ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 1	0.000E+00	1.568E-02	1.568E-02	1.568E-02	1.568E-02	1.568E-02
H 2	0.000E+00	1.653E-05	1.653E-05	1.653E-05	1.653E-05	1.653E-05
H 3	0.000E+00	2.972E-02	2.972E-02	2.972E-02	2.972E-02	2.972E-02
HE 3	0.000E+00	2.542E-04	2.544E-04	2.545E-04	2.564E-04	2.587E-04
HE 4	0.000E+00	4.404E+00	4.404E+00	4.404E+00	4.404E+00	4.404E+00
LI 6	6.498E-02	3.696E-03	3.696E-03	3.696E-03	3.696E-03	3.696E-03
LI 7	9.350E-01	1.064E+00	1.064E+00	1.064E+00	1.064E+00	1.064E+00
BE 9	0.000E+00	1.141E-03	1.141E-03	1.141E-03	1.141E-03	1.141E-03
BE 10	0.000E+00	1.734E-04	1.734E-04	1.734E-04	1.734E-04	1.734E-04
B 10	1.852E-01	8.252E-07	8.252E-07	8.252E-07	8.252E-07	8.252E-07
B 11	8.148E-01	8.395E-01	8.395E-01	8.395E-01	8.395E-01	8.395E-01
C 12	8.833E+01	8.832E+01	8.832E+01	8.832E+01	8.832E+01	8.832E+01
C 13	1.074E+00	1.494E+01	1.494E+01	1.494E+01	1.494E+01	1.494E+01
C 14	0.000E+00	1.958E-01	1.958E-01	1.958E-01	1.958E-01	1.958E-01
N 14	2.490E+01	2.470E+01	2.470E+01	2.470E+01	2.470E+01	2.470E+01
N 15	9.801E-02	1.085E-01	1.085E-01	1.085E-01	1.085E-01	1.085E-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	5.431E+01	5.431E+01	5.431E+01	5.431E+01	5.431E+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	6.060E-04	6.060E-04	6.060E-04	6.060E-04	6.060E-04
NE 21	0.000E+00	2.224E-05	2.224E-05	2.224E-05	2.224E-05	2.224E-05
NE 22	0.000E+00	3.298E-05	3.298E-05	3.298E-05	3.298E-05	3.298E-05
NA 23	1.500E+01	1.495E+01	1.495E+01	1.495E+01	1.495E+01	1.495E+01
NA 24	0.000E+00	4.160E-05	3.972E-05	3.792E-05	2.389E-05	1.372E-05
MG 24	1.559E+00	1.610E+00	1.610E+00	1.610E+00	1.610E+00	1.610E+00
MG 25	2.056E-01	2.058E-01	2.058E-01	2.058E-01	2.058E-01	2.058E-01
MG 26	2.354E-01	2.355E-01	2.355E-01	2.355E-01	2.355E-01	2.355E-01
AL 27	1.670E+01	1.669E+01	1.669E+01	1.669E+01	1.669E+01	1.669E+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	5.887E-01	5.887E-01	5.887E-01	5.887E-01	5.887E-01
SI 30	4.003E-01	4.007E-01	4.007E-01	4.007E-01	4.007E-01	4.007E-01
P 31	3.500E+01	3.498E+01	3.498E+01	3.498E+01	3.498E+01	3.498E+01
P 32	0.000E+00	3.947E-04	3.939E-04	3.931E-04	3.853E-04	3.760E-04

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 S 32      0.000E+00 2.067E-02 2.067E-02 2.068E-02 2.068E-02 2.069E-02
 S 33      0.000E+00 1.825E-05 1.825E-05 1.825E-05 1.825E-05 1.825E-05
 S 34      0.000E+00 1.583E-05 1.583E-05 1.583E-05 1.583E-05 1.583E-05
 S 35      0.000E+00 7.429E-04 7.427E-04 7.424E-04 7.400E-04 7.371E-04
CL 35      3.961E+00 3.458E+00 3.458E+00 3.458E+00 3.458E+00 3.458E+00
CL 36      0.000E+00 5.084E-01 5.084E-01 5.084E-01 5.084E-01 5.084E-01
CL 37      1.339E+00 1.346E+00 1.346E+00 1.346E+00 1.346E+00 1.346E+00
AR 38      0.000E+00 2.066E-03 2.067E-03 2.067E-03 2.067E-03 2.067E-03
 K 40      0.000E+00 9.196E-04 9.196E-04 9.196E-04 9.196E-04 9.196E-04
 K 41      0.000E+00 4.628E-05 4.628E-05 4.628E-05 4.628E-05 4.628E-05
CA 40      1.933E+00 1.930E+00 1.930E+00 1.930E+00 1.930E+00 1.930E+00
CA 41      0.000E+00 2.545E-03 2.545E-03 2.545E-03 2.545E-03 2.545E-03
CA 42      1.354E-02 1.351E-02 1.351E-02 1.351E-02 1.351E-02 1.351E-02
