.285E+02 7.285E+02 7.285E+02
PU240      0.000E+00 5.343E+04 5.343E+04 5.343E+04 5.343E+04 5.343E+04
CM242      0.000E+00 1.514E+06 1.515E+06 1.515E+06 1.518E+06 1.519E+06
CM244      0.000E+00 4.208E+05 4.209E+05 4.209E+05 4.209E+05 4.210E+05

                    PRINCIPAL PHOTON SOURCES IN GROUP 17,PHOTONS/SEC
                     MEAN ENERGY= 7.000MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U238      8.491E+01 8.391E+01 8.391E+01 8.391E+01 8.391E+01 8.391E+01
PU240      0.000E+00 6.129E+03 6.129E+03 6.129E+03 6.129E+03 6.129E+03
CM242      0.000E+00 1.739E+05 1.739E+05 1.740E+05 1.743E+05 1.744E+05
CM244      0.000E+00 4.853E+04 4.854E+04 4.855E+04 4.855E+04 4.855E+04

                    PRINCIPAL PHOTON SOURCES IN GROUP 18,PHOTONS/SEC
                     MEAN ENERGY= 9.500MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U238      9.765E+00 9.650E+00 9.650E+00 9.650E+00 9.650E+00 9.650E+00
PU240      0.000E+00 7.037E+02 7.037E+02 7.037E+02 7.037E+02 7.037E+02
CM242      0.000E+00 2.007E+04 2.007E+04 2.008E+04 2.011E+04 2.012E+04
CM244      0.000E+00 5.576E+03 5.577E+03 5.578E+03 5.578E+03 5.578E+03
□
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6                         PAGE  113
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
               PHOTON SPECTRUM FOR FISSION PRODUCTS

                                 ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BU
RNUP (PWRUE)
                                    POWER=   1.00 MW, BURNUP=      1. M
WD, FLUX= 1.00E+00
N/CM**2-SEC