CA 43      2.787E-03 2.753E-03 2.753E-03 2.753E-03 2.753E-03 2.753E-03
CA 44      4.585E-02 4.576E-02 4.576E-02 4.576E-02 4.576E-02 4.576E-02
CA 45      0.000E+00 2.966E-05 2.966E-05 2.965E-05 2.960E-05 2.954E-05
CA 46      8.027E-05 8.061E-05 8.061E-05 8.061E-05 8.061E-05 8.061E-05
□
         OUTPUT UNIT =
6                          PAGE   21
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  ORIGEN2 V2.2 - FUEL ONLY - 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
                            1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

CA 48      4.547E-03 4.531E-03 4.531E-03 4.531E-03 4.531E-03 4.531E-03
SC 45      0.000E+00 1.216E-04 1.216E-04 1.217E-04 1.217E-04 1.218E-04
TI 46      7.920E-02 7.904E-02 7.904E-02 7.904E-02 7.904E-02 7.904E-02
TI 47      7.307E-02 7.276E-02 7.276E-02 7.276E-02 7.276E-02 7.276E-02
TI 48      7.383E-01 7.203E-01 7.203E-01 7.203E-01 7.203E-01 7.203E-01
TI 49      5.522E-02 7.356E-02 7.356E-02 7.356E-02 7.356E-02 7.356E-02
TI 50      5.426E-02 5.474E-02 5.474E-02 5.474E-02 5.474E-02 5.474E-02
 V 50      7.353E-03 5.690E-03 5.690E-03 5.690E-03 5.690E-03 5.690E-03
 V 51      2.993E+00 2.954E+00 2.954E+00 2.954E+00 2.954E+00 2.954E+00
CR 50      1.671E-01 1.587E-01 1.587E-01 1.587E-01 1.587E-01 1.587E-01
CR 51      0.000E+00 3.040E-04 3.036E-04 3.033E-04 3.002E-04 2.964E-04
CR 52      3.348E+00 3.373E+00 3.373E+00 3.373E+00 3.373E+00 3.373E+00
CR 53      3.869E-01 3.884E-01 3.884E-01 3.884E-01 3.884E-01 3.884E-01
CR 54      9.793E-02 1.217E-01 1.217E-01 1.217E-01 1.217E-01 1.217E-01
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MN 54	0.000E+00	2.239E-04	2.238E-04	2.238E-04	2.236E-04	2.234E-04
MN 55	1.700E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00
MN 56	0.000E+00	1.350E-05	1.032E-05	7.887E-06	5.364E-07	2.131E-08
FE 54	1.010E+00	1.002E+00	1.002E+00	1.002E+00	1.002E+00	1.002E+00
FE 55	0.000E+00	5.283E-03	5.283E-03	5.283E-03	5.281E-03	5.279E-03
FE 56	1.654E+01	1.650E+01	1.650E+01	1.650E+01	1.650E+01	1.650E+01
FE 57	3.945E-01	5.378E-01	5.378E-01	5.378E-01	5.378E-01	5.378E-01
FE 58	5.415E-02	6.678E-02	6.679E-02	6.679E-02	6.679E-02	6.679E-02
FE 59	0.000E+00	1.840E-05	1.839E-05	1.838E-05	1.826E-05	1.812E-05
CO 58	0.000E+00	7.181E-04	7.178E-04	7.175E-04	7.145E-04	7.111E-04
CO 59	1.000E+00	7.451E-01	7.451E-01	7.451E-01	7.451E-01	7.451E-01
CO 60	0.000E+00	2.019E-01	2.019E-01	2.019E-01	2.019E-01	2.018E-01
NI 58	1.617E+01	1.594E+01	1.594E+01	1.594E+01	1.594E+01	1.594E+01
NI 59	0.000E+00	1.821E-01	1.821E-01	1.821E-01	1.821E-01	1.821E-01
NI 60	6.397E+00	6.441E+00	6.441E+00	6.441E+00	6.441E+00	6.441E+00
NI 61	2.816E-01	3.403E-01	3.403E-01	3.403E-01	3.403E-01	3.403E-01
NI 62	9.092E-01	8.709E-01	8.709E-01	8.709E-01	8.709E-01	8.709E-01
NI 63	0.000E+00	3.959E-02	3.959E-02	3.959E-02	3.959E-02	3.959E-02
NI 64	2.379E-01	2.458E-01	2.458E-01	2.458E-01	2.458E-01	2.458E-01
CU 63	6.853E-01	6.739E-01	6.739E-01	6.739E-01	6.739E-01	6.739E-01
CU 65	3.147E-01	3.652E-01	3.652E-01	3.652E-01	3.652E-01	3.653E-01
ZN 64	1.915E+01	1.908E+01	1.908E+01	1.908E+01	1.908E+01	1.908E+01
ZN 65	0.000E+00	1.857E-02	1.856E-02	1.856E-02	1.854E-02	1.851E-02
ZN 66	1.133E+01	1.130E+01	1.130E+01	1.130E+01	1.130E+01	1.130E+01
ZN 67	1.691E+00	1.660E+00	1.660E+00	1.660E+00	1.660E+00	1.660E+00
ZN 68	7.861E+00	7.879E+00	7.879E+00	7.879E+00	7.879E+00	7.879E+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	5.127E-02	5.127E-02	5.127E-02	5.127E-02	5.127E-02
GA 71	0.000E+00	8.017E-05	8.017E-05	8.017E-05	8.018E-05	8.018E-05
GE 70	0.000E+00	5.569E-04	5.569E-04	5.569E-04	5.569E-04	5.569E-04
ZR 92	0.000E+00	1.475E-04	1.475E-04	1.475E-04	1.476E-04	1.476E-04
MO 92	1.418E+00	1.417E+00	1.417E+00	1.417E+00	1.417E+00	1.417E+00
MO 93	0.000E+00	1.008E-03	1.008E-03	1.008E-03	1.008E-03	1.008E-03
MO 94	9.104E-01	9.086E-01	9.086E-01	9.086E-01	9.086E-01	9.086E-01
MO 95	1.573E+00	1.302E+00	1.302E+00	1.302E+00	1.302E+00	1.302E+00
MO 96	1.670E+00	1.887E+00	1.887E+00	1.887E+00	1.887E+00	1.887E+00
MO 97	9.697E-01	9.976E-01	9.976E-01	9.976E-01	9.976E-01	9.976E-01

OUTPUT UNIT =
6 PAGE 22
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
MO 98	2.460E+00	2.346E+00	2.346E+00	2.346E+00	2.346E+00	2.346E+00
MO 99	0.000E+00	5.168E-04	5.114E-04	5.061E-04	4.556E-04	4.017E-04
MO100	9.997E-01	9.926E-01	9.926E-01	9.926E-01	9.926E-01	9.926E-01
TC 99	0.000E+00	1.480E-02	1.480E-02	1.480E-02	1.481E-02	1.481E-02
RU100	0.000E+00	3.434E-03	3.434E-03	3.434E-03	3.434E-03	3.434E-03
RU101	0.000E+00	6.808E-03	6.808E-03	6.808E-03	6.808E-03	6.808E-03
RU102	0.000E+00	4.947E-04	4.947E-04	4.947E-04	4.947E-04	4.947E-04
PD108	0.000E+00	2.447E-04	2.447E-04	2.447E-04	2.447E-04	2.447E-04
PD110	0.000E+00	1.198E-04	1.198E-04	1.198E-04	1.198E-04	1.198E-04
AG107	5.137E-02	3.975E-02	3.975E-02	3.975E-02	3.975E-02	3.975E-02
AG108M	0.000E+00	7.390E-04	7.390E-04	7.390E-04	7.390E-04	7.390E-04
AG109	4.863E-02	7.866E-03	7.866E-03	7.866E-03	7.867E-03	7.867E-03
AG110M	0.000E+00	2.533E-04	2.532E-04	2.532E-04	2.529E-04	2.526E-04
CD106	3.062E-01	3.052E-01	3.052E-01	3.052E-01	3.052E-01	3.052E-01
CD108	2.136E-01	2.227E-01	2.227E-01	2.227E-01	2.227E-01	2.227E-01
CD109	0.000E+00	6.430E-04	6.430E-04	6.430E-04	6.426E-04	6.421E-04
CD110	3.055E+00	2.810E+00	2.810E+00	2.810E+00	2.810E+00	2.810E+00
CD111	3.157E+00	3.001E+00	3.001E+00	3.001E+00	3.001E+00	3.001E+00
CD112	6.000E+00	6.189E+00	6.189E+00	6.189E+00	6.189E+00	6.189E+00
CD113	3.063E+00	1.257E-03	1.257E-03	1.257E-03	1.257E-03	1.257E-03
CD114	7.270E+00	1.019E+01	1.019E+01	1.019E+01	1.019E+01	1.019E+01
CD115	0.000E+00	9.584E-04	9.461E-04	9.339E-04	8.203E-04	7.022E-04
CD115M	0.000E+00	1.409E-03	1.408E-03	1.408E-03	1.398E-03	1.388E-03
CD116	1.933E+00	1.923E+00	1.923E+00	1.923E+00	1.923E+00	1.923E+00
IN113	8.457E-02	4.985E-02	4.985E-02	4.985E-02	4.985E-02	4.985E-02
IN114M	0.000E+00	7.379E-04	7.375E-04	7.370E-04	7.328E-04	7.276E-04
IN115	1.915E+00	4.078E-03	4.079E-03	4.080E-03	4.089E-03	4.100E-03
SN112	3.772E-02	3.652E-02	3.652E-02	3.652E-02	3.652E-02	3.652E-02
SN113	0.000E+00	1.173E-04	1.173E-04	1.173E-04	1.170E-04	1.166E-04
SN114	2.572E-02	5.927E-02	5.927E-02	5.927E-02	5.927E-02	5.928E-02
SN115	1.472E-02	1.257E-02	1.257E-02	1.257E-02	1.257E-02	1.257E-02
SN116	5.742E-01	2.463E+00	2.463E+00	2.463E+00	2.463E+00	2.463E+00
SN117	3.053E-01	3.690E-01	3.690E-01	3.690E-01	3.690E-01	3.690E-01