                                  18 GROUP PHOTON RELEASE RATES, PHOTON
S/SECOND
                                  BASIS=1 MTIHM 4.236% UO2, 19157 MWD/M
TIHM BURNUP, 1 CYCLE
 EMEAN
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
```

1.000E-02	0.000E+00	2.319E+18	7.115E+17	5.866E+17	3.402E+17	2.665E+17
2.500E-02	0.000E+00	5.954E+17	2.176E+17	1.844E+17	1.201E+17	9.914E+16
3.750E-02	0.000E+00	4.892E+17	2.123E+17	1.908E+17	1.439E+17	1.242E+17
5.750E-02	0.000E+00	4.987E+17	1.486E+17	1.238E+17	7.237E+16	5.625E+16
8.500E-02	0.000E+00	3.675E+17	1.262E+17	1.066E+17	7.238E+16	6.260E+16
1.250E-01	0.000E+00	3.911E+17	1.872E+17	1.648E+17	1.314E+17	1.179E+17
2.250E-01	0.000E+00	8.599E+17	2.742E+17	2.280E+17	1.531E+17	1.163E+17
3.750E-01	0.000E+00	5.915E+17	1.694E+17	1.226E+17	7.592E+16	6.610E+16
5.750E-01	0.000E+00	9.843E+17	5.296E+17	4.624E+17	3.169E+17	2.514E+17
8.500E-01	0.000E+00	1.070E+18	5.519E+17	4.468E+17	2.819E+17	2.464E+17
1.250E+00	0.000E+00	6.159E+17	2.269E+17	1.597E+17	5.000E+16	2.731E+16
1.750E+00	0.000E+00	2.256E+17	1.189E+17	1.016E+17	6.891E+16	6.298E+16
2.250E+00	0.000E+00	1.190E+17	4.637E+16	2.982E+16	4.115E+15	2.387E+15
2.750E+00	0.000E+00	5.118E+16	1.819E+16	1.116E+16	2.443E+15	2.287E+15
3.500E+00	0.000E+00	2.832E+16	4.581E+15	2.639E+15	5.838E+13	1.979E+13
5.000E+00	0.000E+00	1.393E+16	5.650E+13	3.750E+13	2.986E+12	1.594E+11
7.000E+00	0.000E+00	1.175E+14	1.698E-05	2.135E-06	2.135E-06	2.135E-06
9.500E+00	0.000E+00	2.389E+10	1.350E-07	1.350E-07	1.350E-07	1.350E-07
TOTAL	0.000E+00	9.220E+18	3.543E+18	2.922E+18	1.834E+18	1.502E+18
MEV/SEC	0.000E+00	3.799E+18	1.624E+18	1.282E+18	7.226E+17	5.941E+17

18 GROUP SPECIFIC ENERGY RELEASE RATE
S, MEV/WATT-SEC

BASIS=1 MTIHM 4.236% UO2, 19157 MWD/M
TIHM BURNUP, 1 CYCLE

EMEAN

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	0.000E+00	2.319E+10	7.115E+09	5.866E+09	3.402E+09	2.665E+09
2.500E-02	0.000E+00	1.488E+10	5.439E+09	4.610E+09	3.003E+09	2.478E+09
3.750E-02	0.000E+00	1.834E+10	7.961E+09	7.156E+09	5.396E+09	4.659E+09
5.750E-02	0.000E+00	2.868E+10	8.547E+09	7.121E+09	4.161E+09	3.234E+09
8.500E-02	0.000E+00	3.124E+10	1.072E+10	9.058E+09	6.152E+09	5.321E+09
1.250E-01	0.000E+00	4.888E+10	2.340E+10	2.060E+10	1.642E+10	1.473E+10
2.250E-01	0.000E+00	1.935E+11	6.170E+10	5.131E+10	3.444E+10	2.616E+10
3.750E-01	0.000E+00	2.218E+11	6.353E+10	4.599E+10	2.847E+10	2.479E+10
5.750E-01	0.000E+00	5.660E+11	3.045E+11	2.659E+11	1.822E+11	1.445E+11
8.500E-01	0.000E+00	9.093E+11	4.691E+11	3.798E+11	2.396E+11	2.095E+11
1.250E+00	0.000E+00	7.699E+11	2.836E+11	1.997E+11	6.251E+10	3.413E+10
1.750E+00	0.000E+00	3.949E+11	2.081E+11	1.777E+11	1.206E+11	1.102E+11
2.250E+00	0.000E+00	2.678E+11	1.043E+11	6.710E+10	9.260E+09	5.370E+09
2.750E+00	0.000E+00	1.407E+11	5.002E+10	3.068E+10	6.718E+09	6.288E+09
3.500E+00	0.000E+00	9.913E+10	1.603E+10	9.237E+09	2.043E+08	6.927E+07
5.000E+00	0.000E+00	6.965E+10	2.825E+08	1.875E+08	1.493E+07	7.972E+05
7.000E+00	0.000E+00	8.222E+08	1.188E-10	1.495E-11	1.495E-11	1.495E-11
9.500E+00	0.000E+00	2.270E+05	1.283E-12	1.283E-12	1.283E-12	1.283E-12

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  TOTAL    0.000E+00 3.799E+12 1.624E+12 1.282E+12 7.226E+11 5.941E+11

 GAM POW   0.000E+00 6.089E+05 2.604E+05 2.055E+05 1.158E+05 9.524E+04
□
         OUTPUT UNIT =
6                        PAGE  114
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP  1,PHOTONS/SEC
                     MEAN ENERGY= 0.010MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 87      0.000E+00 1.789E+16 1.048E+16 6.077E+15 2.610E+13 3.763E+10
BR 88      0.000E+00 2.943E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 88      0.000E+00 1.036E+16 8.121E+15 6.362E+15 5.536E+14 2.956E+13
RB 88      0.000E+00 3.897E+16 3.330E+16 2.636E+16 2.297E+15 1.226E+14
KR 89      0.000E+00 3.249E+16 6.617E+10 1.327E+05 0.000E+00 0.000E+00
RB 89      0.000E+00 2.547E+16 2.067E+15 1.340E+14 1.755E+02 9.660E-13
SR 89      0.000E+00 1.561E+16 1.561E+16 1.560E+16 1.551E+16 1.540E+16
KR 90      0.000E+00 3.329E+16 9.928E-18 0.000E+00 0.000E+00 0.000E+00
RB 90      0.000E+00 4.436E+16 7.797E+10 4.470E+06 0.000E+00 0.000E+00
SR 91      0.000E+00 2.066E+16 1.924E+16 1.789E+16 8.624E+15 3.593E+15
 Y 91      0.000E+00 2.027E+16 2.027E+16 2.027E+16 2.023E+16 2.015E+16
RB 92      0.000E+00 8.433E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 92      0.000E+00 4.853E+16 4.746E+16 4.487E+16 1.236E+16 1.537E+15
 Y 93      0.000E+00 4.458E+16 4.214E+16 3.935E+16 1.981E+16 8.693E+15
RB 94      0.000E+00 3.600E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 94      0.000E+00 6.259E+16 7.561E+15 8.569E+14 2.996E+05 1.345E-06
ZR 95      0.000E+00 4.507E+15 4.506E+15 4.504E+15 4.484E+15 4.459E+15
 Y 96      0.000E+00 9.978E+16 1.425E+09 1.999E+01 0.000E+00 0.000E+00
ZR 97      0.000E+00 2.702E+16 2.594E+16 2.489E+16 1.652E+16 1.010E+16
NB 97      0.000E+00 1.830E+16 1.803E+16 1.756E+16 1.193E+16 6.835E+15
NB 98      0.000E+00 7.663E+16 9.227E-19 0.000E+00 0.000E+00 0.000E+00
NB 99      0.000E+00 6.126E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO 99      0.000E+00 2.033E+16 2.012E+16 1.991E+16 1.792E+16 1.580E+16
TC 99M     0.000E+00 7.058E+15 7.054E+15 7.043E+15 6.670E+15 5.992E+15
ZR101      0.000E+00 6.110E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101      0.000E+00 1.108E+17 6.507E+15 3.784E+14 1.674E+02 2.505E-13
TC102      0.000E+00 5.288E+16 1.282E+15 3.025E+13 1.617E-03 0.000E+00
TC104      0.000E+00 3.988E+16 4.427E+15 4.505E+14 5.366E+04 6.619E-08
RH106      0.000E+00 9.376E+15 8.278E+15 8.278E+15 8.271E+15 8.264E+15
 I131      0.000E+00 3.960E+15 3.957E+15 3.948E+15 3.827E+15 3.681E+15
 I132      0.000E+00 1.541E+16 1.534E+16 1.526E+16 1.409E+16 1.268E+16
 I133      0.000E+00 1.870E+16 1.836E+16 1.784E+16 1.284E+16 8.610E+15
XE133      0.000E+00 6.358E+15 6.357E+15 6.356E+15 6.296E+15 6.128E+15
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 I134      0.000E+00 3.171E+16 2.262E+16 1.327E+16 9.151E+12 7.373E+08
TE135      0.000E+00 4.878E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I135      0.000E+00 1.538E+16 1.386E+16 1.248E+16 4.374E+15 1.243E+15
XE135      0.000E+00 4.197E+15 4.819E+15 5.292E+15 5.761E+15 3.464E+15
 I136      0.000E+00 4.195E+16 4.363E+03 3.829E-10 0.000E+00 0.000E+00
 I136M     0.000E+00 2.700E+16 7.456E-08 0.000E+00 0.000E+00 0.000E+00
XE137      0.000E+00 7.125E+16 1.451E+12 2.791E+07 0.000E+00 0.000E+00
 I138      0.000E+00 3.194E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE138      0.000E+00 2.815E+16 1.499E+15 7.964E+13 1.428E+01 7.224E-15
CS138      0.000E+00 5.185E+16 2.253E+16 6.630E+15 1.656E+10 3.076E+03
XE139      0.000E+00 5.401E+16 1.999E-11 0.000E+00 0.000E+00 0.000E+00
CS139      0.000E+00 6.887E+16 8.728E+14 1.046E+13 6.379E-07 0.000E+00
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BA139      0.000E+00 3.770E+16 2.576E+16 1.561E+16 1.022E+14 2.447E+11
BA140      0.000E+00 1.752E+16 1.748E+16 1.744E+16 1.705E+16 1.659E+16
LA140      0.000E+00 2.253E+16 2.252E+16 2.251E+16 2.241E+16 2.221E+16
BA141      0.000E+00 3.393E+16 3.542E+15 3.635E+14 4.706E+04 6.415E-08
LA141      0.000E+00 3.661E+16 3.298E+16 2.788E+16 4.786E+15 5.767E+14
CE141      0.000E+00 6.366E+15 6.365E+15 6.364E+15 6.328E+15 6.264E+15
LA142      0.000E+00 3.188E+16 2.287E+16 1.466E+16 1.651E+14 7.581E+11
CE143      0.000E+00 1.764E+16 1.740E+16 1.704E+16 1.381E+16 1.073E+16
PR143      0.000E+00 1.142E+16 1.142E+16 1.142E+16 1.139E+16 1.130E+16
PR144      0.000E+00 3.015E+16 2.993E+16 2.991E+16 2.988E+16 2.984E+16
PR145      0.000E+00 1.686E+16 1.516E+16 1.350E+16 4.237E+15 1.055E+15
ND147      0.000E+00 4.556E+15 4.548E+15 4.536E+15 4.419E+15 4.283E+15
PM148      0.000E+00 3.700E+15 3.681E+15 3.661E+15 3.471E+15 3.255E+15
PM149      0.000E+00 4.271E+15 4.248E+15 4.215E+15 3.739E+15 3.197E+15

                    PRINCIPAL PHOTON SOURCES IN GROUP  2,PHOTONS/SEC
                     MEAN ENERGY= 0.025MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 87      0.000E+00 3.909E+15 2.291E+15 1.328E+15 5.704E+12 8.224E+09
BR 88      0.000E+00 6.627E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 88      0.000E+00 8.736E+15 7.465E+15 5.908E+15 5.149E+14 2.749E+13
KR 89      0.000E+00 7.078E+15 1.442E+10 2.891E+04 0.000E+00 0.000E+00
SR 89      0.000E+00 3.260E+15 3.259E+15 3.257E+15 3.238E+15 3.216E+15
KR 90      0.000E+00 6.578E+15 1.962E-18 0.000E+00 0.000E+00 0.000E+00
RB 90      0.000E+00 9.898E+15 1.740E+10 9.975E+05 0.000E+00 0.000E+00
SR 91      0.000E+00 4.371E+15 4.070E+15 3.784E+15 1.824E+15 7.600E+14
 Y 91      0.000E+00 4.250E+15 4.250E+15 4.250E+15 4.242E+15 4.224E+15
RB 92      0.000E+00 1.919E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 92      0.000E+00 1.070E+16 1.046E+16 9.891E+15 2.724E+15 3.388E+14
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 Y 93      0.000E+00 9.676E+15 9.145E+15 8.539E+15 4.299E+15 1.887E+15
RB 94      0.000E+00 8.246E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 94      0.000E+00 1.390E+16 1.679E+15 1.902E+14 6.650E+04 2.986E-07
 Y 96      0.000E+00 2.245E+16 3.206E+08 4.497E+00 0.000E+00 0.000E+00
ZR 97      0.000E+00 5.697E+15 5.468E+15 5.249E+15 3.483E+15 2.129E+15
NB 97      0.000E+00 3.739E+15 3.683E+15 3.588E+15 2.438E+15 1.396E+15
NB 98      0.000E+00 1.698E+16 2.044E-19 0.000E+00 0.000E+00 0.000E+00
NB 99      0.000E+00 1.350E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO 99      0.000E+00 3.652E+15 3.615E+15 3.577E+15 3.220E+15 2.839E+15
ZR101      0.000E+00 1.379E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC102      0.000E+00 1.168E+16 2.832E+14 6.682E+12 3.573E-04 0.000E+00
RH103M     0.000E+00 2.915E+15 2.914E+15 2.913E+15 2.894E+15 2.867E+15
TC104      0.000E+00 8.725E+15 9.687E+14 9.858E+13 1.174E+04 1.448E-08
RH105M     0.000E+00 2.887E+15 2.560E+15 2.190E+15 4.595E+14 7.055E+13
RH106      0.000E+00 2.061E+15 1.820E+15 1.820E+15 1.818E+15 1.817E+15
PD109      0.000E+00 2.566E+15 2.454E+15 2.331E+15 1.393E+15 7.509E+14
AG109M     0.000E+00 2.248E+15 2.152E+15 2.044E+15 1.222E+15 6.585E+14
TE129      0.000E+00 2.592E+15 2.495E+15 2.301E+15 7.131E+14 3.169E+14
SN130      0.000E+00 6.932E+15 9.669E+10 1.349E+06 0.000E+00 0.000E+00
TE131      0.000E+00 6.781E+15 3.278E+15 1.103E+15 1.833E+14 1.389E+14
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         OUTPUT UNIT =
6                          PAGE  116
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
 I131      0.000E+00 2.438E+15 2.436E+15 2.431E+15 2.356E+15 2.266E+15
SB132M     0.000E+00 6.064E+15 3.036E+11 1.520E+07 0.000E+00 0.000E+00
TE132      0.000E+00 3.449E+16 3.420E+16 3.389E+16 3.102E+16 2.789E+16
 I132      0.000E+00 3.674E+15 3.658E+15 3.638E+15 3.360E+15 3.023E+15
 I133      0.000E+00 3.817E+15 3.748E+15 3.643E+15 2.622E+15 1.758E+15
XE133M     0.000E+00 1.298E+15 1.297E+15 1.296E+15 1.258E+15 1.175E+15
TE134      0.000E+00 2.105E+16 7.785E+15 2.879E+15 1.375E+11 8.974E+05
 I134      0.000E+00 7.584E+15 5.411E+15 3.175E+15 2.189E+12 1.763E+08
TE135      0.000E+00 1.093E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I135      0.000E+00 3.120E+15 2.811E+15 2.531E+15 8.871E+14 2.521E+14
 I136      0.000E+00 9.352E+15 9.728E+02 8.537E-11 0.000E+00 0.000E+00
 I136M     0.000E+00 7.744E+15 2.139E-08 0.000E+00 0.000E+00 0.000E+00
XE137      0.000E+00 1.574E+16 3.206E+11 6.167E+06 0.000E+00 0.000E+00
 I138      0.000E+00 7.277E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS138      0.000E+00 1.129E+16 4.905E+15 1.443E+15 3.605E+09 6.696E+02
XE139      0.000E+00 1.196E+16 4.424E-12 0.000E+00 0.000E+00 0.000E+00
CS139      0.000E+00 1.525E+16 1.933E+14 2.316E+12 1.413E-07 0.000E+00
BA139      0.000E+00 7.992E+15 5.461E+15 3.310E+15 2.167E+13 5.189E+10
BA140      0.000E+00 1.397E+16 1.394E+16 1.391E+16 1.360E+16 1.324E+16
LA140      0.000E+00 4.671E+15 4.670E+15 4.668E+15 4.647E+15 4.605E+15
BA141      0.000E+00 7.225E+15 7.542E+14 7.739E+13 1.002E+04 1.366E-08
LA141      0.000E+00 7.840E+15 7.063E+15 5.971E+15 1.025E+15 1.235E+14
CE141      0.000E+00 1.015E+15 1.015E+15 1.015E+15 1.009E+15 9.987E+14
LA142      0.000E+00 6.831E+15 4.902E+15 3.141E+15 3.537E+13 1.625E+11
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CE143      0.000E+00 2.998E+15 2.956E+15 2.896E+15 2.347E+15 1.824E+15
PR143      0.000E+00 2.283E+15 2.283E+15 2.283E+15 2.277E+15 2.260E+15
PR144      0.000E+00 6.550E+15 6.503E+15 6.498E+15 6.491E+15 6.483E+15
PR145      0.000E+00 3.547E+15 3.190E+15 2.841E+15 8.914E+14 2.219E+14

                    PRINCIPAL PHOTON SOURCES IN GROUP  3,PHOTONS/SEC
                     MEAN ENERGY= 0.038MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

RB 88      0.000E+00 5.943E+15 5.079E+15 4.019E+15 3.503E+14 1.870E+13
SR 89      0.000E+00 2.125E+15 2.124E+15 2.123E+15 2.110E+15 2.096E+15
RB 90      0.000E+00 6.736E+15 1.184E+10 6.788E+05 0.000E+00 0.000E+00
SR 91      0.000E+00 2.872E+15 2.674E+15 2.486E+15 1.198E+15 4.993E+14
 Y 91      0.000E+00 2.776E+15 2.776E+15 2.775E+15 2.770E+15 2.758E+15
RB 92      0.000E+00 1.317E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 92      0.000E+00 7.150E+15 6.992E+15 6.611E+15 1.821E+15 2.265E+14
 Y 93      0.000E+00 6.450E+15 6.097E+15 5.693E+15 2.866E+15 1.258E+15
RB 94      0.000E+00 5.675E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 94      0.000E+00 9.389E+15 1.134E+15 1.285E+14 4.493E+04 2.018E-07
 Y 96      0.000E+00 1.534E+16 2.191E+08 3.073E+00 0.000E+00 0.000E+00
ZR 97      0.000E+00 3.737E+15 3.587E+15 3.443E+15 2.285E+15 1.397E+15
NB 97      0.000E+00 2.414E+15 2.378E+15 2.317E+15 1.574E+15 9.015E+14
NB 98      0.000E+00 1.149E+16 1.384E-19 0.000E+00 0.000E+00 0.000E+00
NB 99      0.000E+00 9.112E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO 99      0.000E+00 2.972E+15 2.942E+15 2.911E+15 2.621E+15 2.310E+15
ZR101      0.000E+00 9.433E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE  117
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
TC102      0.000E+00 7.864E+15 1.906E+14 4.498E+12 2.405E-04 0.000E+00
TC104      0.000E+00 5.843E+15 6.488E+14 6.602E+13 7.863E+03 9.699E-09
TE132      0.000E+00 6.002E+15 5.952E+15 5.899E+15 5.399E+15 4.854E+15
 I132      0.000E+00 2.154E+15 2.145E+15 2.133E+15 1.970E+15 1.772E+15
 I133      0.000E+00 2.452E+15 2.408E+15 2.340E+15 1.684E+15 1.129E+15
XE133      0.000E+00 3.101E+16 3.101E+16 3.101E+16 3.071E+16 2.989E+16
 I134      0.000E+00 4.508E+15 3.216E+15 1.887E+15 1.301E+12 1.048E+08
TE135      0.000E+00 7.438E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE135      0.000E+00 1.507E+15 1.731E+15 1.900E+15 2.069E+15 1.244E+15
 I136      0.000E+00 6.361E+15 6.617E+02 5.807E-11 0.000E+00 0.000E+00
XE137      0.000E+00 1.086E+16 2.211E+11 4.253E+06 0.000E+00 0.000E+00
 I138      0.000E+00 4.974E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE138      0.000E+00 5.618E+15 2.991E+14 1.589E+13 2.848E+00 1.441E-15
CS138      0.000E+00 7.574E+15 3.291E+15 9.685E+14 2.419E+09 4.493E+02
XE139      0.000E+00 8.076E+15 2.988E-12 0.000E+00 0.000E+00 0.000E+00
CS139      0.000E+00 1.028E+16 1.303E+14 1.561E+12 9.524E-08 0.000E+00
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BA139	0.000E+00	8.063E+15	5.509E+15	3.339E+15	2.186E+13	5.235E+10
BA140	0.000E+00	2.420E+15	2.414E+15	2.409E+15	2.355E+15	2.292E+15
LA140	0.000E+00	4.056E+15	4.055E+15	4.054E+15	4.035E+15	3.999E+15
BA141	0.000E+00	8.580E+15	8.956E+14	9.190E+13	1.190E+04	1.622E-08
LA141	0.000E+00	5.216E+15	4.699E+15	3.973E+15	6.819E+14	8.216E+13
CE141	0.000E+00	1.166E+16	1.166E+16	1.166E+16	1.159E+16	1.148E+16
BA142	0.000E+00	1.306E+16	2.683E+14	5.503E+12	7.251E-05	3.845E-25
LA142	0.000E+00	4.668E+15	3.349E+15	2.146E+15	2.417E+13	1.110E+11
CE143	0.000E+00	3.936E+16	3.880E+16	3.801E+16	3.081E+16	2.395E+16
PR143	0.000E+00	1.449E+15	1.449E+15	1.449E+15	1.445E+15	1.434E+15
CE144	0.000E+00	4.499E+15	4.499E+15	4.498E+15	4.494E+15	4.488E+15
PR144	0.000E+00	4.367E+15	4.335E+15	4.332E+15	4.327E+15	4.322E+15
CE145	0.000E+00	2.356E+16	2.698E+10	2.573E+04	0.000E+00	0.000E+00
PR145	0.000E+00	2.602E+15	2.340E+15	2.084E+15	6.539E+14	1.627E+14
ND147	0.000E+00	1.250E+16	1.248E+16	1.244E+16	1.212E+16	1.175E+16
ND149	0.000E+00	5.177E+15	3.545E+15	2.374E+15	4.320E+13	3.527E+11
SM153	0.000E+00	5.240E+15	5.166E+15	5.090E+15	4.388E+15	3.672E+15

PRINCIPAL PHOTON SOURCES IN GROUP 4,PHOTONS/SEC
MEAN ENERGY= 0.058MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 87	0.000E+00	3.932E+15	2.304E+15	1.336E+15	5.737E+12	8.272E+09
BR 88	0.000E+00	6.945E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	9.028E+15	7.715E+15	6.106E+15	5.321E+14	2.841E+13
KR 89	0.000E+00	7.118E+15	1.450E+10	2.908E+04	0.000E+00	0.000E+00
RB 89	0.000E+00	5.455E+15	4.427E+14	2.869E+13	3.759E+01	2.069E-13
SR 89	0.000E+00	3.038E+15	3.037E+15	3.035E+15	3.018E+15	2.997E+15
KR 90	0.000E+00	6.578E+15	1.962E-18	0.000E+00	0.000E+00	0.000E+00
RB 90	0.000E+00	1.023E+16	1.798E+10	1.031E+06	0.000E+00	0.000E+00
SR 91	0.000E+00	4.159E+15	3.873E+15	3.601E+15	1.736E+15	7.232E+14
Y 91	0.000E+00	3.971E+15	3.971E+15	3.971E+15	3.963E+15	3.946E+15
RB 92	0.000E+00	2.035E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	1.075E+16	1.052E+16	9.943E+15	2.738E+15	3.406E+14

OUTPUT UNIT =
6 PAGE 118
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

Y 93	0.000E+00	9.612E+15	9.085E+15	8.483E+15	4.271E+15	1.874E+15
RB 94	0.000E+00	8.810E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	1.415E+16	1.709E+15	1.937E+14	6.770E+04	3.040E-07
Y 96	0.000E+00	2.351E+16	3.357E+08	4.710E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	5.404E+15	5.187E+15	4.979E+15	3.304E+15	2.020E+15
NB 97	0.000E+00	3.398E+15	3.347E+15	3.261E+15	2.215E+15	1.269E+15
NB 98	0.000E+00	1.744E+16	2.100E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	1.363E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00

MO 99	0.000E+00	2.930E+15	2.900E+15	2.870E+15	2.584E+15	2.278E+15
ZR101	0.000E+00	1.444E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC102	0.000E+00	1.180E+16	2.860E+14	6.747E+12	3.608E-04	0.000E+00
TC104	0.000E+00	8.804E+15	9.775E+14	9.948E+13	1.185E+04	1.461E-08
RH106	0.000E+00	2.061E+15	1.820E+15	1.820E+15	1.818E+15	1.817E+15
SN130	0.000E+00	6.027E+15	8.407E+10	1.173E+06	0.000E+00	0.000E+00
TE132	0.000E+00	6.687E+15	6.631E+15	6.572E+15	6.015E+15	5.408E+15
I132	0.000E+00	2.938E+15	2.925E+15	2.909E+15	2.687E+15	2.417E+15
I133	0.000E+00	3.429E+15	3.367E+15	3.273E+15	2.356E+15	1.579E+15
I134	0.000E+00	6.239E+15	4.451E+15	2.612E+15	1.801E+12	1.451E+08
TE135	0.000E+00	1.138E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	2.774E+15	2.498E+15	2.250E+15	7.885E+14	2.241E+14
XE135	0.000E+00	7.096E+14	8.147E+14	8.946E+14	9.740E+14	5.857E+14
I136	0.000E+00	9.627E+15	1.001E+03	8.788E-11	0.000E+00	0.000E+00
I136M	0.000E+00	6.237E+15	1.722E-08	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.608E+16	3.275E+11	6.300E+06	0.000E+00	0.000E+00
I138	0.000E+00	7.679E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	0.000E+00	5.273E+15	2.807E+14	1.492E+13	2.674E+00	1.353E-15
CS138	0.000E+00	1.122E+16	4.874E+15	1.434E+15	3.582E+09	6.653E+02
XE139	0.000E+00	1.222E+16	4.522E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.553E+16	1.968E+14	2.358E+12	1.438E-07	0.000E+00
BA139	0.000E+00	7.780E+15	5.316E+15	3.222E+15	2.109E+13	5.051E+10
BA140	0.000E+00	1.997E+15	1.993E+15	1.988E+15	1.944E+15	1.892E+15
LA140	0.000E+00	4.381E+15	4.380E+15	4.378E+15	4.358E+15	4.319E+15
BA141	0.000E+00	6.967E+15	7.273E+14	7.463E+13	9.662E+03	1.317E-08
LA141	0.000E+00	7.645E+15	6.888E+15	5.823E+15	9.995E+14	1.204E+14
CE141	0.000E+00	7.578E+14	7.578E+14	7.576E+14	7.533E+14	7.457E+14
LA142	0.000E+00	6.641E+15	4.765E+15	3.053E+15	3.439E+13	1.579E+11
CE143	0.000E+00	9.871E+15	9.732E+15	9.533E+15	7.727E+15	6.005E+15
PR143	0.000E+00	1.977E+15	1.977E+15	1.976E+15	1.971E+15	1.956E+15
PR144	0.000E+00	6.508E+15	6.461E+15	6.457E+15	6.450E+15	6.442E+15
CE145	0.000E+00	9.156E+15	1.049E+10	1.000E+04	0.000E+00	0.000E+00
PR145	0.000E+00	3.368E+15	3.029E+15	2.697E+15	8.464E+14	2.107E+14
PM148	0.000E+00	7.538E+14	7.498E+14	7.458E+14	7.070E+14	6.631E+14
PM149	0.000E+00	7.696E+14	7.655E+14	7.595E+14	6.737E+14	5.761E+14
SM153	0.000E+00	1.759E+15	1.735E+15	1.709E+15	1.473E+15	1.233E+15

OUTPUT UNIT =
6 PAGE 119
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

PRINCIPAL PHOTON SOURCES IN GROUP 5,PHOTONS/SEC
MEAN ENERGY= 0.085MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 87	0.000E+00	2.523E+15	1.478E+15	8.572E+14	3.681E+12	5.308E+09

BR 88	0.000E+00	4.595E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	5.910E+15	5.051E+15	3.997E+15	3.483E+14	1.860E+13
KR 89	0.000E+00	4.573E+15	9.313E+09	1.868E+04	0.000E+00	0.000E+00
SR 89	0.000E+00	1.818E+15	1.818E+15	1.817E+15	1.806E+15	1.794E+15
KR 90	0.000E+00	4.175E+15	1.245E-18	0.000E+00	0.000E+00	0.000E+00
RB 90	0.000E+00	6.695E+15	1.177E+10	6.746E+05	0.000E+00	0.000E+00
SR 91	0.000E+00	2.538E+15	2.363E+15	2.197E+15	1.059E+15	4.413E+14
Y 91	0.000E+00	2.385E+15	2.385E+15	2.385E+15	2.380E+15	2.370E+15
RB 92	0.000E+00	1.364E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	6.925E+15	6.772E+15	6.403E+15	1.763E+15	2.194E+14
Y 93	0.000E+00	6.077E+15	5.744E+15	5.363E+15	2.700E+15	1.185E+15
RB 94	0.000E+00	5.940E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	9.138E+15	1.104E+15	1.251E+14	4.374E+04	1.964E-07
Y 96	0.000E+00	1.559E+16	2.226E+08	3.123E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	3.295E+15	3.162E+15	3.035E+15	2.014E+15	1.231E+15
NB 97	0.000E+00	1.981E+15	1.951E+15	1.901E+15	1.292E+15	7.398E+14
NB 98	0.000E+00	1.136E+16	1.368E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	8.779E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	1.690E+15	1.672E+15	1.655E+15	1.490E+15	1.313E+15
ZR101	0.000E+00	9.585E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	4.550E+15	2.673E+14	1.554E+13	6.876E+00	1.029E-14
TC102	0.000E+00	7.579E+15	1.837E+14	4.335E+12	2.318E-04	0.000E+00
TC104	0.000E+00	5.685E+15	6.312E+14	6.424E+13	7.651E+03	9.437E-09
RH106	0.000E+00	1.322E+15	1.167E+15	1.167E+15	1.166E+15	1.165E+15
I131	0.000E+00	1.199E+15	1.198E+15	1.195E+15	1.159E+15	1.114E+15
I132	0.000E+00	1.738E+15	1.731E+15	1.721E+15	1.590E+15	1.430E+15
TE133M	0.000E+00	4.212E+15	1.990E+15	9.392E+14	5.158E+11	6.312E+07
I133	0.000E+00	1.978E+15	1.943E+15	1.888E+15	1.359E+15	9.110E+14
XE133	0.000E+00	2.776E+16	2.776E+16	2.775E+16	2.749E+16	2.675E+16
TE134	0.000E+00	1.433E+16	5.299E+15	1.959E+15	9.356E+10	6.108E+05
I134	0.000E+00	3.762E+15	2.684E+15	1.575E+15	1.086E+12	8.748E+07
TE135	0.000E+00	7.507E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	1.589E+15	1.431E+15	1.289E+15	4.517E+14	1.284E+14
I136	0.000E+00	6.327E+15	6.581E+02	5.775E-11	0.000E+00	0.000E+00
I136M	0.000E+00	4.081E+15	1.127E-08	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.045E+16	2.128E+11	4.093E+06	0.000E+00	0.000E+00
I138	0.000E+00	5.131E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	7.101E+15	3.086E+15	9.079E+14	2.268E+09	4.212E+02
XE139	0.000E+00	8.023E+15	2.969E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.007E+16	1.277E+14	1.530E+12	9.332E-08	0.000E+00
BA139	0.000E+00	4.817E+15	3.291E+15	1.995E+15	1.306E+13	3.127E+10
BA140	0.000E+00	1.104E+15	1.102E+15	1.099E+15	1.075E+15	1.046E+15
LA140	0.000E+00	2.577E+15	2.577E+15	2.576E+15	2.564E+15	2.541E+15
BA141	0.000E+00	4.329E+15	4.518E+14	4.637E+13	6.003E+03	8.184E-09

OUTPUT UNIT =
6 PAGE 120
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

LA141	0.000E+00	4.775E+15	4.302E+15	3.637E+15	6.243E+14	7.522E+13
BA142	0.000E+00	8.481E+15	1.742E+14	3.573E+12	4.708E-05	2.497E-25
LA142	0.000E+00	4.137E+15	2.968E+15	1.902E+15	2.142E+13	9.837E+10
CE143	0.000E+00	1.548E+15	1.527E+15	1.495E+15	1.212E+15	9.421E+14
PR143	0.000E+00	1.099E+15	1.099E+15	1.099E+15	1.096E+15	1.087E+15
CE144	0.000E+00	1.033E+15	1.033E+15	1.033E+15	1.032E+15	1.031E+15
PR144	0.000E+00	4.127E+15	4.098E+15	4.095E+15	4.090E+15	4.085E+15
PR145	0.000E+00	2.106E+15	1.894E+15	1.687E+15	5.294E+14	1.318E+14
ND147	0.000E+00	7.916E+15	7.902E+15	7.882E+15	7.679E+15	7.442E+15

PRINCIPAL PHOTON SOURCES IN GROUP 6,PHOTONS/SEC
MEAN ENERGY= 0.125MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
RB 88	0.000E+00	4.189E+15	3.580E+15	2.833E+15	2.469E+14	1.318E+13
KR 90	0.000E+00	1.670E+16	4.981E-18	0.000E+00	0.000E+00	0.000E+00
RB 90	0.000E+00	4.723E+15	8.303E+09	4.760E+05	0.000E+00	0.000E+00
Y 91	0.000E+00	1.536E+15	1.536E+15	1.536E+15	1.533E+15	1.526E+15
KR 92	0.000E+00	7.321E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	0.000E+00	9.810E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	4.780E+15	4.674E+15	4.420E+15	1.217E+15	1.514E+14
Y 93	0.000E+00	4.142E+15	3.915E+15	3.656E+15	1.840E+15	8.077E+14
RB 94	0.000E+00	4.297E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	6.384E+15	7.712E+14	8.740E+13	3.056E+04	1.372E-07
Y 96	0.000E+00	1.110E+16	1.585E+08	2.224E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	2.188E+15	2.100E+15	2.015E+15	1.337E+15	8.175E+14
NB 98	0.000E+00	7.993E+15	9.625E-20	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	6.079E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	4.935E+15	4.884E+15	4.833E+15	4.351E+15	3.836E+15
TC 99M	0.000E+00	6.138E+16	6.134E+16	6.124E+16	5.800E+16	5.211E+16
ZR101	0.000E+00	6.836E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC102	0.000E+00	5.266E+15	1.276E+14	3.012E+12	1.610E-04	0.000E+00
TC104	0.000E+00	4.027E+15	4.471E+14	4.550E+13	5.419E+03	6.684E-09
TE131	0.000E+00	2.800E+16	1.354E+16	4.554E+15	7.571E+14	5.738E+14
SB132M	0.000E+00	4.483E+15	2.244E+11	1.124E+07	0.000E+00	0.000E+00
TE132	0.000E+00	1.832E+15	1.817E+15	1.801E+15	1.648E+15	1.482E+15
I134	0.000E+00	6.581E+15	4.696E+15	2.755E+15	1.900E+12	1.530E+08
TE135	0.000E+00	5.293E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	4.436E+15	4.614E+02	4.049E-11	0.000E+00	0.000E+00
XE137	0.000E+00	7.260E+15	1.479E+11	2.844E+06	0.000E+00	0.000E+00
CS138	0.000E+00	6.125E+15	2.661E+15	7.831E+14	1.956E+09	3.633E+02
XE139	0.000E+00	5.873E+15	2.173E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	6.969E+15	8.833E+13	1.058E+12	6.456E-08	0.000E+00
BA139	0.000E+00	3.218E+15	2.199E+15	1.333E+15	8.725E+12	2.089E+10
LA140	0.000E+00	2.114E+15	2.114E+15	2.113E+15	2.104E+15	2.085E+15
LA141	0.000E+00	3.201E+15	2.883E+15	2.438E+15	4.184E+14	5.042E+13

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CE141      0.000E+00 3.697E+16 3.697E+16 3.696E+16 3.675E+16 3.638E+16
LA142      0.000E+00 2.859E+15 2.051E+15 1.314E+15 1.480E+13 6.799E+10
CE144      0.000E+00 4.833E+15 4.832E+15 4.832E+15 4.827E+15 4.821E+15
PR144      0.000E+00 2.817E+15 2.797E+15 2.795E+15 2.792E+15 2.789E+15
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ND149      0.000E+00 2.789E+15 1.909E+15 1.279E+15 2.327E+13 1.900E+11
SM153      0.000E+00 2.282E+15 2.250E+15 2.217E+15 1.911E+15 1.599E+15
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PRINCIPAL PHOTON SOURCES IN GROUP 7,PHOTONS/SEC
MEAN ENERGY= 0.225MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 85M	0.000E+00	5.952E+15	5.161E+15	4.421E+15	9.413E+14	1.471E+14
KR 88	0.000E+00	8.721E+15	6.839E+15	5.357E+15	4.662E+14	2.490E+13
RB 88	0.000E+00	6.560E+15	5.606E+15	4.437E+15	3.866E+14	2.065E+13
KR 89	0.000E+00	1.364E+16	2.778E+10	5.572E+04	0.000E+00	0.000E+00
SR 89	0.000E+00	1.499E+15	1.499E+15	1.498E+15	1.489E+15	1.479E+15
KR 90	0.000E+00	1.012E+16	3.019E-18	0.000E+00	0.000E+00	0.000E+00
SR 91	0.000E+00	3.370E+15	3.138E+15	2.917E+15	1.406E+15	5.859E+14
Y 91	0.000E+00	1.988E+15	1.988E+15	1.988E+15	1.984E+15	1.976E+15
RB 92	0.000E+00	1.596E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	7.206E+15	7.047E+15	6.663E+15	1.835E+15	2.283E+14
Y 93	0.000E+00	1.113E+16	1.052E+16	9.822E+15	4.945E+15	2.170E+15
Y 94	0.000E+00	9.764E+15	1.179E+15	1.337E+14	4.673E+04	2.098E-07
Y 96	0.000E+00	1.777E+16	2.538E+08	3.560E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	4.245E+15	4.075E+15	3.911E+15	2.595E+15	1.586E+15
NB 98	0.000E+00	1.235E+16	1.487E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	9.179E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	4.655E+15	4.607E+15	4.559E+15	4.104E+15	3.618E+15
ZR101	0.000E+00	6.072E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	1.377E+16	8.087E+14	4.703E+13	2.081E+01	3.113E-14
RU105	0.000E+00	3.214E+15	2.842E+15	2.432E+15	5.102E+14	7.833E+13
RH106	0.000E+00	1.355E+15	1.197E+15	1.197E+15	1.196E+15	1.195E+15
SN130	0.000E+00	1.098E+16	1.532E+11	2.138E+06	0.000E+00	0.000E+00
I131	0.000E+00	3.032E+15	3.030E+15	3.023E+15	2.930E+15	2.819E+15
TE132	0.000E+00	4.707E+16	4.667E+16	4.626E+16	4.234E+16	3.807E+16
I132	0.000E+00	3.029E+15	3.016E+15	2.999E+15	2.770E+15	2.492E+15
TE133M	0.000E+00	1.101E+16	5.202E+15	2.455E+15	1.348E+12	1.650E+08
TE134	0.000E+00	4.922E+16	1.821E+16	6.732E+15	3.215E+11	2.099E+06
I134	0.000E+00	6.033E+15	4.304E+15	2.526E+15	1.741E+12	1.403E+08
TE135	0.000E+00	1.339E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	5.930E+15	5.342E+15	4.810E+15	1.686E+15	4.791E+14
XE135	0.000E+00	2.342E+16	2.689E+16	2.953E+16	3.215E+16	1.933E+16

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 I136M     0.000E+00 1.760E+16 4.861E-08 0.000E+00 0.000E+00 0.000E+00
XE137      0.000E+00 1.126E+16 2.294E+11 4.412E+06 0.000E+00 0.000E+00
XE138      0.000E+00 3.246E+16 1.728E+15 9.182E+13 1.646E+01 8.329E-15
CS138      0.000E+00 8.812E+15 3.829E+15 1.127E+15 2.814E+09 5.227E+02
XE139      0.000E+00 6.607E+16 2.445E-11 0.000E+00 0.000E+00 0.000E+00
CS139      0.000E+00 1.076E+16 1.364E+14 1.635E+12 9.971E-08 0.000E+00
BA139      0.000E+00 1.598E+16 1.092E+16 6.620E+15 4.334E+13 1.038E+11
BA140      0.000E+00 3.469E+15 3.461E+15 3.454E+15 3.377E+15 3.286E+15
LA140      0.000E+00 2.826E+15 2.825E+15 2.825E+15 2.812E+15 2.786E+15
BA141      0.000E+00 4.825E+16 5.037E+15 5.169E+14 6.692E+04 9.123E-08
LA141      0.000E+00 4.516E+15 4.068E+15 3.440E+15 5.904E+14 7.114E+13
BA142      0.000E+00 2.637E+16 5.416E+14 1.111E+13 1.464E-04 7.764E-25
□
         OUTPUT UNIT =
6                        PAGE  122
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
LA142      0.000E+00 3.966E+15 2.846E+15 1.823E+15 2.054E+13 9.431E+10
CE143      0.000E+00 3.732E+16 3.680E+16 3.605E+16 2.922E+16 2.271E+16
PR144      0.000E+00 4.115E+15 4.085E+15 4.082E+15 4.078E+15 4.073E+15
ND149      0.000E+00 9.512E+15 6.512E+15 4.363E+15 7.938E+13 6.480E+11

                    PRINCIPAL PHOTON SOURCES IN GROUP  8,PHOTONS/SEC
                     MEAN ENERGY= 0.375MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 87      0.000E+00 1.341E+16 7.858E+15 4.556E+15 1.956E+13 2.821E+10
RB 88      0.000E+00 3.670E+15 3.136E+15 2.482E+15 2.163E+14 1.155E+13
KR 89      0.000E+00 7.198E+15 1.466E+10 2.940E+04 0.000E+00 0.000E+00
 Y 91      0.000E+00 7.763E+14 7.763E+14 7.762E+14 7.748E+14 7.715E+14
RB 92      0.000E+00 9.595E+15 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 92      0.000E+00 2.199E+15 1.704E+15 1.319E+15 1.022E+14 4.748E+12
 Y 92      0.000E+00 5.304E+15 5.187E+15 4.904E+15 1.351E+15 1.680E+14
 Y 93      0.000E+00 2.979E+15 2.815E+15 2.629E+15 1.323E+15 5.808E+14
 Y 94      0.000E+00 6.635E+15 8.015E+14 9.083E+13 3.175E+04 1.426E-07
 Y 96      0.000E+00 1.023E+16 1.460E+08 2.049E+00 0.000E+00 0.000E+00
ZR 97      0.000E+00 2.904E+15 2.787E+15 2.675E+15 1.775E+15 1.085E+15
NB 98      0.000E+00 6.804E+15 8.193E-20 0.000E+00 0.000E+00 0.000E+00
MO 99      0.000E+00 1.227E+15 1.214E+15 1.201E+15 1.082E+15 9.536E+14
ZR101      0.000E+00 1.241E+16 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC101      0.000E+00 4.582E+16 1.001E+16 9.746E+14 1.557E+03 3.141E-12
TC104      0.000E+00 3.802E+16 4.221E+15 4.296E+14 5.116E+04 6.311E-08
RU105      0.000E+00 6.338E+15 5.603E+15 4.794E+15 1.006E+15 1.544E+14
RH105      0.000E+00 5.862E+15 5.864E+15 5.849E+15 5.224E+15 4.220E+15
RH107      0.000E+00 1.258E+16 2.333E+15 3.433E+14 1.630E+06 1.675E-04
RH108      0.000E+00 6.050E+15 6.262E+11 6.067E+07 0.000E+00 0.000E+00
SB128M     0.000E+00 5.111E+15 2.843E+15 1.411E+15 1.225E+12 2.598E+08
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 I131      0.000E+00 2.911E+16 2.909E+16 2.903E+16 2.813E+16 2.706E+16
 I132      0.000E+00 2.144E+15 2.134E+15 2.123E+15 1.960E+15 1.764E+15
TE133      0.000E+00 4.289E+16 3.796E+15 1.123E+15 5.869E+11 7.183E+07
TE133M     0.000E+00 6.107E+15 2.885E+15 1.362E+15 7.479E+11 9.153E+07
 I133      0.000E+00 1.148E+15 1.128E+15 1.096E+15 7.887E+14 5.288E+14
TE134      0.000E+00 1.507E+16 5.575E+15 2.061E+15 9.844E+10 6.426E+05
 I134      0.000E+00 1.354E+16 9.661E+15 5.669E+15 3.908E+12 3.148E+08
 I135      0.000E+00 4.572E+15 4.119E+15 3.709E+15 1.300E+15 3.694E+14
 I136M     0.000E+00 2.721E+16 7.514E-08 0.000E+00 0.000E+00 0.000E+00
XE137      0.000E+00 6.093E+15 1.241E+11 2.387E+06 0.000E+00 0.000E+00
XE138      0.000E+00 2.325E+16 1.238E+15 6.577E+13 1.179E+01 5.966E-15
CS138      0.000E+00 8.084E+15 3.513E+15 1.034E+15 2.582E+09 4.795E+02
XE139      0.000E+00 8.915E+15 3.299E-12 0.000E+00 0.000E+00 0.000E+00
BA140      0.000E+00 5.262E+15 5.250E+15 5.238E+15 5.121E+15 4.984E+15
LA140      0.000E+00 1.430E+16 1.430E+16 1.430E+16 1.423E+16 1.410E+16
BA141      0.000E+00 2.497E+16 2.606E+15 2.674E+14 3.462E+04 4.720E-08
LA141      0.000E+00 2.093E+15 1.885E+15 1.594E+15 2.736E+14 3.297E+13
BA142      0.000E+00 1.139E+16 2.340E+14 4.799E+12 6.323E-05 3.353E-25
LA142      0.000E+00 2.460E+15 1.765E+15 1.131E+15 1.274E+13 5.851E+10
CE143      0.000E+00 2.480E+15 2.445E+15 2.395E+15 1.941E+15 1.509E+15
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         OUTPUT UNIT =
6                          PAGE  123
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
PR144      0.000E+00 2.032E+15 2.018E+15 2.016E+15 2.014E+15 2.011E+15
CE145      0.000E+00 9.072E+15 1.039E+10 9.909E+03 0.000E+00 0.000E+00
CE146      0.000E+00 8.739E+15 4.710E+14 2.518E+13 4.803E+00 2.618E-15
ND147      0.000E+00 1.089E+15 1.087E+15 1.085E+15 1.057E+15 1.024E+15
PR148      0.000E+00 1.601E+16 3.170E+08 4.447E+00 0.000E+00 0.000E+00
ND149      0.000E+00 2.858E+15 1.957E+15 1.311E+15 2.385E+13 1.947E+11

                    PRINCIPAL PHOTON SOURCES IN GROUP  9,PHOTONS/SEC
                     MEAN ENERGY= 0.575MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 89      0.000E+00 1.527E+16 3.110E+10 6.238E+04 0.000E+00 0.000E+00
KR 90      0.000E+00 1.647E+16 4.911E-18 0.000E+00 0.000E+00 0.000E+00
SR 91      0.000E+00 8.583E+15 7.993E+15 7.430E+15 3.582E+15 1.492E+15
 Y 91M     0.000E+00 2.835E+16 2.772E+16 2.636E+16 1.296E+16 5.398E+15
ZR 97      0.000E+00 5.027E+15 4.825E+15 4.631E+15 3.073E+15 1.878E+15
NB 97      0.000E+00 7.412E+16 7.302E+16 7.113E+16 4.833E+16 2.768E+16
MO101      0.000E+00 2.860E+16 1.680E+15 9.770E+13 4.322E+01 6.467E-14
TC102      0.000E+00 4.154E+16 1.007E+15 2.376E+13 1.271E-03 0.000E+00
RU103      0.000E+00 4.337E+16 4.334E+16 4.331E+16 4.299E+16 4.262E+16
TC104      0.000E+00 1.753E+16 1.946E+15 1.981E+14 2.359E+04 2.910E-08
RU105      0.000E+00 1.328E+16 1.174E+16 1.005E+16 2.108E+15 3.237E+14
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RH106	0.000E+00	3.764E+15	3.323E+15	3.323E+15	3.320E+15	3.317E+15
SB131	0.000E+00	1.333E+16	2.224E+15	3.646E+14	5.115E+06	1.929E-03
I131	0.000E+00	3.157E+15	3.155E+15	3.147E+15	3.051E+15	2.934E+15
SB132	0.000E+00	2.317E+16	9.099E+09	3.224E+03	0.000E+00	0.000E+00
SB132M	0.000E+00	1.680E+16	8.409E+11	4.210E+07	0.000E+00	0.000E+00
I132	0.000E+00	8.959E+16	8.920E+16	8.870E+16	8.193E+16	7.370E+16
TE133M	0.000E+00	1.384E+16	6.537E+15	3.086E+15	1.695E+12	2.074E+08
I133	0.000E+00	6.432E+16	6.316E+16	6.138E+16	4.418E+16	2.962E+16
TE134	0.000E+00	2.424E+16	8.966E+15	3.315E+15	1.583E+11	1.033E+06
I134	0.000E+00	4.242E+16	3.027E+16	1.776E+16	1.224E+13	9.863E+08
CS134	0.000E+00	2.531E+15	2.531E+15	2.531E+15	2.530E+15	2.529E+15
TE135	0.000E+00	3.290E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	5.980E+15	5.387E+15	4.851E+15	1.700E+15	4.832E+14
XE135M	0.000E+00	1.085E+16	7.901E+15	6.992E+15	2.447E+15	6.954E+14
XE137	0.000E+00	2.022E+16	4.118E+11	7.921E+06	0.000E+00	0.000E+00
I138	0.000E+00	2.635E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	2.797E+16	1.215E+16	3.576E+15	8.932E+09	1.659E+03
BA140	0.000E+00	1.275E+16	1.272E+16	1.269E+16	1.241E+16	1.207E+16
LA140	0.000E+00	2.550E+16	2.549E+16	2.548E+16	2.537E+16	2.514E+16
BA141	0.000E+00	1.793E+16	1.872E+15	1.921E+14	2.487E+04	3.391E-08
LA142	0.000E+00	3.922E+16	2.814E+16	1.803E+16	2.031E+14	9.326E+11
CE143	0.000E+00	5.577E+15	5.498E+15	5.386E+15	4.366E+15	3.393E+15
ND147	0.000E+00	3.462E+15	3.456E+15	3.447E+15	3.358E+15	3.254E+15

OUTPUT UNIT =
6 PAGE 124
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

PRINCIPAL PHOTON SOURCES IN GROUP 10,PHOTONS/SEC
MEAN ENERGY= 0.850MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 88	0.000E+00	2.039E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	0.000E+00	1.133E+16	2.308E+10	4.629E+04	0.000E+00	0.000E+00
RB 90	0.000E+00	1.516E+16	2.664E+10	1.527E+06	0.000E+00	0.000E+00
SR 91	0.000E+00	1.377E+16	1.283E+16	1.193E+16	5.749E+15	2.395E+15
Y 92	0.000E+00	1.070E+16	1.046E+16	9.891E+15	2.724E+15	3.388E+14
RB 94	0.000E+00	1.809E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	5.276E+16	6.374E+15	7.224E+14	2.525E+05	1.134E-06
ZR 95	0.000E+00	6.008E+16	6.006E+16	6.003E+16	5.976E+16	5.944E+16
NB 95	0.000E+00	6.287E+16	6.287E+16	6.287E+16	6.286E+16	6.285E+16
NB 97M	0.000E+00	5.290E+16	5.073E+16	4.869E+16	3.231E+16	1.975E+16
MO 99	0.000E+00	1.038E+16	1.027E+16	1.016E+16	9.148E+15	8.065E+15
TC104	0.000E+00	1.141E+16	1.267E+15	1.289E+14	1.535E+04	1.894E-08
RU105	0.000E+00	1.507E+16	1.332E+16	1.140E+16	2.392E+15	3.673E+14
SB128M	0.000E+00	1.162E+16	6.463E+15	3.207E+15	2.785E+12	5.906E+08

SB129	0.000E+00	9.257E+15	7.995E+15	6.810E+15	1.368E+15	1.995E+14
SB130M	0.000E+00	3.480E+16	9.816E+13	1.341E+11	0.000E+00	0.000E+00
SB131	0.000E+00	2.746E+16	4.583E+15	7.514E+14	1.054E+07	3.975E-03
TE131M	0.000E+00	4.763E+15	4.675E+15	4.572E+15	3.629E+15	2.751E+15
SB132	0.000E+00	2.849E+16	1.119E+10	3.963E+03	0.000E+00	0.000E+00
SB132M	0.000E+00	1.507E+16	7.543E+11	3.777E+07	0.000E+00	0.000E+00
I132	0.000E+00	5.813E+16	5.787E+16	5.755E+16	5.316E+16	4.782E+16
TE133M	0.000E+00	5.114E+16	2.416E+16	1.140E+16	6.264E+12	7.665E+08
I133	0.000E+00	6.199E+15	6.087E+15	5.916E+15	4.258E+15	2.855E+15
TE134	0.000E+00	3.232E+16	1.195E+16	4.420E+15	2.111E+11	1.378E+06
I134	0.000E+00	1.611E+17	1.149E+17	6.745E+16	4.650E+13	3.746E+09
I135	0.000E+00	7.439E+15	6.702E+15	6.035E+15	2.115E+15	6.010E+14
LA140	0.000E+00	2.874E+16	2.874E+16	2.873E+16	2.860E+16	2.834E+16
BA142	0.000E+00	1.851E+16	3.802E+14	7.798E+12	1.027E-04	5.449E-25
LA142	0.000E+00	8.476E+15	6.082E+15	3.897E+15	4.389E+13	2.016E+11
CE143	0.000E+00	3.628E+15	3.576E+15	3.503E+15	2.840E+15	2.207E+15
CE145	0.000E+00	2.668E+16	3.055E+10	2.914E+04	0.000E+00	0.000E+00

PRINCIPAL PHOTON SOURCES IN GROUP 11,PHOTONS/SEC
MEAN ENERGY= 1.250MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 89	0.000E+00	9.862E+15	2.008E+10	4.028E+04	0.000E+00	0.000E+00
RB 89	0.000E+00	3.864E+16	3.136E+15	2.033E+14	2.663E+02	1.466E-12
KR 90	0.000E+00	1.607E+16	4.793E-18	0.000E+00	0.000E+00	0.000E+00
SR 91	0.000E+00	1.595E+16	1.485E+16	1.381E+16	6.656E+15	2.773E+15
SR 92	0.000E+00	5.723E+16	4.433E+16	3.433E+16	2.660E+15	1.235E+14
Y 92	0.000E+00	3.693E+15	3.612E+15	3.415E+15	9.405E+14	1.170E+14
Y 94	0.000E+00	9.389E+15	1.134E+15	1.285E+14	4.493E+04	2.018E-07
ZR 97	0.000E+00	3.991E+15	3.831E+15	3.677E+15	2.440E+15	1.492E+15
MO101	0.000E+00	2.278E+16	1.338E+15	7.782E+13	3.443E+01	5.151E-14

OUTPUT UNIT =
6 PAGE 125
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

TC102	0.000E+00	6.554E+15	1.589E+14	3.748E+12	2.004E-04	0.000E+00
TC104	0.000E+00	7.975E+15	8.855E+14	9.011E+13	1.073E+04	1.324E-08
SB130M	0.000E+00	8.260E+15	2.330E+13	3.183E+10	0.000E+00	0.000E+00
SB131	0.000E+00	8.188E+15	1.367E+15	2.241E+14	3.143E+06	1.185E-03
TE131M	0.000E+00	1.377E+15	1.352E+15	1.322E+15	1.049E+15	7.952E+14
I132	0.000E+00	1.248E+16	1.242E+16	1.236E+16	1.141E+16	1.027E+16
TE133	0.000E+00	1.034E+16	9.150E+14	2.707E+14	1.415E+11	1.731E+07
I133	0.000E+00	3.623E+15	3.558E+15	3.458E+15	2.489E+15	1.668E+15
I134	0.000E+00	2.734E+16	1.950E+16	1.144E+16	7.890E+12	6.356E+08
I135	0.000E+00	5.338E+16	4.808E+16	4.330E+16	1.517E+16	4.312E+15
I136	0.000E+00	3.473E+16	3.612E+03	3.170E-10	0.000E+00	0.000E+00

I136M	0.000E+00	2.261E+16	6.242E-08	0.000E+00	0.000E+00	0.000E+00
CS136	0.000E+00	1.022E+15	1.020E+15	1.017E+15	9.952E+14	9.692E+14
CS138	0.000E+00	8.521E+16	3.703E+16	1.090E+16	2.721E+10	5.055E+03
XE139	0.000E+00	6.398E+15	2.367E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	7.797E+15	9.882E+13	1.184E+12	7.223E-08	0.000E+00
BA141	0.000E+00	9.032E+15	9.427E+14	9.674E+13	1.252E+04	1.707E-08
BA142	0.000E+00	2.922E+16	6.001E+14	1.231E+13	1.622E-04	8.602E-25
LA142	0.000E+00	1.145E+16	8.215E+15	5.264E+15	5.928E+13	2.723E+11
PR144	0.000E+00	3.535E+14	3.510E+14	3.507E+14	3.504E+14	3.499E+14
PM148	0.000E+00	2.241E+15	2.229E+15	2.217E+15	2.102E+15	1.971E+15
EU156	0.000E+00	9.267E+14	9.255E+14	9.242E+14	9.099E+14	8.911E+14

PRINCIPAL PHOTON SOURCES IN GROUP 12,PHOTONS/SEC
MEAN ENERGY= 1.750MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 88	0.000E+00	2.435E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	0.000E+00	4.168E+15	3.269E+15	2.560E+15	2.228E+14	1.190E+13
RB 88	0.000E+00	7.794E+15	6.660E+15	5.271E+15	4.594E+14	2.453E+13
KR 89	0.000E+00	8.152E+15	1.660E+10	3.330E+04	0.000E+00	0.000E+00
KR 90	0.000E+00	7.642E+15	2.279E-18	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	4.294E+15	5.187E+14	5.878E+13	2.055E+04	9.228E-08
ZR 97	0.000E+00	1.120E+15	1.075E+15	1.032E+15	6.846E+14	4.185E+14
MO101	0.000E+00	8.199E+15	4.816E+14	2.801E+13	1.239E+01	1.854E-14
TC104	0.000E+00	1.109E+16	1.232E+15	1.253E+14	1.493E+04	1.842E-08
SB129	0.000E+00	1.703E+15	1.471E+15	1.253E+15	2.518E+14	3.671E+13
SB131	0.000E+00	5.417E+15	9.041E+14	1.482E+14	2.080E+06	7.842E-04
SB132	0.000E+00	2.355E+15	9.248E+08	3.276E+02	0.000E+00	0.000E+00
I132	0.000E+00	1.157E+15	1.152E+15	1.146E+15	1.058E+15	9.520E+14
TE133	0.000E+00	2.777E+15	2.457E+14	7.269E+13	3.800E+10	4.650E+06
TE133M	0.000E+00	3.339E+15	1.578E+15	7.446E+14	4.090E+11	5.005E+07
I134	0.000E+00	1.234E+16	8.805E+15	5.166E+15	3.562E+12	2.869E+08
I135	0.000E+00	1.741E+16	1.568E+16	1.412E+16	4.949E+15	1.406E+15
XE138	0.000E+00	1.325E+16	7.054E+14	3.748E+13	6.718E+00	3.400E-15
XE139	0.000E+00	4.158E+15	1.539E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	2.291E+15	2.903E+13	3.479E+11	2.122E-08	0.000E+00
LA140	0.000E+00	6.025E+16	6.024E+16	6.022E+16	5.994E+16	5.940E+16
BA141	0.000E+00	3.148E+15	3.286E+14	3.372E+13	4.366E+03	5.952E-09
LA142	0.000E+00	1.392E+16	9.985E+15	6.398E+15	7.206E+13	3.309E+11

OUTPUT UNIT =
6 PAGE 126
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

PRINCIPAL PHOTON SOURCES IN GROUP 13,PHOTONS/SEC
MEAN ENERGY= 2.250MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 88	0.000E+00	1.978E+16	1.551E+16	1.215E+16	1.058E+15	5.647E+13
KR 89	0.000E+00	2.342E+15	4.770E+09	9.567E+03	0.000E+00	0.000E+00
RB 89	0.000E+00	6.588E+15	5.346E+14	3.465E+13	4.539E+01	2.498E-13
RB 90	0.000E+00	1.417E+15	2.491E+09	1.428E+05	0.000E+00	0.000E+00
Y 93	0.000E+00	2.169E+14	2.050E+14	1.914E+14	9.637E+13	4.230E+13
Y 94	0.000E+00	1.559E+15	1.883E+14	2.134E+13	7.459E+03	3.349E-08
MO101	0.000E+00	5.533E+15	3.250E+14	1.890E+13	8.361E+00	1.251E-14
TC104	0.000E+00	2.945E+15	3.270E+14	3.328E+13	3.964E+03	4.889E-09
SB131	0.000E+00	2.609E+15	4.354E+14	7.139E+13	1.002E+06	3.777E-04
TE131M	0.000E+00	1.290E+14	1.266E+14	1.238E+14	9.827E+13	7.448E+13
I132	0.000E+00	9.226E+14	9.185E+14	9.134E+14	8.437E+14	7.589E+14
TE133M	0.000E+00	1.995E+15	9.422E+14	4.448E+14	2.443E+11	2.989E+07
I134	0.000E+00	9.169E+14	6.542E+14	3.839E+14	2.646E+11	2.132E+07
I135	0.000E+00	1.885E+15	1.698E+15	1.529E+15	5.359E+14	1.523E+14
I136	0.000E+00	6.533E+15	6.796E+02	5.964E-11	0.000E+00	0.000E+00
XE138	0.000E+00	1.371E+16	7.300E+14	3.879E+13	6.953E+00	3.519E-15
CS138	0.000E+00	1.143E+16	4.968E+15	1.462E+15	3.652E+09	6.783E+02
XE139	0.000E+00	2.743E+15	1.015E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.711E+15	2.169E+13	2.599E+11	1.585E-08	0.000E+00
LA140	0.000E+00	6.329E+14	6.328E+14	6.326E+14	6.297E+14	6.240E+14
LA142	0.000E+00	2.245E+16	1.611E+16	1.032E+16	1.163E+14	5.340E+11
PR144	0.000E+00	3.195E+14	3.172E+14	3.170E+14	3.167E+14	3.163E+14
EU156	0.000E+00	3.429E+14	3.424E+14	3.420E+14	3.367E+14	3.297E+14

PRINCIPAL PHOTON SOURCES IN GROUP 14,PHOTONS/SEC
MEAN ENERGY= 2.750MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 87	0.000E+00	2.886E+15	1.691E+15	9.807E+14	4.211E+12	6.073E+09
BR 88	0.000E+00	1.622E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	0.000E+00	2.453E+14	1.923E+14	1.507E+14	1.311E+13	7.002E+11
RB 88	0.000E+00	7.632E+14	6.522E+14	5.161E+14	4.498E+13	2.402E+12
KR 89	0.000E+00	2.235E+15	4.551E+09	9.129E+03	0.000E+00	0.000E+00
RB 89	0.000E+00	4.741E+15	3.848E+14	2.494E+13	3.267E+01	1.798E-13
KR 90	0.000E+00	5.869E+14	1.751E-19	0.000E+00	0.000E+00	0.000E+00
RB 90M	0.000E+00	1.493E+15	1.013E+11	6.384E+06	0.000E+00	0.000E+00
RB 92	0.000E+00	7.702E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	8.450E+14	1.021E+14	1.157E+13	4.044E+03	1.816E-08
TC104	0.000E+00	2.622E+15	2.911E+14	2.962E+13	3.528E+03	4.351E-09
I136	0.000E+00	4.023E+15	4.185E+02	3.672E-11	0.000E+00	0.000E+00
CS138	0.000E+00	5.710E+15	2.481E+15	7.301E+14	1.824E+09	3.387E+02
XE139	0.000E+00	1.547E+15	5.725E-13	0.000E+00	0.000E+00	0.000E+00

CS139	0.000E+00	8.418E+14	1.067E+13	1.278E+11	7.798E-09	0.000E+00
LA140	0.000E+00	2.294E+15	2.293E+15	2.293E+15	2.282E+15	2.262E+15
LA142	0.000E+00	1.354E+16	9.712E+15	6.223E+15	7.009E+13	3.219E+11

OUTPUT UNIT =
6 PAGE 127
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

PRINCIPAL PHOTON SOURCES IN GROUP 15,PHOTONS/SEC
MEAN ENERGY= 3.500MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 84	0.000E+00	1.391E+15	4.190E+14	1.133E+14	2.368E+08	3.620E+01
KR 87	0.000E+00	1.139E+14	6.673E+13	3.869E+13	1.661E+11	2.396E+08
BR 88	0.000E+00	2.583E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	2.205E+14	1.884E+14	1.491E+14	1.300E+13	6.940E+11
KR 89	0.000E+00	3.821E+15	7.783E+09	1.561E+04	0.000E+00	0.000E+00
RB 89	0.000E+00	5.916E+14	4.801E+13	3.112E+12	4.077E+00	2.244E-14
RB 90	0.000E+00	7.311E+15	1.285E+10	7.367E+05	0.000E+00	0.000E+00
RB 90M	0.000E+00	2.162E+15	1.466E+11	9.243E+06	0.000E+00	0.000E+00
RB 92	0.000E+00	5.852E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	3.310E+12	3.237E+12	3.061E+12	8.430E+11	1.049E+11
RB 94	0.000E+00	3.401E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC104	0.000E+00	1.402E+15	1.556E+14	1.584E+13	1.886E+03	2.326E-09
RH106	0.000E+00	3.148E+11	2.779E+11	2.779E+11	2.777E+11	2.774E+11
I136	0.000E+00	7.049E+14	7.332E+01	6.434E-12	0.000E+00	0.000E+00
CS138	0.000E+00	3.787E+14	1.646E+14	4.842E+13	1.210E+08	2.246E+01
XE139	0.000E+00	3.351E+14	1.240E-13	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	4.596E+14	5.824E+12	6.979E+10	4.257E-09	0.000E+00
LA140	0.000E+00	1.886E+13	1.886E+13	1.885E+13	1.877E+13	1.860E+13
LA142	0.000E+00	4.889E+15	3.508E+15	2.248E+15	2.532E+13	1.163E+11

PRINCIPAL PHOTON SOURCES IN GROUP 16,PHOTONS/SEC
MEAN ENERGY= 5.000MEV

NUCLIDE	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 84	0.000E+00	2.172E+13	6.540E+12	1.769E+12	3.697E+06	5.650E-01
BR 88	0.000E+00	3.176E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	5.066E+13	4.329E+13	3.426E+13	2.986E+12	1.594E+11
KR 89	0.000E+00	2.819E+14	5.742E+08	1.152E+03	0.000E+00	0.000E+00
RB 89	0.000E+00	2.589E+13	2.101E+12	1.362E+11	1.784E-01	9.819E-16
RB 90	0.000E+00	8.461E+15	1.487E+10	8.526E+05	0.000E+00	0.000E+00
RB 90M	0.000E+00	3.436E+14	2.330E+10	1.469E+06	0.000E+00	0.000E+00
RB 92	0.000E+00	1.403E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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CS138      0.000E+00 1.041E+13 4.525E+12 1.332E+12 3.326E+06 6.178E-01

                    PRINCIPAL PHOTON SOURCES IN GROUP 17,PHOTONS/SEC
                     MEAN ENERGY= 7.000MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

RB 92      0.000E+00 1.106E+14 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 94      0.000E+00 6.620E+12 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I136      0.000E+00 1.427E+08 1.484E-05 1.303E-18 0.000E+00 0.000E+00
CE142      0.000E+00 2.052E-06 2.052E-06 2.052E-06 2.053E-06 2.053E-06
SM147      0.000E+00 8.263E-08 8.264E-08 8.265E-08 8.277E-08 8.292E-08
□
         OUTPUT UNIT =
6                        PAGE  128
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

                    PRINCIPAL PHOTON SOURCES IN GROUP 18,PHOTONS/SEC
                     MEAN ENERGY= 9.500MEV

NUCLIDE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

RB 94      0.000E+00 2.389E+10 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE142      0.000E+00 1.298E-07 1.298E-07 1.298E-07 1.298E-07 1.298E-07
SM147      0.000E+00 5.225E-09 5.226E-09 5.226E-09 5.234E-09 5.243E-09
□
         OUTPUT UNIT =
6                        PAGE  129
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                                                REACTIVITY AND BURNUP DAT
A
                         BASIS=17X17 PWR ASSEMBLY, 4.236% UO2, 19157 M
WD/MTIHM, 1 CYCLE

           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

TIME, SEC   0.00E+00  3.60E+03  7.20E+03  4.32E+04  8.64E+04
NEUT. FLUX  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
SP POW,MW   0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
BURNUP,MWD  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
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K INFINITY   0.00000   1.13321   1.13062   1.12802   1.14061
NEUT PRODN  0.00E+00  4.64E+03  4.64E+03  4.64E+03  4.64E+03
NEUT DESTN  0.00E+00  4.09E+03  4.10E+03  4.11E+03  4.07E+03
TOT BURNUP  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
AVG N FLUX  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00
AVG SP POW  0.00E+00  0.00E+00  0.00E+00  0.00E+00  0.00E+00



SIZE OF MMAX(I): MMAX= 1  #= 876    MMAX= 2  #= 431    MMAX= 3  #= 143
    MMAX= 4  #=  51
MMAX= 5  #=  86    MMAX= 6  #=  58
MMAX= 7  #=  44    MMAX= 8  #=   0    MMAX= 9  #=   0    MMAX=10  #=
 0    MMAX=11  #=   0
MMAX=12  #=   0

THE NUMBER OF NON-ZERO TERMS IN A=6473
THE NUMBER OF NON-ZERO FISSION PRODUCT YIELDS=3254
ILITE= 688     IACT= 129     IFP= 879     ITOT=1696
THE NUMBER OF NON-ZERO NATURAL ABUNDANCES= 437
THE NUMBER OF NON-ZERO PHOTON YIELDS= 7903
THE MAXIMUM NUMBER OF TERMS IN AP=  983
□
         OUTPUT UNIT =
6                        PAGE  130
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □


ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  1      1.432E+00 1.432E+00 1.432E+00 1.432E+00 1.432E+00
 H  2      1.173E-03 1.173E-03 1.173E-03 1.173E-03 1.173E-03
 H  3      7.754E-03 7.754E-03 7.754E-03 7.754E-03 7.753E-03
HE  3      9.346E-05 9.351E-05 9.356E-05 9.406E-05 9.465E-05
HE  4      5.780E-01 5.780E-01 5.780E-01 5.780E-01 5.780E-01
LI  6      1.423E-02 1.423E-02 1.423E-02 1.423E-02 1.423E-02
LI  7      5.005E-01 5.005E-01 5.005E-01 5.005E-01 5.005E-01
BE  9      1.993E-04 1.993E-04 1.993E-04 1.993E-04 1.993E-04
 B 10      4.468E-03 4.468E-03 4.468E-03 4.468E-03 4.468E-03
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 B 11      4.627E-01 4.627E-01 4.627E-01 4.627E-01 4.627E-01
 C 12      7.246E+01 7.246E+01 7.246E+01 7.246E+01 7.246E+01
 C 13      2.548E+00 2.548E+00 2.548E+00 2.548E+00 2.548E+00
 C 14      6.115E-02 6.115E-02 6.115E-02 6.115E-02 6.115E-02
 N 14      5.246E+01 5.246E+01 5.246E+01 5.246E+01 5.246E+01
 N 15      2.095E-01 2.095E-01 2.095E-01 2.095E-01 2.095E-01
 O 16      6.197E+04 6.197E+04 6.197E+04 6.197E+04 6.197E+04
 O 17      2.509E+01 2.509E+01 2.509E+01 2.509E+01 2.509E+01
 O 18      1.426E+02 1.426E+02 1.426E+02 1.426E+02 1.426E+02
 F 19      4.937E+00 4.937E+00 4.937E+00 4.937E+00 4.937E+00
NE 20      7.274E-05 7.274E-05 7.274E-05 7.274E-05 7.274E-05
NA 23      6.915E+00 6.915E+00 6.915E+00 6.915E+00 6.915E+00
MG 24      7.255E-01 7.255E-01 7.255E-01 7.255E-01 7.255E-01
MG 25      9.499E-02 9.499E-02 9.499E-02 9.499E-02 9.499E-02
MG 26      1.087E-01 1.087E-01 1.087E-01 1.087E-01 1.087E-01
AL 27      4.581E+01 4.581E+01 4.581E+01 4.581E+01 4.581E+01
SI 28      1.916E+02 1.916E+02 1.916E+02 1.916E+02 1.916E+02
SI 29      1.006E+01 1.006E+01 1.006E+01 1.006E+01 1.006E+01
SI 30      6.901E+00 6.901E+00 6.901E+00 6.901E+00 6.901E+00
 P 31      1.486E+02 1.486E+02 1.486E+02 1.486E+02 1.486E+02
 P 32      1.008E-03 1.006E-03 1.004E-03 9.837E-04 9.602E-04
 S 32      9.536E+00 9.536E+00 9.536E+00 9.536E+00 9.536E+00
 S 33      7.988E-02 7.988E-02 7.988E-02 7.988E-02 7.988E-02
 S 34      4.483E-01 4.483E-01 4.483E-01 4.483E-01 4.483E-01
 S 35      2.432E-04 2.431E-04 2.430E-04 2.422E-04 2.412E-04
 S 36      1.915E-03 1.915E-03 1.915E-03 1.915E-03 1.915E-03
CL 35      1.764E+00 1.764E+00 1.764E+00 1.764E+00 1.764E+00
CL 36      6.489E-02 6.489E-02 6.489E-02 6.489E-02 6.489E-02
CL 37      6.179E-01 6.179E-01 6.179E-01 6.179E-01 6.179E-01
AR 38      2.478E-04 2.478E-04 2.478E-04 2.478E-04 2.478E-04
 K 40      1.150E-04 1.150E-04 1.150E-04 1.150E-04 1.150E-04
CA 40      8.915E-01 8.915E-01 8.915E-01 8.915E-01 8.915E-01
CA 41      3.056E-04 3.056E-04 3.056E-04 3.056E-04 3.056E-04
CA 42      6.242E-03 6.242E-03 6.242E-03 6.242E-03 6.242E-03
CA 43      1.288E-03 1.288E-03 1.288E-03 1.288E-03 1.288E-03
CA 44      2.120E-02 2.120E-02 2.120E-02 2.120E-02 2.120E-02
CA 46      4.308E-05 4.308E-05 4.308E-05 4.308E-05 4.308E-05
CA 48      2.096E-03 2.096E-03 2.096E-03 2.096E-03 2.096E-03
SC 46      3.510E-05 3.509E-05 3.508E-05 3.495E-05 3.481E-05
TI 46      3.953E+00 3.953E+00 3.953E+00 3.953E+00 3.953E+00
TI 47      3.645E+00 3.645E+00 3.645E+00 3.645E+00 3.645E+00
TI 48      3.663E+01 3.663E+01 3.663E+01 3.663E+01 3.663E+01
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         OUTPUT UNIT =
6                        PAGE  131
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
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ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
TI 49	2.998E+00	2.998E+00	2.998E+00	2.998E+00	2.998E+00
TI 50	2.717E+00	2.717E+00	2.717E+00	2.717E+00	2.717E+00
V 50	1.478E-02	1.478E-02	1.478E-02	1.478E-02	1.478E-02
V 51	4.747E+00	4.747E+00	4.747E+00	4.748E+00	4.750E+00
CR 50	2.092E+02	2.092E+02	2.092E+02	2.092E+02	2.092E+02
CR 51	1.124E-01	1.123E-01	1.122E-01	1.110E-01	1.097E-01
CR 52	4.214E+03	4.214E+03	4.214E+03	4.214E+03	4.214E+03
CR 53	4.876E+02	4.876E+02	4.876E+02	4.876E+02	4.876E+02
CR 54	1.269E+02	1.269E+02	1.269E+02	1.269E+02	1.269E+02
MN 54	2.905E-02	2.904E-02	2.904E-02	2.901E-02	2.898E-02
MN 55	3.944E+02	3.944E+02	3.944E+02	3.944E+02	3.944E+02
MN 56	5.800E-04	4.433E-04	3.388E-04	2.304E-05	9.154E-07
FE 54	8.104E+02	8.104E+02	8.104E+02	8.104E+02	8.104E+02
FE 55	4.686E-01	4.686E-01	4.685E-01	4.684E-01	4.682E-01
FE 56	1.327E+04	1.327E+04	1.327E+04	1.327E+04	1.327E+04
FE 57	3.263E+02	3.263E+02	3.263E+02	3.263E+02	3.263E+02
FE 58	4.411E+01	4.411E+01	4.411E+01	4.411E+01	4.411E+01
FE 59	2.338E-03	2.337E-03	2.335E-03	2.320E-03	2.302E-03
CO 58	1.029E-01	1.029E-01	1.028E-01	1.024E-01	1.019E-01
CO 59	4.272E+01	4.272E+01	4.272E+01	4.272E+01	4.272E+01
CO 60	2.380E+00	2.380E+00	2.380E+00	2.379E+00	2.379E+00
NI 58	3.813E+03	3.813E+03	3.813E+03	3.813E+03	3.813E+03
NI 59	1.020E+01	1.020E+01	1.020E+01	1.020E+01	1.020E+01
NI 60	1.511E+03	1.511E+03	1.511E+03	1.511E+03	1.511E+03
NI 61	6.933E+01	6.933E+01	6.933E+01	6.933E+01	6.933E+01
NI 62	2.131E+02	2.131E+02	2.131E+02	2.131E+02	2.131E+02
NI 63	1.990E+00	1.990E+00	1.990E+00	1.990E+00	1.990E+00
NI 64	5.623E+01	5.623E+01	5.623E+01	5.623E+01	5.623E+01
CU 63	5.829E+00	5.829E+00	5.829E+00	5.829E+00	5.829E+00
CU 64	4.340E-05	4.110E-05	3.891E-05	2.255E-05	1.171E-05
CU 65	2.743E+00	2.743E+00	2.743E+00	2.743E+00	2.743E+00
ZN 64	8.836E+00	8.836E+00	8.836E+00	8.836E+00	8.836E+00
ZN 65	4.626E-03	4.626E-03	4.625E-03	4.620E-03	4.613E-03
ZN 66	5.232E+00	5.232E+00	5.232E+00	5.232E+00	5.232E+00
ZN 67	7.764E-01	7.764E-01	7.764E-01	7.764E-01	7.764E-01
ZN 68	3.629E+00	3.629E+00	3.629E+00	3.629E+00	3.629E+00
ZN 70	1.233E-01	1.233E-01	1.233E-01	1.233E-01	1.233E-01

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GA 69      6.194E-03 6.195E-03 6.195E-03 6.195E-03 6.196E-03
SR 87      4.871E-04 4.871E-04 4.871E-04 4.871E-04 4.871E-04
SR 88      4.553E-02 4.553E-02 4.553E-02 4.553E-02 4.553E-02
SR 89      5.335E-04 5.332E-04 5.328E-04 5.298E-04 5.262E-04
 Y 89      2.934E-03 2.934E-03 2.934E-03 2.937E-03 2.941E-03
 Y 90      1.052E-03 1.041E-03 1.029E-03 9.237E-04 8.111E-04
 Y 91      1.606E-03 1.605E-03 1.604E-03 1.596E-03 1.587E-03
ZR 90      5.387E+04 5.387E+04 5.387E+04 5.387E+04 5.387E+04
ZR 91      1.183E+04 1.183E+04 1.183E+04 1.183E+04 1.183E+04
ZR 92      1.830E+04 1.830E+04 1.830E+04 1.830E+04 1.830E+04
ZR 93      2.273E+01 2.273E+01 2.273E+01 2.273E+01 2.273E+01
ZR 94      1.901E+04 1.901E+04 1.901E+04 1.901E+04 1.901E+04
ZR 95      8.339E-01 8.335E-01 8.332E-01 8.294E-01 8.249E-01
ZR 96      3.118E+03 3.118E+03 3.118E+03 3.118E+03 3.118E+03
□
         OUTPUT UNIT =
6                        PAGE  132
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZR 97      1.494E-02 1.434E-02 1.377E-02 9.134E-03 5.583E-03
NB 92      5.582E-05 5.566E-05 5.551E-05 5.395E-05 5.214E-05
NB 93      3.256E+02 3.256E+02 3.256E+02 3.256E+02 3.256E+02
NB 94      1.602E+00 1.602E+00 1.602E+00 1.602E+00 1.602E+00
NB 95      4.581E-01 4.581E-01 4.581E-01 4.581E-01 4.581E-01
NB 95M     3.323E-04 3.323E-04 3.322E-04 3.319E-04 3.314E-04
NB 97      1.062E-03 1.050E-03 1.025E-03 6.978E-04 3.997E-04
MO 92      2.574E+01 2.574E+01 2.574E+01 2.574E+01 2.574E+01
MO 93      4.762E-03 4.762E-03 4.762E-03 4.762E-03 4.762E-03
MO 94      1.652E+01 1.652E+01 1.652E+01 1.652E+01 1.652E+01
MO 95      3.019E+01 3.019E+01 3.019E+01 3.019E+01 3.020E+01
MO 96      3.150E+01 3.150E+01 3.150E+01 3.150E+01 3.150E+01
MO 97      2.460E+01 2.460E+01 2.460E+01 2.461E+01 2.461E+01
MO 98      4.413E+01 4.413E+01 4.413E+01 4.413E+01 4.413E+01
MO 99      5.929E-03 5.867E-03 5.806E-03 5.227E-03 4.608E-03
MO100      1.812E+01 1.812E+01 1.812E+01 1.812E+01 1.812E+01
TC 99      8.251E-02 8.252E-02 8.253E-02 8.260E-02 8.268E-02
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RU100      4.737E-03 4.737E-03 4.737E-03 4.737E-03 4.737E-03
RU101      3.376E-02 3.377E-02 3.377E-02 3.377E-02 3.377E-02
RU102      6.300E-04 6.300E-04 6.300E-04 6.300E-04 6.300E-04
PD108      3.579E-05 3.579E-05 3.579E-05 3.579E-05 3.579E-05
PD110      2.515E-05 2.515E-05 2.515E-05 2.515E-05 2.515E-05
AG107      2.216E-02 2.216E-02 2.216E-02 2.216E-02 2.216E-02
AG108M     9.808E-05 9.808E-05 9.808E-05 9.808E-05 9.808E-05
AG109      1.379E-02 1.379E-02 1.379E-02 1.379E-02 1.379E-02
AG110M     2.014E-04 2.014E-04 2.014E-04 2.012E-04 2.009E-04
CD106      1.415E-01 1.415E-01 1.415E-01 1.415E-01 1.415E-01
CD108      1.000E-01 1.000E-01 1.000E-01 1.000E-01 1.000E-01
CD109      1.758E-04 1.758E-04 1.758E-04 1.757E-04 1.756E-04
CD110      1.386E+00 1.386E+00 1.386E+00 1.386E+00 1.386E+00
CD111      1.441E+00 1.441E+00 1.441E+00 1.441E+00 1.441E+00
CD112      2.799E+00 2.799E+00 2.799E+00 2.799E+00 2.799E+00
CD113      6.038E-04 6.038E-04 6.038E-04 6.038E-04 6.038E-04
CD114      4.771E+00 4.771E+00 4.771E+00 4.771E+00 4.771E+00
CD115      2.736E-04 2.701E-04 2.666E-04 2.342E-04 2.004E-04
CD115M     4.059E-04 4.056E-04 4.054E-04 4.028E-04 3.996E-04
CD116      8.929E-01 8.929E-01 8.929E-01 8.929E-01 8.929E-01
IN113      1.293E-01 1.293E-01 1.293E-01 1.294E-01 1.295E-01
IN114M     9.932E-04 9.926E-04 9.921E-04 9.863E-04 9.794E-04
IN115      1.240E-01 1.240E-01 1.240E-01 1.240E-01 1.240E-01
SN112      1.624E+01 1.624E+01 1.624E+01 1.624E+01 1.624E+01
SN113      2.990E-02 2.989E-02 2.988E-02 2.981E-02 2.972E-02
SN114      1.117E+01 1.117E+01 1.117E+01 1.117E+01 1.117E+01
SN115      6.141E+00 6.141E+00 6.141E+00 6.141E+00 6.141E+00
SN116      2.485E+02 2.485E+02 2.485E+02 2.485E+02 2.485E+02
SN117      1.332E+02 1.332E+02 1.332E+02 1.332E+02 1.332E+02
SN117M     3.172E-02 3.166E-02 3.159E-02 3.095E-02 3.019E-02
SN118      4.184E+02 4.184E+02 4.184E+02 4.184E+02 4.184E+02
SN119      1.507E+02 1.507E+02 1.507E+02 1.507E+02 1.507E+02
SN119M     4.337E-01 4.336E-01 4.336E-01 4.331E-01 4.325E-01
SN120      5.685E+02 5.685E+02 5.685E+02 5.685E+02 5.685E+02
□
         OUTPUT UNIT =
6                        PAGE  133
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                             17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
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MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SN121	1.348E-03	1.313E-03	1.280E-03	9.882E-04	7.245E-04
SN121M	2.000E-03	2.000E-03	2.000E-03	2.000E-03	2.000E-03
SN122	8.201E+01	8.201E+01	8.201E+01	8.201E+01	8.201E+01
SN123	1.382E-02	1.382E-02	1.382E-02	1.379E-02	1.375E-02
SN124	1.011E+02	1.011E+02	1.011E+02	1.011E+02	1.011E+02
SN125	8.157E-03	8.132E-03	8.108E-03	7.869E-03	7.591E-03
SB121	3.789E-01	3.789E-01	3.789E-01	3.792E-01	3.795E-01
SB122	2.157E-04	2.134E-04	2.111E-04	1.897E-04	1.668E-04
SB123	2.439E-02	2.439E-02	2.440E-02	2.443E-02	2.446E-02
SB124	1.397E-04	1.397E-04	1.396E-04	1.389E-04	1.381E-04
SB125	3.896E-01	3.896E-01	3.896E-01	3.897E-01	3.899E-01
SB126	1.317E-04	1.314E-04	1.311E-04	1.281E-04	1.246E-04
TE122	1.256E-02	1.256E-02	1.257E-02	1.259E-02	1.261E-02
TE123	9.718E-05	9.719E-05	9.719E-05	9.725E-05	9.732E-05
TE123M	2.331E-05	2.331E-05	2.330E-05	2.324E-05	2.318E-05
TE124	3.125E-04	3.126E-04	3.127E-04	3.133E-04	3.141E-04
TE125	6.378E-02	6.379E-02	6.380E-02	6.390E-02	6.403E-02
TE125M	4.347E-03	4.347E-03	4.347E-03	4.351E-03	4.356E-03
TE126	2.107E-03	2.108E-03	2.108E-03	2.111E-03	2.114E-03
EU153	1.133E-04	1.134E-04	1.134E-04	1.136E-04	1.138E-04
EU154	2.046E-05	2.046E-05	2.046E-05	2.046E-05	2.046E-05
GD152	1.925E-03	1.925E-03	1.925E-03	1.925E-03	1.925E-03
GD153	1.631E-04	1.631E-04	1.631E-04	1.629E-04	1.627E-04
GD154	2.050E-02	2.050E-02	2.050E-02	2.050E-02	2.050E-02
GD155	1.366E-04	1.366E-04	1.366E-04	1.366E-04	1.366E-04
GD156	3.895E-01	3.895E-01	3.895E-01	3.895E-01	3.895E-01
GD157	1.986E-04	1.986E-04	1.986E-04	1.986E-04	1.986E-04
GD158	4.777E-01	4.777E-01	4.777E-01	4.777E-01	4.777E-01
GD159	2.550E-05	2.457E-05	2.367E-05	1.631E-05	1.043E-05
GD160	2.546E-01	2.546E-01	2.546E-01	2.546E-01	2.546E-01
TB159	9.565E-03	9.566E-03	9.567E-03	9.575E-03	9.580E-03
TB160	2.700E-04	2.699E-04	2.698E-04	2.687E-04	2.674E-04
TB161	2.902E-05	2.890E-05	2.878E-05	2.761E-05	2.626E-05
DY160	4.508E-04	4.510E-04	4.511E-04	4.521E-04	4.534E-04
DY161	9.328E-04	9.329E-04	9.330E-04	9.342E-04	9.356E-04
DY162	2.913E-04	2.913E-04	2.913E-04	2.913E-04	2.913E-04
DY163	8.355E-05	8.355E-05	8.355E-05	8.355E-05	8.355E-05
LU175	3.057E-03	3.057E-03	3.058E-03	3.061E-03	3.065E-03
LU176	7.046E-05	7.046E-05	7.046E-05	7.046E-05	7.046E-05
HF174	8.990E-03	8.990E-03	8.990E-03	8.990E-03	8.990E-03
HF175	7.843E-04	7.840E-04	7.837E-04	7.805E-04	7.766E-04
HF176	3.512E-01	3.512E-01	3.512E-01	3.512E-01	3.512E-01
HF177	2.524E-01	2.524E-01	2.524E-01	2.524E-01	2.524E-01
HF178	2.240E+00	2.240E+00	2.240E+00	2.240E+00	2.240E+00
HF179	2.277E+00	2.277E+00	2.277E+00	2.277E+00	2.277E+00

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HF180      3.279E+00 3.279E+00 3.279E+00 3.279E+00 3.279E+00
HF181      8.414E-03 8.408E-03 8.403E-03 8.346E-03 8.278E-03
HF182      2.265E-04 2.265E-04 2.265E-04 2.265E-04 2.265E-04
TA181      4.953E-02 4.953E-02 4.954E-02 4.960E-02 4.966E-02
TA182      1.046E-03 1.046E-03 1.045E-03 1.043E-03 1.040E-03
TA183      1.008E-04 1.002E-04 9.962E-05 9.413E-05 8.795E-05
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         OUTPUT UNIT =
6                        PAGE  134
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 W180      3.861E-03 3.861E-03 3.861E-03 3.861E-03 3.861E-03
 W181      7.638E-05 7.637E-05 7.635E-05 7.617E-05 7.595E-05
 W182      7.033E-01 7.033E-01 7.033E-01 7.033E-01 7.034E-01
 W183      5.434E-01 5.434E-01 5.434E-01 5.434E-01 5.434E-01
 W184      1.031E+00 1.031E+00 1.031E+00 1.031E+00 1.031E+00
 W185      1.165E-03 1.164E-03 1.164E-03 1.159E-03 1.154E-03
 W186      7.907E-01 7.907E-01 7.907E-01 7.907E-01 7.907E-01
 W187      3.899E-04 3.787E-04 3.679E-04 2.753E-04 1.944E-04
 W188      6.816E-05 6.814E-05 6.811E-05 6.782E-05 6.749E-05
RE185      3.140E-03 3.141E-03 3.141E-03 3.146E-03 3.151E-03
RE186      2.072E-05 2.056E-05 2.041E-05 1.891E-05 1.725E-05
RE187      1.291E-01 1.291E-01 1.291E-01 1.292E-01 1.293E-01
RE188      3.918E-05 3.824E-05 3.680E-05 2.471E-05 1.541E-05
OS186      7.461E-04 7.462E-04 7.464E-04 7.478E-04 7.493E-04
OS188      9.438E-03 9.440E-03 9.441E-03 9.454E-03 9.463E-03
OS189      1.270E-04 1.270E-04 1.270E-04 1.270E-04 1.270E-04
PB204      6.353E-03 6.353E-03 6.353E-03 6.353E-03 6.353E-03
PB206      1.082E-01 1.082E-01 1.082E-01 1.082E-01 1.082E-01
PB207      1.042E-01 1.042E-01 1.042E-01 1.042E-01 1.042E-01
PB208      2.427E-01 2.427E-01 2.427E-01 2.427E-01 2.427E-01
BI209      1.845E-01 1.845E-01 1.845E-01 1.845E-01 1.845E-01
SUMTOT     1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05

TOTAL      1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05
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         OUTPUT UNIT =
6                        PAGE  135
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         1.441E+00 1.441E+00 1.441E+00 1.441E+00 1.441E+00
HE         5.781E-01 5.781E-01 5.781E-01 5.781E-01 5.781E-01
LI         5.147E-01 5.147E-01 5.147E-01 5.147E-01 5.147E-01
BE         2.090E-04 2.090E-04 2.090E-04 2.090E-04 2.090E-04
 B         4.672E-01 4.672E-01 4.672E-01 4.672E-01 4.672E-01
 C         7.507E+01 7.507E+01 7.507E+01 7.507E+01 7.507E+01
 N         5.267E+01 5.267E+01 5.267E+01 5.267E+01 5.267E+01
 O         6.214E+04 6.214E+04 6.214E+04 6.214E+04 6.214E+04
 F         4.937E+00 4.937E+00 4.937E+00 4.937E+00 4.937E+00
NE         7.934E-05 7.934E-05 7.934E-05 7.934E-05 7.934E-05
NA         6.915E+00 6.915E+00 6.915E+00 6.915E+00 6.915E+00
MG         9.291E-01 9.291E-01 9.291E-01 9.291E-01 9.291E-01
AL         4.581E+01 4.581E+01 4.581E+01 4.581E+01 4.581E+01
SI         2.086E+02 2.086E+02 2.086E+02 2.086E+02 2.086E+02
 P         1.486E+02 1.486E+02 1.486E+02 1.486E+02 1.486E+02
 S         1.007E+01 1.007E+01 1.007E+01 1.007E+01 1.007E+01
CL         2.447E+00 2.447E+00 2.447E+00 2.447E+00 2.447E+00
AR         2.505E-04 2.505E-04 2.505E-04 2.505E-04 2.505E-04
 K         1.165E-04 1.165E-04 1.165E-04 1.165E-04 1.165E-04
CA         9.227E-01 9.227E-01 9.227E-01 9.227E-01 9.227E-01
SC         4.880E-05 4.876E-05 4.873E-05 4.842E-05 4.807E-05
TI         4.995E+01 4.995E+01 4.995E+01 4.995E+01 4.995E+01
 V         4.762E+00 4.762E+00 4.762E+00 4.763E+00 4.764E+00
CR         5.038E+03 5.038E+03 5.038E+03 5.038E+03 5.038E+03
MN         3.945E+02 3.945E+02 3.945E+02 3.945E+02 3.945E+02
FE         1.445E+04 1.445E+04 1.445E+04 1.445E+04 1.445E+04
CO         4.521E+01 4.521E+01 4.521E+01 4.520E+01 4.520E+01
NI         5.674E+03 5.674E+03 5.674E+03 5.674E+03 5.674E+03
CU         8.572E+00 8.572E+00 8.572E+00 8.572E+00 8.572E+00
ZN         1.860E+01 1.860E+01 1.860E+01 1.860E+01 1.860E+01
GA         6.204E-03 6.204E-03 6.204E-03 6.205E-03 6.205E-03
SR         4.655E-02 4.655E-02 4.655E-02 4.655E-02 4.654E-02
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 Y         5.602E-03 5.588E-03 5.575E-03 5.458E-03 5.339E-03
ZR         1.062E+05 1.062E+05 1.062E+05 1.062E+05 1.062E+05
NB         3.277E+02 3.277E+02 3.277E+02 3.277E+02 3.277E+02
MO         1.908E+02 1.908E+02 1.908E+02 1.908E+02 1.908E+02
TC         8.251E-02 8.252E-02 8.253E-02 8.260E-02 8.268E-02
RU         3.913E-02 3.913E-02 3.913E-02 3.913E-02 3.913E-02
PD         6.105E-05 6.105E-05 6.105E-05 6.105E-05 6.105E-05
AG         3.625E-02 3.625E-02 3.625E-02 3.625E-02 3.625E-02
CD         1.153E+01 1.153E+01 1.153E+01 1.153E+01 1.153E+01
IN         2.543E-01 2.543E-01 2.543E-01 2.544E-01 2.544E-01
SN         1.737E+03 1.737E+03 1.737E+03 1.737E+03 1.737E+03
SB         7.933E-01 7.933E-01 7.934E-01 7.938E-01 7.942E-01
TE         8.323E-02 8.324E-02 8.325E-02 8.339E-02 8.355E-02
EU         1.389E-04 1.389E-04 1.389E-04 1.391E-04 1.393E-04
GD         1.145E+00 1.145E+00 1.145E+00 1.145E+00 1.145E+00
TB         9.864E-03 9.865E-03 9.866E-03 9.871E-03 9.874E-03
DY         1.767E-03 1.768E-03 1.768E-03 1.770E-03 1.773E-03
LU         3.131E-03 3.131E-03 3.131E-03 3.134E-03 3.138E-03
HF         8.419E+00 8.419E+00 8.419E+00 8.419E+00 8.419E+00
TA         5.067E-02 5.068E-02 5.068E-02 5.073E-02 5.079E-02
 W         3.074E+00 3.074E+00 3.074E+00 3.074E+00 3.074E+00
RE         1.323E-01 1.323E-01 1.323E-01 1.324E-01 1.325E-01
OS         1.032E-02 1.032E-02 1.032E-02 1.034E-02 1.035E-02
PB         4.614E-01 4.614E-01 4.614E-01 4.614E-01 4.614E-01
BI         1.846E-01 1.846E-01 1.846E-01 1.846E-01 1.846E-01
SUMTOT     1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05

TOTAL      1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05
ACT+FP     0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP  1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05
□
         OUTPUT UNIT =
6                        PAGE  136
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                             17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
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MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	7.486E+01	7.486E+01	7.486E+01	7.486E+01	7.485E+01
H 4	2.060E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HE 6	1.402E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI 8	8.699E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 8	8.752E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B 12	7.299E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 14	2.727E-01	2.727E-01	2.727E-01	2.727E-01	2.727E-01
C 15	1.326E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	8.306E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O 19	1.539E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F 20	1.458E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE 23	6.892E-01	5.466E-30	0.000E+00	0.000E+00	0.000E+00
NA 24	1.032E+02	9.852E+01	9.407E+01	5.926E+01	3.404E+01
NA 24M	4.217E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 25	8.464E-03	5.553E-21	0.000E+00	0.000E+00	0.000E+00
MG 27	5.924E+00	7.305E-02	9.010E-04	7.333E-23	0.000E+00
AL 28	1.593E+02	1.381E-06	3.744E-09	2.688E-09	1.806E-09
AL 29	3.311E-01	5.620E-04	9.549E-07	0.000E+00	0.000E+00
AL 30	3.206E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SI 31	1.619E+02	1.243E+02	9.539E+01	6.781E+00	2.840E-01
P 32	2.877E+02	2.871E+02	2.866E+02	2.808E+02	2.741E+02
P 33	9.183E-04	9.172E-04	9.162E-04	9.056E-04	8.932E-04
P 34	2.752E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S 35	1.031E+01	1.031E+01	1.031E+01	1.027E+01	1.023E+01
S 37	5.972E-03	1.609E-06	4.336E-10	0.000E+00	0.000E+00
CL 36	2.142E-03	2.142E-03	2.142E-03	2.142E-03	2.142E-03
CL 38	2.616E+00	8.557E-01	2.799E-01	3.925E-06	5.890E-12
CL 38M	3.127E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AR 37	1.853E-01	1.851E-01	1.850E-01	1.834E-01	1.816E-01
AR 39	1.287E-05	1.287E-05	1.287E-05	1.287E-05	1.287E-05
AR 41	2.078E-05	1.422E-05	9.732E-06	2.190E-07	2.308E-09
K 42	3.508E-03	3.317E-03	3.136E-03	1.790E-03	9.132E-04
K 43	1.137E-04	1.103E-04	1.069E-04	7.869E-05	5.446E-05
K 44	4.298E-05	6.491E-06	9.802E-07	6.045E-15	8.502E-25
CA 41	3.291E-05	3.291E-05	3.291E-05	3.291E-05	3.291E-05
CA 45	1.506E-01	1.505E-01	1.505E-01	1.502E-01	1.499E-01
CA 47	2.447E-04	2.431E-04	2.416E-04	2.267E-04	2.100E-04
CA 49	1.610E-02	1.427E-04	1.264E-06	3.776E-27	0.000E+00
SC 46	1.190E+00	1.189E+00	1.189E+00	1.185E+00	1.180E+00
SC 46M	8.002E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SC 47	1.904E+00	1.887E+00	1.871E+00	1.716E+00	1.548E+00
SC 48	1.788E-01	1.760E-01	1.733E-01	1.479E-01	1.223E-01
SC 49	1.730E-01	8.533E-02	4.141E-02	2.992E-05	5.088E-09
SC 50	3.026E-03	8.092E-14	2.164E-24	0.000E+00	0.000E+00
TI 51	3.550E+00	2.597E-03	1.900E-06	0.000E+00	0.000E+00

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 V 52      2.433E+02 3.712E-03 5.665E-08 0.000E+00 0.000E+00
 V 53      4.734E-01 2.862E-12 1.731E-23 0.000E+00 0.000E+00
 V 54      5.027E-03 9.943E-23 0.000E+00 0.000E+00 0.000E+00
CR 51      1.039E+04 1.038E+04 1.037E+04 1.026E+04 1.014E+04
CR 55      1.416E+02 1.157E-03 9.453E-09 0.000E+00 0.000E+00
MN 54      2.248E+02 2.248E+02 2.248E+02 2.246E+02 2.243E+02
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         OUTPUT UNIT =
6                        PAGE  137
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

MN 56      1.259E+04 9.624E+03 7.355E+03 5.003E+02 1.987E+01
MN 57      8.660E-01 5.236E-12 3.166E-23 0.000E+00 0.000E+00
MN 58      2.785E-03 7.062E-20 0.000E+00 0.000E+00 0.000E+00
FE 55      1.172E+03 1.172E+03 1.172E+03 1.171E+03 1.171E+03
FE 59      1.150E+02 1.150E+02 1.149E+02 1.142E+02 1.133E+02
CO 58      3.275E+03 3.273E+03 3.272E+03 3.259E+03 3.243E+03
CO 60      2.692E+03 2.692E+03 2.692E+03 2.691E+03 2.691E+03
CO 60M     5.451E+03 1.027E+02 1.933E+00 1.085E-17 0.000E+00
CO 61      4.324E+01 2.841E+01 1.867E+01 2.797E-01 1.809E-03
CO 62      3.040E-01 2.765E-13 2.514E-25 0.000E+00 0.000E+00
NI 59      7.732E-01 7.732E-01 7.732E-01 7.732E-01 7.732E-01
NI 63      1.228E+02 1.228E+02 1.228E+02 1.228E+02 1.228E+02
NI 65      3.732E+02 2.834E+02 2.153E+02 1.375E+01 5.070E-01
NI 66      2.435E-03 2.404E-03 2.374E-03 2.091E-03 1.795E-03
CU 64      1.674E+02 1.585E+02 1.501E+02 8.697E+01 4.518E+01
CU 66      3.699E+01 1.304E-02 2.381E-03 2.094E-03 1.798E-03
CU 67      4.534E-05 4.484E-05 4.434E-05 3.964E-05 3.465E-05
ZN 65      3.813E+01 3.812E+01 3.812E+01 3.807E+01 3.802E+01
ZN 69      3.611E+01 1.863E+01 1.014E+01 1.431E+00 7.782E-01
ZN 69M     2.427E+00 2.308E+00 2.194E+00 1.326E+00 7.245E-01
ZN 71      4.898E-02 2.175E-06 1.821E-06 3.108E-07 3.723E-08
ZN 71M     5.135E-03 4.302E-03 3.605E-03 6.152E-04 7.370E-05
GA 70      2.006E-01 2.795E-02 3.894E-03 1.072E-11 5.730E-22
GA 72      6.580E-04 6.264E-04 5.963E-04 3.648E-04 2.022E-04
GA 72M     2.033E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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GE 71       3.116E-04 3.108E-04 3.101E-04 3.026E-04 2.938E-04
GE 71M      2.543E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 89       1.551E+01 1.550E+01 1.549E+01 1.540E+01 1.529E+01
SR 90       2.388E-04 2.388E-04 2.388E-04 2.388E-04 2.388E-04
SR 91       3.005E+00 2.794E+00 2.597E+00 1.252E+00 5.216E-01
SR 93       1.036E-02 4.046E-05 1.581E-07 0.000E+00 0.000E+00
 Y 89M      9.716E-03 9.631E-03 9.546E-03 8.739E-03 7.860E-03
 Y 90       5.725E+02 5.664E+02 5.603E+02 5.028E+02 4.415E+02
 Y 91       3.939E+01 3.938E+01 3.936E+01 3.917E+01 3.894E+01
 Y 92       1.006E+02 8.273E+01 6.801E+01 9.593E+00 9.145E-01
 Y 93       1.036E-02 9.792E-03 9.143E-03 4.603E-03 2.020E-03
 Y 94       2.150E+00 2.436E-01 2.761E-02 9.653E-12 4.334E-23
 Y 96       1.379E-02 1.934E-10 2.713E-18 0.000E+00 0.000E+00
ZR 89       9.731E-03 9.646E-03 9.561E-03 8.752E-03 7.872E-03
ZR 93       5.713E-02 5.713E-02 5.713E-02 5.713E-02 5.713E-02
ZR 95       1.792E+04 1.791E+04 1.791E+04 1.783E+04 1.773E+04
ZR 97       2.858E+04 2.743E+04 2.633E+04 1.747E+04 1.068E+04
NB 92       7.801E+00 7.779E+00 7.757E+00 7.540E+00 7.287E+00
NB 93M      1.797E-03 1.797E-03 1.797E-03 1.800E-03 1.804E-03
NB 94       3.004E-01 3.004E-01 3.004E-01 3.004E-01 3.004E-01
NB 95       1.792E+04 1.792E+04 1.792E+04 1.792E+04 1.792E+04
NB 95M      1.266E+02 1.266E+02 1.266E+02 1.265E+02 1.263E+02
NB 96       2.055E+01 1.995E+01 1.936E+01 1.439E+01 1.008E+01
NB 97       2.858E+04 2.824E+04 2.756E+04 1.877E+04 1.075E+04
NB 97M      2.704E+04 2.598E+04 2.494E+04 1.655E+04 1.011E+04
NB 98       4.018E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  138
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

NB100       2.019E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO 93M      5.626E-01 5.085E-01 4.595E-01 1.671E-01 4.960E-02
MO 93       5.235E-03 5.235E-03 5.235E-03 5.235E-03 5.235E-03
MO 99       2.845E+03 2.815E+03 2.786E+03 2.508E+03 2.211E+03
MO101       1.363E+02 7.929E+00 4.611E-01 2.040E-13 3.052E-28
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TC 99	1.399E-03	1.400E-03	1.400E-03	1.401E-03	1.402E-03
TC100	3.730E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC101	1.363E+02	2.956E+01	2.876E+00	4.588E-12	9.255E-27
RU103	5.816E-03	5.812E-03	5.808E-03	5.765E-03	5.715E-03
RH104	9.541E-05	3.960E-10	2.729E-14	0.000E+00	0.000E+00
PD109	1.159E-02	1.101E-02	1.045E-02	6.247E-03	3.367E-03
PD109M	1.719E-04	2.422E-08	3.412E-12	0.000E+00	0.000E+00
PD111	3.334E-04	7.241E-05	3.039E-05	6.657E-06	1.467E-06
PD111M	4.146E-05	3.655E-05	3.222E-05	9.137E-06	2.014E-06
AG106	3.475E-04	3.463E-04	3.451E-04	3.336E-04	3.203E-04
AG108	5.660E+00	2.278E-04	2.276E-04	2.276E-04	2.276E-04
AG108M	2.557E-03	2.557E-03	2.557E-03	2.557E-03	2.557E-03
AG109M	4.657E-01	4.651E-01	4.645E-01	4.600E-01	4.568E-01
AG110	2.379E+01	1.273E-02	1.273E-02	1.271E-02	1.270E-02
AG110M	9.573E-01	9.572E-01	9.571E-01	9.560E-01	9.547E-01
AG111	1.018E-01	1.014E-01	1.010E-01	9.718E-02	9.276E-02
AG111M	5.067E-02	8.648E-05	4.105E-05	9.537E-06	2.102E-06
AG112	1.022E-04	8.192E-05	6.565E-05	7.172E-06	5.032E-07
CD107	4.473E-01	4.020E-01	3.613E-01	1.241E-01	3.445E-02
CD109	4.541E-01	4.541E-01	4.541E-01	4.538E-01	4.535E-01
CD111M	8.754E-01	3.727E-01	1.587E-01	3.102E-05	1.099E-09
CD115	1.395E+02	1.377E+02	1.359E+02	1.194E+02	1.022E+02
CD115M	1.034E+01	1.033E+01	1.033E+01	1.026E+01	1.018E+01
CD117	4.152E+00	3.180E+00	2.436E+00	1.694E-01	6.911E-03
CD117M	1.229E-01	1.003E-01	8.176E-02	1.065E-02	9.220E-04
CD119	2.856E-04	3.422E-06	4.100E-08	2.501E-27	0.000E+00
CD121	8.654E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN113M	3.003E+02	3.003E+02	3.003E+02	2.996E+02	2.987E+02
IN114	6.071E+01	2.198E+01	2.197E+01	2.184E+01	2.169E+01
IN114M	2.299E+01	2.297E+01	2.296E+01	2.283E+01	2.267E+01
IN116	4.938E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	3.596E+02	1.668E+02	7.740E+01	3.575E-02	3.553E-06
IN117	2.309E+00	2.194E+00	2.027E+00	2.747E-01	1.453E-02
IN117M	3.916E+00	3.764E+00	3.419E+00	4.746E-01	2.411E-02
IN118	3.765E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	2.693E-02	3.173E-06	3.364E-07	3.157E-17	2.871E-29
IN119M	2.856E-04	5.556E-05	5.839E-06	5.436E-16	4.944E-28
IN121	7.096E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN113	3.003E+02	3.002E+02	3.001E+02	2.994E+02	2.985E+02
SN113M	1.413E+02	1.766E+01	2.208E+00	2.056E-09	2.992E-20
SN117M	2.529E+03	2.524E+03	2.519E+03	2.467E+03	2.407E+03
SN119M	1.943E+03	1.943E+03	1.943E+03	1.940E+03	1.937E+03
SN121	1.303E+03	1.270E+03	1.237E+03	9.554E+02	7.005E+02
SN121M	1.183E-01	1.183E-01	1.183E-01	1.183E-01	1.183E-01
SN123	1.137E+02	1.136E+02	1.136E+02	1.134E+02	1.131E+02
SN123M	4.185E-01	1.483E-01	5.254E-02	1.638E-06	6.414E-12

OUTPUT UNIT =

6 PAGE 139
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SN125	8.842E+02	8.816E+02	8.790E+02	8.530E+02	8.229E+02
SN125M	6.129E+02	7.765E+00	9.838E-02	1.048E-20	0.000E+00
SB122	8.552E+01	8.461E+01	8.371E+01	7.522E+01	6.616E+01
SB122M	6.680E-01	3.345E-05	1.675E-09	0.000E+00	0.000E+00
SB124	2.446E+00	2.444E+00	2.443E+00	2.431E+00	2.418E+00
SB124M	8.406E-03	1.870E-14	4.160E-26	0.000E+00	0.000E+00
SB125	4.024E+02	4.024E+02	4.024E+02	4.026E+02	4.027E+02
SB126	1.102E+01	1.099E+01	1.097E+01	1.072E+01	1.042E+01
SB126M	7.986E-01	8.947E-02	1.002E-02	3.125E-12	1.223E-23
TE123M	2.069E-01	2.068E-01	2.068E-01	2.063E-01	2.057E-01
TE125M	7.832E+01	7.833E+01	7.834E+01	7.841E+01	7.849E+01
TE127	3.655E-02	3.406E-02	3.174E-02	1.599E-02	7.539E-03
TE127M	1.696E-03	1.696E-03	1.695E-03	1.691E-03	1.686E-03
I128	7.249E-04	1.372E-04	2.596E-05	1.530E-12	3.231E-21
EU154	5.526E-03	5.526E-03	5.526E-03	5.525E-03	5.524E-03
EU155	2.052E-03	2.052E-03	2.052E-03	2.052E-03	2.052E-03
EU156	3.798E-02	3.791E-02	3.784E-02	3.713E-02	3.629E-02
GD153	5.755E-01	5.754E-01	5.753E-01	5.746E-01	5.738E-01
GD155M	3.736E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	2.704E+01	2.605E+01	2.509E+01	1.729E+01	1.105E+01
GD161	2.921E+00	3.836E-05	5.039E-10	0.000E+00	0.000E+00
GD162	5.970E-04	9.328E-06	1.457E-07	1.264E-25	0.000E+00
TB160	3.049E+00	3.048E+00	3.046E+00	3.034E+00	3.020E+00
TB161	3.402E+00	3.389E+00	3.375E+00	3.237E+00	3.079E+00
TB162	5.850E-04	2.953E-05	5.394E-07	4.897E-25	0.000E+00
DY165	4.319E-02	3.234E-02	2.408E-02	1.261E-03	3.660E-05
DY165M	2.762E-02	1.150E-16	4.789E-31	0.000E+00	0.000E+00
DY166	1.161E-04	1.151E-04	1.142E-04	1.049E-04	9.468E-05
HO166	2.297E-03	2.241E-03	2.187E-03	1.714E-03	1.283E-03
LU176M	1.305E+00	1.081E+00	8.963E-01	1.370E-01	1.438E-02
LU177	2.933E-01	2.920E-01	2.908E-01	2.785E-01	2.645E-01
LU177M	4.428E-04	4.428E-04	4.427E-04	4.419E-04	4.409E-04
HF175	8.364E+00	8.361E+00	8.357E+00	8.323E+00	8.282E+00

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HF178M     2.856E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
HF179M     1.795E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
HF180M     7.569E+00 6.673E+00 5.883E+00 1.668E+00 3.677E-01
HF181      1.432E+02 1.431E+02 1.430E+02 1.421E+02 1.409E+02
TA182      6.527E+00 6.526E+00 6.524E+00 6.508E+00 6.488E+00
TA182M     1.150E-02 9.244E-04 7.434E-05 8.408E-16 6.149E-29
TA183      1.410E+01 1.402E+01 1.394E+01 1.318E+01 1.231E+01
 W181      4.549E-01 4.548E-01 4.547E-01 4.536E-01 4.523E-01
 W183M     6.183E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 W185      1.095E+01 1.095E+01 1.094E+01 1.090E+01 1.085E+01
 W185M     1.247E-02 1.908E-13 2.918E-24 0.000E+00 0.000E+00
 W187      2.735E+02 2.657E+02 2.581E+02 1.931E+02 1.363E+02
 W188      6.825E-01 6.822E-01 6.819E-01 6.791E-01 6.757E-01
RE186      3.854E+00 3.824E+00 3.795E+00 3.516E+00 3.207E+00
RE188      3.848E+01 3.756E+01 3.614E+01 2.426E+01 1.513E+01
RE188M     3.699E+01 4.001E+00 4.328E-01 9.497E-11 2.438E-22
RE189      1.397E-04 1.358E-04 1.320E-04 9.922E-05 7.046E-05
OS191      2.733E-04 2.731E-04 2.729E-04 2.703E-04 2.660E-04
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         OUTPUT UNIT =
6                        PAGE  140
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

OS191M     1.913E-04 1.813E-04 1.719E-04 1.009E-04 5.319E-05
IR192      2.866E-05 2.865E-05 2.864E-05 2.853E-05 2.839E-05
PB209      1.961E-04 1.589E-04 1.288E-04 1.577E-05 1.268E-06
BI210      1.565E-02 1.556E-02 1.547E-02 1.460E-02 1.363E-02
PO210      1.369E-02 1.369E-02 1.369E-02 1.369E-02 1.369E-02
SUMTOT     1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04

TOTAL      1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04
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         OUTPUT UNIT =
6                        PAGE  141
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         7.692E+01 7.486E+01 7.486E+01 7.486E+01 7.485E+01
HE         1.402E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LI         8.699E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE         8.752E-01 2.160E-07 2.160E-07 2.160E-07 2.160E-07
 B         7.299E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C         1.354E+01 2.727E-01 2.727E-01 2.727E-01 2.727E-01
 N         8.306E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 O         1.539E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 F         1.458E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NE         6.892E-01 5.466E-30 0.000E+00 0.000E+00 0.000E+00
NA         1.454E+02 9.852E+01 9.407E+01 5.926E+01 3.404E+01
MG         5.924E+00 7.305E-02 9.010E-04 2.683E-09 1.802E-09
AL         1.597E+02 5.634E-04 9.586E-07 2.688E-09 1.806E-09
SI         1.619E+02 1.243E+02 9.539E+01 6.781E+00 2.840E-01
 P         2.877E+02 2.871E+02 2.866E+02 2.808E+02 2.741E+02
 S         1.032E+01 1.031E+01 1.031E+01 1.027E+01 1.023E+01
CL         2.650E+00 8.579E-01 2.821E-01 2.145E-03 2.142E-03
AR         1.853E-01 1.851E-01 1.850E-01 1.835E-01 1.816E-01
 K         3.665E-03 3.433E-03 3.244E-03 1.869E-03 9.677E-04
CA         1.669E-01 1.509E-01 1.508E-01 1.505E-01 1.502E-01
SC         3.449E+00 3.338E+00 3.274E+00 3.049E+00 2.850E+00
TI         3.550E+00 2.597E-03 1.900E-06 0.000E+00 0.000E+00
 V         2.438E+02 3.712E-03 5.665E-08 2.643E-15 2.643E-15
CR         1.054E+04 1.038E+04 1.037E+04 1.026E+04 1.014E+04
MN         1.282E+04 9.849E+03 7.580E+03 7.248E+02 2.442E+02
FE         1.287E+03 1.287E+03 1.287E+03 1.286E+03 1.284E+03
CO         1.146E+04 6.096E+03 5.984E+03 5.950E+03 5.934E+03
NI         4.968E+02 4.070E+02 3.389E+02 1.373E+02 1.241E+02
CU         2.044E+02 1.585E+02 1.501E+02 8.697E+01 4.518E+01
ZN         7.672E+01 5.906E+01 5.046E+01 4.083E+01 3.952E+01
GA         2.013E-01 2.857E-02 4.490E-03 3.648E-04 2.022E-04
GE         3.370E-04 3.108E-04 3.101E-04 3.026E-04 2.938E-04
SR         1.852E+01 1.829E+01 1.808E+01 1.665E+01 1.582E+01
 Y         7.147E+02 6.887E+02 6.677E+02 5.515E+02 4.813E+02
ZR         4.650E+04 4.534E+04 4.423E+04 3.529E+04 2.841E+04
NB         7.369E+04 7.230E+04 7.057E+04 5.339E+04 3.893E+04
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MO          2.982E+03 2.824E+03 2.787E+03 2.508E+03 2.211E+03
TC          1.736E+02 2.956E+01 2.877E+00 1.401E-03 1.402E-03
RU          5.816E-03 5.812E-03 5.808E-03 5.765E-03 5.715E-03
RH          1.125E-04 2.749E-08 2.584E-08 1.968E-08 1.525E-08
PD          1.213E-02 1.112E-02 1.052E-02 6.262E-03 3.371E-03
AG          3.103E+01 1.540E+00 1.539E+00 1.529E+00 1.520E+00
CD          1.559E+02 1.525E+02 1.497E+02 1.304E+02 1.129E+02
IN          1.244E+03 5.181E+02 4.280E+02 3.450E+02 3.431E+02
SN          7.828E+03 7.058E+03 6.994E+03 6.629E+03 6.280E+03
SB          5.029E+02 5.006E+02 4.996E+02 4.909E+02 4.817E+02
TE          7.857E+01 7.857E+01 7.858E+01 7.863E+01 7.871E+01
 I          7.249E-04 1.372E-04 2.596E-05 1.075E-10 5.409E-11
EU          4.556E-02 4.549E-02 4.542E-02 4.470E-02 4.386E-02
GD          3.054E+01 2.662E+01 2.567E+01 1.786E+01 1.163E+01
TB          6.451E+00 6.437E+00 6.421E+00 6.271E+00 6.098E+00
DY          7.093E-02 3.246E-02 2.419E-02 1.366E-03 1.313E-04
HO          2.297E-03 2.241E-03 2.187E-03 1.714E-03 1.283E-03
LU          1.599E+00 1.374E+00 1.187E+00 4.159E-01 2.793E-01
HF          1.957E+03 1.582E+02 1.573E+02 1.521E+02 1.496E+02
TA          2.064E+01 2.055E+01 2.047E+01 1.968E+01 1.880E+01
 W          2.862E+02 2.777E+02 2.701E+02 2.051E+02 1.483E+02
RE          7.932E+01 4.538E+01 4.037E+01 2.778E+01 1.834E+01
OS          4.652E-04 4.544E-04 4.448E-04 3.712E-04 3.192E-04
IR          2.910E-05 2.905E-05 2.902E-05 2.880E-05 2.857E-05
PB          1.961E-04 1.589E-04 1.288E-04 1.577E-05 1.268E-06
BI          1.565E-02 1.556E-02 1.547E-02 1.460E-02 1.363E-02
PO          1.369E-02 1.369E-02 1.369E-02 1.369E-02 1.369E-02
SUMTOT      1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04

TOTAL       1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04

                                            CUMULATIVE TABLE TOTALS

AP+FP       1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04
ACT+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP   1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04
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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC
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9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	2.521E-03	2.521E-03	2.520E-03	2.520E-03	2.520E-03
HE 6	1.303E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI 8	3.244E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 8	4.929E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B 12	5.785E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 14	7.996E-05	7.996E-05	7.996E-05	7.996E-05	7.996E-05
C 15	2.257E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	3.600E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O 19	4.395E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F 20	6.076E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE 23	8.448E-03	6.701E-32	0.000E+00	0.000E+00	0.000E+00
NA 24	2.859E+00	2.730E+00	2.607E+00	1.642E+00	9.432E-01
NA 24M	1.180E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 25	9.713E-05	6.373E-23	0.000E+00	0.000E+00	0.000E+00
MG 27	5.594E-02	6.898E-04	8.508E-06	6.924E-25	0.000E+00
AL 28	2.858E+00	2.477E-08	6.715E-11	4.821E-11	3.239E-11
AL 29	4.614E-03	7.832E-06	1.331E-08	0.000E+00	0.000E+00
AL 30	1.088E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SI 31	5.723E-01	4.394E-01	3.373E-01	2.398E-02	1.004E-03
P 32	2.916E+00	2.910E+00	2.905E+00	2.847E+00	2.778E+00
P 33	1.350E-06	1.348E-06	1.347E-06	1.331E-06	1.313E-06
P 34	8.319E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S 35	1.023E-02	1.023E-02	1.023E-02	1.019E-02	1.015E-02
S 37	1.699E-04	4.579E-08	1.234E-11	0.000E+00	0.000E+00
CL 36	3.158E-06	3.158E-06	3.158E-06	3.158E-06	3.158E-06
CL 38	4.677E-02	1.530E-02	5.004E-03	7.018E-08	1.053E-13
CL 38M	1.244E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AR 37	2.306E-06	2.304E-06	2.302E-06	2.283E-06	2.261E-06
AR 41	2.154E-07	1.474E-07	1.008E-07	2.269E-09	2.391E-11
K 42	3.547E-05	3.354E-05	3.171E-05	1.810E-05	9.235E-06
K 43	8.620E-07	8.360E-07	8.107E-07	5.966E-07	4.129E-07
K 44	1.325E-06	2.001E-07	3.021E-08	1.863E-16	2.621E-26
CA 45	6.890E-05	6.888E-05	6.887E-05	6.875E-05	6.860E-05
CA 47	2.042E-06	2.029E-06	2.016E-06	1.892E-06	1.753E-06
CA 49	5.019E-04	4.448E-06	3.942E-08	1.177E-28	0.000E+00
SC 46	1.496E-02	1.496E-02	1.495E-02	1.490E-02	1.484E-02
SC 46M	6.508E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SC 47	3.056E-03	3.029E-03	3.003E-03	2.755E-03	2.485E-03
SC 48	3.783E-03	3.723E-03	3.665E-03	3.128E-03	2.587E-03
SC 49	2.059E-03	1.016E-03	4.929E-04	3.561E-07	6.056E-11
SC 50	8.658E-05	2.315E-15	6.193E-26	0.000E+00	0.000E+00
TI 51	2.598E-02	1.901E-05	1.391E-08	0.000E+00	0.000E+00
V 52	3.626E+00	5.532E-05	8.441E-10	0.000E+00	0.000E+00

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 V 53      5.716E-03 3.456E-14 2.090E-25 0.000E+00 0.000E+00
 V 54      2.175E-04 4.302E-24 0.000E+00 0.000E+00 0.000E+00
CR 51      2.230E+00 2.228E+00 2.226E+00 2.203E+00 2.175E+00
CR 55      9.238E-01 7.552E-06 6.169E-11 0.000E+00 0.000E+00
MN 54      1.119E+00 1.119E+00 1.119E+00 1.118E+00 1.117E+00
MN 56      1.882E+02 1.438E+02 1.099E+02 7.476E+00 2.970E-01
MN 57      6.011E-03 3.634E-14 2.197E-25 0.000E+00 0.000E+00
MN 58      6.594E-05 1.672E-21 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  143
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

FE 55      3.960E-02 3.959E-02 3.959E-02 3.958E-02 3.957E-02
FE 59      8.906E-01 8.901E-01 8.895E-01 8.838E-01 8.770E-01
CO 58      1.959E+01 1.958E+01 1.957E+01 1.949E+01 1.940E+01
CO 60      4.150E+01 4.150E+01 4.150E+01 4.149E+01 4.149E+01
CO 60M     2.037E+00 3.835E-02 7.223E-04 4.052E-21 0.000E+00
CO 61      1.400E-01 9.195E-02 6.041E-02 9.051E-04 5.854E-06
CO 62      5.766E-03 5.244E-15 4.770E-27 0.000E+00 0.000E+00
NI 59      3.071E-05 3.071E-05 3.071E-05 3.071E-05 3.071E-05
NI 63      1.238E-02 1.238E-02 1.238E-02 1.238E-02 1.238E-02
NI 65      2.613E+00 1.984E+00 1.507E+00 9.629E-02 3.549E-03
NI 66      9.669E-07 9.548E-07 9.427E-07 8.303E-07 7.130E-07
CU 64      3.106E-01 2.941E-01 2.785E-01 1.614E-01 8.382E-02
CU 66      2.532E-01 8.925E-05 1.630E-05 1.434E-05 1.231E-05
CU 67      7.281E-08 7.200E-08 7.120E-08 6.365E-08 5.564E-08
ZN 65      1.334E-01 1.334E-01 1.334E-01 1.332E-01 1.331E-01
ZN 69      6.869E-02 3.544E-02 1.929E-02 2.722E-03 1.480E-03
ZN 69M     6.312E-03 6.002E-03 5.707E-03 3.449E-03 1.884E-03
ZN 71      8.146E-04 3.618E-08 3.029E-08 5.169E-09 6.193E-10
ZN 71M     9.018E-05 7.557E-05 6.332E-05 1.080E-05 1.294E-06
GA 70      7.767E-04 1.082E-04 1.507E-05 4.151E-14 2.218E-24
GA 72      1.251E-05 1.191E-05 1.134E-05 6.934E-06 3.844E-06
SR 89      5.360E-02 5.357E-02 5.354E-02 5.324E-02 5.287E-02
SR 90      2.772E-07 2.772E-07 2.772E-07 2.772E-07 2.772E-07
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SR 91      2.408E-02 2.239E-02 2.081E-02 1.003E-02 4.180E-03
SR 93      1.569E-04 6.130E-07 2.396E-09 0.000E+00 0.000E+00
 Y 89M     5.280E-05 5.234E-05 5.188E-05 4.749E-05 4.271E-05
 Y 90      3.173E+00 3.139E+00 3.105E+00 2.786E+00 2.447E+00
 Y 91      1.415E-01 1.414E-01 1.414E-01 1.407E-01 1.398E-01
 Y 92      1.013E+00 8.327E-01 6.845E-01 9.655E-02 9.205E-03
 Y 93      7.748E-05 7.325E-05 6.839E-05 3.443E-05 1.511E-05
 Y 94      3.582E-02 4.060E-03 4.601E-04 1.608E-13 7.222E-25
 Y 96      3.162E-04 4.436E-12 6.223E-20 0.000E+00 0.000E+00
ZR 89      7.280E-05 7.216E-05 7.152E-05 6.547E-05 5.889E-05
ZR 93      6.638E-06 6.638E-06 6.638E-06 6.638E-06 6.638E-06
ZR 95      9.078E+01 9.074E+01 9.070E+01 9.029E+01 8.980E+01
ZR 97      1.489E+02 1.429E+02 1.372E+02 9.103E+01 5.564E+01
NB 92      6.983E-02 6.963E-02 6.943E-02 6.749E-02 6.522E-02
NB 93M     3.183E-07 3.184E-07 3.184E-07 3.190E-07 3.196E-07
NB 94      3.061E-03 3.061E-03 3.061E-03 3.061E-03 3.061E-03
NB 95      8.596E+01 8.596E+01 8.596E+01 8.596E+01 8.596E+01
NB 95M     1.759E-01 1.759E-01 1.759E-01 1.757E-01 1.755E-01
NB 96      3.417E-01 3.317E-01 3.220E-01 2.393E-01 1.676E-01
NB 97      1.902E+02 1.880E+02 1.835E+02 1.249E+02 7.157E+01
NB 97M     1.190E+02 1.144E+02 1.098E+02 7.285E+01 4.453E+01
NB 98      4.959E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100      4.764E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO 93M     7.870E-03 7.113E-03 6.429E-03 2.337E-03 6.939E-04
MO 93      4.903E-07 4.903E-07 4.903E-07 4.903E-07 4.903E-07
MO 99      9.136E+00 9.041E+00 8.947E+00 8.055E+00 7.101E+00
MO101      1.557E+00 9.057E-02 5.267E-03 2.330E-15 3.486E-30
TC 99      7.018E-07 7.018E-07 7.019E-07 7.025E-07 7.032E-07
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         OUTPUT UNIT =
6                        PAGE  144
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

TC100      3.283E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC101      6.544E-01 1.419E-01 1.380E-02 2.202E-14 4.442E-29
RU103      1.946E-05 1.944E-05 1.943E-05 1.929E-05 1.912E-05
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RH104	5.641E-07	2.341E-12	1.614E-16	0.000E+00	0.000E+00
RH106	1.171E-07	7.917E-17	7.916E-17	7.910E-17	7.903E-17
PD109	3.081E-05	2.927E-05	2.780E-05	1.661E-05	8.954E-06
PD109M	1.916E-07	2.699E-11	3.803E-15	0.000E+00	0.000E+00
PD111	1.773E-06	3.850E-07	1.616E-07	3.539E-08	7.801E-09
PD111M	1.445E-07	1.274E-07	1.123E-07	3.185E-08	7.019E-09
AG106	2.511E-06	2.502E-06	2.494E-06	2.411E-06	2.314E-06
AG108	2.107E-02	8.481E-07	8.474E-07	8.474E-07	8.474E-07
AG108M	2.477E-05	2.477E-05	2.477E-05	2.477E-05	2.477E-05
AG109M	2.401E-04	2.398E-04	2.395E-04	2.371E-04	2.355E-04
AG110	1.709E-01	9.146E-05	9.145E-05	9.135E-05	9.122E-05
AG110M	1.599E-02	1.598E-02	1.598E-02	1.596E-02	1.594E-02
AG111	2.280E-04	2.272E-04	2.263E-04	2.177E-04	2.078E-04
AG111M	1.952E-05	3.332E-08	1.582E-08	3.675E-09	8.099E-10
AG112	1.268E-06	1.016E-06	8.145E-07	8.899E-08	6.243E-09
CD107	3.200E-04	2.876E-04	2.585E-04	8.882E-05	2.465E-05
CD109	5.276E-05	5.276E-05	5.276E-05	5.272E-05	5.268E-05
CD111M	2.055E-03	8.748E-04	3.724E-04	7.282E-08	2.581E-12
CD115	4.428E-01	4.371E-01	4.314E-01	3.790E-01	3.244E-01
CD115M	3.856E-02	3.854E-02	3.851E-02	3.826E-02	3.797E-02
CD117	2.990E-02	2.291E-02	1.755E-02	1.220E-03	4.977E-05
CD117M	9.990E-04	8.147E-04	6.645E-04	8.651E-05	7.493E-06
CD119	3.132E-06	3.752E-08	4.496E-10	2.743E-29	0.000E+00
CD121	1.434E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN113M	6.997E-01	6.996E-01	6.995E-01	6.978E-01	6.957E-01
IN114	2.891E-01	1.047E-01	1.046E-01	1.040E-01	1.033E-01
IN114M	3.262E-02	3.260E-02	3.258E-02	3.239E-02	3.216E-02
IN116	4.045E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	5.920E+00	2.746E+00	1.274E+00	5.884E-04	5.849E-08
IN117	1.040E-02	9.883E-03	9.133E-03	1.238E-03	6.545E-05
IN117M	1.478E-02	1.421E-02	1.291E-02	1.792E-03	9.103E-05
IN118	4.546E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	2.153E-04	2.537E-08	2.690E-09	2.524E-19	2.296E-31
IN119M	2.412E-06	4.693E-07	4.932E-08	4.592E-18	4.176E-30
IN121	8.547E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN113	5.002E-02	5.000E-02	4.999E-02	4.987E-02	4.972E-02
SN113M	6.642E-02	8.302E-03	1.038E-03	9.665E-13	1.406E-23
SN117M	4.691E+00	4.681E+00	4.672E+00	4.576E+00	4.464E+00
SN119M	1.004E+00	1.004E+00	1.004E+00	1.003E+00	1.001E+00
SN121	1.576E+00	1.536E+00	1.496E+00	1.155E+00	8.470E-01
SN121M	2.370E-04	2.370E-04	2.370E-04	2.370E-04	2.370E-04
SN123	3.550E-01	3.549E-01	3.548E-01	3.540E-01	3.531E-01
SN123M	1.525E-03	5.404E-04	1.915E-04	5.971E-09	2.338E-14
SN125	5.860E+00	5.842E+00	5.825E+00	5.653E+00	5.453E+00
SN125M	4.124E+00	5.224E-02	6.619E-04	7.052E-23	0.000E+00
SB122	5.100E-01	5.046E-01	4.992E-01	4.486E-01	3.945E-01
SB122M	6.415E-04	3.212E-08	1.608E-12	0.000E+00	0.000E+00
SB124	3.247E-02	3.246E-02	3.244E-02	3.228E-02	3.210E-02

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         OUTPUT UNIT =
6                          PAGE  145
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

SB124M     2.161E-05 4.807E-17 1.069E-28 0.000E+00 0.000E+00
SB125      1.258E+00 1.258E+00 1.258E+00 1.259E+00 1.259E+00
SB126      2.036E-01 2.031E-01 2.027E-01 1.980E-01 1.925E-01
SB126M     1.017E-02 1.139E-03 1.276E-04 3.979E-14 1.557E-25
TE123M     3.013E-04 3.012E-04 3.011E-04 3.004E-04 2.995E-04
TE125M     6.583E-02 6.584E-02 6.584E-02 6.590E-02 6.598E-02
TE127      4.935E-05 4.599E-05 4.286E-05 2.159E-05 1.018E-05
TE127M     9.124E-07 9.122E-07 9.120E-07 9.095E-07 9.067E-07
 I128      3.596E-06 6.805E-07 1.288E-07 7.592E-15 1.603E-23
EU154      4.943E-05 4.943E-05 4.942E-05 4.942E-05 4.941E-05
EU155      1.493E-06 1.493E-06 1.493E-06 1.493E-06 1.492E-06
EU156      3.920E-04 3.912E-04 3.905E-04 3.831E-04 3.745E-04
GD153      5.199E-04 5.198E-04 5.197E-04 5.191E-04 5.184E-04
GD155M     2.691E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD159      8.814E-02 8.492E-02 8.181E-02 5.636E-02 3.604E-02
GD161      2.119E-02 2.784E-07 3.656E-12 0.000E+00 0.000E+00
GD162      2.169E-06 3.389E-08 5.296E-10 4.594E-28 0.000E+00
TB160      2.483E-02 2.482E-02 2.481E-02 2.471E-02 2.459E-02
TB161      6.816E-03 6.790E-03 6.762E-03 6.485E-03 6.168E-03
TB162      5.833E-06 2.945E-07 5.378E-09 4.882E-27 0.000E+00
DY165      2.000E-04 1.497E-04 1.115E-04 5.837E-06 1.694E-07
DY165M     2.063E-05 8.590E-20 3.577E-34 0.000E+00 0.000E+00
DY166      1.356E-07 1.345E-07 1.333E-07 1.224E-07 1.106E-07
HO166      9.846E-06 9.607E-06 9.374E-06 7.345E-06 5.499E-06
LU176M     1.013E-02 8.398E-03 6.960E-03 1.064E-03 1.116E-04
LU177      3.164E-04 3.150E-04 3.137E-04 3.005E-04 2.853E-04
LU177M     3.565E-06 3.564E-06 3.563E-06 3.557E-06 3.549E-06
HF175      2.057E-02 2.056E-02 2.055E-02 2.047E-02 2.037E-02
HF178M     1.942E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
HF179M     4.022E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
HF180M     5.124E-02 4.517E-02 3.982E-02 1.129E-02 2.489E-03
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HF181      6.402E-01 6.397E-01 6.393E-01 6.350E-01 6.298E-01
TA182      5.811E-02 5.810E-02 5.808E-02 5.794E-02 5.776E-02
TA182M     3.428E-05 2.756E-06 2.217E-07 2.507E-18 1.833E-31
TA183      8.944E-02 8.894E-02 8.844E-02 8.357E-02 7.808E-02
 W181      1.302E-04 1.302E-04 1.302E-04 1.299E-04 1.295E-04
 W183M     9.529E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 W185      8.244E-03 8.241E-03 8.237E-03 8.206E-03 8.168E-03
 W185M     1.457E-05 2.228E-16 3.407E-27 0.000E+00 0.000E+00
 W187      1.240E+00 1.205E+00 1.170E+00 8.757E-01 6.183E-01
 W188      4.082E-04 4.080E-04 4.079E-04 4.062E-04 4.041E-04
RE186      8.239E-03 8.177E-03 8.114E-03 7.517E-03 6.858E-03
RE188      1.909E-01 1.864E-01 1.794E-01 1.204E-01 7.507E-02
RE188M     3.771E-02 4.079E-03 4.413E-04 9.683E-14 2.486E-25
RE189      8.365E-07 8.130E-07 7.901E-07 5.940E-07 4.218E-07
OS191      3.969E-07 3.966E-07 3.964E-07 3.926E-07 3.863E-07
IR192      1.755E-07 1.754E-07 1.754E-07 1.747E-07 1.739E-07
PB209      2.255E-07 1.827E-07 1.481E-07 1.813E-08 1.458E-09
BI210      3.608E-05 3.587E-05 3.567E-05 3.367E-05 3.142E-05
PO210      4.387E-04 4.387E-04 4.387E-04 4.388E-04 4.389E-04
SUMTOT     9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02

TOTAL      9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02
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OUTPUT UNIT =
6 PAGE 146
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