SN117M	0.000E+00	5.422E-04	5.411E-04	5.400E-04	5.290E-04	5.161E-04
SN118	9.656E-01	9.591E-01	9.591E-01	9.591E-01	9.591E-01	9.591E-01
SN119	3.446E-01	3.567E-01	3.567E-01	3.567E-01	3.567E-01	3.567E-01
SN119M	0.000E+00	1.944E-03	1.944E-03	1.944E-03	1.941E-03	1.939E-03
SN120	1.309E+00	1.310E+00	1.310E+00	1.310E+00	1.310E+00	1.310E+00
SN121M	0.000E+00	1.826E-05	1.826E-05	1.826E-05	1.826E-05	1.826E-05
SN122	1.890E-01	1.886E-01	1.886E-01	1.886E-01	1.886E-01	1.886E-01
SN123	0.000E+00	5.583E-05	5.581E-05	5.580E-05	5.568E-05	5.553E-05
SN124	2.338E-01	2.295E-01	2.295E-01	2.295E-01	2.295E-01	2.295E-01

SN125	0.000E+00	3.195E-05	3.185E-05	3.176E-05	3.082E-05	2.973E-05
SB121	0.000E+00	3.217E-03	3.217E-03	3.217E-03	3.218E-03	3.219E-03
SB123	0.000E+00	2.818E-04	2.818E-04	2.818E-04	2.820E-04	2.821E-04
SB125	0.000E+00	2.655E-03	2.655E-03	2.655E-03	2.655E-03	2.655E-03
TE122	0.000E+00	4.100E-04	4.101E-04	4.101E-04	4.104E-04	4.107E-04
TE124	0.000E+00	3.266E-05	3.266E-05	3.267E-05	3.268E-05	3.270E-05
TE125	0.000E+00	1.529E-03	1.529E-03	1.529E-03	1.529E-03	1.530E-03
TE125M	0.000E+00	3.289E-05	3.289E-05	3.289E-05	3.290E-05	3.291E-05
TE126	0.000E+00	7.975E-05	7.976E-05	7.976E-05	7.979E-05	7.983E-05

OUTPUT UNIT =
6 PAGE 23
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
EU153	0.000E+00	5.987E-04	5.987E-04	5.988E-04	5.993E-04	6.000E-04
EU154	0.000E+00	2.645E-04	2.645E-04	2.645E-04	2.645E-04	2.645E-04
EU155	0.000E+00	9.980E-05	9.979E-05	9.979E-05	9.978E-05	9.976E-05
EU156	0.000E+00	2.564E-05	2.559E-05	2.555E-05	2.506E-05	2.450E-05
GD152	4.831E-03	2.750E-03	2.750E-03	2.750E-03	2.750E-03	2.750E-03
GD153	0.000E+00	4.626E-04	4.625E-04	4.625E-04	4.619E-04	4.613E-04
GD154	5.139E-02	2.940E-02	2.940E-02	2.940E-02	2.940E-02	2.940E-02
GD155	3.645E-01	1.963E-04	1.963E-04	1.963E-04	1.963E-04	1.964E-04
GD156	5.107E-01	7.526E-01	7.526E-01	7.526E-01	7.526E-01	7.526E-01
GD157	3.917E-01	3.837E-04	3.837E-04	3.837E-04	3.837E-04	3.837E-04
GD158	6.227E-01	1.078E+00	1.078E+00	1.078E+00	1.078E+00	1.078E+00
GD159	0.000E+00	9.722E-05	9.367E-05	9.024E-05	6.217E-05	3.975E-05
GD160	5.543E-01	5.446E-01	5.446E-01	5.446E-01	5.446E-01	5.446E-01
TB159	0.000E+00	6.467E-02	6.467E-02	6.467E-02	6.470E-02	6.473E-02
TB160	0.000E+00	3.157E-03	3.156E-03	3.154E-03	3.142E-03	3.127E-03
TB161	0.000E+00	1.664E-04	1.657E-04	1.650E-04	1.583E-04	1.505E-04
DY160	0.000E+00	9.275E-03	9.277E-03	9.278E-03	9.290E-03	9.305E-03
DY161	0.000E+00	9.214E-03	9.215E-03	9.216E-03	9.222E-03	9.230E-03
DY162	0.000E+00	5.575E-03	5.575E-03	5.575E-03	5.575E-03	5.575E-03
DY163	0.000E+00	4.450E-03	4.450E-03	4.450E-03	4.450E-03	4.450E-03
DY164	0.000E+00	9.468E-04	9.468E-04	9.468E-04	9.468E-04	9.468E-04
HO165	0.000E+00	1.684E-03	1.685E-03	1.685E-03	1.685E-03	1.685E-03

HO166M	0.000E+00	1.816E-05	1.816E-05	1.816E-05	1.816E-05	1.816E-05
ER166	0.000E+00	3.233E-04	3.234E-04	3.234E-04	3.239E-04	3.244E-04
TA181	0.000E+00	3.051E-04	3.051E-04	3.051E-04	3.053E-04	3.055E-04
W180	2.545E-03	2.031E-03	2.031E-03	2.031E-03	2.031E-03	2.031E-03
W181	0.000E+00	7.009E-05	7.007E-05	7.005E-05	6.989E-05	6.969E-05
W182	5.206E-01	2.598E-01	2.598E-01	2.598E-01	2.598E-01	2.598E-01
W183	2.846E-01	4.020E-01	4.020E-01	4.020E-01	4.020E-01	4.020E-01
W184	6.137E-01	7.460E-01	7.460E-01	7.460E-01	7.460E-01	7.460E-01
W185	0.000E+00	1.414E-03	1.413E-03	1.412E-03	1.407E-03	1.401E-03
W186	5.785E-01	3.045E-01	3.045E-01	3.045E-01	3.045E-01	3.045E-01
W187	0.000E+00	2.558E-04	2.485E-04	2.414E-04	1.806E-04	1.275E-04
W188	0.000E+00	7.462E-05	7.458E-05	7.455E-05	7.424E-05	7.387E-05
RE185	0.000E+00	5.232E-03	5.232E-03	5.233E-03	5.238E-03	5.245E-03
RE186	0.000E+00	5.693E-05	5.650E-05	5.607E-05	5.194E-05	4.739E-05
RE187	0.000E+00	2.078E-01	2.078E-01	2.078E-01	2.079E-01	2.079E-01
RE188	0.000E+00	1.025E-04	1.000E-04	9.625E-05	6.426E-05	3.967E-05
OS186	0.000E+00	6.546E-03	6.546E-03	6.547E-03	6.550E-03	6.555E-03
OS188	0.000E+00	6.434E-02	6.435E-02	6.435E-02	6.438E-02	6.441E-02
OS189	0.000E+00	3.065E-03	3.065E-03	3.065E-03	3.065E-03	3.065E-03
OS190	0.000E+00	7.427E-04	7.427E-04	7.427E-04	7.427E-04	7.427E-04
PB204	1.378E-02	1.373E-02	1.373E-02	1.373E-02	1.373E-02	1.373E-02
PB205	0.000E+00	5.031E-05	5.031E-05	5.031E-05	5.031E-05	5.031E-05
PB206	2.396E-01	2.204E-01	2.204E-01	2.204E-01	2.204E-01	2.204E-01
PB207	2.207E-01	2.395E-01	2.395E-01	2.395E-01	2.395E-01	2.395E-01
PB208	5.259E-01	5.265E-01	5.265E-01	5.265E-01	5.265E-01	5.265E-01
BI209	4.000E-01	3.999E-01	3.999E-01	3.999E-01	3.999E-01	3.999E-01
BI210M	0.000E+00	5.032E-05	5.032E-05	5.032E-05	5.032E-05	5.032E-05
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 24
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	0.000E+00	4.542E-02	4.542E-02	4.542E-02	4.542E-02	4.541E-02

HE	0.000E+00	4.404E+00	4.404E+00	4.404E+00	4.404E+00	4.404E+00
LI	1.000E+00	1.068E+00	1.068E+00	1.068E+00	1.068E+00	1.068E+00
BE	0.000E+00	1.314E-03	1.314E-03	1.314E-03	1.314E-03	1.314E-03
B	1.000E+00	8.395E-01	8.395E-01	8.395E-01	8.395E-01	8.395E-01
C	8.940E+01	1.035E+02	1.035E+02	1.035E+02	1.035E+02	1.035E+02
N	2.500E+01	2.481E+01	2.481E+01	2.481E+01	2.481E+01	2.481E+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	6.612E-04	6.612E-04	6.612E-04	6.612E-04	6.612E-04
NA	1.500E+01	1.495E+01	1.495E+01	1.495E+01	1.495E+01	1.495E+01
MG	2.000E+00	2.051E+00	2.051E+00	2.051E+00	2.051E+00	2.051E+00
AL	1.670E+01	1.669E+01	1.669E+01	1.669E+01	1.669E+01	1.669E+01
SI	1.210E+01	1.211E+01	1.211E+01	1.211E+01	1.211E+01	1.211E+01
P	3.500E+01	3.498E+01	3.498E+01	3.498E+01	3.498E+01	3.498E+01
S	0.000E+00	2.145E-02	2.145E-02	2.145E-02	2.146E-02	2.146E-02
CL	5.300E+00	5.312E+00	5.312E+00	5.312E+00	5.312E+00	5.312E+00
AR	0.000E+00	2.088E-03	2.088E-03	2.088E-03	2.088E-03	2.088E-03
K	0.000E+00	9.659E-04	9.659E-04	9.659E-04	9.659E-04	9.659E-04
CA	2.000E+00	1.999E+00	1.999E+00	1.999E+00	1.999E+00	1.999E+00
SC	0.000E+00	1.239E-04	1.239E-04	1.239E-04	1.239E-04	1.240E-04
TI	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
V	3.000E+00	2.960E+00	2.960E+00	2.960E+00	2.960E+00	2.960E+00
CR	4.000E+00	4.042E+00	4.042E+00	4.042E+00	4.042E+00	4.042E+00
MN	1.700E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00
FE	1.800E+01	1.811E+01	1.811E+01	1.811E+01	1.811E+01	1.811E+01
CO	1.000E+00	9.477E-01	9.477E-01	9.477E-01	9.476E-01	9.476E-01