```
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         2.521E-03 2.521E-03 2.520E-03 2.520E-03 2.520E-03
HE         1.303E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LI         3.244E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE         4.929E-04 2.592E-10 2.592E-10 2.592E-10 2.592E-10
 B         5.785E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C         2.258E-01 7.996E-05 7.996E-05 7.996E-05 7.996E-05
 N         3.600E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 O         4.395E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 F         6.076E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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NE	8.448E-03	6.701E-32	0.000E+00	0.000E+00	0.000E+00
NA	2.977E+00	2.730E+00	2.607E+00	1.642E+00	9.432E-01
MG	5.594E-02	6.898E-04	8.508E-06	2.438E-11	1.638E-11
AL	2.862E+00	7.857E-06	1.337E-08	4.821E-11	3.239E-11
SI	5.723E-01	4.394E-01	3.373E-01	2.398E-02	1.004E-03
P	2.917E+00	2.911E+00	2.905E+00	2.847E+00	2.778E+00
S	1.040E-02	1.023E-02	1.023E-02	1.019E-02	1.015E-02
CL	4.690E-02	1.530E-02	5.007E-03	3.229E-06	3.158E-06
AR	2.565E-06	2.495E-06	2.446E-06	2.329E-06	2.304E-06
K	3.766E-05	3.458E-05	3.255E-05	1.870E-05	9.648E-06
CA	5.729E-04	7.536E-05	7.093E-05	7.064E-05	7.036E-05
SC	2.395E-02	2.273E-02	2.211E-02	2.078E-02	1.991E-02
TI	2.598E-02	1.901E-05	1.391E-08	0.000E+00	0.000E+00
V	3.632E+00	5.532E-05	8.441E-10	2.914E-17	2.914E-17
CR	3.154E+00	2.228E+00	2.226E+00	2.203E+00	2.175E+00
MN	1.893E+02	1.449E+02	1.110E+02	8.594E+00	1.414E+00
FE	9.302E-01	9.296E-01	9.291E-01	9.234E-01	9.166E-01
CO	6.327E+01	6.121E+01	6.113E+01	6.099E+01	6.088E+01
NI	2.625E+00	1.997E+00	1.520E+00	1.087E-01	1.596E-02
CU	5.638E-01	2.942E-01	2.785E-01	1.614E-01	8.383E-02
ZN	2.093E-01	1.749E-01	1.585E-01	1.394E-01	1.364E-01
GA	7.892E-04	1.201E-04	2.641E-05	6.934E-06	3.844E-06
SR	7.784E-02	7.596E-02	7.435E-02	6.327E-02	5.705E-02
Y	4.364E+00	4.117E+00	3.932E+00	3.024E+00	2.596E+00
ZR	2.397E+02	2.337E+02	2.279E+02	1.813E+02	1.454E+02
NB	3.958E+02	3.889E+02	3.798E+02	2.842E+02	2.025E+02
MO	1.070E+01	9.139E+00	8.958E+00	8.057E+00	7.102E+00
TC	9.827E-01	1.419E-01	1.380E-02	7.025E-07	7.032E-07
RU	1.946E-05	1.944E-05	1.943E-05	1.929E-05	1.912E-05
RH	6.853E-07	4.195E-11	3.699E-11	2.678E-11	2.104E-11
PD	3.292E-05	2.978E-05	2.807E-05	1.668E-05	8.969E-06
AG	2.085E-01	1.657E-02	1.657E-02	1.654E-02	1.650E-02
CD	5.147E-01	5.006E-01	4.889E-01	4.187E-01	3.625E-01
IN	1.101E+01	3.607E+00	2.133E+00	8.379E-01	8.314E-01
SN	1.773E+01	1.353E+01	1.340E+01	1.279E+01	1.217E+01
SB	2.015E+00	1.999E+00	1.993E+00	1.937E+00	1.878E+00
TE	6.618E-02	6.619E-02	6.619E-02	6.623E-02	6.629E-02
I	3.596E-06	6.805E-07	1.288E-07	1.533E-12	7.785E-13
EU	4.429E-04	4.422E-04	4.414E-04	4.340E-04	4.254E-04
GD	1.099E-01	8.544E-02	8.233E-02	5.688E-02	3.656E-02
TB	3.165E-02	3.161E-02	3.157E-02	3.120E-02	3.076E-02
DY	2.207E-04	1.499E-04	1.116E-04	5.960E-06	2.800E-07
HO	9.846E-06	9.607E-06	9.374E-06	7.345E-06	5.499E-06
LU	1.045E-02	8.716E-03	7.277E-03	1.368E-03	4.005E-04
HF	4.753E+00	7.055E-01	6.997E-01	6.667E-01	6.527E-01
TA	1.476E-01	1.470E-01	1.465E-01	1.415E-01	1.358E-01
W	1.250E+00	1.214E+00	1.179E+00	8.845E-01	6.270E-01
RE	2.369E-01	1.986E-01	1.879E-01	1.279E-01	8.193E-02