NI	2.400E+01	2.406E+01	2.406E+01	2.406E+01	2.406E+01	2.406E+01
CU	1.000E+00	1.039E+00	1.039E+00	1.039E+00	1.039E+00	1.039E+00
ZN	4.030E+01	4.021E+01	4.021E+01	4.021E+01	4.021E+01	4.021E+01
GA	0.000E+00	5.135E-02	5.135E-02	5.135E-02	5.135E-02	5.135E-02
GE	0.000E+00	5.589E-04	5.589E-04	5.589E-04	5.589E-04	5.589E-04
ZR	0.000E+00	1.730E-04	1.730E-04	1.730E-04	1.731E-04	1.731E-04
MO	1.000E+01	9.851E+00	9.851E+00	9.851E+00	9.851E+00	9.851E+00
TC	0.000E+00	1.480E-02	1.480E-02	1.480E-02	1.481E-02	1.481E-02
RU	0.000E+00	1.074E-02	1.074E-02	1.074E-02	1.074E-02	1.074E-02
PD	0.000E+00	3.655E-04	3.655E-04	3.655E-04	3.654E-04	3.654E-04
AG	1.000E-01	4.861E-02	4.861E-02	4.861E-02	4.861E-02	4.861E-02
CD	2.500E+01	2.464E+01	2.464E+01	2.464E+01	2.464E+01	2.464E+01
IN	2.000E+00	5.467E-02	5.467E-02	5.467E-02	5.467E-02	5.468E-02
SN	4.000E+00	5.987E+00	5.987E+00	5.987E+00	5.987E+00	5.987E+00
SB	0.000E+00	6.161E-03	6.161E-03	6.161E-03	6.163E-03	6.164E-03
TE	0.000E+00	2.092E-03	2.092E-03	2.092E-03	2.093E-03	2.094E-03
EU	0.000E+00	9.886E-04	9.886E-04	9.886E-04	9.886E-04	9.887E-04
GD	2.500E+00	2.409E+00	2.409E+00	2.409E+00	2.409E+00	2.409E+00
TB	0.000E+00	6.799E-02	6.799E-02	6.799E-02	6.800E-02	6.800E-02
DY	0.000E+00	2.946E-02	2.946E-02	2.947E-02	2.948E-02	2.951E-02
HO	0.000E+00	1.705E-03	1.705E-03	1.705E-03	1.705E-03	1.705E-03
ER	0.000E+00	3.350E-04	3.351E-04	3.351E-04	3.356E-04	3.361E-04

TA	0.000E+00	3.146E-04	3.146E-04	3.146E-04	3.147E-04	3.148E-04
W	2.000E+00	1.716E+00	1.716E+00	1.716E+00	1.716E+00	1.716E+00
RE	0.000E+00	2.132E-01	2.132E-01	2.132E-01	2.132E-01	2.133E-01
OS	0.000E+00	7.470E-02	7.470E-02	7.471E-02	7.474E-02	7.477E-02
PB	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00
BI	4.000E-01	3.999E-01	3.999E-01	3.999E-01	3.999E-01	3.999E-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 25
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	0.000E+00	2.869E+02	2.869E+02	2.869E+02	2.869E+02	2.869E+02
H 4	0.000E+00	7.183E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HE 6	0.000E+00	3.363E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI 8	0.000E+00	3.034E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 8	0.000E+00	3.084E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 10	0.000E+00	3.876E-06	3.876E-06	3.876E-06	3.876E-06	3.876E-06
BE 11	0.000E+00	9.530E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B 12	0.000E+00	2.177E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 14	0.000E+00	8.731E-01	8.731E-01	8.731E-01	8.731E-01	8.731E-01
C 15	0.000E+00	4.707E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	2.948E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O 19	0.000E+00	5.463E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F 20	0.000E+00	5.180E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE 23	0.000E+00	2.444E+00	1.938E-29	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	3.622E+02	3.459E+02	3.303E+02	2.081E+02	1.195E+02
NA 24M	0.000E+00	1.495E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

NA 25	0.000E+00	3.007E-02	1.973E-20	0.000E+00	0.000E+00	0.000E+00
MG 27	0.000E+00	3.715E+00	4.582E-02	5.651E-04	4.599E-23	0.000E+00