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OS          4.875E-07 4.763E-07 4.718E-07 4.368E-07 4.096E-07
IR          1.777E-07 1.776E-07 1.774E-07 1.761E-07 1.748E-07
PB          2.255E-07 1.827E-07 1.481E-07 1.813E-08 1.458E-09
BI          3.608E-05 3.588E-05 3.567E-05 3.367E-05 3.142E-05
PO          4.387E-04 4.387E-04 4.387E-04 4.388E-04 4.389E-04
SUMTOT      9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02

TOTAL       9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02

                                          CUMULATIVE TABLE TOTALS

AP+FP       9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02
ACT+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP   9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02
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OUTPUT UNIT =
6 PAGE 147
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTIVATION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

19 SUMMARY TABLE: NEUTRON ABSORPTION RATE,NEUTRONS PER SECOND
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/MTIHM, 1 CYCLE

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           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N 14      3.806E-01 3.806E-01 3.806E-01 3.806E-01 3.806E-01
 O 16      6.261E+00 6.261E+00 6.261E+00 6.261E+00 6.261E+00
TI 48      2.436E-01 2.436E-01 2.436E-01 2.436E-01 2.436E-01
CR 50      2.739E+00 2.739E+00 2.739E+00 2.739E+00 2.739E+00
CR 52      7.323E+00 7.323E+00 7.323E+00 7.323E+00 7.323E+00
CR 53      6.880E+00 6.880E+00 6.880E+00 6.880E+00 6.880E+00
MN 55      5.237E+00 5.237E+00 5.237E+00 5.237E+00 5.237E+00
FE 54      1.547E+00 1.547E+00 1.547E+00 1.547E+00 1.547E+00
FE 56      2.642E+01 2.642E+01 2.642E+01 2.642E+01 2.642E+01
FE 57      5.937E-01 5.937E-01 5.937E-01 5.937E-01 5.937E-01
CO 58      2.816E-01 2.815E-01 2.814E-01 2.802E-01 2.788E-01
CO 59      2.773E+00 2.773E+00 2.773E+00 2.773E+00 2.773E+00
NI 58      1.237E+01 1.237E+01 1.237E+01 1.237E+01 1.237E+01
NI 59      9.578E-01 9.578E-01 9.578E-01 9.578E-01 9.578E-01
NI 60      2.953E+00 2.953E+00 2.953E+00 2.953E+00 2.953E+00
NI 62      2.000E+00 2.000E+00 2.000E+00 2.000E+00 2.000E+00
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ZR 90       8.603E+00 8.603E+00 8.603E+00 8.603E+00 8.603E+00
ZR 91       2.057E+01 2.057E+01 2.057E+01 2.057E+01 2.057E+01
ZR 92       1.260E+01 1.260E+01 1.260E+01 1.260E+01 1.260E+01
ZR 93       1.487E-01 1.487E-01 1.487E-01 1.487E-01 1.487E-01
ZR 94       2.319E+00 2.319E+00 2.319E+00 2.319E+00 2.319E+00
ZR 96       3.639E+00 3.639E+00 3.639E+00 3.639E+00 3.639E+00
NB 93       1.003E+00 1.003E+00 1.003E+00 1.003E+00 1.003E+00
MO 95       7.640E-01 7.640E-01 7.640E-01 7.641E-01 7.642E-01
MO 96       1.364E-01 1.364E-01 1.364E-01 1.364E-01 1.364E-01
MO 98       3.446E-01 3.446E-01 3.446E-01 3.446E-01 3.446E-01
SN116       7.853E-01 7.853E-01 7.853E-01 7.853E-01 7.853E-01
SN117       4.986E-01 4.986E-01 4.986E-01 4.986E-01 4.986E-01
SN118       8.445E-01 8.445E-01 8.445E-01 8.445E-01 8.445E-01
SN119       1.945E-01 1.945E-01 1.945E-01 1.945E-01 1.945E-01
SN120       1.668E-01 1.668E-01 1.668E-01 1.668E-01 1.668E-01
SN124       1.907E-01 1.907E-01 1.907E-01 1.907E-01 1.907E-01
HF177       1.591E-01 1.591E-01 1.591E-01 1.591E-01 1.591E-01
HF178       3.719E-01 3.719E-01 3.719E-01 3.719E-01 3.719E-01
SUMTOT      1.323E+02 1.323E+02 1.323E+02 1.323E+02 1.323E+02

TOTAL       1.340E+02 1.340E+02 1.340E+02 1.340E+02 1.340E+02
□
         OUTPUT UNIT =
6                        PAGE  148
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                              17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N         3.806E-01 3.806E-01 3.806E-01 3.806E-01 3.806E-01
 O         6.277E+00 6.277E+00 6.277E+00 6.277E+00 6.277E+00
TI         2.590E-01 2.590E-01 2.590E-01 2.590E-01 2.590E-01
CR         1.698E+01 1.698E+01 1.698E+01 1.698E+01 1.698E+01
MN         5.237E+00 5.237E+00 5.237E+00 5.237E+00 5.237E+00
FE         2.861E+01 2.861E+01 2.861E+01 2.861E+01 2.861E+01
CO         3.059E+00 3.059E+00 3.059E+00 3.058E+00 3.057E+00
NI         1.849E+01 1.849E+01 1.849E+01 1.849E+01 1.849E+01
ZR         4.788E+01 4.788E+01 4.788E+01 4.788E+01 4.788E+01
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NB          1.047E+00 1.047E+00 1.047E+00 1.047E+00 1.047E+00
MO          1.371E+00 1.371E+00 1.372E+00 1.372E+00 1.372E+00
SN          2.867E+00 2.867E+00 2.867E+00 2.867E+00 2.867E+00
HF          6.961E-01 6.961E-01 6.961E-01 6.961E-01 6.961E-01
SUMTOT      1.332E+02 1.332E+02 1.332E+02 1.332E+02 1.331E+02

TOTAL       1.340E+02 1.340E+02 1.340E+02 1.340E+02 1.340E+02

                                          CUMULATIVE TABLE TOTALS

AP+FP       1.340E+02 1.340E+02 1.340E+02 1.340E+02 1.340E+02
ACT+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AP+ACT+FP   1.340E+02 1.340E+02 1.340E+02 1.340E+02 1.340E+02
□
         OUTPUT UNIT =
6                          PAGE  149
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N 14      2.841E-03 2.841E-03 2.841E-03 2.841E-03 2.841E-03
 O 16      4.674E-02 4.674E-02 4.674E-02 4.674E-02 4.674E-02
TI 48      1.818E-03 1.818E-03 1.818E-03 1.818E-03 1.818E-03
CR 50      2.045E-02 2.045E-02 2.045E-02 2.045E-02 2.045E-02
CR 52      5.466E-02 5.466E-02 5.466E-02 5.466E-02 5.466E-02
CR 53      5.136E-02 5.136E-02 5.136E-02 5.136E-02 5.136E-02
MN 55      3.909E-02 3.909E-02 3.909E-02 3.909E-02 3.909E-02
FE 54      1.155E-02 1.155E-02 1.155E-02 1.155E-02 1.155E-02
FE 56      1.972E-01 1.972E-01 1.972E-01 1.972E-01 1.972E-01
FE 57      4.431E-03 4.431E-03 4.431E-03 4.431E-03 4.431E-03
CO 58      2.102E-03 2.101E-03 2.100E-03 2.092E-03 2.081E-03
CO 59      2.070E-02 2.070E-02 2.070E-02 2.070E-02 2.070E-02
NI 58      9.233E-02 9.233E-02 9.233E-02 9.233E-02 9.233E-02
NI 59      7.149E-03 7.149E-03 7.149E-03 7.149E-03 7.149E-03
NI 60      2.204E-02 2.204E-02 2.204E-02 2.204E-02 2.204E-02
NI 62      1.493E-02 1.493E-02 1.493E-02 1.493E-02 1.493E-02
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ZR 90      6.421E-02 6.421E-02 6.421E-02 6.421E-02 6.421E-02
ZR 91      1.536E-01 1.536E-01 1.536E-01 1.536E-01 1.536E-01
ZR 92      9.403E-02 9.403E-02 9.403E-02 9.403E-02 9.403E-02
ZR 93      1.110E-03 1.110E-03 1.110E-03 1.110E-03 1.110E-03
ZR 94      1.731E-02 1.731E-02 1.731E-02 1.731E-02 1.731E-02
ZR 96      2.716E-02 2.716E-02 2.716E-02 2.716E-02 2.716E-02
NB 93      7.488E-03 7.488E-03 7.488E-03 7.488E-03 7.488E-03
MO 95      5.703E-03 5.703E-03 5.703E-03 5.704E-03 5.704E-03
MO 96      1.018E-03 1.018E-03 1.018E-03 1.018E-03 1.018E-03
MO 98      2.572E-03 2.572E-03 2.572E-03 2.572E-03 2.572E-03
SN116      5.862E-03 5.862E-03 5.862E-03 5.862E-03 5.862E-03
SN117      3.722E-03 3.722E-03 3.722E-03 3.722E-03 3.722E-03
SN118      6.303E-03 6.303E-03 6.303E-03 6.303E-03 6.303E-03
SN119      1.452E-03 1.452E-03 1.452E-03 1.452E-03 1.452E-03
SN120      1.245E-03 1.245E-03 1.245E-03 1.245E-03 1.245E-03
SN124      1.423E-03 1.423E-03 1.423E-03 1.423E-03 1.423E-03
HF177      1.187E-03 1.187E-03 1.187E-03 1.187E-03 1.187E-03
HF178      2.776E-03 2.776E-03 2.776E-03 2.776E-03 2.776E-03
SUMTOT     9.875E-01 9.875E-01 9.875E-01 9.875E-01 9.875E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE  150
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTIVATION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 N         2.841E-03 2.841E-03 2.841E-03 2.841E-03 2.841E-03
 O         4.685E-02 4.685E-02 4.685E-02 4.685E-02 4.685E-02
TI         1.933E-03 1.933E-03 1.933E-03 1.933E-03 1.933E-03
CR         1.267E-01 1.267E-01 1.267E-01 1.267E-01 1.267E-01
MN         3.909E-02 3.909E-02 3.909E-02 3.909E-02 3.909E-02
FE         2.135E-01 2.135E-01 2.135E-01 2.135E-01 2.135E-01
CO         2.284E-02 2.283E-02 2.283E-02 2.283E-02 2.282E-02
NI         1.380E-01 1.380E-01 1.380E-01 1.380E-01 1.380E-01
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ZR          3.574E-01 3.574E-01 3.574E-01 3.574E-01 3.574E-01
NB          7.812E-03 7.812E-03 7.812E-03 7.812E-03 7.812E-03
MO          1.024E-02 1.024E-02 1.024E-02 1.024E-02 1.024E-02
SN          2.140E-02 2.140E-02 2.140E-02 2.140E-02 2.140E-02
HF          5.196E-03 5.196E-03 5.196E-03 5.196E-03 5.196E-03
SUMTOT      9.939E-01 9.939E-01 9.939E-01 9.939E-01 9.939E-01