AL 28	0.000E+00	9.128E+01	7.930E-07	3.851E-09	2.765E-09	1.857E-09
AL 29	0.000E+00	1.005E-01	1.706E-04	2.895E-07	0.000E+00	0.000E+00
AL 30	0.000E+00	9.666E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SI 31	0.000E+00	6.501E+01	4.990E+01	3.831E+01	2.723E+00	1.141E-01
P 32	0.000E+00	1.127E+02	1.125E+02	1.122E+02	1.100E+02	1.073E+02
P 33	0.000E+00	5.693E-07	5.686E-07	5.680E-07	5.614E-07	5.537E-07
P 34	0.000E+00	7.993E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S 35	0.000E+00	3.151E+01	3.150E+01	3.149E+01	3.138E+01	3.126E+01
S 37	0.000E+00	1.610E-02	4.339E-06	1.169E-09	0.000E+00	0.000E+00
CL 36	0.000E+00	1.678E-02	1.678E-02	1.678E-02	1.678E-02	1.678E-02
CL 38	0.000E+00	9.344E+00	3.057E+00	9.998E-01	1.402E-05	2.104E-11
CL 38M	0.000E+00	1.117E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AR 37	0.000E+00	6.574E-01	6.569E-01	6.564E-01	6.510E-01	6.445E-01
AR 39	0.000E+00	1.030E-04	1.030E-04	1.030E-04	1.030E-04	1.030E-04
AR 41	0.000E+00	1.613E-04	1.104E-04	7.554E-05	1.700E-06	1.791E-08
K 42	0.000E+00	1.344E-02	1.270E-02	1.201E-02	6.856E-03	3.498E-03
K 43	0.000E+00	3.984E-04	3.864E-04	3.747E-04	2.757E-04	1.908E-04
K 44	0.000E+00	1.522E-04	2.298E-05	3.471E-06	2.140E-14	3.010E-24
CA 41	0.000E+00	2.741E-04	2.741E-04	2.741E-04	2.741E-04	2.741E-04
CA 45	0.000E+00	5.284E-01	5.283E-01	5.282E-01	5.273E-01	5.262E-01
CA 47	0.000E+00	6.766E-04	6.723E-04	6.681E-04	6.269E-04	5.807E-04
CA 49	0.000E+00	5.707E-02	5.057E-04	4.481E-06	1.338E-26	0.000E+00
SC 46	0.000E+00	7.294E-02	7.291E-02	7.289E-02	7.264E-02	7.234E-02
SC 46M	0.000E+00	1.415E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SC 47	0.000E+00	6.325E-02	6.271E-02	6.218E-02	5.710E-02	5.155E-02
SC 48	0.000E+00	6.143E-03	6.047E-03	5.952E-03	5.081E-03	4.202E-03
SC 49	0.000E+00	6.339E-02	3.567E-02	1.735E-02	1.253E-05	2.131E-09
SC 50	0.000E+00	1.002E-04	2.680E-15	7.167E-26	0.000E+00	0.000E+00
TI 51	0.000E+00	1.261E-01	9.228E-05	6.751E-08	0.000E+00	0.000E+00
V 50	1.315E-15	1.017E-15	1.017E-15	1.017E-15	1.017E-15	1.017E-15
V 52	0.000E+00	1.610E+02	2.456E-03	3.747E-08	0.000E+00	0.000E+00
V 53	0.000E+00	1.331E-03	8.049E-15	4.867E-26	0.000E+00	0.000E+00
V 54	0.000E+00	1.651E-05	3.265E-25	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 26
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CR 51	0.000E+00	2.810E+01	2.807E+01	2.804E+01	2.775E+01	2.740E+01
CR 55	0.000E+00	5.382E-01	4.396E-06	3.591E-11	0.000E+00	0.000E+00
MN 54	0.000E+00	1.733E+00	1.733E+00	1.733E+00	1.731E+00	1.729E+00
MN 56	0.000E+00	2.931E+02	2.240E+02	1.712E+02	1.165E+01	4.627E-01
MN 57	0.000E+00	6.940E-03	4.196E-14	2.537E-25	0.000E+00	0.000E+00
MN 58	0.000E+00	2.109E-05	5.348E-22	0.000E+00	0.000E+00	0.000E+00
FE 55	0.000E+00	1.321E+01	1.321E+01	1.321E+01	1.321E+01	1.320E+01
FE 59	0.000E+00	9.053E-01	9.048E-01	9.042E-01	8.984E-01	8.915E-01
CO 58	0.000E+00	2.285E+01	2.284E+01	2.283E+01	2.274E+01	2.263E+01
CO 60	0.000E+00	2.284E+02	2.284E+02	2.284E+02	2.283E+02	2.283E+02
CO 60M	0.000E+00	2.130E+02	4.012E+00	7.555E-02	4.239E-19	0.000E+00
CO 61	0.000E+00	5.829E+00	3.829E+00	2.516E+00	3.769E-02	2.437E-04
CO 62	0.000E+00	4.117E-03	3.744E-15	3.405E-27	0.000E+00	0.000E+00