TOTAL       1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE  151
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE  4       7.300E-03 7.303E-03 7.305E-03 7.330E-03 7.360E-03
TH230       5.148E-04 5.148E-04 5.149E-04 5.153E-04 5.158E-04
PA231       7.629E-05 7.630E-05 7.632E-05 7.644E-05 7.655E-05
 U232       4.828E-05 4.829E-05 4.829E-05 4.837E-05 4.845E-05
 U233       6.437E-04 6.437E-04 6.437E-04 6.438E-04 6.438E-04
 U234       1.393E+02 1.393E+02 1.393E+02 1.393E+02 1.393E+02
 U235       1.098E+04 1.098E+04 1.098E+04 1.098E+04 1.098E+04
 U236       1.557E+03 1.557E+03 1.557E+03 1.557E+03 1.557E+03
 U237       3.858E+00 3.842E+00 3.825E+00 3.665E+00 3.482E+00
 U238       4.365E+05 4.365E+05 4.365E+05 4.365E+05 4.365E+05
 U239       2.331E-01 3.981E-02 6.800E-03 1.437E-10 8.862E-20
NP236       5.956E-05 5.956E-05 5.956E-05 5.956E-05 5.956E-05
NP237       9.837E+01 9.839E+01 9.840E+01 9.856E+01 9.875E+01
NP238       2.390E-01 2.358E-01 2.326E-01 2.029E-01 1.723E-01
NP239       3.355E+01 3.334E+01 3.296E+01 2.917E+01 2.517E+01
NP240       5.907E-04 3.115E-04 1.643E-04 2.732E-07 1.265E-10
PU236       1.118E-04 1.118E-04 1.119E-04 1.121E-04 1.123E-04
PU238       1.366E+01 1.366E+01 1.366E+01 1.369E+01 1.373E+01
PU239       2.138E+03 2.138E+03 2.139E+03 2.143E+03 2.147E+03
PU240       4.778E+02 4.778E+02 4.778E+02 4.778E+02 4.778E+02
PU241       2.799E+02 2.799E+02 2.799E+02 2.799E+02 2.799E+02
PU242       3.592E+01 3.592E+01 3.592E+01 3.592E+01 3.592E+01
PU243       9.019E-03 7.842E-03 6.818E-03 1.684E-03 3.143E-04
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PU244      4.945E-04 4.946E-04 4.946E-04 4.946E-04 4.946E-04
AM241      4.681E+00 4.683E+00 4.684E+00 4.700E+00 4.718E+00
AM242M     1.446E-01 1.446E-01 1.446E-01 1.446E-01 1.446E-01
AM242      9.127E-03 8.741E-03 8.371E-03 5.431E-03 3.232E-03
AM243      3.315E+00 3.316E+00 3.317E+00 3.322E+00 3.323E+00
AM244M     1.058E-04 2.137E-05 4.317E-06 4.879E-13 2.250E-21
AM244      1.295E-04 1.209E-04 1.129E-04 5.683E-05 2.494E-05
CM242      6.880E-01 6.882E-01 6.884E-01 6.896E-01 6.899E-01
CM243      8.920E-03 8.920E-03 8.920E-03 8.920E-03 8.919E-03
CM244      3.978E-01 3.979E-01 3.980E-01 3.980E-01 3.980E-01
CM245      8.353E-03 8.353E-03 8.353E-03 8.353E-03 8.353E-03
CM246      3.171E-04 3.171E-04 3.171E-04 3.171E-04 3.171E-04
SUMTOT     4.522E+05 4.522E+05 4.522E+05 4.522E+05 4.522E+05

TOTAL      4.522E+05 4.522E+05 4.522E+05 4.522E+05 4.522E+05
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         OUTPUT UNIT =
6                        PAGE  152
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE         7.300E-03 7.303E-03 7.305E-03 7.330E-03 7.360E-03
TH         5.551E-04 5.552E-04 5.552E-04 5.556E-04 5.561E-04
PA         7.952E-05 7.953E-05 7.954E-05 7.962E-05 7.969E-05
 U         4.492E+05 4.492E+05 4.492E+05 4.492E+05 4.492E+05
NP         1.322E+02 1.320E+02 1.316E+02 1.279E+02 1.241E+02
PU         2.945E+03 2.946E+03 2.946E+03 2.950E+03 2.954E+03
AM         8.150E+00 8.152E+00 8.154E+00 8.172E+00 8.189E+00
CM         1.103E+00 1.104E+00 1.104E+00 1.105E+00 1.106E+00
SUMTOT     4.522E+05 4.522E+05 4.522E+05 4.522E+05 4.522E+05

TOTAL      4.522E+05 4.522E+05 4.522E+05 4.522E+05 4.522E+05

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.968E+05 1.968E+05 1.968E+05 1.968E+05 1.968E+05
ACT+FP     4.522E+05 4.522E+05 4.522E+05 4.522E+05 4.522E+05
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AP+ACT+FP  6.491E+05 6.491E+05 6.491E+05 6.491E+05 6.491E+05
□
         OUTPUT UNIT =
6                        PAGE  153
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

TH231      2.769E-01 2.701E-01 2.635E-01 2.065E-01 1.557E-01
TH233      2.008E-03 3.058E-04 4.657E-05 3.129E-13 4.876E-23
TH234      1.469E-01 1.469E-01 1.469E-01 1.469E-01 1.469E-01
PA232      9.952E-02 9.735E-02 9.522E-02 7.639E-02 5.863E-02
PA233      6.221E-02 6.222E-02 6.223E-02 6.230E-02 6.240E-02
PA234M     1.477E-01 1.469E-01 1.469E-01 1.469E-01 1.469E-01
 U232      1.034E-03 1.034E-03 1.034E-03 1.036E-03 1.037E-03
 U234      8.709E-01 8.709E-01 8.709E-01 8.709E-01 8.709E-01
 U235      2.375E-02 2.375E-02 2.375E-02 2.375E-02 2.375E-02
 U236      1.008E-01 1.008E-01 1.008E-01 1.008E-01 1.008E-01
 U237      3.151E+05 3.137E+05 3.124E+05 2.993E+05 2.843E+05
 U238      1.468E-01 1.468E-01 1.468E-01 1.468E-01 1.468E-01
 U239      7.795E+06 1.331E+06 2.274E+05 4.807E-03 2.964E-12
 U240      7.189E+00 6.844E+00 6.515E+00 3.985E+00 2.209E+00
NP235      8.424E-04 8.423E-04 8.422E-04 8.416E-04 8.409E-04
NP236M     1.193E+00 1.157E+00 1.122E+00 8.244E-01 5.696E-01
NP237      6.937E-02 6.938E-02 6.939E-02 6.951E-02 6.964E-02
NP238      6.197E+04 6.113E+04 6.030E+04 5.261E+04 4.466E+04
NP239      7.786E+06 7.736E+06 7.649E+06 6.768E+06 5.842E+06
NP240M     1.466E+03 1.219E+01 6.592E+00 4.020E+00 2.229E+00
NP240      7.123E+03 3.756E+03 1.981E+03 3.294E+00 1.525E-03
PU236      5.944E-02 5.945E-02 5.947E-02 5.958E-02 5.967E-02
PU237      1.953E-01 1.952E-01 1.951E-01 1.939E-01 1.924E-01
PU238      2.339E+02 2.339E+02 2.340E+02 2.345E+02 2.351E+02
PU239      1.330E+02 1.330E+02 1.330E+02 1.332E+02 1.335E+02
PU240      1.089E+02 1.089E+02 1.089E+02 1.089E+02 1.089E+02
PU241      2.885E+04 2.885E+04 2.885E+04 2.884E+04 2.884E+04
PU242      1.372E-01 1.372E-01 1.372E-01 1.372E-01 1.372E-01
PU243      2.348E+04 2.042E+04 1.775E+04 4.383E+03 8.182E+02
PU245      1.079E-02 1.011E-02 9.471E-03 4.925E-03 2.247E-03
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AM240      3.117E-02 3.075E-02 3.033E-02 2.646E-02 2.247E-02
AM241      1.607E+01 1.608E+01 1.608E+01 1.614E+01 1.620E+01
AM242M     1.406E+00 1.406E+00 1.406E+00 1.406E+00 1.406E+00
AM242      7.381E+03 7.069E+03 6.770E+03 4.392E+03 2.614E+03
AM243      6.610E-01 6.613E-01 6.615E-01 6.625E-01 6.628E-01
AM244M     3.138E+03 6.337E+02 1.280E+02 1.447E-05 6.671E-14
AM244      1.647E+02 1.538E+02 1.436E+02 7.230E+01 3.173E+01
AM245      1.079E-02 1.069E-02 1.043E-02 6.073E-03 2.792E-03
CM242      2.276E+03 2.276E+03 2.277E+03 2.281E+03 2.282E+03
CM243      4.606E-01 4.606E-01 4.606E-01 4.606E-01 4.606E-01
CM244      3.220E+01 3.221E+01 3.221E+01 3.221E+01 3.221E+01
CM245      1.435E-03 1.435E-03 1.435E-03 1.435E-03 1.435E-03
SUMTOT     1.603E+07 9.506E+06 8.308E+06 7.160E+06 6.206E+06

TOTAL      1.603E+07 9.506E+06 8.308E+06 7.160E+06 6.206E+06
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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

TH         4.260E-01 4.175E-01 4.106E-01 3.535E-01 3.027E-01
PA         3.103E-01 3.074E-01 3.052E-01 2.860E-01 2.682E-01
 U         8.110E+06 1.645E+06 5.398E+05 2.993E+05 2.843E+05
NP         7.857E+06 7.801E+06 7.712E+06 6.821E+06 5.887E+06
PU         5.280E+04 4.974E+04 4.707E+04 3.370E+04 3.014E+04
AM         1.070E+04 7.875E+03 7.059E+03 4.483E+03 2.664E+03
CM         2.308E+03 2.309E+03 2.310E+03 2.314E+03 2.315E+03
SUMTOT     1.603E+07 9.506E+06 8.308E+06 7.160E+06 6.206E+06

TOTAL      1.603E+07 9.506E+06 8.308E+06 7.160E+06 6.206E+06

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.744E+05 1.589E+05 1.533E+05 1.188E+05 9.590E+04
ACT+FP     1.603E+07 9.506E+06 8.308E+06 7.160E+06 6.206E+06
AP+ACT+FP  1.621E+07 9.665E+06 8.461E+06 7.279E+06 6.302E+06
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OUTPUT UNIT =
6 PAGE 155
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BI212	2.495E-06	2.496E-06	2.496E-06	2.495E-06	2.614E-06
PO212	4.981E-06	4.983E-06	4.983E-06	4.980E-06	5.219E-06
PO216	6.006E-06	6.007E-06	6.007E-06	6.006E-06	6.007E-06
RN220	5.570E-06	5.571E-06	5.571E-06	5.570E-06	5.572E-06
RA224	5.035E-06	5.035E-06	5.035E-06	5.035E-06	5.036E-06
TH228	4.786E-06	4.787E-06	4.788E-06	4.800E-06	4.815E-06
TH231	1.554E-04	1.516E-04	1.479E-04	1.159E-04	8.734E-05
TH233	5.082E-06	7.740E-07	1.179E-07	7.919E-16	1.234E-25
TH234	5.956E-05	5.956E-05	5.956E-05	5.956E-05	5.956E-05
PA232	6.507E-04	6.365E-04	6.226E-04	4.994E-04	3.833E-04
PA233	1.412E-04	1.412E-04	1.412E-04	1.414E-04	1.416E-04
PA234M	7.297E-04	7.260E-04	7.260E-04	7.260E-04	7.260E-04
PA234	1.356E-05	1.249E-05	1.154E-05	5.866E-06	3.643E-06
U232	3.319E-05	3.319E-05	3.320E-05	3.325E-05	3.330E-05
U234	2.508E-02	2.508E-02	2.508E-02	2.508E-02	2.508E-02
U235	6.221E-04	6.221E-04	6.221E-04	6.221E-04	6.221E-04
U236	2.731E-03	2.731E-03	2.731E-03	2.731E-03	2.731E-03
U237	5.961E+02	5.936E+02	5.910E+02	5.663E+02	5.380E+02
U238	3.723E-03	3.723E-03	3.723E-03	3.723E-03	3.723E-03
U239	2.098E+04	3.584E+03	6.122E+02	1.294E-05	7.978E-15
U240	5.897E-03	5.614E-03	5.345E-03	3.269E-03	1.812E-03
NP236M	9.428E-04	9.142E-04	8.865E-04	6.514E-04	4.501E-04
NP237	2.120E-03	2.121E-03	2.121E-03	2.124E-03	2.128E-03
NP238	2.968E+02	2.928E+02	2.888E+02	2.520E+02	2.139E+02
NP239	1.882E+04	1.870E+04	1.849E+04	1.636E+04	1.412E+04
NP240M	8.495E+00	7.064E-02	3.820E-02	2.330E-02	1.292E-02
NP240	7.549E+01	3.981E+01	2.100E+01	3.492E-02	1.616E-05
PU236	2.069E-03	2.069E-03	2.069E-03	2.073E-03	2.077E-03
PU237	7.202E-05	7.197E-05	7.193E-05	7.147E-05	7.093E-05
PU238	7.751E+00	7.753E+00	7.755E+00	7.772E+00	7.790E+00
PU239	4.097E+00	4.098E+00	4.099E+00	4.106E+00	4.114E+00

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PU240      3.391E+00 3.391E+00 3.391E+00 3.391E+00 3.391E+00
PU241      8.943E-01 8.943E-01 8.943E-01 8.942E-01 8.942E-01
PU242      4.052E-03 4.052E-03 4.052E-03 4.052E-03 4.052E-03
PU243      2.710E+01 2.356E+01 2.049E+01 5.059E+00 9.442E-01
PU245      2.559E-05 2.397E-05 2.246E-05 1.168E-05 5.328E-06
AM240      2.040E-04 2.012E-04 1.985E-04 1.732E-04 1.470E-04
AM241      5.339E-01 5.341E-01 5.342E-01 5.360E-01 5.381E-01
AM242M     5.554E-04 5.554E-04 5.554E-04 5.554E-04 5.554E-04
AM242      8.379E+00 8.024E+00 7.685E+00 4.986E+00 2.967E+00
AM243      2.125E-02 2.126E-02 2.126E-02 2.130E-02 2.130E-02
AM244M     9.491E+00 1.917E+00 3.872E-01 4.376E-08 2.018E-16
AM244      8.633E-01 8.060E-01 7.525E-01 3.789E-01 1.663E-01
AM245      2.003E-05 1.983E-05 1.935E-05 1.127E-05 5.179E-06
CM241      2.201E-06 2.199E-06 2.197E-06 2.180E-06 2.159E-06
CM242      8.385E+01 8.387E+01 8.390E+01 8.405E+01 8.409E+01
CM243      1.690E-02 1.690E-02 1.690E-02 1.690E-02 1.690E-02
CM244      1.126E+00 1.127E+00 1.127E+00 1.127E+00 1.127E+00
CM245      4.761E-05 4.761E-05 4.761E-05 4.761E-05 4.761E-05
CM246      3.190E-06 3.190E-06 3.190E-06 3.190E-06 3.190E-06
SUMTOT     4.093E+04 2.335E+04 2.013E+04 1.729E+04 1.498E+04

TOTAL      4.093E+04 2.335E+04 2.013E+04 1.729E+04 1.498E+04
□
         OUTPUT UNIT =
6                        PAGE  156
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

BI         2.497E-06 2.498E-06 2.498E-06 2.497E-06 2.616E-06
PO         1.099E-05 1.099E-05 1.099E-05 1.099E-05 1.123E-05
RN         5.572E-06 5.573E-06 5.573E-06 5.573E-06 5.574E-06
RA         5.037E-06 5.037E-06 5.037E-06 5.037E-06 5.038E-06
TH         2.251E-04 2.170E-04 2.126E-04 1.805E-04 1.520E-04
PA         1.535E-03 1.516E-03 1.502E-03 1.373E-03 1.255E-03
 U         2.158E+04 4.178E+03 1.203E+03 5.663E+02 5.380E+02
NP         1.920E+04 1.903E+04 1.880E+04 1.661E+04 1.434E+04
PU         4.324E+01 3.971E+01 3.663E+01 2.123E+01 1.714E+01
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AM          1.929E+01 1.130E+01 9.381E+00 5.923E+00 3.694E+00
CM          8.499E+01 8.502E+01 8.504E+01 8.519E+01 8.523E+01
SUMTOT      4.093E+04 2.335E+04 2.013E+04 1.729E+04 1.498E+04

TOTAL       4.093E+04 2.335E+04 2.013E+04 1.729E+04 1.498E+04

                                          CUMULATIVE TABLE TOTALS

AP+FP       9.669E+02 8.761E+02 8.242E+02 5.723E+02 4.439E+02
ACT+FP      4.093E+04 2.335E+04 2.013E+04 1.729E+04 1.498E+04
AP+ACT+FP   4.190E+04 2.422E+04 2.096E+04 1.786E+04 1.542E+04
□
         OUTPUT UNIT =
6                         PAGE  157
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                              17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234       7.022E+00 7.022E+00 7.022E+00 7.022E+00 7.022E+00
 U235       1.314E+03 1.314E+03 1.314E+03 1.314E+03 1.314E+03
 U236       3.377E+01 3.377E+01 3.377E+01 3.377E+01 3.377E+01
 U238       1.056E+03 1.056E+03 1.056E+03 1.056E+03 1.056E+03
NP237       7.706E+00 7.708E+00 7.709E+00 7.722E+00 7.736E+00
PU239       8.445E+02 8.447E+02 8.449E+02 8.464E+02 8.479E+02
PU240       2.567E+02 2.567E+02 2.567E+02 2.567E+02 2.567E+02
PU241       9.439E+01 9.439E+01 9.439E+01 9.438E+01 9.438E+01
SUMTOT      3.614E+03 3.614E+03 3.615E+03 3.616E+03 3.618E+03

TOTAL       3.622E+03 3.622E+03 3.622E+03 3.623E+03 3.625E+03
□
         OUTPUT UNIT =
6                         PAGE  158
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □
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ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         2.411E+03 2.411E+03 2.411E+03 2.411E+03 2.411E+03
NP         8.854E+00 8.848E+00 8.836E+00 8.718E+00 8.595E+00
PU         1.200E+03 1.200E+03 1.200E+03 1.201E+03 1.203E+03
SUMTOT     3.620E+03 3.620E+03 3.620E+03 3.621E+03 3.623E+03

TOTAL      3.622E+03 3.622E+03 3.622E+03 3.623E+03 3.625E+03

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.340E+02 1.340E+02 1.340E+02 1.340E+02 1.340E+02
ACT+FP     3.622E+03 3.622E+03 3.622E+03 3.623E+03 3.625E+03
AP+ACT+FP  3.756E+03 3.756E+03 3.756E+03 3.757E+03 3.759E+03
□
         OUTPUT UNIT =
6                        PAGE  159
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234      1.939E-03 1.939E-03 1.939E-03 1.938E-03 1.937E-03
 U235      3.628E-01 3.627E-01 3.627E-01 3.626E-01 3.624E-01
 U236      9.325E-03 9.325E-03 9.325E-03 9.321E-03 9.317E-03
 U238      2.917E-01 2.917E-01 2.917E-01 2.916E-01 2.915E-01
NP237      2.128E-03 2.128E-03 2.128E-03 2.131E-03 2.134E-03
PU239      2.332E-01 2.332E-01 2.333E-01 2.336E-01 2.339E-01
PU240      7.088E-02 7.088E-02 7.088E-02 7.085E-02 7.082E-02
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PU241      2.606E-02 2.606E-02 2.606E-02 2.605E-02 2.604E-02
SUMTOT     9.980E-01 9.980E-01 9.980E-01 9.980E-01 9.981E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE  160
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    20 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,FRACTIO
NAL  NEUTRONS PER
SECOND
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         6.658E-01 6.658E-01 6.658E-01 6.655E-01 6.652E-01
NP         2.445E-03 2.443E-03 2.440E-03 2.406E-03 2.371E-03
PU         3.312E-01 3.313E-01 3.313E-01 3.316E-01 3.319E-01
SUMTOT     9.995E-01 9.995E-01 9.995E-01 9.995E-01 9.995E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE  161
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    21 SUMMARY TABLE:  FISSION RATE,   FISSIONS PER SE
COND
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      1.063E+03 1.063E+03 1.063E+03 1.063E+03 1.063E+03
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 U238      1.070E+02 1.070E+02 1.070E+02 1.070E+02 1.070E+02
PU239      5.345E+02 5.346E+02 5.347E+02 5.357E+02 5.367E+02
PU241      7.085E+01 7.085E+01 7.085E+01 7.084E+01 7.084E+01
SUMTOT     1.775E+03 1.775E+03 1.775E+03 1.776E+03 1.777E+03

TOTAL      1.777E+03 1.777E+03 1.777E+03 1.778E+03 1.779E+03
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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    21 SUMMARY TABLE:  FISSION RATE,   FISSIONS PER SE
COND
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         1.171E+03 1.171E+03 1.171E+03 1.171E+03 1.171E+03
PU         6.062E+02 6.063E+02 6.064E+02 6.073E+02 6.083E+02
SUMTOT     1.777E+03 1.777E+03 1.777E+03 1.778E+03 1.779E+03

TOTAL      1.777E+03 1.777E+03 1.777E+03 1.778E+03 1.779E+03

                                         CUMULATIVE TABLE TOTALS

AP+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ACT+FP     1.777E+03 1.777E+03 1.777E+03 1.778E+03 1.779E+03
AP+ACT+FP  1.777E+03 1.777E+03 1.777E+03 1.778E+03 1.779E+03
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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    22 SUMMARY TABLE:  FISSION RATE,   FRACTIONAL  FIS
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SIONS PER SECOND
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      5.980E-01 5.979E-01 5.979E-01 5.976E-01 5.972E-01
 U238      6.019E-02 6.018E-02 6.018E-02 6.015E-02 6.012E-02
PU239      3.008E-01 3.008E-01 3.008E-01 3.012E-01 3.016E-01
PU241      3.987E-02 3.986E-02 3.986E-02 3.984E-02 3.981E-02
SUMTOT     9.988E-01 9.988E-01 9.988E-01 9.988E-01 9.988E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE  164
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    22 SUMMARY TABLE:  FISSION RATE,   FRACTIONAL  FIS
SIONS PER SECOND
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         6.587E-01 6.586E-01 6.586E-01 6.583E-01 6.579E-01
PU         3.411E-01 3.411E-01 3.412E-01 3.415E-01 3.419E-01
SUMTOT     9.998E-01 9.998E-01 9.998E-01 9.998E-01 9.998E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                        PAGE  165
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                    23 SUMMARY TABLE:  ALPHA RADIOACTIVITY CURIES
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                              17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

PU238      2.339E+02 2.339E+02 2.340E+02 2.345E+02 2.351E+02
PU239      1.330E+02 1.330E+02 1.330E+02 1.332E+02 1.335E+02
PU240      1.089E+02 1.089E+02 1.089E+02 1.089E+02 1.089E+02
AM241      1.607E+01 1.608E+01 1.608E+01 1.614E+01 1.620E+01
CM242      2.276E+03 2.276E+03 2.277E+03 2.281E+03 2.282E+03
CM244      3.220E+01 3.221E+01 3.221E+01 3.221E+01 3.221E+01
SUMTOT     2.800E+03 2.800E+03 2.801E+03 2.806E+03 2.808E+03

TOTAL      2.803E+03 2.804E+03 2.804E+03 2.809E+03 2.811E+03
□
         OUTPUT UNIT =
6                         PAGE  166
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

ACTINIDES+DAUGHTERS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     23 SUMMARY TABLE:  ALPHA RADIOACTIVITY CURIES

                              17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

PU         4.766E+02 4.767E+02 4.768E+02 4.776E+02 4.784E+02
AM         1.674E+01 1.675E+01 1.675E+01 1.681E+01 1.687E+01
CM         2.308E+03 2.309E+03 2.310E+03 2.314E+03 2.315E+03
SUMTOT     2.802E+03 2.802E+03 2.803E+03 2.808E+03 2.810E+03

TOTAL      2.803E+03 2.804E+03 2.804E+03 2.809E+03 2.811E+03

                                          CUMULATIVE TABLE TOTALS

AP+FP      0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ACT+FP     2.803E+03 2.804E+03 2.804E+03 2.809E+03 2.811E+03
AP+ACT+FP  2.803E+03 2.804E+03 2.804E+03 2.809E+03 2.811E+03
□
         OUTPUT UNIT =
6                         PAGE  167
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12
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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3      1.454E-02 1.454E-02 1.454E-02 1.454E-02 1.454E-02
LI  6      8.174E-05 8.174E-05 8.174E-05 8.174E-05 8.174E-05
LI  7      2.733E-06 2.733E-06 2.733E-06 2.733E-06 2.733E-06
BE  9      5.267E-06 5.267E-06 5.267E-06 5.267E-06 5.267E-06
BE 10      3.513E-05 3.513E-05 3.513E-05 3.513E-05 3.513E-05
 C 14      7.103E-06 7.103E-06 7.103E-06 7.103E-06 7.103E-06
ZN 68      3.317E-04 3.317E-04 3.317E-04 3.317E-04 3.317E-04
ZN 70      1.136E-03 1.136E-03 1.136E-03 1.136E-03 1.136E-03
ZN 72      2.950E-05 2.906E-05 2.863E-05 2.467E-05 2.063E-05
GA 72      8.968E-06 8.964E-06 8.953E-06 8.589E-06 7.787E-06
GE 72      4.843E-03 4.843E-03 4.843E-03 4.848E-03 4.853E-03
GA 73      6.834E-06 5.937E-06 5.151E-06 1.245E-06 2.264E-07
GE 73      1.123E-02 1.123E-02 1.123E-02 1.123E-02 1.123E-02
GE 74      2.470E-02 2.470E-02 2.470E-02 2.470E-02 2.470E-02
GE 75      8.820E-06 5.473E-06 3.312E-06 2.181E-08 5.253E-11
AS 75      5.393E-02 5.393E-02 5.394E-02 5.394E-02 5.394E-02
GE 76      1.403E-01 1.403E-01 1.403E-01 1.403E-01 1.403E-01
AS 76      4.945E-06 4.816E-06 4.691E-06 3.605E-06 2.628E-06
SE 76      7.373E-04 7.374E-04 7.375E-04 7.386E-04 7.396E-04
GE 77      1.384E-04 1.303E-04 1.225E-04 6.635E-05 3.178E-05
AS 77      1.333E-03 1.318E-03 1.302E-03 1.140E-03 9.507E-04
SE 77      2.982E-01 2.982E-01 2.983E-01 2.985E-01 2.987E-01
GE 78      1.063E-04 6.598E-05 4.091E-05 3.434E-07 1.108E-09
AS 78      1.133E-04 1.035E-04 8.518E-05 2.681E-06 1.809E-08
SE 78      6.502E-01 6.503E-01 6.503E-01 6.504E-01 6.504E-01
GE 79      1.875E-06 1.207E-31 0.000E+00 0.000E+00 0.000E+00
AS 79      2.799E-05 2.961E-07 2.914E-09 2.488E-29 0.000E+00
SE 79      1.640E+00 1.640E+00 1.640E+00 1.640E+00 1.640E+00
SE 79M     1.212E-05 2.252E-07 2.224E-09 1.894E-29 0.000E+00
BR 79      1.333E-05 1.334E-05 1.334E-05 1.336E-05 1.338E-05
GE 80      2.295E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 80      1.931E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 80      3.781E+00 3.781E+00 3.781E+00 3.781E+00 3.781E+00
KR 80      4.283E-05 4.283E-05 4.284E-05 4.285E-05 4.285E-05
GE 81      1.220E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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AS 81       6.047E-06 1.068E-39 0.000E+00 0.000E+00 0.000E+00
SE 81       2.227E-04 2.793E-05 4.700E-06 1.578E-09 2.604E-13
SE 81M      2.006E-05 9.709E-06 4.698E-06 3.310E-09 5.460E-13
BR 81       6.342E+00 6.342E+00 6.342E+00 6.342E+00 6.342E+00
KR 81       2.674E-06 2.674E-06 2.674E-06 2.674E-06 2.674E-06
AS 82       3.810E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 82M      9.294E-07 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 82       9.880E+00 9.880E+00 9.880E+00 9.880E+00 9.880E+00
BR 82       1.206E-03 1.184E-03 1.161E-03 9.540E-04 7.538E-04
BR 82M      1.323E-06 1.496E-09 1.687E-12 0.000E+00 0.000E+00
KR 82       1.406E-01 1.406E-01 1.406E-01 1.408E-01 1.410E-01
AS 83       4.584E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 83       2.499E-04 3.962E-05 6.241E-06 5.858E-14 1.364E-23
SE 83M      2.030E-05 7.938E-21 2.619E-36 0.000E+00 0.000E+00
BR 83       4.151E-03 3.300E-03 2.497E-03 1.378E-04 4.243E-06
KR 83       1.437E+01 1.437E+01 1.437E+01 1.438E+01 1.438E+01
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         OUTPUT UNIT =
6                        PAGE  168
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 83M      3.179E-03 3.074E-03 2.795E-03 3.281E-04 1.257E-05
AS 84       1.558E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 84       1.680E-04 5.720E-10 1.923E-15 0.000E+00 0.000E+00
BR 84       1.665E-03 5.015E-04 1.356E-04 2.835E-10 4.332E-17
BR 84M      9.040E-06 8.828E-09 8.621E-12 0.000E+00 0.000E+00
KR 84       3.186E+01 3.186E+01 3.186E+01 3.186E+01 3.186E+01
SE 85       2.023E-05 3.349E-33 0.000E+00 0.000E+00 0.000E+00
SE 85M      7.233E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 85       1.852E-04 1.101E-10 5.508E-17 0.000E+00 0.000E+00
KR 85       7.594E+00 7.595E+00 7.595E+00 7.597E+00 7.597E+00
KR 85M      1.758E-02 1.525E-02 1.306E-02 2.780E-03 4.344E-04
RB 85       2.952E+01 2.953E+01 2.953E+01 2.954E+01 2.954E+01
SE 86       1.758E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 86       4.393E-05 1.119E-24 0.000E+00 0.000E+00 0.000E+00
BR 86M      3.618E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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KR 86      5.866E+01 5.866E+01 5.866E+01 5.866E+01 5.866E+01
RB 86      5.946E-03 5.937E-03 5.928E-03 5.837E-03 5.729E-03
SR 86      5.339E-02 5.340E-02 5.341E-02 5.350E-02 5.361E-02
SE 87      4.662E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 87      1.027E-04 4.089E-24 1.219E-43 0.000E+00 0.000E+00
KR 87      1.000E-02 5.863E-03 3.399E-03 1.459E-05 2.113E-08
RB 87      7.561E+01 7.561E+01 7.561E+01 7.562E+01 7.562E+01
SR 87      3.666E-04 3.666E-04 3.666E-04 3.667E-04 3.667E-04
BR 88      3.357E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 88      3.187E-02 2.499E-02 1.958E-02 1.704E-03 9.097E-05
RB 88      3.373E-03 2.883E-03 2.281E-03 1.988E-04 1.062E-05
SR 88      1.087E+02 1.087E+02 1.087E+02 1.087E+02 1.087E+02
BR 89      6.797E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 89      7.440E-04 1.506E-09 3.021E-15 0.000E+00 0.000E+00
RB 89      3.764E-03 3.055E-04 1.980E-05 2.594E-17 1.428E-31
SR 89      1.903E+01 1.903E+01 1.902E+01 1.891E+01 1.878E+01
 Y 89      1.237E+02 1.237E+02 1.237E+02 1.238E+02 1.240E+02
BR 90      1.605E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 90      1.266E-04 3.777E-38 0.000E+00 0.000E+00 0.000E+00
RB 90      6.250E-04 1.099E-09 6.298E-14 0.000E+00 0.000E+00
RB 90M     2.351E-04 1.594E-08 1.005E-12 0.000E+00 0.000E+00
SR 90      1.697E+02 1.697E+02 1.697E+02 1.697E+02 1.697E+02
 Y 90      4.395E-02 4.393E-02 4.392E-02 4.378E-02 4.363E-02
ZR 90      3.153E+00 3.154E+00 3.154E+00 3.159E+00 3.165E+00
KR 91      2.555E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 91      2.928E-04 7.744E-23 1.862E-41 0.000E+00 0.000E+00
SR 91      1.822E-01 1.697E-01 1.578E-01 7.606E-02 3.169E-02
 Y 91      2.839E+01 2.839E+01 2.839E+01 2.834E+01 2.822E+01
 Y 91M     9.223E-03 9.018E-03 8.576E-03 4.217E-03 1.756E-03
ZR 91      1.528E+02 1.528E+02 1.528E+02 1.529E+02 1.531E+02
KR 92      2.546E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 92      1.960E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 92      5.565E-02 4.311E-02 3.338E-02 2.586E-03 1.202E-04
 Y 92      7.293E-02 7.132E-02 6.743E-02 1.857E-02 2.310E-03
ZR 92      1.920E+02 1.920E+02 1.920E+02 1.921E+02 1.921E+02
RB 93      1.925E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  169
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC
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5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SR 93	2.863E-03	1.126E-05	4.399E-08	0.000E+00	0.000E+00
Y 93	2.363E-01	2.234E-01	2.086E-01	1.050E-01	4.608E-02
ZR 93	2.125E+02	2.126E+02	2.126E+02	2.127E+02	2.127E+02
NB 93	6.655E-06	6.656E-06	6.657E-06	6.666E-06	6.677E-06
NB 93M	6.413E-05	6.414E-05	6.415E-05	6.425E-05	6.437E-05
RB 94	4.637E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 94	4.542E-04	2.121E-18	9.814E-33	0.000E+00	0.000E+00
Y 94	7.452E-03	9.002E-04	1.020E-04	3.566E-14	1.601E-25
ZR 94	2.128E+02	2.128E+02	2.128E+02	2.128E+02	2.128E+02
NB 94	1.306E-04	1.306E-04	1.306E-04	1.306E-04	1.306E-04
SR 95	1.462E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	4.372E-03	8.618E-05	1.641E-06	1.032E-23	0.000E+00
ZR 95	4.012E+01	4.011E+01	4.009E+01	3.991E+01	3.970E+01
NB 95	2.225E+01	2.225E+01	2.225E+01	2.225E+01	2.224E+01
NB 95M	1.611E-02	1.610E-02	1.610E-02	1.608E-02	1.604E-02
MO 95	1.589E+02	1.589E+02	1.590E+02	1.591E+02	1.594E+02
SR 96	1.571E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	9.131E-04	1.304E-11	1.829E-19	0.000E+00	0.000E+00
ZR 96	2.250E+02	2.250E+02	2.250E+02	2.250E+02	2.250E+02
NB 96	9.189E-04	8.920E-04	8.659E-04	6.435E-04	4.507E-04
MO 96	3.442E+00	3.442E+00	3.442E+00	3.442E+00	3.442E+00
Y 97	6.326E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	4.247E-01	4.076E-01	3.912E-01	2.596E-01	1.587E-01
NB 97	3.042E-02	2.997E-02	2.919E-02	1.983E-02	1.136E-02
NB 97M	3.971E-04	3.808E-04	3.655E-04	2.425E-04	1.482E-04
MO 97	2.177E+02	2.177E+02	2.177E+02	2.179E+02	2.180E+02
Y 98	1.230E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 98	2.187E-04	2.429E-39	0.000E+00	0.000E+00	0.000E+00
NB 98	2.003E-05	2.411E-40	0.000E+00	0.000E+00	0.000E+00
NB 98M	1.809E-04	8.068E-05	3.598E-05	1.119E-08	6.924E-13
MO 98	2.218E+02	2.218E+02	2.218E+02	2.218E+02	2.218E+02
TC 98	6.308E-04	6.308E-04	6.308E-04	6.308E-04	6.308E-04
Y 99	1.874E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 99	1.687E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	1.041E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	4.044E-05	4.571E-12	5.166E-19	0.000E+00	0.000E+00
MO 99	1.822E+00	1.804E+00	1.785E+00	1.607E+00	1.417E+00
TC 99	2.195E+02	2.195E+02	2.195E+02	2.197E+02	2.199E+02
TC 99M	1.455E-01	1.454E-01	1.452E-01	1.375E-01	1.235E-01
RU 99	4.852E-04	4.853E-04	4.854E-04	4.862E-04	4.872E-04
ZR100	4.667E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	9.709E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	9.749E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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MO100      2.486E+02 2.486E+02 2.486E+02 2.486E+02 2.486E+02
TC100      1.389E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU100      1.286E+01 1.286E+01 1.286E+01 1.286E+01 1.286E+01
ZR101      1.407E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB101      4.642E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101      6.128E-03 3.600E-04 2.093E-05 9.261E-18 1.386E-32
TC101      5.954E-03 1.300E-03 1.266E-04 2.023E-16 4.081E-31
RU101      2.057E+02 2.057E+02 2.057E+02 2.057E+02 2.057E+02
□
         OUTPUT UNIT =
6                        PAGE  170
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZR102      6.696E-05 8.576E-43 0.000E+00 0.000E+00 0.000E+00
NB102      1.639E-05 1.429E-43 0.000E+00 0.000E+00 0.000E+00
MO102      4.274E-03 1.029E-04 2.428E-06 1.298E-22 3.859E-42
TC102      3.392E-05 8.223E-07 1.940E-08 1.037E-24 0.000E+00
TC102M     1.570E-06 1.106E-10 7.794E-15 0.000E+00 0.000E+00
RU102      1.905E+02 1.905E+02 1.905E+02 1.905E+02 1.905E+02
RH102      9.876E-05 9.876E-05 9.876E-05 9.873E-05 9.870E-05
ZR103      1.428E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB103      5.633E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO103      3.468E-04 3.687E-22 3.197E-40 0.000E+00 0.000E+00
TC103      2.929E-04 1.843E-21 1.599E-39 0.000E+00 0.000E+00
RU103      1.978E+01 1.977E+01 1.976E+01 1.961E+01 1.944E+01
RH103      1.143E+02 1.143E+02 1.144E+02 1.145E+02 1.147E+02
RH103M     1.768E-02 1.767E-02 1.766E-02 1.755E-02 1.739E-02
NB104      1.574E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO104      4.092E-04 2.117E-15 1.089E-26 0.000E+00 0.000E+00
TC104      4.955E-03 5.502E-04 5.599E-05 6.669E-15 8.225E-27
RU104      1.153E+02 1.153E+02 1.153E+02 1.153E+02 1.153E+02
RH104      8.069E-05 4.339E-10 2.990E-14 0.000E+00 0.000E+00
RH104M     3.251E-05 2.240E-09 1.544E-13 0.000E+00 0.000E+00
PD104      2.515E+01 2.515E+01 2.515E+01 2.515E+01 2.515E+01
MO105      1.533E-04 1.317E-24 0.000E+00 0.000E+00 0.000E+00
TC105      1.667E-03 1.017E-05 5.618E-08 0.000E+00 0.000E+00
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RU105      5.623E-02 4.972E-02 4.254E-02 8.925E-03 1.370E-03
RH105      4.204E-01 4.205E-01 4.195E-01 3.746E-01 3.026E-01
RH105M     4.434E-05 3.931E-05 3.364E-05 7.057E-06 1.084E-06
PD105      7.556E+01 7.556E+01 7.557E+01 7.565E+01 7.573E+01
MO106      1.258E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC106      8.242E-05 5.092E-34 0.000E+00 0.000E+00 0.000E+00
RU106      3.686E+01 3.686E+01 3.686E+01 3.683E+01 3.679E+01
RH106      3.924E-05 3.464E-05 3.464E-05 3.462E-05 3.458E-05
RH106M     5.556E-04 4.054E-04 2.959E-04 1.267E-05 2.889E-07
PD106      2.240E+01 2.241E+01 2.241E+01 2.244E+01 2.247E+01
MO107      3.073E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC107      3.334E-05 1.649E-42 0.000E+00 0.000E+00 0.000E+00
RU107      4.532E-04 2.476E-08 1.240E-12 0.000E+00 0.000E+00
RH107      2.354E-03 4.365E-04 6.422E-05 3.050E-13 3.134E-23
PD107      3.500E+01 3.500E+01 3.500E+01 3.500E+01 3.500E+01
AG107      2.012E-06 2.012E-06 2.013E-06 2.017E-06 2.022E-06
TC108      3.533E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU108      3.290E-04 3.224E-08 3.124E-12 0.000E+00 0.000E+00
RH108      2.067E-05 2.139E-09 2.073E-13 0.000E+00 0.000E+00
RH108M     4.181E-06 3.631E-09 3.152E-12 0.000E+00 0.000E+00
PD108      2.316E+01 2.316E+01 2.316E+01 2.316E+01 2.316E+01
CD108      2.380E-05 2.380E-05 2.380E-05 2.380E-05 2.380E-05
TC109      1.695E-05 9.582E-27 0.000E+00 0.000E+00 0.000E+00
RU109      2.674E-05 2.096E-26 0.000E+00 0.000E+00 0.000E+00
RH109      7.139E-05 2.651E-16 2.411E-28 0.000E+00 0.000E+00
RH109M     1.983E-05 4.771E-25 0.000E+00 0.000E+00 0.000E+00
PD109      4.196E-02 4.013E-02 3.812E-02 2.278E-02 1.228E-02
PD109M     1.119E-04 3.189E-08 4.493E-12 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  171
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

AG109      1.312E+01 1.312E+01 1.312E+01 1.314E+01 1.315E+01
AG109M     3.427E-05 3.281E-05 3.116E-05 1.862E-05 1.004E-05
RU110      5.495E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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RH110	1.068E-05	9.249E-43	0.000E+00	0.000E+00	0.000E+00
PD110	7.801E+00	7.801E+00	7.801E+00	7.801E+00	7.801E+00
AG110	5.423E-06	1.305E-09	1.305E-09	1.304E-09	1.302E-09
AG110M	8.614E-02	8.613E-02	8.612E-02	8.603E-02	8.591E-02
CD110	2.601E+00	2.601E+00	2.601E+00	2.601E+00	2.601E+00
RU111	2.500E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	1.356E-05	1.064E-22	6.685E-40	0.000E+00	0.000E+00
PD111	2.895E-04	4.837E-05	9.157E-06	6.340E-07	1.397E-07
PD111M	5.916E-05	5.222E-05	4.603E-05	1.305E-05	2.877E-06
AG111	1.419E-01	1.417E-01	1.412E-01	1.358E-01	1.297E-01
AG111M	1.422E-05	2.536E-06	5.143E-07	4.473E-08	9.858E-09
CD111	4.598E+00	4.598E+00	4.599E+00	4.604E+00	4.610E+00
PD112	9.022E-03	8.717E-03	8.422E-03	5.965E-03	3.944E-03
AG112	1.410E-03	1.404E-03	1.390E-03	1.083E-03	7.263E-04
CD112	3.022E+00	3.022E+00	3.022E+00	3.025E+00	3.028E+00
PD113	9.322E-06	8.666E-18	7.882E-30	0.000E+00	0.000E+00
AG113	1.781E-03	1.570E-03	1.378E-03	3.726E-04	7.756E-05
CD113	7.750E-02	7.772E-02	7.791E-02	7.890E-02	7.919E-02
CD113M	4.770E-02	4.770E-02	4.771E-02	4.772E-02	4.772E-02
IN113	1.328E-03	1.328E-03	1.328E-03	1.331E-03	1.334E-03
PD114	1.101E-05	3.341E-13	9.958E-21	0.000E+00	0.000E+00
CD114	4.527E+00	4.527E+00	4.527E+00	4.527E+00	4.527E+00
IN114M	8.634E-06	8.629E-06	8.624E-06	8.574E-06	8.514E-06
SN114	5.169E-05	5.169E-05	5.170E-05	5.174E-05	5.180E-05
PD115	2.872E-06	9.635E-35	0.000E+00	0.000E+00	0.000E+00
AG115	6.794E-05	8.788E-06	1.099E-06	1.023E-15	1.489E-26
CD115	1.401E-02	1.389E-02	1.372E-02	1.205E-02	1.032E-02
CD115M	2.680E-02	2.679E-02	2.677E-02	2.660E-02	2.639E-02
IN115	9.080E-01	9.082E-01	9.084E-01	9.102E-01	9.122E-01
IN115M	1.129E-03	1.128E-03	1.125E-03	1.039E-03	9.000E-04
SN115	7.040E-02	7.040E-02	7.041E-02	7.048E-02	7.054E-02
AG116	5.356E-06	1.061E-12	1.934E-19	0.000E+00	0.000E+00
CD116	1.843E+00	1.843E+00	1.843E+00	1.843E+00	1.843E+00
IN116M	8.793E-05	4.079E-05	1.893E-05	8.741E-09	8.688E-13
SN116	1.133E+00	1.133E+00	1.133E+00	1.133E+00	1.133E+00
AG117	2.436E-06	4.067E-21	6.376E-36	0.000E+00	0.000E+00
CD117	4.108E-04	3.164E-04	2.423E-04	1.685E-05	6.875E-07
CD117M	2.916E-04	2.384E-04	1.944E-04	2.531E-05	2.192E-06
IN117	1.070E-04	1.034E-04	9.487E-05	1.384E-05	9.577E-07
IN117M	3.583E-04	3.455E-04	3.153E-04	4.793E-05	2.983E-06
SN117	1.864E+00	1.864E+00	1.864E+00	1.865E+00	1.865E+00
SN117M	1.520E-04	1.517E-04	1.514E-04	1.483E-04	1.447E-04
CD118	2.056E-04	9.013E-05	3.943E-05	1.012E-08	4.966E-13
SN118	1.901E+00	1.901E+00	1.901E+00	1.901E+00	1.901E+00
CD119	1.915E-05	2.320E-07	2.780E-09	1.696E-28	0.000E+00
CD119M	6.520E-06	1.529E-11	3.469E-17	0.000E+00	0.000E+00
IN119	2.935E-06	7.490E-08	7.818E-09	7.311E-19	6.650E-31
IN119M	5.506E-05	9.404E-06	9.754E-07	9.066E-17	8.245E-29

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         OUTPUT UNIT =
6                          PAGE  172
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

SN119      1.866E+00 1.866E+00 1.866E+00 1.866E+00 1.866E+00
SN119M     1.615E-02 1.615E-02 1.614E-02 1.613E-02 1.610E-02
CD120      3.453E-06 1.656E-27 0.000E+00 0.000E+00 0.000E+00
IN120      1.539E-06 5.739E-27 0.000E+00 0.000E+00 0.000E+00
SN120      1.928E+00 1.928E+00 1.928E+00 1.928E+00 1.928E+00
IN121      1.617E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121M     2.877E-06 1.030E-11 3.466E-17 0.000E+00 0.000E+00
SN121      6.985E-03 6.812E-03 6.638E-03 5.125E-03 3.758E-03
SN121M     7.141E-04 7.141E-04 7.141E-04 7.141E-04 7.141E-04
SB121      1.943E+00 1.943E+00 1.943E+00 1.945E+00 1.946E+00
SN122      2.134E+00 2.134E+00 2.134E+00 2.134E+00 2.134E+00
SB122      1.109E-03 1.097E-03 1.085E-03 9.752E-04 8.577E-04
TE122      6.394E-02 6.396E-02 6.397E-02 6.407E-02 6.419E-02
IN123M     1.186E-06 3.538E-29 0.000E+00 0.000E+00 0.000E+00
SN123      1.797E-01 1.797E-01 1.796E-01 1.792E-01 1.788E-01
SN123M     1.671E-04 5.971E-05 2.116E-05 6.598E-10 2.583E-15
SB123      2.212E+00 2.212E+00 2.212E+00 2.213E+00 2.213E+00
TE123      4.919E-04 4.920E-04 4.920E-04 4.923E-04 4.926E-04
TE123M     1.181E-04 1.181E-04 1.181E-04 1.178E-04 1.175E-04
CD124      1.009E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN124      2.938E+00 2.938E+00 2.938E+00 2.938E+00 2.938E+00
SB124      1.375E-02 1.374E-02 1.374E-02 1.367E-02 1.359E-02
TE124      3.173E-02 3.174E-02 3.175E-02 3.181E-02 3.189E-02
SN125      5.041E-02 5.026E-02 5.011E-02 4.863E-02 4.692E-02
SN125M     5.540E-05 7.100E-07 8.995E-09 9.584E-28 0.000E+00
SB125      3.533E+00 3.533E+00 3.533E+00 3.534E+00 3.534E+00
TE125      5.559E-01 5.560E-01 5.561E-01 5.570E-01 5.582E-01
TE125M     3.889E-02 3.889E-02 3.890E-02 3.894E-02 3.898E-02
SN126      6.195E+00 6.195E+00 6.195E+00 6.195E+00 6.195E+00
SB126      4.637E-03 4.627E-03 4.616E-03 4.510E-03 4.386E-03
SB126M     2.335E-06 2.636E-07 3.152E-08 2.238E-09 2.238E-09
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TE126      1.397E-01 1.398E-01 1.398E-01 1.399E-01 1.400E-01
SN127      2.351E-03 1.690E-03 1.215E-03 4.478E-05 8.529E-07
SN127M     3.719E-05 1.587E-09 6.773E-14 0.000E+00 0.000E+00
SB127      1.632E-01 1.626E-01 1.619E-01 1.513E-01 1.383E-01
TE127      1.625E-02 1.624E-02 1.624E-02 1.592E-02 1.511E-02
TE127M     5.779E-01 5.779E-01 5.779E-01 5.780E-01 5.780E-01
 I127      1.188E+01 1.188E+01 1.188E+01 1.189E+01 1.191E+01
SN128      2.882E-03 1.424E-03 7.038E-04 6.111E-07 1.296E-10
SB128      2.085E-03 1.930E-03 1.787E-03 8.282E-04 3.291E-04
SB128M     5.455E-04 3.035E-04 1.506E-04 1.308E-07 2.773E-11
TE128      2.630E+01 2.630E+01 2.630E+01 2.630E+01 2.630E+01
 I128      3.841E-05 7.270E-06 1.376E-06 8.111E-14 1.712E-22
XE128      3.231E-01 3.231E-01 3.231E-01 3.231E-01 3.231E-01
SN129      2.384E-04 9.312E-07 3.637E-09 0.000E+00 0.000E+00
SN129M     9.869E-05 5.885E-12 3.508E-19 0.000E+00 0.000E+00
SB129      2.452E-02 2.118E-02 1.804E-02 3.625E-03 5.284E-04
TE129      6.485E-03 6.241E-03 5.756E-03 1.784E-03 7.927E-04
TE129M     6.756E-01 6.755E-01 6.753E-01 6.714E-01 6.650E-01
 I129      4.365E+01 4.366E+01 4.366E+01 4.368E+01 4.369E+01
XE129      8.319E-04 8.319E-04 8.319E-04 8.320E-04 8.322E-04
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         OUTPUT UNIT =
6                        PAGE  173
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

XE129M     3.868E-06 3.854E-06 3.840E-06 3.704E-06 3.547E-06
SN130      4.086E-04 5.704E-09 7.960E-14 0.000E+00 0.000E+00
SB130      1.226E-03 4.334E-04 1.532E-04 4.677E-09 1.784E-14
SB130M     9.174E-04 2.588E-06 3.537E-09 0.000E+00 0.000E+00
TE130      8.822E+01 8.822E+01 8.822E+01 8.822E+01 8.822E+01
 I130      3.539E-03 3.359E-03 3.176E-03 1.813E-03 9.249E-04
 I130M     1.684E-05 1.657E-07 1.631E-09 1.393E-29 0.000E+00
XE130      1.191E+00 1.191E+00 1.192E+00 1.193E+00 1.194E+00
SN131      1.066E-04 6.702E-22 4.212E-39 0.000E+00 0.000E+00
SB131      6.221E-03 1.038E-03 1.702E-04 2.388E-12 9.005E-22
TE131      7.080E-03 3.422E-03 1.151E-03 1.914E-04 1.451E-04
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TE131M	8.034E-02	7.886E-02	7.712E-02	6.122E-02	4.640E-02
I131	3.688E+00	3.685E+00	3.677E+00	3.564E+00	3.428E+00
XE131	1.301E+02	1.301E+02	1.302E+02	1.303E+02	1.304E+02
XE131M	6.062E-02	6.062E-02	6.062E-02	6.059E-02	6.050E-02
SN132	3.837E-05	3.100E-32	0.000E+00	0.000E+00	0.000E+00
SB132	4.656E-04	1.828E-10	6.476E-17	0.000E+00	0.000E+00
SB132M	4.540E-04	2.273E-08	1.138E-12	0.000E+00	0.000E+00
TE132	2.162E+00	2.144E+00	2.125E+00	1.945E+00	1.749E+00
I132	6.442E-02	6.413E-02	6.378E-02	5.891E-02	5.299E-02
XE132	2.559E+02	2.559E+02	2.559E+02	2.561E+02	2.563E+02
CS132	3.544E-04	3.528E-04	3.512E-04	3.359E-04	3.184E-04
BA132	1.831E-04	1.831E-04	1.832E-04	1.835E-04	1.838E-04
SB133	4.912E-04	1.465E-11	4.367E-19	0.000E+00	0.000E+00
TE133	4.958E-03	4.387E-04	1.298E-04	6.784E-08	8.302E-12
TE133M	1.470E-02	6.944E-03	3.278E-03	1.800E-06	2.203E-10
I133	8.539E-01	8.386E-01	8.150E-01	5.866E-01	3.932E-01
I133M	2.779E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	5.165E+00	5.165E+00	5.164E+00	5.115E+00	4.978E+00
XE133M	6.613E-02	6.608E-02	6.600E-02	6.408E-02	5.983E-02
CS133	3.220E+02	3.220E+02	3.221E+02	3.224E+02	3.227E+02
SB134	5.614E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	5.091E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	2.522E-02	9.328E-03	3.449E-03	1.647E-07	1.075E-12
I134	4.005E-02	2.858E-02	1.677E-02	1.156E-05	9.313E-10
I134M	2.399E-04	3.153E-09	4.141E-14	0.000E+00	0.000E+00
XE134	3.983E+02	3.983E+02	3.983E+02	3.984E+02	3.984E+02
CS134	1.921E+01	1.921E+01	1.921E+01	1.920E+01	1.919E+01
CS134M	1.424E-03	1.121E-03	8.829E-04	8.088E-05	4.594E-06
BA134	3.000E+00	3.001E+00	3.002E+00	3.009E+00	3.018E+00
TE135	9.910E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	2.565E-01	2.310E-01	2.080E-01	7.292E-02	2.072E-02
XE135	1.132E-01	1.300E-01	1.427E-01	1.554E-01	9.343E-02
XE135M	1.996E-03	1.454E-03	1.286E-03	4.502E-04	1.279E-04
CS135	1.081E+02	1.081E+02	1.081E+02	1.083E+02	1.084E+02
CS135M	1.318E-04	6.015E-05	2.744E-05	1.073E-08	8.731E-13
BA135	8.810E-03	8.810E-03	8.810E-03	8.812E-03	8.813E-03
BA135M	7.100E-06	6.931E-06	6.766E-06	5.314E-06	3.977E-06
TE136	5.966E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	4.290E-04	4.462E-17	3.916E-30	0.000E+00	0.000E+00
I136M	1.447E-04	3.996E-28	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 174
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

5 SUMMARY TABLE: CONCENTRATIONS, GRAMS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
XE136	5.888E+02	5.888E+02	5.888E+02	5.888E+02	5.888E+02
CS136	2.012E-01	2.008E-01	2.004E-01	1.960E-01	1.909E-01
BA136	2.880E+00	2.881E+00	2.881E+00	2.886E+00	2.891E+00
TE137	2.619E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I137	1.292E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	2.361E-03	4.808E-08	9.249E-13	0.000E+00	0.000E+00
CS137	3.244E+02	3.244E+02	3.244E+02	3.244E+02	3.244E+02
BA137	5.151E+00	5.152E+00	5.153E+00	5.161E+00	5.171E+00
BA137M	4.978E-05	4.964E-05	4.963E-05	4.963E-05	4.963E-05
I138	1.703E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	8.590E-03	4.573E-04	2.430E-05	4.356E-18	2.204E-33
CS138	2.146E-02	9.325E-03	2.744E-03	6.854E-09	1.273E-15
CS138M	8.498E-05	5.025E-11	2.971E-17	0.000E+00	0.000E+00
BA138	3.531E+02	3.531E+02	3.531E+02	3.531E+02	3.531E+02
LA138	2.239E-03	2.239E-03	2.239E-03	2.239E-03	2.239E-03
I139	2.890E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE139	3.182E-04	1.178E-31	0.000E+00	0.000E+00	0.000E+00
CS139	5.979E-03	7.577E-05	9.079E-07	5.538E-26	0.000E+00
BA139	5.392E-02	3.684E-02	2.233E-02	1.462E-04	3.500E-07
LA139	3.381E+02	3.381E+02	3.381E+02	3.381E+02	3.381E+02
XE140	7.403E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	6.141E-04	7.317E-21	7.556E-38	0.000E+00	0.000E+00
BA140	1.165E+01	1.163E+01	1.160E+01	1.134E+01	1.104E+01
LA140	1.548E+00	1.548E+00	1.547E+00	1.540E+00	1.526E+00
CE140	3.207E+02	3.208E+02	3.208E+02	3.211E+02	3.214E+02
XE141	3.226E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	1.824E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	1.102E-02	1.150E-03	1.180E-04	1.528E-14	2.083E-26
LA141	1.429E-01	1.287E-01	1.088E-01	1.868E-02	2.250E-03
CE141	2.885E+01	2.884E+01	2.884E+01	2.867E+01	2.839E+01
PR141	2.835E+02	2.835E+02	2.835E+02	2.838E+02	2.841E+02
CS142	7.725E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	6.237E-03	1.281E-04	2.628E-06	3.462E-23	1.990E-43
LA142	5.521E-02	3.962E-02	2.538E-02	2.859E-04	1.312E-06
CE142	3.136E+02	3.136E+02	3.137E+02	3.137E+02	3.137E+02
PR142	1.366E-02	1.321E-02	1.274E-02	8.866E-03	5.740E-03
PR142M	3.404E-05	1.972E-06	1.142E-07	4.861E-20	6.941E-35
ND142	2.638E+00	2.639E+00	2.639E+00	2.643E+00	2.646E+00
CS143	3.957E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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BA143      1.183E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA143      8.148E-03 4.241E-04 2.175E-05 2.729E-18 9.006E-34
CE143      1.158E+00 1.142E+00 1.119E+00 9.067E-01 7.047E-01
PR143      1.137E+01 1.137E+01 1.137E+01 1.134E+01 1.125E+01
ND143      2.618E+02 2.618E+02 2.618E+02 2.620E+02 2.623E+02
BA144      7.436E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA144      3.484E-04 3.650E-31 0.000E+00 0.000E+00 0.000E+00
CE144      1.628E+02 1.628E+02 1.628E+02 1.626E+02 1.624E+02
PR144      6.929E-03 6.880E-03 6.875E-03 6.867E-03 6.859E-03
PR144M     3.441E-05 3.437E-05 3.436E-05 3.433E-05 3.429E-05
ND144      1.604E+02 1.604E+02 1.604E+02 1.606E+02 1.608E+02
BA145      2.095E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE  175
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

LA145      1.805E-04 8.940E-42 0.000E+00 0.000E+00 0.000E+00
CE145      1.200E-03 1.375E-09 1.311E-15 0.000E+00 0.000E+00
PR145      1.436E-01 1.292E-01 1.150E-01 3.610E-02 8.984E-03
ND145      2.008E+02 2.008E+02 2.008E+02 2.009E+02 2.009E+02
BA146      2.694E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA146      3.336E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE146      4.483E-03 2.416E-04 1.292E-05 2.464E-18 1.343E-33
PR146      7.667E-03 2.752E-03 5.670E-04 2.058E-11 2.276E-20
ND146      1.767E+02 1.767E+02 1.767E+02 1.767E+02 1.767E+02
PM146      1.096E-03 1.096E-03 1.096E-03 1.096E-03 1.096E-03
SM146      3.720E-04 3.720E-04 3.720E-04 3.720E-04 3.721E-04
LA147      1.940E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE147      2.830E-04 1.011E-19 3.336E-35 0.000E+00 0.000E+00
PR147      2.989E-03 1.039E-04 3.247E-06 2.884E-21 2.501E-39
ND147      3.952E+00 3.945E+00 3.935E+00 3.833E+00 3.715E+00
PM147      6.511E+01 6.512E+01 6.513E+01 6.521E+01 6.530E+01
SM147      1.333E+01 1.333E+01 1.334E+01 1.336E+01 1.338E+01
LA148      9.210E-07 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE148      1.249E-04 7.917E-30 0.000E+00 0.000E+00 0.000E+00
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PR148      4.456E-04 8.823E-12 1.238E-19 0.000E+00 0.000E+00
ND148      9.952E+01 9.952E+01 9.952E+01 9.952E+01 9.952E+01
PM148      6.516E-01 6.481E-01 6.447E-01 6.111E-01 5.732E-01
PM148M     6.642E-01 6.637E-01 6.633E-01 6.586E-01 6.531E-01
SM148      2.989E+01 2.989E+01 2.990E+01 2.994E+01 2.998E+01
CE149      1.575E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR149      3.031E-04 4.282E-12 6.007E-20 0.000E+00 0.000E+00
ND149      1.416E-02 9.694E-03 6.494E-03 1.182E-04 9.647E-07
PM149      6.194E-01 6.161E-01 6.113E-01 5.422E-01 4.637E-01
SM149      1.477E+00 1.485E+00 1.493E+00 1.569E+00 1.647E+00
PR150      1.726E-05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND150      4.369E+01 4.369E+01 4.369E+01 4.369E+01 4.369E+01
PM150      2.819E-04 2.177E-04 1.681E-04 1.265E-05 5.680E-07
SM150      7.820E+01 7.820E+01 7.820E+01 7.820E+01 7.820E+01
PR151      3.019E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND151      8.155E-04 2.861E-05 9.999E-07 2.716E-21 9.012E-39
PM151      1.122E-01 1.103E-01 1.077E-01 8.433E-02 6.291E-02
SM151      6.668E+00 6.671E+00 6.673E+00 6.697E+00 6.718E+00
EU151      6.530E-03 6.536E-03 6.542E-03 6.601E-03 6.671E-03
PR152      2.719E-06 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND152      5.164E-04 1.397E-05 3.755E-07 7.392E-23 1.044E-41
PM152      1.885E-04 7.737E-06 2.084E-07 4.095E-23 5.751E-42
PM152M     6.086E-06 2.377E-08 9.288E-11 0.000E+00 0.000E+00
SM152      3.566E+01 3.566E+01 3.566E+01 3.566E+01 3.566E+01
EU152      1.707E-02 1.707E-02 1.707E-02 1.707E-02 1.706E-02
EU152M     2.098E-05 1.948E-05 1.808E-05 8.594E-06 3.520E-06
GD152      8.409E-03 8.410E-03 8.411E-03 8.419E-03 8.423E-03
ND153      2.946E-05 2.734E-21 2.462E-37 0.000E+00 0.000E+00
PM153      1.599E-04 8.960E-08 4.051E-11 0.000E+00 0.000E+00
SM153      2.703E-01 2.665E-01 2.626E-01 2.264E-01 1.894E-01
EU153      2.236E+01 2.236E+01 2.237E+01 2.240E+01 2.244E+01
GD153      3.454E-04 3.453E-04 3.453E-04 3.449E-04 3.444E-04
□
         OUTPUT UNIT =
6                        PAGE  176
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR
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ND154	8.457E-06	6.859E-33	0.000E+00	0.000E+00	0.000E+00
PM154	4.352E-05	1.983E-11	7.025E-18	0.000E+00	0.000E+00
PM154M	4.674E-06	4.319E-16	3.991E-26	0.000E+00	0.000E+00
SM154	7.582E+00	7.582E+00	7.582E+00	7.582E+00	7.582E+00
EU154	4.123E+00	4.123E+00	4.123E+00	4.122E+00	4.122E+00
GD154	1.368E-01	1.368E-01	1.368E-01	1.372E-01	1.377E-01
ND155	2.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	5.802E-06	2.971E-35	0.000E+00	0.000E+00	0.000E+00
SM155	2.422E-04	3.846E-05	5.907E-06	4.319E-14	7.452E-24
EU155	2.200E+00	2.200E+00	2.200E+00	2.200E+00	2.199E+00
GD155	1.938E-02	1.942E-02	1.945E-02	1.980E-02	2.022E-02
ND156	1.544E-06	4.577E-25	2.186E-43	0.000E+00	0.000E+00
PM156	1.084E-06	1.321E-25	0.000E+00	0.000E+00	0.000E+00
SM156	3.756E-03	3.491E-03	3.243E-03	1.551E-03	6.403E-04
EU156	4.909E-01	4.903E-01	4.896E-01	4.820E-01	4.721E-01
GD156	5.936E+00	5.937E+00	5.938E+00	5.947E+00	5.958E+00
PM157	2.627E-06	3.109E-22	3.634E-38	0.000E+00	0.000E+00
SM157	3.409E-05	2.054E-07	1.135E-09	0.000E+00	0.000E+00
EU157	4.708E-03	4.534E-03	4.332E-03	2.746E-03	1.589E-03
GD157	2.889E-02	2.910E-02	2.930E-02	3.089E-02	3.204E-02
SM158	9.967E-05	3.874E-05	1.505E-05	1.178E-09	1.391E-14
EU158	1.116E-04	8.245E-05	4.783E-05	1.921E-08	5.661E-13
GD158	2.625E+00	2.625E+00	2.625E+00	2.625E+00	2.625E+00
SM159	2.792E-06	5.841E-13	1.217E-19	0.000E+00	0.000E+00
EU159	2.281E-05	2.623E-06	2.636E-07	2.767E-17	2.933E-29
GD159	1.571E-03	1.536E-03	1.483E-03	1.022E-03	6.532E-04
TB159	4.046E-01	4.046E-01	4.047E-01	4.051E-01	4.055E-01
SM160	2.245E-06	1.766E-09	1.389E-12	0.000E+00	0.000E+00
GD160	1.956E-01	1.956E-01	1.956E-01	1.956E-01	1.956E-01
TB160	1.053E-02	1.052E-02	1.052E-02	1.048E-02	1.043E-02
DY160	1.477E-02	1.477E-02	1.478E-02	1.482E-02	1.487E-02
GD161	1.086E-06	1.753E-11	2.302E-16	0.000E+00	0.000E+00
TB161	3.087E-03	3.075E-03	3.062E-03	2.937E-03	2.794E-03
DY161	7.369E-02	7.371E-02	7.372E-02	7.384E-02	7.399E-02
GD162	1.436E-06	3.249E-08	5.086E-10	4.412E-28	0.000E+00
TB162	1.062E-06	7.255E-08	1.389E-09	1.276E-27	0.000E+00
DY162	5.450E-02	5.451E-02	5.451E-02	5.451E-02	5.451E-02
TB163	1.229E-06	1.578E-07	1.870E-08	1.022E-17	7.844E-29
DY163	3.438E-02	3.438E-02	3.438E-02	3.438E-02	3.438E-02
DY164	9.601E-03	9.602E-03	9.602E-03	9.602E-03	9.602E-03
DY165	7.758E-06	5.823E-06	4.336E-06	2.270E-07	6.590E-09
HO165	1.222E-02	1.222E-02	1.223E-02	1.223E-02	1.223E-02
DY166	4.206E-05	4.170E-05	4.135E-05	3.798E-05	3.429E-05
HO166	2.359E-05	2.334E-05	2.309E-05	2.079E-05	1.840E-05
HO166M	6.026E-05	6.026E-05	6.026E-05	6.026E-05	6.026E-05
ER166	3.929E-03	3.929E-03	3.930E-03	3.936E-03	3.942E-03
ER167	8.965E-04	8.965E-04	8.965E-04	8.965E-04	8.965E-04

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ER168      5.974E-04 5.974E-04 5.974E-04 5.974E-04 5.974E-04
TM169      1.929E-06 1.929E-06 1.930E-06 1.936E-06 1.943E-06
SUMTOT     9.168E+03 9.168E+03 9.168E+03 9.168E+03 9.168E+03

TOTAL      9.168E+03 9.168E+03 9.168E+03 9.168E+03 9.168E+03
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         OUTPUT UNIT =
6                        PAGE  177
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     5 SUMMARY TABLE:  CONCENTRATIONS, GRAMS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         1.454E-02 1.454E-02 1.454E-02 1.454E-02 1.454E-02
LI         8.448E-05 8.448E-05 8.448E-05 8.448E-05 8.448E-05
BE         4.040E-05 4.040E-05 4.040E-05 4.040E-05 4.040E-05
 C         7.103E-06 7.103E-06 7.103E-06 7.103E-06 7.103E-06
ZN         1.497E-03 1.496E-03 1.496E-03 1.492E-03 1.488E-03
GA         1.732E-05 1.545E-05 1.465E-05 1.038E-05 8.561E-06
GE         1.813E-01 1.813E-01 1.812E-01 1.811E-01 1.811E-01
AS         5.543E-02 5.536E-02 5.533E-02 5.509E-02 5.489E-02
SE         1.625E+01 1.625E+01 1.625E+01 1.625E+01 1.625E+01
BR         6.349E+00 6.347E+00 6.346E+00 6.343E+00 6.343E+00
KR         1.127E+02 1.127E+02 1.127E+02 1.126E+02 1.126E+02
RB         1.051E+02 1.051E+02 1.051E+02 1.052E+02 1.052E+02
SR         2.978E+02 2.977E+02 2.977E+02 2.975E+02 2.973E+02
 Y         1.525E+02 1.525E+02 1.524E+02 1.523E+02 1.523E+02
ZR         1.039E+03 1.039E+03 1.039E+03 1.039E+03 1.039E+03
NB         2.230E+01 2.230E+01 2.230E+01 2.228E+01 2.227E+01
MO         8.523E+02 8.523E+02 8.524E+02 8.525E+02 8.526E+02
TC         2.196E+02 2.197E+02 2.197E+02 2.198E+02 2.200E+02
RU         5.811E+02 5.811E+02 5.811E+02 5.809E+02 5.807E+02
RH         1.148E+02 1.148E+02 1.148E+02 1.149E+02 1.150E+02
PD         1.891E+02 1.891E+02 1.891E+02 1.892E+02 1.893E+02
AG         1.335E+01 1.335E+01 1.335E+01 1.336E+01 1.336E+01
CD         1.676E+01 1.676E+01 1.676E+01 1.677E+01 1.677E+01
IN         9.111E-01 9.111E-01 9.113E-01 9.127E-01 9.145E-01
SN         2.029E+01 2.029E+01 2.029E+01 2.028E+01 2.028E+01
SB         7.908E+00 7.896E+00 7.891E+00 7.866E+00 7.852E+00
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TE          1.189E+02 1.189E+02 1.188E+02 1.186E+02 1.184E+02
 I          6.044E+01 6.039E+01 6.032E+01 5.986E+01 5.950E+01
XE          1.380E+03 1.380E+03 1.380E+03 1.381E+03 1.381E+03
CS          7.740E+02 7.740E+02 7.740E+02 7.744E+02 7.748E+02
BA          3.759E+02 3.758E+02 3.758E+02 3.755E+02 3.752E+02
LA          3.398E+02 3.398E+02 3.398E+02 3.397E+02 3.397E+02
CE          8.272E+02 8.272E+02 8.272E+02 8.270E+02 8.266E+02
PR          2.950E+02 2.950E+02 2.950E+02 2.952E+02 2.954E+02
ND          9.494E+02 9.494E+02 9.495E+02 9.499E+02 9.503E+02
PM          6.716E+01 6.716E+01 6.716E+01 6.711E+01 6.706E+01
SM          1.731E+02 1.731E+02 1.731E+02 1.732E+02 1.734E+02
EU          2.920E+01 2.920E+01 2.921E+01 2.923E+01 2.926E+01
GD          8.952E+00 8.953E+00 8.954E+00 8.965E+00 8.978E+00
TB          4.182E-01 4.182E-01 4.183E-01 4.186E-01 4.187E-01
DY          1.870E-01 1.870E-01 1.870E-01 1.872E-01 1.874E-01
HO          1.231E-02 1.231E-02 1.231E-02 1.231E-02 1.231E-02
ER          5.423E-03 5.423E-03 5.424E-03 5.430E-03 5.436E-03
TM          2.113E-06 2.114E-06 2.114E-06 2.120E-06 2.126E-06
SUMTOT      9.168E+03 9.168E+03 9.168E+03 9.168E+03 9.168E+03

TOTAL       9.168E+03 9.168E+03 9.168E+03 9.168E+03 9.168E+03

                                            CUMULATIVE TABLE TOTALS

AP+FP       2.060E+05 2.060E+05 2.060E+05 2.060E+05 2.060E+05
ACT+FP      4.614E+05 4.614E+05 4.614E+05 4.614E+05 4.614E+05
AP+ACT+FP   6.582E+05 6.582E+05 6.582E+05 6.582E+05 6.582E+05
□
         OUTPUT UNIT =
6                        PAGE  178
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3      1.404E+02 1.404E+02 1.404E+02 1.404E+02 1.404E+02
CO 72      6.276E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 72      1.237E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 72      2.394E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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ZN 72	2.762E+01	2.721E+01	2.681E+01	2.310E+01	1.931E+01
GA 72	2.769E+01	2.768E+01	2.765E+01	2.653E+01	2.405E+01
CO 73	1.929E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 73	9.905E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 73	3.365E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 73	5.758E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 73	6.013E+01	5.225E+01	4.533E+01	1.095E+01	1.993E+00
GE 73M	6.017E+01	5.225E+01	4.533E+01	1.095E+01	1.993E+00
CO 74	4.069E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 74	6.851E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 74	5.048E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 74	1.167E+02	4.582E-10	1.793E-21	0.000E+00	0.000E+00
GA 74	1.233E+02	8.941E-01	5.267E-03	0.000E+00	0.000E+00
NI 75	2.771E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 75	5.129E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 75	2.259E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 75	2.649E+02	8.872E-08	2.766E-17	0.000E+00	0.000E+00
GE 75	2.672E+02	1.658E+02	1.003E+02	6.607E-01	1.591E-03
GE 75M	1.172E+01	6.215E-09	1.937E-18	0.000E+00	0.000E+00
NI 76	7.462E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 76	4.153E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 76	4.290E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 76	6.251E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 76	7.750E+00	7.549E+00	7.353E+00	5.650E+00	4.119E+00
NI 77	1.227E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 77	1.884E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 77	4.845E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 77	1.174E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 77	4.987E+02	4.694E+02	4.415E+02	2.391E+02	1.145E+02
GE 77M	1.134E+03	1.624E-17	0.000E+00	0.000E+00	0.000E+00
AS 77	1.398E+03	1.382E+03	1.366E+03	1.196E+03	9.975E+02
SE 77M	3.541E+00	3.429E+00	3.388E+00	2.966E+00	2.474E+00
NI 78	1.411E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 78	6.838E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 78	5.046E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 78	2.173E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 78	2.948E+03	1.829E+03	1.134E+03	9.518E+00	3.072E-02
AS 78	3.013E+03	2.752E+03	2.265E+03	7.129E+01	4.810E-01
CU 79	1.629E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 79	2.752E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 79	2.263E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 79	6.230E+03	4.011E-22	0.000E+00	0.000E+00	0.000E+00
AS 79	7.406E+03	7.834E+01	7.711E-01	6.583E-21	0.000E+00
SE 79	1.143E-01	1.143E-01	1.143E-01	1.143E-01	1.143E-01
SE 79M	7.418E+03	1.378E+02	1.361E+00	1.159E-20	0.000E+00
CU 80	1.793E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 80	1.071E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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         OUTPUT UNIT =
6                        PAGE  179
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

GA 80      2.524E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 80      1.349E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 80      1.651E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 80      3.013E-01 1.846E-01 1.511E-01 3.132E-02 4.769E-03
BR 80M     1.922E-01 1.643E-01 1.404E-01 2.927E-02 4.456E-03
CU 81      1.254E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 81      2.269E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 81      1.432E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 81      1.684E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 81      2.633E+04 4.649E-30 0.000E+00 0.000E+00 0.000E+00
SE 81      2.795E+04 3.506E+03 5.901E+02 1.981E-01 3.268E-05
SE 81M     8.131E+02 3.935E+02 1.904E+02 1.341E-01 2.213E-05
KR 81M     8.874E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 82      2.767E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 82      5.068E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 82      1.509E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 82      2.497E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 82M     9.840E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 82      1.306E+03 1.282E+03 1.257E+03 1.033E+03 8.163E+02
BR 82M     4.949E+02 5.599E-01 6.312E-04 0.000E+00 0.000E+00
ZN 83      2.486E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 83      1.353E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 83      1.096E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 83      4.617E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 83      2.517E+04 3.991E+03 6.286E+02 5.901E-06 1.374E-15
SE 83M     3.943E+04 1.542E-11 5.088E-27 0.000E+00 0.000E+00
BR 83      6.560E+04 5.215E+04 3.946E+04 2.177E+03 6.706E+01
KR 83M     6.562E+04 6.345E+04 5.769E+04 6.772E+03 2.594E+02
GA 84      1.403E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 84      2.876E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 84      3.608E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 84      1.140E+05 3.881E-01 1.305E-06 0.000E+00 0.000E+00
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BR 84       1.173E+05 3.532E+04 9.550E+03 1.996E-02 3.051E-09
BR 84M      3.374E+03 3.295E+00 3.218E-03 0.000E+00 0.000E+00
GE 85       8.090E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 85       2.235E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 85       6.889E+04 1.140E-23 0.000E+00 0.000E+00 0.000E+00
SE 85M      5.055E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 85       1.430E+05 8.496E-02 4.252E-08 0.000E+00 0.000E+00
KR 85       2.981E+03 2.981E+03 2.981E+03 2.982E+03 2.982E+03
KR 85M      1.447E+05 1.255E+05 1.075E+05 2.289E+04 3.576E+03
GE 86       1.501E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 86       1.213E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 86       1.390E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 86       1.048E+05 2.671E-15 0.000E+00 0.000E+00 0.000E+00
BR 86M      1.055E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 86       4.841E+02 4.833E+02 4.826E+02 4.752E+02 4.664E+02
RB 86M      6.085E+01 1.101E-16 2.589E-34 0.000E+00 0.000E+00
GE 87       2.223E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 87       6.449E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 87       1.080E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  180
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

BR 87       2.387E+05 9.507E-15 2.834E-34 0.000E+00 0.000E+00
KR 87       2.835E+05 1.661E+05 9.633E+04 4.136E+02 5.987E-01
SR 87M      1.135E+00 8.866E-01 6.925E-01 5.854E-02 3.019E-03
GE 88       6.217E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 88       3.952E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 88       4.047E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 88       2.641E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 88       3.999E+05 3.136E+05 2.457E+05 2.138E+04 1.142E+03
RB 88       4.051E+05 3.462E+05 2.740E+05 2.387E+04 1.275E+03
AS 89       3.850E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 89       1.125E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 89       1.916E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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KR 89      4.960E+05 1.004E+00 2.014E-06 0.000E+00 0.000E+00
RB 89      5.234E+05 4.247E+04 2.753E+03 3.607E-09 1.985E-23
SR 89      5.533E+05 5.531E+05 5.528E+05 5.496E+05 5.458E+05
 Y 89M     1.812E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 90      3.642E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 90      1.258E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 90      4.914E+05 1.466E-28 0.000E+00 0.000E+00 0.000E+00
RB 90      5.123E+05 9.005E-01 5.162E-05 0.000E+00 0.000E+00
RB 90M     1.143E+05 7.750E+00 4.885E-04 0.000E+00 0.000E+00
SR 90      2.316E+04 2.316E+04 2.316E+04 2.316E+04 2.316E+04
 Y 90      2.392E+04 2.391E+04 2.390E+04 2.383E+04 2.375E+04
 Y 90M     5.836E+00 4.667E+00 3.732E+00 3.989E-01 2.726E-02
SE 91      4.667E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 91      4.152E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 91      3.642E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 91      6.241E+05 1.650E-13 3.968E-32 0.000E+00 0.000E+00
SR 91      6.609E+05 6.154E+05 5.721E+05 2.758E+05 1.149E+05
 Y 91      6.967E+05 6.966E+05 6.966E+05 6.953E+05 6.923E+05
 Y 91M     3.835E+05 3.750E+05 3.566E+05 1.753E+05 7.303E+04
SE 92      1.903E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 92      3.338E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 92      1.697E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 92      5.367E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 92      6.998E+05 5.421E+05 4.198E+05 3.252E+04 1.511E+03
 Y 92      7.023E+05 6.868E+05 6.494E+05 1.788E+05 2.225E+04
BR 93      6.628E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 93      6.031E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 93      4.028E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 93      7.721E+05 3.037E+03 1.186E+01 0.000E+00 0.000E+00
 Y 93      7.888E+05 7.456E+05 6.962E+05 3.505E+05 1.538E+05
ZR 93      5.343E-01 5.343E-01 5.343E-01 5.346E-01 5.347E-01
NB 93M     1.813E-02 1.814E-02 1.814E-02 1.817E-02 1.820E-02
BR 94      5.257E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 94      2.398E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 94      2.070E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 94      7.214E+05 3.369E-09 1.559E-23 0.000E+00 0.000E+00
 Y 94      7.808E+05 9.431E+04 1.069E+04 3.737E-06 1.678E-17
NB 94M     3.929E-01 5.116E-04 6.649E-07 0.000E+00 0.000E+00
BR 95      3.396E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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OUTPUT UNIT =
6 PAGE 181
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS

POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 95	2.246E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 95	1.053E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 95	6.679E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	8.244E+05	1.625E+04	3.095E+02	1.945E-15	0.000E+00
ZR 95	8.623E+05	8.620E+05	8.617E+05	8.578E+05	8.531E+05
NB 95	8.704E+05	8.704E+05	8.704E+05	8.703E+05	8.702E+05
NB 95M	6.137E+03	6.136E+03	6.135E+03	6.126E+03	6.113E+03
BR 96	1.789E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 96	3.561E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 96	2.751E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 96	4.617E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	7.779E+05	1.111E-02	1.558E-10	0.000E+00	0.000E+00
NB 96	1.285E+03	1.248E+03	1.211E+03	9.000E+02	6.303E+02
KR 97	1.832E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 97	5.162E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 97	2.413E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 97	6.632E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	8.122E+05	7.796E+05	7.482E+05	4.965E+05	3.035E+05
NB 97	8.182E+05	8.060E+05	7.852E+05	5.335E+05	3.056E+05
NB 97M	7.700E+05	7.384E+05	7.088E+05	4.703E+05	2.875E+05
KR 98	2.161E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 98	1.042E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 98	9.310E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 98	4.722E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 98	8.124E+05	9.025E-30	0.000E+00	0.000E+00	0.000E+00
NB 98	8.240E+05	9.919E-30	0.000E+00	0.000E+00	0.000E+00
NB 98M	6.743E+03	3.007E+03	1.341E+03	4.171E-01	2.581E-05
RB 99	9.809E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 99	2.394E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 99	2.671E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 99	8.012E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	8.296E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	2.955E+04	3.340E-03	3.775E-10	0.000E+00	0.000E+00
MO 99	8.745E+05	8.654E+05	8.564E+05	7.710E+05	6.797E+05
TC 99	3.722E+00	3.723E+00	3.723E+00	3.726E+00	3.730E+00
TC 99M	7.656E+05	7.652E+05	7.639E+05	7.234E+05	6.499E+05
RB100	7.804E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR100	4.422E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y100	1.191E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR100	7.418E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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NB100      4.566E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100M     4.566E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC100      9.923E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR101      6.124E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y101      3.825E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR101      4.764E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB101      7.410E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101      7.807E+05 4.586E+04 2.667E+03 1.180E-09 1.765E-24
TC101      7.809E+05 1.706E+05 1.661E+04 2.653E-08 5.352E-23
SR102      5.273E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y102      8.785E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE  182
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZR102      2.589E+05 3.316E-33 0.000E+00 0.000E+00 0.000E+00
NB102      6.046E+05 5.272E-33 0.000E+00 0.000E+00 0.000E+00
MO102      7.101E+05 1.710E+04 4.034E+02 2.157E-14 6.412E-34
TC102      7.108E+05 1.723E+04 4.066E+02 2.174E-14 0.000E+00
TC102M     6.658E+02 4.691E-02 3.304E-06 0.000E+00 0.000E+00
RH102      1.194E-01 1.194E-01 1.194E-01 1.194E-01 1.193E-01
SR103      1.642E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y103      1.141E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR103      8.839E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB103      3.939E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO103      6.333E+05 6.733E-13 5.839E-31 0.000E+00 0.000E+00
TC103      6.420E+05 4.039E-12 3.504E-30 0.000E+00 0.000E+00
RU103      6.388E+05 6.383E+05 6.379E+05 6.332E+05 6.276E+05
RH103M     5.753E+05 5.752E+05 5.749E+05 5.712E+05 5.659E+05
SR104      6.043E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y104      8.791E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR104      1.788E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB104      1.709E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO104      4.626E+05 2.393E-06 1.231E-17 0.000E+00 0.000E+00
TC104      4.925E+05 5.468E+04 5.564E+03 6.627E-07 8.175E-19
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RH104      2.070E+05 1.113E+00 7.671E-05 0.000E+00 0.000E+00
RH104M     1.355E+04 9.335E-01 6.433E-05 0.000E+00 0.000E+00
 Y105      4.952E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR105      2.363E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB105      5.339E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO105      3.051E+05 2.621E-15 0.000E+00 0.000E+00 0.000E+00
TC105      3.733E+05 2.277E+03 1.258E+01 0.000E+00 0.000E+00
RU105      3.783E+05 3.344E+05 2.861E+05 6.004E+04 9.218E+03
RH105      3.550E+05 3.551E+05 3.542E+05 3.163E+05 2.555E+05
RH105M     1.059E+05 9.390E+04 8.034E+04 1.686E+04 2.588E+03
ZR106      3.390E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB106      1.442E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO106      1.489E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC106      2.372E+05 1.465E-24 0.000E+00 0.000E+00 0.000E+00
RU106      1.234E+05 1.234E+05 1.234E+05 1.233E+05 1.232E+05
RH106      1.397E+05 1.234E+05 1.234E+05 1.233E+05 1.232E+05
RH106M     7.469E+03 5.451E+03 3.978E+03 1.703E+02 3.884E+00
ZR107      1.595E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB107      2.158E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO107      5.072E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC107      1.213E+05 5.999E-33 0.000E+00 0.000E+00 0.000E+00
RU107      1.897E+05 1.036E+01 5.189E-04 0.000E+00 0.000E+00
RH107      1.907E+05 3.536E+04 5.203E+03 2.471E-05 2.539E-15
PD107      1.801E-02 1.801E-02 1.801E-02 1.801E-02 1.801E-02
PD107M     7.309E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR108      3.691E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB108      4.909E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO108      1.603E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC108      7.099E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU108      1.273E+05 1.248E+01 1.209E-03 0.000E+00 0.000E+00
RH108      1.286E+05 1.331E+01 1.289E-03 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  183
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR
```

RH108M	1.234E+03	1.072E+00	9.306E-04	0.000E+00	0.000E+00
AG108	2.164E-01	3.741E-07	3.689E-07	3.689E-07	3.689E-07
ZR109	2.628E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB109	9.124E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO109	5.307E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC109	3.442E+04	1.945E-17	0.000E+00	0.000E+00	0.000E+00
RU109	7.912E+04	6.201E-17	0.000E+00	0.000E+00	0.000E+00
RH109	8.214E+04	3.050E-07	2.774E-19	0.000E+00	0.000E+00
RH109M	4.107E+04	9.880E-16	0.000E+00	0.000E+00	0.000E+00
PD109	8.965E+04	8.575E+04	8.145E+04	4.867E+04	2.624E+04
PD109M	4.119E+04	1.173E+01	1.653E-03	0.000E+00	0.000E+00
AG109M	8.961E+04	8.578E+04	8.147E+04	4.868E+04	2.624E+04
NB110	1.042E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO110	1.133E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC110	9.109E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU110	3.524E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	3.780E+04	3.272E-33	0.000E+00	0.000E+00	0.000E+00
RH110M	2.562E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110	2.262E+04	5.444E+00	5.444E+00	5.437E+00	5.430E+00
AG110M	4.094E+02	4.093E+02	4.093E+02	4.088E+02	4.083E+02
NB111	8.840E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO111	2.352E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC111	3.186E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU111	1.649E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	2.188E+04	1.717E-13	1.079E-30	0.000E+00	0.000E+00
PD111	2.230E+04	3.726E+03	7.054E+02	4.884E+01	1.076E+01
PD111M	3.038E+02	2.681E+02	2.364E+02	6.704E+01	1.477E+01
AG111	2.242E+04	2.238E+04	2.230E+04	2.146E+04	2.048E+04
AG111M	2.224E+04	3.968E+03	8.045E+02	6.997E+01	1.542E+01
CD111M	1.643E+00	6.995E-01	2.978E-01	5.822E-05	2.063E-09
MO112	4.310E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	1.114E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	7.700E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	1.181E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD112	1.257E+04	1.214E+04	1.173E+04	8.308E+03	5.492E+03
AG112	1.261E+04	1.255E+04	1.243E+04	9.680E+03	6.494E+03
MO113	3.064E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC113	2.974E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU113	4.341E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH113	8.731E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD113	1.035E+04	9.617E-09	8.747E-21	0.000E+00	0.000E+00
AG113	9.324E+03	8.221E+03	7.213E+03	1.950E+03	4.060E+02
AG113M	1.048E+03	3.606E-09	3.280E-21	0.000E+00	0.000E+00
CD113M	1.035E+01	1.035E+01	1.035E+01	1.035E+01	1.035E+01
MO114	3.134E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC114	6.720E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU114	2.024E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH114	5.356E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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PD114      7.570E+03 2.297E-04 6.847E-12 0.000E+00 0.000E+00
AG114      7.666E+03 2.372E-04 7.069E-12 0.000E+00 0.000E+00
IN114      5.892E-01 1.911E-01 1.910E-01 1.899E-01 1.886E-01
□
         OUTPUT UNIT =
6                        PAGE  184
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN114M     1.998E-01 1.997E-01 1.996E-01 1.984E-01 1.970E-01
MO115      2.097E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC115      1.414E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU115      9.488E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH115      4.115E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD115      7.417E+03 2.489E-25 0.000E+00 0.000E+00 0.000E+00
AG115      5.557E+03 7.188E+02 8.984E+01 8.367E-08 1.218E-18
AG115M     2.134E+03 1.216E-25 0.000E+00 0.000E+00 0.000E+00
CD115      7.143E+03 7.082E+03 6.995E+03 6.145E+03 5.260E+03
CD115M     6.827E+02 6.823E+02 6.818E+02 6.774E+02 6.722E+02
IN115M     7.158E+03 7.152E+03 7.135E+03 6.588E+03 5.706E+03
TC116      8.767E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU116      2.120E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH116      1.984E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD116      5.824E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG116      3.241E+03 6.422E-04 1.170E-10 0.000E+00 0.000E+00
AG116M     3.241E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116      3.616E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN116M     2.633E+03 1.222E+03 5.668E+02 2.618E-01 2.602E-05
TC117      3.769E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU117      3.340E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH117      1.340E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD117      5.390E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG117      3.211E+03 5.360E-12 8.402E-27 0.000E+00 0.000E+00
AG117M     3.210E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD117      4.234E+03 3.261E+03 2.498E+03 1.737E+02 7.085E+00
CD117M     2.298E+03 1.879E+03 1.532E+03 1.995E+02 1.728E+01
IN117      3.909E+03 3.778E+03 3.467E+03 5.057E+02 3.500E+01
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IN117M     4.949E+03 4.772E+03 4.355E+03 6.620E+02 4.120E+01
SN117M     1.212E+01 1.210E+01 1.207E+01 1.183E+01 1.154E+01
RU118      2.059E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH118      1.613E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD118      4.203E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG118      4.360E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG118M     2.905E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD118      6.517E+03 2.856E+03 1.250E+03 3.206E-01 1.574E-05
IN118      6.520E+03 2.861E+03 1.252E+03 3.211E-01 1.576E-05
IN118M     2.376E+00 2.075E-04 1.812E-08 0.000E+00 0.000E+00
RH119      1.235E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD119      2.919E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG119      5.759E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD119      3.221E+03 3.902E+01 4.675E-01 2.852E-20 0.000E+00
CD119M     3.221E+03 7.555E-03 1.714E-08 0.000E+00 0.000E+00
IN119      1.856E+03 4.736E+01 4.944E+00 4.623E-10 4.204E-22
IN119M     4.835E+03 8.259E+02 8.565E+01 7.962E-09 7.241E-21
SN119M     7.234E+01 7.234E+01 7.233E+01 7.224E+01 7.214E+01
RU120      4.304E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH120      1.964E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD120      1.139E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG120      4.057E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD120      6.394E+03 3.065E-18 0.000E+00 0.000E+00 0.000E+00
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OUTPUT UNIT =
6 PAGE 185
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

```
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN120      3.260E+03 1.216E-17 0.000E+00 0.000E+00 0.000E+00
IN120M     3.260E+03 1.632E-18 0.000E+00 0.000E+00 0.000E+00
RH121      3.092E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD121      4.406E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG121      2.801E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD121      6.337E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121      5.388E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121M     1.356E+03 4.855E-03 1.633E-08 0.000E+00 0.000E+00
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SN121	6.753E+03	6.586E+03	6.417E+03	4.955E+03	3.633E+03
SN121M	4.224E-02	4.224E-02	4.224E-02	4.224E-02	4.224E-02
RH122	3.744E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD122	1.347E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG122	1.725E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD122	6.112E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122	6.570E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122M	4.594E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB122	4.397E+02	4.350E+02	4.303E+02	3.867E+02	3.401E+02
SB122M	3.478E+00	1.742E-04	8.721E-09	0.000E+00	0.000E+00
RH123	3.208E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD123	3.065E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG123	9.046E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD123	5.817E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123	5.415E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123M	2.267E+03	6.763E-20	0.000E+00	0.000E+00	0.000E+00
SN123	1.478E+03	1.477E+03	1.477E+03	1.474E+03	1.470E+03
SN123M	6.376E+03	2.278E+03	8.072E+02	2.517E-02	9.855E-08
TE123M	1.048E+00	1.048E+00	1.048E+00	1.045E+00	1.042E+00
PD124	5.651E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG124	4.079E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD124	5.350E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN124	8.890E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	2.406E+02	2.405E+02	2.404E+02	2.392E+02	2.379E+02
SB124M	3.380E+00	7.520E-12	1.673E-23	0.000E+00	0.000E+00
AG125	1.222E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD125	3.651E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125	5.372E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125M	3.934E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN125	5.465E+03	5.449E+03	5.432E+03	5.272E+03	5.086E+03
SN125M	8.757E+03	1.122E+02	1.422E+00	1.515E-19	0.000E+00
SB125	3.650E+03	3.650E+03	3.650E+03	3.650E+03	3.651E+03
TE125M	7.007E+02	7.008E+02	7.009E+02	7.016E+02	7.024E+02
PD126	8.036E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG126	3.760E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD126	2.798E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN126	1.278E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN126	1.758E-01	1.758E-01	1.758E-01	1.758E-01	1.758E-01
SB126	3.879E+02	3.870E+02	3.861E+02	3.772E+02	3.668E+02
SB126M	1.835E+02	2.071E+01	2.477E+00	1.758E-01	1.758E-01
CD127	1.448E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127	7.217E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127M	7.226E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 186
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

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    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

SN127      2.763E+04 1.987E+04 1.428E+04 5.264E+02 1.003E+01
SN127M     1.333E+04 5.687E-01 2.427E-05 0.000E+00 0.000E+00
SB127      4.360E+04 4.346E+04 4.326E+04 4.043E+04 3.696E+04
TE127      4.289E+04 4.289E+04 4.287E+04 4.202E+04 3.989E+04
TE127M     5.453E+03 5.453E+03 5.453E+03 5.454E+03 5.454E+03
XE127      3.577E-03 3.575E-03 3.572E-03 3.543E-03 3.510E-03
AG128      1.431E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD128      5.592E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN128      1.271E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN128      7.178E+04 3.548E+04 1.753E+04 1.522E+01 3.228E-03
SB128      5.666E+03 5.247E+03 4.858E+03 2.251E+03 8.944E+02
SB128M     7.709E+04 4.288E+04 2.128E+04 1.848E+01 3.918E-03
 I128      2.260E+03 4.277E+02 8.094E+01 4.771E-06 1.007E-14
CD129      2.188E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN129      9.915E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN129      4.634E+04 1.811E+02 7.071E-01 0.000E+00 0.000E+00
SN129M     5.756E+04 3.433E-03 2.046E-10 0.000E+00 0.000E+00
SB129      1.380E+05 1.192E+05 1.015E+05 2.039E+04 2.973E+03
TE129      1.359E+05 1.308E+05 1.206E+05 3.737E+04 1.661E+04
TE129M     2.036E+04 2.036E+04 2.035E+04 2.024E+04 2.004E+04
 I129      7.710E-03 7.710E-03 7.711E-03 7.715E-03 7.717E-03
XE129M     4.896E-01 4.878E-01 4.861E-01 4.688E-01 4.490E-01
CD130      2.324E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN130      1.248E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN130      1.589E+05 2.219E+00 3.096E-05 0.000E+00 0.000E+00
SB130      4.435E+04 1.568E+04 5.544E+03 1.692E-01 6.453E-07
SB130M     2.107E+05 5.944E+02 8.124E-01 0.000E+00 0.000E+00
 I130      6.904E+03 6.553E+03 6.196E+03 3.537E+03 1.804E+03
 I130M     2.707E+03 2.665E+01 2.623E-01 2.239E-21 0.000E+00
CD131      3.515E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN131      4.450E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN131      1.458E+05 9.166E-13 5.760E-30 0.000E+00 0.000E+00
SB131      3.884E+05 6.482E+04 1.063E+04 1.491E-04 5.622E-14
TE131      4.067E+05 1.966E+05 6.613E+04 1.099E+04 8.332E+03
TE131M     6.409E+04 6.291E+04 6.152E+04 4.884E+04 3.701E+04
 I131      4.574E+05 4.570E+05 4.560E+05 4.420E+05 4.251E+05
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XE131M     5.080E+03 5.080E+03 5.080E+03 5.078E+03 5.070E+03
CD132      3.196E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN132      1.178E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN132      8.202E+04 6.625E-23 0.000E+00 0.000E+00 0.000E+00
SB132      2.369E+05 9.303E-02 3.296E-08 0.000E+00 0.000E+00
SB132M     1.540E+05 7.712E+00 3.861E-04 0.000E+00 0.000E+00
TE132      6.568E+05 6.512E+05 6.455E+05 5.907E+05 5.311E+05
 I132      6.652E+05 6.623E+05 6.586E+05 6.083E+05 5.472E+05
CS132      5.417E+01 5.393E+01 5.369E+01 5.134E+01 4.867E+01
IN133      1.184E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN133      2.456E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB133      2.895E+05 8.635E-03 2.573E-10 0.000E+00 0.000E+00
TE133      5.632E+05 4.984E+04 1.474E+04 7.707E+00 9.431E-04
TE133M     3.753E+05 1.773E+05 8.368E+04 4.596E+01 5.624E-03
 I133      9.678E+05 9.503E+05 9.236E+05 6.648E+05 4.456E+05
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         OUTPUT UNIT =
6                        PAGE  187
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 I133M     2.620E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE133      9.671E+05 9.671E+05 9.669E+05 9.577E+05 9.322E+05
XE133M     2.966E+04 2.964E+04 2.960E+04 2.874E+04 2.684E+04
IN134      6.123E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN134      2.911E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB134      4.299E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB134M     4.008E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE134      8.469E+05 3.133E+05 1.158E+05 5.531E+00 3.611E-05
 I134      1.069E+06 7.627E+05 4.475E+05 3.085E+02 2.486E-02
 I134M     9.102E+04 1.196E+00 1.571E-05 0.000E+00 0.000E+00
XE134M     6.049E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS134      2.486E+04 2.486E+04 2.486E+04 2.485E+04 2.484E+04
CS134M     1.149E+04 9.046E+03 7.123E+03 6.526E+02 3.707E+01
SN135      3.323E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB135      2.676E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE135      4.315E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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 I135      9.010E+05 8.116E+05 7.308E+05 2.561E+05 7.279E+04
XE135      2.892E+05 3.321E+05 3.647E+05 3.970E+05 2.387E+05
XE135M     1.819E+05 1.325E+05 1.172E+05 4.103E+04 1.166E+04
CS135      1.245E-01 1.246E-01 1.246E-01 1.247E-01 1.248E-01
CS135M     3.466E+03 1.581E+03 7.215E+02 2.821E-01 2.296E-05
BA135M     5.747E+00 5.609E+00 5.476E+00 4.301E+00 3.218E+00
SN136      2.706E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB136      4.910E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE136      2.358E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I136      4.289E+05 4.461E-08 3.915E-21 0.000E+00 0.000E+00
 I136M     2.611E+05 7.210E-19 0.000E+00 0.000E+00 0.000E+00
CS136      1.475E+04 1.472E+04 1.469E+04 1.437E+04 1.399E+04
BA136M     2.431E+03 2.426E+03 2.421E+03 2.368E+03 2.306E+03
SB137      6.384E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE137      6.164E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I137      4.327E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE137      8.464E+05 1.724E+01 3.316E-04 0.000E+00 0.000E+00
CS137      2.823E+04 2.823E+04 2.823E+04 2.823E+04 2.823E+04
BA137M     2.679E+04 2.671E+04 2.671E+04 2.670E+04 2.670E+04
SB138      7.489E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE138      1.483E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I138      2.177E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE138      8.263E+05 4.399E+04 2.337E+03 4.190E-10 2.120E-25
CS138      9.084E+05 3.948E+05 1.162E+05 2.901E-01 5.389E-08
CS138M     3.995E+04 2.362E-02 1.397E-08 0.000E+00 0.000E+00
SB139      5.389E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE139      2.749E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I139      9.777E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE139      6.541E+05 2.421E-22 0.000E+00 0.000E+00 0.000E+00
CS139      8.607E+05 1.091E+04 1.307E+02 7.973E-18 0.000E+00
BA139      8.823E+05 6.028E+05 3.654E+05 2.392E+03 5.727E+00
TE140      3.248E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I140      2.825E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE140      4.388E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS140      7.760E+05 9.245E-12 9.548E-29 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  188
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
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17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA140	8.502E+05	8.483E+05	8.464E+05	8.275E+05	8.054E+05
LA140	8.619E+05	8.617E+05	8.614E+05	8.575E+05	8.497E+05
PR140	4.265E+00	2.004E-05	9.418E-11	0.000E+00	0.000E+00
TE141	1.421E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I141	4.492E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE141	1.501E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	5.841E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	8.047E+05	8.400E+04	8.620E+03	1.116E-06	1.521E-18
LA141	8.082E+05	7.281E+05	6.156E+05	1.057E+05	1.273E+04
CE141	8.220E+05	8.219E+05	8.218E+05	8.171E+05	8.089E+05
TE142	1.363E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I142	5.536E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE142	5.135E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS142	3.612E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	7.722E+05	1.586E+04	3.253E+02	4.287E-15	2.464E-35
LA142	7.890E+05	5.661E+05	3.627E+05	4.085E+03	1.875E+01
PR142	1.577E+04	1.524E+04	1.470E+04	1.023E+04	6.625E+03
PR142M	3.089E+03	1.789E+02	1.037E+01	4.410E-12	6.297E-27
I143	3.380E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE143	8.026E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS143	1.837E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	6.863E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	7.656E+05	3.985E+04	2.043E+03	2.565E-10	8.462E-26
CE143	7.695E+05	7.587E+05	7.432E+05	6.024E+05	4.682E+05
PR143	7.657E+05	7.657E+05	7.657E+05	7.636E+05	7.578E+05
I144	2.614E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE144	1.320E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS144	4.685E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA144	5.298E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	6.827E+05	7.152E-22	0.000E+00	0.000E+00	0.000E+00
CE144	5.197E+05	5.196E+05	5.195E+05	5.190E+05	5.184E+05
PR144	5.237E+05	5.200E+05	5.196E+05	5.190E+05	5.184E+05
PR144M	6.242E+03	6.235E+03	6.235E+03	6.228E+03	6.221E+03
XE145	1.195E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS145	1.156E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA145	2.630E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	4.846E+05	2.400E-32	0.000E+00	0.000E+00	0.000E+00
CE145	5.191E+05	5.945E-01	5.670E-07	0.000E+00	0.000E+00
PR145	5.193E+05	4.670E+05	4.159E+05	1.305E+05	3.248E+04
XE146	8.033E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS146	1.595E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA146	9.465E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA146	3.107E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	4.067E+05	2.192E+04	1.172E+03	2.235E-10	1.219E-25

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PR146      4.082E+05 1.465E+05 3.019E+04 1.095E-03 1.211E-12
PM146      4.882E-01 4.882E-01 4.882E-01 4.881E-01 4.880E-01
XE147      6.770E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS147      2.384E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA147      2.089E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA147      1.490E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE147      3.105E+05 1.109E-10 3.659E-26 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE  189
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

PR147      3.187E+05 1.108E+04 3.462E+02 3.075E-13 2.667E-31
ND147      3.175E+05 3.169E+05 3.161E+05 3.080E+05 2.985E+05
PM147      6.038E+04 6.039E+04 6.040E+04 6.047E+04 6.056E+04
CS148      1.467E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA148      3.384E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA148      5.403E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE148      2.216E+05 1.404E-20 0.000E+00 0.000E+00 0.000E+00
PR148      2.463E+05 4.876E-03 6.840E-11 0.000E+00 0.000E+00
PM148      1.071E+05 1.065E+05 1.060E+05 1.004E+05 9.421E+04
PM148M     1.420E+04 1.419E+04 1.418E+04 1.408E+04 1.396E+04
BA149      3.527E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA149      1.265E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE149      1.193E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR149      1.664E+05 2.350E-03 3.297E-11 0.000E+00 0.000E+00
ND149      1.722E+05 1.179E+05 7.898E+04 1.437E+03 1.173E+01
PM149      2.455E+05 2.442E+05 2.423E+05 2.149E+05 1.838E+05
CS150      1.332E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA150      2.549E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA150      2.277E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE150      5.182E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR150      1.047E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM150      2.199E+03 1.698E+03 1.311E+03 9.868E+01 4.429E+00
LA151      2.751E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE151      1.490E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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PR151      5.642E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND151      8.193E+04 2.874E+03 1.005E+02 2.729E-13 9.054E-31
PM151      8.207E+04 8.066E+04 7.873E+04 6.168E+04 4.601E+04
SM151      1.755E+02 1.756E+02 1.756E+02 1.762E+02 1.768E+02
BA152      6.485E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA152      2.952E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE152      3.159E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR152      2.427E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND152      5.557E+04 1.504E+03 4.041E+01 7.954E-15 1.123E-33
PM152      5.690E+04 2.335E+03 6.290E+01 1.236E-14 1.736E-33
PM152M     1.004E+03 3.923E+00 1.533E-02 0.000E+00 0.000E+00
EU152      2.953E+00 2.953E+00 2.953E+00 2.952E+00 2.952E+00
EU152M     4.643E+01 4.311E+01 4.002E+01 1.902E+01 7.791E+00
LA153      2.973E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE153      5.223E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR153      7.431E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND153      3.217E+04 2.986E-12 2.689E-28 0.000E+00 0.000E+00
PM153      3.642E+04 2.040E+01 9.222E-03 0.000E+00 0.000E+00
SM153      1.186E+05 1.170E+05 1.152E+05 9.934E+04 8.313E+04
GD153      1.218E+00 1.218E+00 1.218E+00 1.217E+00 1.215E+00
LA154      1.368E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE154      5.840E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR154      1.673E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND154      1.550E+04 1.257E-23 0.000E+00 0.000E+00 0.000E+00
PM154      1.898E+04 8.650E-03 3.065E-09 0.000E+00 0.000E+00
PM154M     3.172E+03 2.931E-07 2.708E-17 0.000E+00 0.000E+00
EU154      1.113E+03 1.113E+03 1.113E+03 1.113E+03 1.113E+03
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OUTPUT UNIT =
6 PAGE 190
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

7 SUMMARY TABLE: RADIOACTIVITY, CURIES
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

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           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

CE155      6.624E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR155      3.206E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND155      5.773E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM155      1.155E+04 5.918E-26 0.000E+00 0.000E+00 0.000E+00
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SM155	1.324E+04	2.102E+03	3.229E+02	2.361E-06	4.074E-16
EU155	1.024E+03	1.024E+03	1.024E+03	1.023E+03	1.023E+03
GD155M	2.492E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE156	6.217E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR156	5.706E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND156	1.909E+03	5.661E-16	2.704E-34	0.000E+00	0.000E+00
PM156	5.985E+03	7.295E-16	0.000E+00	0.000E+00	0.000E+00
SM156	8.029E+03	7.464E+03	6.933E+03	3.317E+03	1.369E+03
EU156	2.707E+04	2.704E+04	2.700E+04	2.658E+04	2.603E+04
CE157	4.883E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR157	8.833E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND157	5.181E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	2.777E+03	3.286E-13	3.841E-29	0.000E+00	0.000E+00
SM157	5.106E+03	3.077E+01	1.700E-01	0.000E+00	0.000E+00
EU157	6.186E+03	5.957E+03	5.691E+03	3.607E+03	2.087E+03
PR158	6.611E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	7.785E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM158	8.742E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	2.698E+03	1.049E+03	4.073E+02	3.187E-02	3.764E-07
EU158	2.894E+03	2.139E+03	1.241E+03	4.982E-01	1.468E-05
PR159	2.614E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	7.734E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	1.928E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	1.222E+03	2.556E-04	5.325E-11	0.000E+00	0.000E+00
EU159	1.491E+03	1.714E+02	1.723E+01	1.809E-09	1.917E-21
GD159	1.665E+03	1.629E+03	1.572E+03	1.083E+03	6.924E+02
ND160	6.622E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM160	3.450E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	4.537E+02	3.569E-01	2.807E-04	0.000E+00	0.000E+00
EU160	6.887E+02	4.180E-01	3.287E-04	0.000E+00	0.000E+00
TB160	1.189E+02	1.188E+02	1.188E+02	1.183E+02	1.177E+02
ND161	4.626E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	3.941E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	1.218E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU161	2.960E+02	6.001E-24	0.000E+00	0.000E+00	0.000E+00
GD161	3.428E+02	5.535E-03	7.270E-08	0.000E+00	0.000E+00
TB161	3.619E+02	3.606E+02	3.591E+02	3.444E+02	3.276E+02
PM162	1.813E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM162	1.653E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU162	9.074E+01	8.856E-03	8.522E-07	0.000E+00	0.000E+00
GD162	1.667E+02	3.772E+00	5.906E-02	5.122E-20	0.000E+00
TB162	1.651E+02	1.128E+01	2.159E-01	1.984E-19	0.000E+00
TB162M	5.097E+00	3.977E+00	2.919E+00	1.304E-01	3.129E-03
SM163	1.920E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU163	2.148E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD163	6.728E+01	1.487E-10	3.094E-22	0.000E+00	0.000E+00
TB163	7.272E+01	9.341E+00	1.107E+00	6.049E-10	4.642E-21

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         OUTPUT UNIT =
6                        PAGE  191
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

SM164      1.753E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU164      4.476E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD164      2.721E+01 3.998E+00 5.873E-01 2.748E-09 2.775E-19
TB164      3.372E+01 4.652E+00 6.816E-01 3.190E-09 3.221E-19
SM165      1.124E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU165      7.264E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD165      9.352E+00 1.433E-10 2.192E-21 0.000E+00 0.000E+00
TB165      1.513E+01 2.129E-10 3.257E-21 0.000E+00 0.000E+00
DY165      6.273E+01 4.708E+01 3.505E+01 1.836E+00 5.328E-02
DY165M     3.786E+01 4.295E-10 6.568E-21 0.000E+00 0.000E+00
DY166      9.747E+00 9.664E+00 9.582E+00 8.801E+00 7.947E+00
HO166      1.662E+01 1.645E+01 1.627E+01 1.465E+01 1.297E+01
ER167M     2.153E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ER169      1.639E-02 1.634E-02 1.629E-02 1.580E-02 1.523E-02
SUMTOT     8.277E+07 3.071E+07 2.722E+07 1.952E+07 1.654E+07

TOTAL      8.277E+07 3.071E+07 2.722E+07 1.952E+07 1.654E+07
□
         OUTPUT UNIT =
6                        PAGE  192
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
```

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	1.404E+02	1.404E+02	1.404E+02	1.404E+02	1.404E+02
CO	8.666E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI	3.278E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU	2.284E+02	1.546E-08	6.869E-11	5.745E-11	5.022E-11
ZN	2.254E+03	2.721E+01	2.681E+01	2.310E+01	1.931E+01
GA	1.132E+04	8.082E+01	7.298E+01	3.748E+01	2.604E+01
GE	7.138E+04	2.517E+03	1.721E+03	2.602E+02	1.165E+02
AS	2.131E+05	4.220E+03	3.639E+03	1.273E+03	1.002E+03
SE	6.371E+05	8.032E+03	1.414E+03	3.413E+00	2.588E+00
BR	1.407E+06	8.876E+04	5.027E+04	3.211E+03	8.833E+02
KR	2.505E+06	6.717E+05	5.102E+05	5.443E+04	7.959E+03
RB	3.465E+06	3.891E+05	2.772E+05	2.435E+04	1.741E+03
SR	4.924E+06	1.737E+06	1.568E+06	8.811E+05	6.854E+05
Y	6.548E+06	2.638E+06	2.434E+06	1.424E+06	9.651E+05
ZR	4.874E+06	1.642E+06	1.610E+06	1.354E+06	1.157E+06
NB	7.050E+06	2.425E+06	2.373E+06	1.881E+06	1.470E+06
MO	3.989E+06	9.284E+05	8.594E+05	7.710E+05	6.797E+05
TC	4.343E+06	1.010E+06	7.865E+05	7.234E+05	6.500E+05
RU	1.604E+06	1.096E+06	1.047E+06	8.165E+05	7.600E+05
RH	1.945E+06	1.188E+06	1.142E+06	1.028E+06	9.471E+05
PD	2.114E+05	1.019E+05	9.412E+04	5.709E+04	3.175E+04
AG	2.316E+05	1.340E+05	1.247E+05	8.226E+04	5.406E+04
CD	6.628E+04	1.581E+04	1.297E+04	7.206E+03	5.967E+03
IN	1.497E+05	2.066E+04	1.687E+04	7.757E+03	5.783E+03
SN	6.602E+05	7.151E+04	4.603E+04	1.233E+04	1.028E+04
SB	1.709E+06	2.966E+05	1.918E+05	6.775E+04	4.542E+04
TE	3.865E+06	1.651E+06	1.177E+06	7.564E+05	6.592E+05
I	5.661E+06	3.651E+06	3.223E+06	1.975E+06	1.493E+06
XE	4.456E+06	1.510E+06	1.486E+06	1.430E+06	1.214E+06
CS	3.857E+06	4.842E+05	1.920E+05	6.815E+04	6.715E+04
BA	4.937E+06	1.580E+06	1.250E+06	8.589E+05	8.344E+05
LA	4.921E+06	2.196E+06	1.842E+06	9.672E+05	8.625E+05
CE	3.759E+06	2.122E+06	2.086E+06	1.939E+06	1.795E+06
PR	3.168E+06	1.932E+06	1.753E+06	1.430E+06	1.322E+06
ND	6.832E+05	4.392E+05	3.952E+05	3.094E+05	2.985E+05
PM	6.494E+05	5.100E+05	5.029E+05	4.517E+05	3.985E+05
SM	1.497E+05	1.278E+05	1.231E+05	1.028E+05	8.468E+04
EU	4.093E+04	3.749E+04	3.613E+04	3.235E+04	3.027E+04
GD	2.280E+03	1.638E+03	1.574E+03	1.084E+03	6.936E+02
TB	7.726E+02	5.086E+02	4.827E+02	4.628E+02	4.453E+02
DY	1.103E+02	5.675E+01	4.464E+01	1.064E+01	8.001E+00
HO	1.662E+01	1.645E+01	1.627E+01	1.465E+01	1.297E+01
ER	2.317E-01	1.634E-02	1.629E-02	1.580E-02	1.523E-02
SUMTOT	8.277E+07	3.071E+07	2.722E+07	1.952E+07	1.654E+07
TOTAL	8.277E+07	3.071E+07	2.722E+07	1.952E+07	1.654E+07

CUMULATIVE TABLE TOTALS

AP+FP	8.294E+07	3.087E+07	2.737E+07	1.964E+07	1.664E+07
ACT+FP	9.880E+07	4.022E+07	3.553E+07	2.668E+07	2.275E+07
AP+ACT+FP	9.897E+07	4.038E+07	3.568E+07	2.680E+07	2.284E+07

OUTPUT UNIT = 6 PAGE 193
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	4.726E-03	4.726E-03	4.726E-03	4.726E-03	4.726E-03
CO 72	3.192E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 72	2.352E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 72	6.657E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 72	4.180E-02	4.118E-02	4.057E-02	3.495E-02	2.923E-02
GA 72	5.265E-01	5.262E-01	5.256E-01	5.042E-01	4.571E-01
CO 73	8.720E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 73	3.156E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 73	6.898E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 73	8.380E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 73	2.720E-01	2.363E-01	2.050E-01	4.954E-02	9.012E-03
GE 73M	2.390E-02	2.075E-02	1.800E-02	4.351E-03	7.914E-04
CO 74	2.300E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 74	1.726E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 74	1.677E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 74	7.500E-01	2.944E-12	1.152E-23	0.000E+00	0.000E+00
GA 74	3.174E+00	2.301E-02	1.355E-04	0.000E+00	0.000E+00
CO 75	2.727E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 75	1.054E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 75	1.370E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 75	4.390E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 75	2.168E+00	7.263E-10	2.264E-19	0.000E+00	0.000E+00
GE 75	7.380E-01	4.579E-01	2.771E-01	1.825E-03	4.396E-06
GE 75M	9.657E-03	5.121E-12	1.596E-21	0.000E+00	0.000E+00
NI 76	2.332E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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CU 76      1.632E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 76      5.592E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 76      1.804E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 76      6.864E-02 6.685E-02 6.512E-02 5.004E-02 3.648E-02
NI 77      5.374E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 77      6.167E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 77      1.214E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 77      1.780E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 77      5.123E+00 4.822E+00 4.535E+00 2.456E+00 1.176E+00
GE 77M     6.948E+00 9.954E-20 0.000E+00 0.000E+00 0.000E+00
AS 77      1.969E+00 1.947E+00 1.924E+00 1.684E+00 1.405E+00
SE 77M     5.248E-03 5.081E-03 5.021E-03 4.396E-03 3.666E-03
NI 78      5.271E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 78      3.077E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 78      9.255E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 78      5.904E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 78      8.999E+00 5.584E+00 3.462E+00 2.906E-02 9.377E-05
AS 78      4.710E+01 4.301E+01 3.540E+01 1.114E+00 7.519E-03
CU 79      6.313E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 79      8.583E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 79      4.697E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 79      7.917E+01 5.098E-24 0.000E+00 0.000E+00 0.000E+00
AS 79      3.859E+01 4.082E-01 4.018E-03 3.430E-23 0.000E+00
SE 79      2.846E-05 2.846E-05 2.846E-05 2.846E-05 2.846E-05
SE 79M     4.177E+00 7.761E-02 7.665E-04 6.529E-24 0.000E+00
CU 80      1.014E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  194
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZN 80      2.580E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 80      8.414E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 80      8.228E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 80      3.062E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 80      1.432E-03 8.770E-04 7.180E-04 1.488E-04 2.266E-05
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BR 80M	9.630E-05	8.232E-05	7.037E-05	1.466E-05	2.233E-06
CU 81	6.775E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 81	9.771E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 81	3.802E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 81	3.240E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 81	2.605E+02	4.600E-32	0.000E+00	0.000E+00	0.000E+00
SE 81	1.016E+02	1.274E+01	2.144E+00	7.198E-04	1.188E-07
SE 81M	4.964E-01	2.402E-01	1.163E-01	8.190E-05	1.351E-08
ZN 82	1.104E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 82	2.280E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 82	1.846E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82	5.164E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82M	3.327E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 82	2.152E+01	2.112E+01	2.071E+01	1.702E+01	1.345E+01
BR 82M	2.292E-01	2.592E-04	2.923E-07	0.000E+00	0.000E+00
ZN 83	1.212E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 83	5.726E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 83	3.275E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 83	7.283E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	4.477E+02	7.100E+01	1.118E+01	1.050E-07	2.444E-17
SE 83M	5.168E+02	2.021E-13	6.669E-29	0.000E+00	0.000E+00
BR 83	1.278E+02	1.016E+02	7.687E+01	4.241E+00	1.306E-01
KR 83M	1.585E+01	1.533E+01	1.394E+01	1.636E+00	6.267E-02
GA 84	7.107E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 84	7.390E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 84	1.255E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	6.346E+02	2.160E-03	7.265E-09	0.000E+00	0.000E+00
BR 84	2.110E+03	6.356E+02	1.719E+02	3.592E-04	5.490E-11
BR 84M	7.328E+01	7.156E-02	6.988E-05	0.000E+00	0.000E+00
GE 85	2.910E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 85	6.673E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 85	1.370E+03	2.267E-25	0.000E+00	0.000E+00	0.000E+00
SE 85M	1.047E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	8.824E+02	5.243E-04	2.624E-10	0.000E+00	0.000E+00
KR 85	4.465E+00	4.465E+00	4.465E+00	4.466E+00	4.466E+00
KR 85M	3.544E+02	3.073E+02	2.633E+02	5.604E+01	8.756E+00
GE 86	4.946E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 86	4.895E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 86	2.009E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	3.165E+03	8.064E-17	0.000E+00	0.000E+00	0.000E+00
BR 86M	2.972E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 86	2.187E+00	2.184E+00	2.181E+00	2.147E+00	2.108E+00
RB 86M	2.020E-01	3.655E-19	8.595E-37	0.000E+00	0.000E+00
GE 87	9.387E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 87	2.254E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 87	2.713E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 87	5.466E+03	2.176E-16	6.489E-36	0.000E+00	0.000E+00
KR 87	3.562E+03	2.088E+03	1.211E+03	5.197E+00	7.524E-03
SR 87M	2.603E-03	2.033E-03	1.588E-03	1.343E-04	6.924E-06
GE 88	2.395E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 88	1.852E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 88	8.942E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 88	3.959E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	5.498E+03	4.311E+03	3.377E+03	2.939E+02	1.569E+01
RB 88	6.445E+03	5.507E+03	4.359E+03	3.798E+02	2.028E+01
AS 89	1.674E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 89	3.396E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 89	5.447E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	9.403E+03	1.904E-02	3.819E-08	0.000E+00	0.000E+00
RB 89	9.615E+03	7.803E+02	5.058E+01	6.625E-11	3.647E-25
SR 89	1.913E+03	1.912E+03	1.911E+03	1.900E+03	1.887E+03
Y 89M	9.846E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 90	9.909E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 90	4.231E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 90	7.547E+03	2.251E-30	0.000E+00	0.000E+00	0.000E+00
RB 90	1.221E+04	2.146E-02	1.230E-06	0.000E+00	0.000E+00
RB 90M	3.029E+03	2.054E-01	1.295E-05	0.000E+00	0.000E+00
SR 90	2.688E+01	2.688E+01	2.688E+01	2.688E+01	2.688E+01
Y 90	1.326E+02	1.325E+02	1.325E+02	1.321E+02	1.316E+02
Y 90M	2.363E-02	1.889E-02	1.511E-02	1.615E-03	1.104E-04
SE 91	1.811E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 91	1.327E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 91	7.127E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	1.505E+04	3.978E-15	9.565E-34	0.000E+00	0.000E+00
SR 91	5.296E+03	4.932E+03	4.585E+03	2.210E+03	9.210E+02
Y 91	2.502E+03	2.502E+03	2.502E+03	2.497E+03	2.486E+03
Y 91M	1.268E+03	1.239E+03	1.179E+03	5.796E+02	2.414E+02
SE 92	6.285E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 92	1.324E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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KR 92      3.209E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 92      1.188E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 92      6.368E+03 4.933E+03 3.819E+03 2.959E+02 1.375E+01
 Y 92      7.069E+03 6.913E+03 6.536E+03 1.800E+03 2.239E+02
BR 93      2.579E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 93      1.715E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 93      8.217E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 93      1.170E+04 4.602E+01 1.797E-01 0.000E+00 0.000E+00
 Y 93      5.901E+03 5.577E+03 5.208E+03 2.622E+03 1.151E+03
ZR 93      6.207E-05 6.208E-05 6.208E-05 6.211E-05 6.213E-05
BR 94      2.635E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 94      5.499E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 94      5.809E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 94      9.031E+03 4.218E-11 1.951E-25 0.000E+00 0.000E+00
 Y 94      1.301E+04 1.572E+03 1.781E+02 6.226E-08 2.796E-19
NB 94M     1.097E-04 1.428E-07 1.856E-10 0.000E+00 0.000E+00
BR 95      1.509E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 95      7.840E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                          PAGE  196
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

RB 95      2.822E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 95      1.307E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 95      1.092E+04 2.152E+02 4.099E+00 2.576E-17 0.000E+00
ZR 95      4.368E+03 4.366E+03 4.364E+03 4.345E+03 4.321E+03
NB 95      4.175E+03 4.175E+03 4.175E+03 4.175E+03 4.174E+03
NB 95M     8.526E+00 8.525E+00 8.524E+00 8.512E+00 8.494E+00
BR 96      9.934E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 96      1.024E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 96      1.006E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 96      6.765E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 96      1.784E+04 2.547E-04 3.574E-12 0.000E+00 0.000E+00
NB 96      2.137E+01 2.074E+01 2.014E+01 1.497E+01 1.048E+01
KR 97      7.599E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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RB 97       1.601E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 97       5.988E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 97       1.217E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 97       4.232E+03 4.062E+03 3.899E+03 2.587E+03 1.582E+03
NB 97       5.447E+03 5.366E+03 5.227E+03 3.551E+03 2.034E+03
NB 97M      3.390E+03 3.251E+03 3.120E+03 2.070E+03 1.266E+03
KR 98       7.309E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 98       4.202E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 98       1.758E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 98       1.340E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 98       4.349E+03 4.831E-32 0.000E+00 0.000E+00 0.000E+00
NB 98       1.017E+04 1.224E-31 0.000E+00 0.000E+00 0.000E+00
NB 98M      1.297E+02 5.784E+01 2.579E+01 8.024E-03 4.964E-07
RB 99       3.501E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 99       7.386E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 99       5.918E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 99       1.146E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99       7.657E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99M      3.800E+02 4.294E-05 4.854E-12 0.000E+00 0.000E+00
MO 99       2.808E+03 2.779E+03 2.750E+03 2.476E+03 2.183E+03
TC 99       1.867E-03 1.867E-03 1.867E-03 1.869E-03 1.870E-03
TC 99M      6.453E+02 6.450E+02 6.439E+02 6.098E+02 5.478E+02
RB100       3.913E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR100       1.039E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y100       4.114E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR100       6.020E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100       1.077E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100M      9.429E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC100       8.734E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR101       2.212E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y101       1.046E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR101       8.818E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB101       9.799E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101       8.917E+03 5.238E+02 3.046E+01 1.348E-11 2.016E-26
TC101       3.748E+03 8.186E+02 7.971E+01 1.273E-10 2.569E-25
SR102       1.525E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y102       3.507E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR102       3.330E+03 4.265E-35 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  197
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
```

/CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
NB102	1.496E+04	1.305E-34	0.000E+00	0.000E+00	0.000E+00
MO102	1.309E+03	3.152E+01	7.436E-01	3.976E-17	1.182E-36
TC102	7.332E+03	1.777E+02	4.194E+00	2.242E-16	0.000E+00
TC102M	1.264E+01	8.903E-04	6.272E-08	0.000E+00	0.000E+00
RH102	1.523E-03	1.523E-03	1.523E-03	1.523E-03	1.522E-03
SR103	6.836E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y103	3.746E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR103	2.168E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB103	7.282E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	8.612E+03	9.155E-15	7.939E-33	0.000E+00	0.000E+00
TC103	4.669E+03	2.937E-14	2.548E-32	0.000E+00	0.000E+00
RU103	2.137E+03	2.136E+03	2.134E+03	2.118E+03	2.100E+03
RH103M	1.324E+02	1.324E+02	1.323E+02	1.315E+02	1.302E+02
SR104	2.139E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y104	3.974E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR104	3.155E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB104	5.160E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	2.838E+03	1.468E-08	7.554E-20	0.000E+00	0.000E+00
TC104	1.071E+04	1.189E+03	1.210E+02	1.441E-08	1.777E-20
RH104	1.224E+03	6.582E-03	4.535E-07	0.000E+00	0.000E+00
RH104M	1.124E+01	7.747E-04	5.339E-08	0.000E+00	0.000E+00
Y105	1.951E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR105	7.017E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB105	1.252E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO105	5.634E+03	4.840E-17	0.000E+00	0.000E+00	0.000E+00
TC105	4.118E+03	2.512E+01	1.388E-01	0.000E+00	0.000E+00
RU105	2.655E+03	2.347E+03	2.008E+03	4.214E+02	6.469E+01
RH105	4.859E+02	4.860E+02	4.848E+02	4.329E+02	3.497E+02
RH105M	8.093E+01	7.175E+01	6.139E+01	1.288E+01	1.978E+00
ZR106	7.958E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB106	5.132E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO106	1.584E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	5.466E+03	3.377E-26	0.000E+00	0.000E+00	0.000E+00
RU106	7.336E+00	7.335E+00	7.335E+00	7.329E+00	7.322E+00
RH106	1.340E+03	1.183E+03	1.183E+03	1.182E+03	1.181E+03
RH106M	1.423E+02	1.039E+02	7.580E+01	3.246E+00	7.402E-02
Y107	1.940E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR107	5.673E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB107	6.356E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO107	1.110E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	2.013E+03	9.961E-35	0.000E+00	0.000E+00	0.000E+00

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RU107      1.633E+03 8.920E-02 4.466E-06 0.000E+00 0.000E+00
RH107      9.122E+02 1.691E+02 2.488E+01 1.182E-07 1.215E-17
PD107M     9.099E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR108      1.062E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB108      2.041E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO108      2.558E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC108      1.945E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU108      3.894E+02 3.817E-02 3.698E-06 0.000E+00 0.000E+00
RH108      1.777E+03 1.840E-01 1.782E-05 0.000E+00 0.000E+00
RH108M     2.326E+01 2.020E-02 1.754E-05 0.000E+00 0.000E+00
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OUTPUT UNIT =
6 PAGE 198
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

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           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

AG108      8.057E-04 1.393E-09 1.373E-09 1.373E-09 1.373E-09
ZR109      1.069E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB109      3.189E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO109      1.445E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC109      7.596E+02 4.293E-19 0.000E+00 0.000E+00 0.000E+00
RU109      1.117E+03 8.756E-19 0.000E+00 0.000E+00 0.000E+00
RH109      6.208E+02 2.305E-09 2.097E-21 0.000E+00 0.000E+00
RH109M     6.086E+01 1.464E-18 0.000E+00 0.000E+00 0.000E+00
PD109      2.384E+02 2.280E+02 2.166E+02 1.294E+02 6.977E+01
PD109M     4.591E+01 1.308E-02 1.842E-06 0.000E+00 0.000E+00
AG109M     4.619E+01 4.422E+01 4.200E+01 2.510E+01 1.353E+01
NB110      4.839E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO110      2.355E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC110      3.044E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU110      3.215E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH110      8.095E+02 7.008E-35 0.000E+00 0.000E+00 0.000E+00
RH110M     3.853E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG110      1.625E+02 3.911E-02 3.911E-02 3.906E-02 3.901E-02
AG110M     6.836E+00 6.835E+00 6.835E+00 6.827E+00 6.817E+00
NB111      3.549E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO111      7.639E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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TC111      8.627E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU111      3.168E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH111      2.951E+02 2.315E-15 1.455E-32 0.000E+00 0.000E+00
PD111      1.186E+02 1.981E+01 3.750E+00 2.597E-01 5.724E-02
PD111M     1.059E+00 9.346E-01 8.239E-01 2.337E-01 5.150E-02
AG111      5.022E+01 5.012E+01 4.995E+01 4.806E+01 4.588E+01
AG111M     8.569E+00 1.529E+00 3.100E-01 2.696E-02 5.942E-03
CD111M     3.857E-03 1.642E-03 6.990E-04 1.367E-07 4.843E-12
MO112      1.107E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC112      4.324E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU112      1.007E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH112      2.852E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD112      1.154E+01 1.115E+01 1.078E+01 7.633E+00 5.046E+00
AG112      1.564E+02 1.558E+02 1.542E+02 1.201E+02 8.057E+01
MO113      1.165E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC113      9.567E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU113      1.041E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH113      1.559E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD113      1.218E+02 1.132E-10 1.030E-22 0.000E+00 0.000E+00
AG113      5.820E+01 5.131E+01 4.502E+01 1.217E+01 2.534E+00
AG113M     7.334E+00 2.525E-11 2.296E-23 0.000E+00 0.000E+00
CD113M     1.742E-02 1.742E-02 1.742E-02 1.743E-02 1.743E-02
MO114      9.653E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC114      2.980E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU114      3.535E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH114      1.542E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD114      5.264E+01 1.597E-06 4.761E-14 0.000E+00 0.000E+00
AG114      9.315E+01 2.882E-06 8.589E-14 0.000E+00 0.000E+00
IN114      2.806E-03 9.102E-04 9.097E-04 9.044E-04 8.981E-04
IN114M     2.835E-04 2.834E-04 2.832E-04 2.816E-04 2.796E-04
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         OUTPUT UNIT =
6                        PAGE  199
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

MO115      8.973E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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TC115	5.299E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU115	2.750E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH115	9.234E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD115	1.134E+02	3.804E-27	0.000E+00	0.000E+00	0.000E+00
AG115	5.682E+01	7.349E+00	9.187E-01	8.556E-10	1.245E-20
AG115M	2.413E+01	1.375E-27	0.000E+00	0.000E+00	0.000E+00
CD115	2.267E+01	2.248E+01	2.220E+01	1.951E+01	1.670E+01
CD115M	2.546E+00	2.545E+00	2.543E+00	2.527E+00	2.507E+00
IN115M	1.427E+01	1.426E+01	1.423E+01	1.314E+01	1.138E+01
TC116	4.293E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU116	4.686E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH116	6.748E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD116	5.417E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG116	6.577E+01	1.303E-05	2.375E-12	0.000E+00	0.000E+00
AG116M	7.703E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116	2.962E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	4.335E+01	2.011E+01	9.330E+00	4.309E-03	4.283E-07
TC117	1.569E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU117	1.152E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH117	3.644E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD117	1.076E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG117	4.718E+01	7.876E-14	1.235E-28	0.000E+00	0.000E+00
AG117M	4.947E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD117	3.049E+01	2.348E+01	1.799E+01	1.251E+00	5.103E-02
CD117M	1.868E+01	1.527E+01	1.245E+01	1.621E+00	1.404E-01
IN117	1.761E+01	1.702E+01	1.562E+01	2.278E+00	1.577E-01
IN117M	1.869E+01	1.802E+01	1.644E+01	2.500E+00	1.556E-01
SN117M	2.248E-02	2.244E-02	2.239E-02	2.193E-02	2.140E-02
RU118	5.407E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH118	6.393E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD118	5.621E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118	8.228E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118M	3.655E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD118	1.696E+01	7.433E+00	3.252E+00	8.342E-04	4.095E-08
IN118	7.872E+01	3.455E+01	1.511E+01	3.877E-03	1.903E-07
IN118M	4.654E-02	4.064E-06	3.549E-10	0.000E+00	0.000E+00
RH119	3.892E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD119	7.409E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG119	1.086E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD119	3.532E+01	4.279E-01	5.127E-03	3.127E-22	0.000E+00
CD119M	3.940E+01	9.243E-05	2.097E-10	0.000E+00	0.000E+00
IN119	1.484E+01	3.787E-01	3.953E-02	3.697E-12	3.362E-24
IN119M	4.084E+01	6.976E+00	7.235E-01	6.725E-11	6.116E-23
SN119M	3.739E-02	3.739E-02	3.739E-02	3.734E-02	3.729E-02
RU120	1.357E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH120	8.596E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD120	1.993E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG120	6.177E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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CD120      3.593E+01 1.723E-20 0.000E+00 0.000E+00 0.000E+00
IN120      7.547E+01 2.815E-19 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE  200
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN120M     5.223E+01 2.614E-20 0.000E+00 0.000E+00 0.000E+00
RH121      1.142E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD121      1.295E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG121      6.411E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD121      1.050E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121      6.490E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121M     1.746E+01 6.253E-05 2.103E-10 0.000E+00 0.000E+00
SN121      8.166E+00 7.964E+00 7.760E+00 5.992E+00 4.393E+00
SN121M     8.463E-05 8.463E-05 8.463E-05 8.463E-05 8.463E-05
RH122      1.769E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD122      3.008E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG122      6.011E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD122      5.250E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN122      1.811E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN122M     9.010E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB122      2.622E+00 2.594E+00 2.566E+00 2.306E+00 2.028E+00
SB122M     3.340E-03 1.673E-07 8.375E-12 0.000E+00 0.000E+00
RH123      1.316E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD123      1.034E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG123      2.520E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD123      1.161E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN123      7.514E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN123M     3.653E+01 1.090E-21 0.000E+00 0.000E+00 0.000E+00
SN123      4.615E+00 4.614E+00 4.613E+00 4.603E+00 4.590E+00
SN123M     2.324E+01 8.303E+00 2.942E+00 9.174E-05 3.591E-10
TE123M     1.527E-03 1.527E-03 1.526E-03 1.523E-03 1.518E-03
PD124      1.513E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG124      1.604E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD124      7.253E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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IN124      2.348E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB124      3.195E+00 3.193E+00 3.192E+00 3.177E+00 3.158E+00
SB124M     8.690E-03 1.933E-14 4.300E-26 0.000E+00 0.000E+00
AG125      3.969E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD125      8.743E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN125      1.029E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN125M     7.814E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN125      3.622E+01 3.611E+01 3.600E+01 3.494E+01 3.371E+01
SN125M     5.892E+01 7.551E-01 9.566E-03 1.019E-21 0.000E+00
SB125      1.141E+01 1.141E+01 1.141E+01 1.141E+01 1.141E+01
TE125M     5.890E-01 5.891E-01 5.891E-01 5.897E-01 5.904E-01
PD126      2.540E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG126      1.620E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD126      4.909E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN126      3.889E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN126      2.193E-04 2.193E-04 2.193E-04 2.193E-04 2.193E-04
SB126      7.166E+00 7.150E+00 7.133E+00 6.969E+00 6.777E+00
SB126M     2.336E+00 2.638E-01 3.154E-02 2.239E-03 2.239E-03
CD127      4.000E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127      1.740E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127M     1.820E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN127      4.000E+02 2.876E+02 2.067E+02 7.620E+00 1.451E-01
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         OUTPUT UNIT =
6                        PAGE  201
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                           17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

SN127M     1.286E+02 5.488E-03 2.342E-07 0.000E+00 0.000E+00
SB127      2.587E+02 2.579E+02 2.567E+02 2.399E+02 2.193E+02
TE127      5.792E+01 5.791E+01 5.789E+01 5.674E+01 5.386E+01
TE127M     2.933E+00 2.933E+00 2.933E+00 2.934E+00 2.934E+00
AG128      6.695E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD128      1.225E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN128      4.421E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN128      3.463E+02 1.712E+02 8.459E+01 7.345E-02 1.557E-05
SB128      1.169E+02 1.083E+02 1.003E+02 4.646E+01 1.846E+01
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SB128M	1.353E+03	7.524E+02	3.734E+02	3.242E-01	6.875E-05
I128	1.121E+01	2.121E+00	4.015E-01	2.366E-08	4.996E-17
CD129	7.038E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN129	2.715E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN129	6.950E+02	2.715E+00	1.060E-02	0.000E+00	0.000E+00
SN129M	9.168E+02	5.467E-05	3.259E-12	0.000E+00	0.000E+00
SB129	1.541E+03	1.331E+03	1.134E+03	2.279E+02	3.322E+01
TE129	4.854E+02	4.672E+02	4.309E+02	1.335E+02	5.933E+01
TE129M	3.570E+01	3.570E+01	3.569E+01	3.548E+01	3.514E+01
XE129M	6.849E-04	6.825E-04	6.800E-04	6.559E-04	6.281E-04
CD130	6.307E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN130	3.976E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN130	1.239E+03	1.730E-02	2.413E-07	0.000E+00	0.000E+00
SB130	1.038E+03	3.670E+02	1.298E+02	3.960E-03	1.511E-08
SB130M	4.641E+03	1.309E+01	1.790E-02	0.000E+00	0.000E+00
I130	9.940E+01	9.435E+01	8.921E+01	5.092E+01	2.598E+01
I130M	4.936E+00	4.858E-02	4.782E-04	4.083E-24	0.000E+00
CD131	1.543E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN131	1.430E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN131	2.604E+03	1.637E-14	1.028E-31	0.000E+00	0.000E+00
SB131	5.622E+03	9.382E+02	1.538E+02	2.158E-06	8.138E-16
TE131	2.746E+03	1.327E+03	4.465E+02	7.423E+01	5.626E+01
TE131M	6.162E+02	6.049E+02	5.915E+02	4.696E+02	3.559E+02
I131	1.553E+03	1.552E+03	1.549E+03	1.501E+03	1.444E+03
XE131M	4.888E+00	4.888E+00	4.888E+00	4.885E+00	4.878E+00
CD132	1.267E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN132	5.924E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN132	1.002E+03	8.098E-25	0.000E+00	0.000E+00	0.000E+00
SB132	5.528E+03	2.170E-03	7.690E-10	0.000E+00	0.000E+00
SB132M	3.589E+03	1.797E-01	8.998E-06	0.000E+00	0.000E+00
TE132	1.301E+03	1.290E+03	1.279E+03	1.170E+03	1.052E+03
I132	1.093E+04	1.089E+04	1.083E+04	9.999E+03	8.995E+03
CS132	2.339E-01	2.328E-01	2.318E-01	2.217E-01	2.101E-01
IN133	5.477E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN133	7.113E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB133	6.349E+03	1.894E-04	5.644E-12	0.000E+00	0.000E+00
TE133	5.829E+03	5.158E+02	1.526E+02	7.976E-02	9.761E-06
TE133M	6.633E+03	3.134E+03	1.479E+03	8.124E-01	9.942E-05
I133	5.811E+03	5.707E+03	5.546E+03	3.992E+03	2.676E+03
I133M	2.533E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	1.036E+03	1.036E+03	1.036E+03	1.026E+03	9.985E+02
XE133M	4.074E+01	4.070E+01	4.066E+01	3.948E+01	3.686E+01

OUTPUT UNIT =
6 PAGE 202
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/ MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
IN134	3.320E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN134	7.136E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134	1.256E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	1.199E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	5.934E+03	2.195E+03	8.116E+02	3.875E-02	2.530E-07
I134	2.058E+04	1.468E+04	8.616E+03	5.940E+00	4.785E-04
I134M	1.871E+02	2.459E-03	3.230E-08	0.000E+00	0.000E+00
XE134M	6.827E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	2.530E+02	2.530E+02	2.530E+02	2.529E+02	2.528E+02
CS134M	9.207E+00	7.250E+00	5.708E+00	5.230E-01	2.971E-02
SN135	1.111E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB135	7.727E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE135	7.945E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	1.034E+04	9.314E+03	8.387E+03	2.939E+03	8.353E+02
XE135	9.679E+02	1.111E+03	1.220E+03	1.329E+03	7.988E+02
XE135M	5.679E+02	4.136E+02	3.660E+02	1.281E+02	3.640E+01
CS135	4.156E-05	4.157E-05	4.157E-05	4.162E-05	4.166E-05
CS135M	3.326E+01	1.518E+01	6.924E+00	2.707E-03	2.203E-07
BA135M	9.081E-03	8.865E-03	8.653E-03	6.796E-03	5.086E-03
SN136	7.858E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB136	1.914E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE136	3.970E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	1.082E+04	1.126E-09	9.877E-23	0.000E+00	0.000E+00
I136M	5.918E+03	1.634E-20	0.000E+00	0.000E+00	0.000E+00
CS136	2.011E+02	2.007E+02	2.003E+02	1.959E+02	1.908E+02
BA136M	2.940E+01	2.934E+01	2.927E+01	2.863E+01	2.789E+01
SB137	2.212E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE137	1.568E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I137	9.088E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	9.849E+03	2.006E-01	3.858E-06	0.000E+00	0.000E+00
CS137	3.123E+01	3.123E+01	3.123E+01	3.122E+01	3.122E+01
BA137M	1.052E+02	1.049E+02	1.049E+02	1.049E+02	1.049E+02
SB138	3.307E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE138	3.155E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I138	5.162E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	8.822E+03	4.696E+02	2.495E+01	4.473E-12	2.264E-27
CS138	1.916E+04	8.326E+03	2.450E+03	6.119E-03	1.137E-09

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CS138M     2.211E+02 1.308E-04 7.731E-11 0.000E+00 0.000E+00
SB139      2.075E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE139      8.556E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I139      2.448E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE139      1.036E+04 3.834E-24 0.000E+00 0.000E+00 0.000E+00
CS139      1.019E+04 1.291E+02 1.547E+00 9.438E-20 0.000E+00
BA139      4.913E+03 3.357E+03 2.035E+03 1.332E+01 3.189E-02
TE140      8.167E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I140      8.407E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE140      5.835E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS140      1.869E+04 2.226E-13 2.299E-30 0.000E+00 0.000E+00
BA140      2.372E+03 2.367E+03 2.362E+03 2.309E+03 2.247E+03
LA140      1.445E+04 1.444E+04 1.444E+04 1.437E+04 1.424E+04
PR140      1.770E-02 8.316E-08 3.908E-13 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                        PAGE  203
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

TE141      5.064E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I141      1.287E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE141      3.418E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS141      1.109E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA141      8.247E+03 8.609E+02 8.834E+01 1.144E-08 1.559E-20
LA141      4.746E+03 4.276E+03 3.615E+03 6.205E+02 7.476E+01
CE141      1.203E+03 1.203E+03 1.203E+03 1.196E+03 1.184E+03
TE142      3.743E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I142      2.243E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE142      8.715E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS142      9.825E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA142      6.724E+03 1.381E+02 2.833E+00 3.733E-17 2.145E-37
LA142      1.671E+04 1.199E+04 7.681E+03 8.650E+01 3.970E-01
PR142      8.104E+01 7.834E+01 7.556E+01 5.259E+01 3.405E+01
PR142M     4.577E+00 2.652E-01 1.536E-02 6.536E-15 9.332E-30
 I143      1.104E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE143      2.135E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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CS143      4.065E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA143      1.082E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA143      8.949E+03 4.658E+02 2.388E+01 2.998E-12 9.892E-28
CE143      3.241E+03 3.195E+03 3.130E+03 2.537E+03 1.972E+03
PR143      1.427E+03 1.427E+03 1.426E+03 1.423E+03 1.412E+03
 I144      1.118E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE144      2.507E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS144      1.497E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA144      5.320E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA144      1.395E+04 1.461E-23 0.000E+00 0.000E+00 0.000E+00
CE144      3.447E+02 3.447E+02 3.446E+02 3.443E+02 3.438E+02
PR144      3.850E+03 3.822E+03 3.819E+03 3.815E+03 3.810E+03
PR144M     2.136E+00 2.133E+00 2.133E+00 2.131E+00 2.128E+00
XE145      3.566E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS145      2.756E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA145      5.001E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA145      7.405E+03 3.667E-34 0.000E+00 0.000E+00 0.000E+00
CE145      4.570E+03 5.233E-03 4.991E-09 0.000E+00 0.000E+00
PR145      2.129E+03 1.914E+03 1.705E+03 5.350E+02 1.331E+02
XE146      1.882E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS146      5.487E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA146      1.088E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA146      7.598E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE146      1.059E+03 5.706E+01 3.051E+00 5.818E-13 3.172E-28
PR146      6.202E+03 2.226E+03 4.586E+02 1.664E-05 1.841E-14
PM146      2.462E-03 2.462E-03 2.462E-03 2.462E-03 2.461E-03
XE147      2.294E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CS147      6.933E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BA147      4.530E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LA147      2.539E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CE147      3.907E+03 1.396E-12 4.605E-28 0.000E+00 0.000E+00
PR147      2.962E+03 1.030E+02 3.218E+00 2.858E-15 2.479E-33
ND147      7.660E+02 7.646E+02 7.627E+02 7.430E+02 7.201E+02
PM147      2.166E+01 2.166E+01 2.166E+01 2.169E+01 2.172E+01
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OUTPUT UNIT =
6 PAGE 204
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:14:12

* ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
POWER= 1.00000E+00 MW, BURNUP= 1.00000E+00 MWD, FLUX= 1.00E+00 N /CM**2-SEC

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/

MTIHM, 1 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
CS148	5.710E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA148	5.255E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA148	1.473E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	1.295E+03	8.206E-23	0.000E+00	0.000E+00	0.000E+00
PR148	4.118E+03	8.153E-05	1.144E-12	0.000E+00	0.000E+00
PM148	8.246E+02	8.202E+02	8.158E+02	7.734E+02	7.254E+02
PM148M	1.800E+02	1.799E+02	1.797E+02	1.785E+02	1.770E+02
BA149	9.007E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA149	2.686E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE149	1.778E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	1.390E+03	1.963E-05	2.754E-13	0.000E+00	0.000E+00
ND149	9.085E+02	6.220E+02	4.167E+02	7.581E+00	6.190E-02
PM149	5.485E+02	5.456E+02	5.413E+02	4.802E+02	4.106E+02
CS150	5.735E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA150	5.155E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA150	7.114E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE150	4.669E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR150	1.994E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM150	2.975E+01	2.297E+01	1.774E+01	1.335E+00	5.994E-02
LA151	7.176E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE151	2.736E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR151	7.949E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	7.202E+02	2.527E+01	8.830E-01	2.399E-15	7.959E-33
PM151	3.021E+02	2.969E+02	2.898E+02	2.270E+02	1.694E+02
SM151	2.058E-02	2.058E-02	2.059E-02	2.066E-02	2.073E-02
BA152	1.611E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA152	1.062E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE152	4.187E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR152	5.735E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	1.851E+02	5.009E+00	1.346E-01	2.650E-17	3.742E-36
PM152	5.825E+02	2.391E+01	6.439E-01	1.265E-16	1.777E-35
PM152M	1.016E+01	3.969E-02	1.551E-04	0.000E+00	0.000E+00
EU152	2.233E-02	2.233E-02	2.233E-02	2.233E-02	2.233E-02
EU152M	2.231E-01	2.071E-01	1.922E-01	9.137E-02	3.743E-02
LA153	9.177E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE153	1.180E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR153	1.385E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND153	3.982E+02	3.695E-14	3.328E-30	0.000E+00	0.000E+00
PM153	1.619E+02	9.069E-02	4.100E-05	0.000E+00	0.000E+00
SM153	2.327E+02	2.295E+02	2.261E+02	1.949E+02	1.631E+02
GD153	1.101E-03	1.101E-03	1.100E-03	1.099E-03	1.098E-03
LA154	5.540E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE154	1.022E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR154	4.684E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND154	9.911E+01	8.038E-26	0.000E+00	0.000E+00	0.000E+00

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PM154      2.976E+02 1.356E-04 4.805E-11 0.000E+00 0.000E+00
PM154M     4.806E+01 4.440E-09 4.103E-19 0.000E+00 0.000E+00
EU154      9.958E+00 9.958E+00 9.958E+00 9.957E+00 9.956E+00
CE155      1.795E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR155      7.380E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND155      8.737E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                        PAGE  205
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

PM155      1.343E+02 6.879E-28 0.000E+00 0.000E+00 0.000E+00
SM155      7.723E+01 1.226E+01 1.884E+00 1.377E-08 2.376E-18
EU155      7.445E-01 7.445E-01 7.445E-01 7.444E-01 7.443E-01
CE156      1.412E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR156      1.863E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND156      1.952E+01 5.788E-18 2.765E-36 0.000E+00 0.000E+00
PM156      1.141E+02 1.390E-17 0.000E+00 0.000E+00 0.000E+00
SM156      2.032E+01 1.889E+01 1.755E+01 8.395E+00 3.465E+00
EU156      2.794E+02 2.790E+02 2.786E+02 2.743E+02 2.686E+02
CE157      1.549E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PR157      2.507E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND157      9.965E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM157      4.322E+01 5.114E-15 5.978E-31 0.000E+00 0.000E+00
SM157      4.603E+01 2.774E-01 1.532E-03 0.000E+00 0.000E+00
EU157      2.757E+01 2.655E+01 2.537E+01 1.608E+01 9.303E+00
PR158      2.476E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND158      1.170E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM158      2.148E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SM158      1.131E+01 4.395E+00 1.707E+00 1.336E-04 1.577E-09
EU158      3.654E+01 2.700E+01 1.566E+01 6.291E-03 1.854E-07
PR159      8.875E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ND159      1.815E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM159      3.948E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SM159      1.432E+01 2.996E-06 6.240E-13 0.000E+00 0.000E+00
EU159      1.398E+01 1.608E+00 1.616E-01 1.696E-11 1.798E-23
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GD159      5.430E+00 5.310E+00 5.124E+00 3.530E+00 2.257E+00
ND160      1.324E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM160      1.001E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SM160      4.817E+00 3.789E-03 2.980E-06 0.000E+00 0.000E+00
EU160      9.263E+00 5.622E-03 4.422E-06 0.000E+00 0.000E+00
TB160      9.681E-01 9.677E-01 9.673E-01 9.635E-01 9.589E-01
ND161      1.335E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PM161      1.010E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SM161      1.983E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU161      3.644E+00 7.388E-26 0.000E+00 0.000E+00 0.000E+00
GD161      2.487E+00 4.016E-05 5.275E-10 0.000E+00 0.000E+00
TB161      7.251E-01 7.224E-01 7.194E-01 6.900E-01 6.563E-01
PM162      6.253E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SM162      2.135E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU162      1.801E+00 1.758E-04 1.692E-08 0.000E+00 0.000E+00
GD162      6.057E-01 1.371E-02 2.146E-04 1.861E-22 0.000E+00
TB162      1.646E+00 1.124E-01 2.153E-03 1.978E-21 0.000E+00
TB162M     5.535E-02 4.319E-02 3.170E-02 1.416E-03 3.398E-05
SM163      4.073E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU163      3.830E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD163      6.648E-01 1.469E-12 3.058E-24 0.000E+00 0.000E+00
TB163      4.388E-01 5.637E-02 6.680E-03 3.650E-12 2.801E-23
SM164      3.051E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU164      1.170E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD164      1.734E-01 2.548E-02 3.743E-03 1.751E-11 1.768E-21
TB164      4.724E-01 6.516E-02 9.548E-03 4.468E-11 4.511E-21
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         OUTPUT UNIT =
6                        PAGE  206
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                      9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                             17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

SM165      2.924E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU165      1.628E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD165      1.290E-01 1.977E-12 3.024E-23 0.000E+00 0.000E+00
TB165      1.527E-01 2.149E-12 3.287E-23 0.000E+00 0.000E+00
DY165      2.904E-01 2.180E-01 1.623E-01 8.498E-03 2.467E-04
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DY165M     2.827E-02 3.208E-13 4.906E-24 0.000E+00 0.000E+00
DY166      1.138E-02 1.129E-02 1.119E-02 1.028E-02 9.280E-03
HO166      7.125E-02 7.049E-02 6.974E-02 6.281E-02 5.559E-02
ER167M     2.655E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ER169      3.303E-05 3.293E-05 3.283E-05 3.184E-05 3.068E-05
SUMTOT     1.012E+06 2.034E+05 1.616E+05 9.179E+04 7.392E+04

TOTAL      1.012E+06 2.034E+05 1.616E+05 9.179E+04 7.392E+04
□
         OUTPUT UNIT =
6                        PAGE  207
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:14:12

    *  ORIGEN2 V2.2 - PWR ASSEMBLY - EXTENDED BURNUP (PWRUE)
       □

FISSION PRODUCTS
    POWER= 1.00000E+00 MW,  BURNUP= 1.00000E+00 MWD,  FLUX= 1.00E+00 N
/CM**2-SEC

                     9 SUMMARY TABLE:  THERMAL POWER,  WATTS
                            17X17 PWR ASSEMBLY, 4.236% UO2, 19157 MWD/
MTIHM, 1 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         4.726E-03 4.726E-03 4.726E-03 4.726E-03 4.726E-03
CO         4.321E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI         8.580E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU         7.033E+00 1.055E-10 1.335E-13 9.225E-14 8.065E-14
ZN         4.527E+01 4.119E-02 4.057E-02 3.495E-02 2.923E-02
GA         2.994E+02 7.855E-01 7.308E-01 5.538E-01 4.662E-01
GE         1.128E+03 1.088E+01 8.292E+00 2.491E+00 1.177E+00
AS         4.889E+03 4.544E+01 3.740E+01 2.849E+00 1.449E+00
SE         1.020E+04 8.406E+01 1.345E+01 5.226E-03 3.695E-03
BR         2.994E+04 7.584E+02 2.694E+02 2.126E+01 1.358E+01
KR         3.907E+04 6.726E+03 4.869E+03 3.612E+02 2.899E+01
RB         7.629E+04 6.290E+03 4.411E+03 3.820E+02 2.239E+01
SR         6.278E+04 1.185E+04 1.034E+04 4.433E+03 2.849E+03
 Y         9.568E+04 1.815E+04 1.574E+04 7.630E+03 4.234E+03
ZR         4.514E+04 8.429E+03 8.264E+03 6.932E+03 5.903E+03
NB         9.064E+04 1.288E+04 1.258E+04 9.820E+03 7.493E+03
MO         3.325E+04 3.335E+03 2.782E+03 2.476E+03 2.183E+03
TC         4.274E+04 2.855E+03 8.489E+02 6.098E+02 5.479E+02
RU         8.856E+03 4.490E+03 4.150E+03 2.547E+03 2.172E+03
RH         8.815E+03 2.147E+03 1.962E+03 1.763E+03 1.663E+03
PD         1.032E+03 2.599E+02 2.319E+02 1.375E+02 7.492E+01
AG         1.370E+03 3.172E+02 2.993E+02 2.123E+02 1.494E+02
CD         7.520E+02 7.166E+01 5.846E+01 2.492E+01 1.941E+01
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IN	3.241E+03	1.113E+02	7.149E+01	1.792E+01	1.169E+01
SN	8.258E+03	5.193E+02	3.427E+02	5.329E+01	4.289E+01
SB	3.351E+04	3.793E+03	2.172E+03	5.384E+02	2.944E+02
TE	3.753E+04	9.631E+03	5.288E+03	1.944E+03	1.616E+03
I	8.420E+04	4.224E+04	3.501E+04	1.849E+04	1.398E+04
XE	4.208E+04	3.076E+03	2.692E+03	2.527E+03	1.875E+03
CS	7.559E+04	8.962E+03	2.949E+03	4.808E+02	4.751E+02
BA	4.513E+04	6.857E+03	4.621E+03	2.456E+03	2.380E+03
LA	7.816E+04	3.117E+04	2.576E+04	1.508E+04	1.432E+04
CE	1.819E+04	4.800E+03	4.681E+03	4.078E+03	3.500E+03
PR	2.572E+04	9.572E+03	7.490E+03	5.827E+03	5.392E+03
ND	3.195E+03	1.417E+03	1.180E+03	7.506E+02	7.202E+02
PM	3.325E+03	1.911E+03	1.867E+03	1.682E+03	1.504E+03
SM	4.090E+02	2.653E+02	2.473E+02	2.033E+02	1.666E+02
EU	3.837E+02	3.451E+02	3.307E+02	3.012E+02	2.887E+02
GD	9.491E+00	5.351E+00	5.129E+00	3.532E+00	2.259E+00
TB	4.459E+00	1.967E+00	1.737E+00	1.655E+00	1.615E+00
DY	3.301E-01	2.292E-01	1.735E-01	1.878E-02	9.527E-03
HO	7.125E-02	7.049E-02	6.974E-02	6.281E-02	5.559E-02
ER	2.985E-04	3.293E-05	3.283E-05	3.184E-05	3.068E-05
SUMTOT	1.012E+06	2.034E+05	1.616E+05	9.179E+04	7.392E+04
TOTAL	1.012E+06	2.034E+05	1.616E+05	9.179E+04	7.392E+04

CUMULATIVE TABLE TOTALS

AP+FP	1.013E+06	2.043E+05	1.624E+05	9.236E+04	7.437E+04
ACT+FP	1.053E+06	2.267E+05	1.817E+05	1.091E+05	8.890E+04
AP+ACT+FP	1.054E+06	2.276E+05	1.825E+05	1.097E+05	8.935E+04