NI 59	0.000E+00	1.380E-02	1.380E-02	1.380E-02	1.380E-02	1.380E-02
NI 63	0.000E+00	2.443E+00	2.443E+00	2.443E+00	2.443E+00	2.443E+00
NI 65	0.000E+00	3.454E+00	2.623E+00	1.992E+00	1.273E-01	4.692E-03
NI 66	0.000E+00	3.711E-05	3.664E-05	3.618E-05	3.187E-05	2.737E-05
CU 64	0.000E+00	3.214E+01	3.044E+01	2.882E+01	1.670E+01	8.674E+00
CU 66	0.000E+00	8.176E+00	2.386E-03	3.692E-05	3.192E-05	2.741E-05
CU 67	0.000E+00	1.645E-05	1.626E-05	1.608E-05	1.438E-05	1.257E-05
ZN 65	0.000E+00	1.530E+02	1.530E+02	1.530E+02	1.528E+02	1.526E+02
ZN 69	0.000E+00	1.286E+02	6.633E+01	3.611E+01	5.094E+00	2.770E+00
ZN 69M	0.000E+00	8.640E+00	8.215E+00	7.812E+00	4.721E+00	2.579E+00
ZN 71	0.000E+00	1.740E-01	7.730E-06	6.472E-06	1.104E-06	1.323E-07
ZN 71M	0.000E+00	1.825E-02	1.529E-02	1.281E-02	2.186E-03	2.619E-04
GA 70	0.000E+00	2.723E+00	3.793E-01	5.285E-02	1.455E-10	7.777E-21
GA 72	0.000E+00	9.067E-03	8.632E-03	8.218E-03	5.027E-03	2.787E-03
GA 72M	0.000E+00	2.802E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 71	0.000E+00	1.625E-02	1.621E-02	1.618E-02	1.578E-02	1.533E-02
GE 71M	0.000E+00	1.326E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 89	0.000E+00	2.023E-07	2.022E-07	2.021E-07	2.009E-07	1.996E-07
Y 89M	0.000E+00	8.771E-04	8.694E-04	8.617E-04	7.889E-04	7.095E-04
Y 90	0.000E+00	4.380E-06	4.333E-06	4.286E-06	3.847E-06	3.378E-06
Y 92	0.000E+00	1.398E-06	1.150E-06	9.450E-07	1.333E-07	1.271E-08
ZR 89	0.000E+00	8.785E-04	8.707E-04	8.631E-04	7.901E-04	7.106E-04
ZR 95	0.000E+00	2.872E-03	2.871E-03	2.870E-03	2.857E-03	2.841E-03
ZR 97	0.000E+00	6.912E-05	6.634E-05	6.367E-05	4.225E-05	2.583E-05
NB 92	0.000E+00	1.749E-01	1.744E-01	1.739E-01	1.690E-01	1.633E-01
NB 94	0.000E+00	1.380E-06	1.380E-06	1.380E-06	1.380E-06	1.380E-06
NB 95	0.000E+00	8.528E-03	8.523E-03	8.518E-03	8.472E-03	8.417E-03
NB 95M	0.000E+00	2.029E-05	2.029E-05	2.029E-05	2.027E-05	2.024E-05
NB 96	0.000E+00	6.858E-03	6.657E-03	6.462E-03	4.803E-03	3.363E-03
NB 97	0.000E+00	2.519E-03	1.445E-03	8.397E-04	4.781E-05	2.601E-05
NB 97M	0.000E+00	6.541E-05	6.284E-05	6.031E-05	4.002E-05	2.446E-05

NB 98	0.000E+00	3.503E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	0.000E+00	1.814E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 93M	0.000E+00	5.079E-02	4.590E-02	4.148E-02	1.508E-02	4.478E-03
MO 93	0.000E+00	1.108E-03	1.108E-03	1.108E-03	1.108E-03	1.108E-03
MO 99	0.000E+00	2.480E+02	2.454E+02	2.428E+02	2.186E+02	1.927E+02
MO101	0.000E+00	1.225E+01	7.124E-01	4.143E-02	1.833E-14	2.742E-29
TC 99	0.000E+00	2.510E-04	2.510E-04	2.510E-04	2.511E-04	2.512E-04

OUTPUT UNIT = 6 PAGE 27
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
TC100	0.000E+00	1.097E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC101	0.000E+00	1.225E+01	2.656E+00	2.584E-01	4.122E-13	8.315E-28
RU103	0.000E+00	8.549E-03	8.543E-03	8.536E-03	8.474E-03	8.399E-03
RH104	0.000E+00	3.967E-04	1.789E-09	1.233E-13	0.000E+00	0.000E+00
RH104M	0.000E+00	2.177E-05	1.500E-09	1.034E-13	0.000E+00	0.000E+00
RH106	0.000E+00	1.143E-05	2.152E-13	2.152E-13	2.150E-13	2.148E-13
PD109	0.000E+00	1.298E-01	1.233E-01	1.171E-01	6.997E-02	3.772E-02
PD109M	0.000E+00	1.928E-03	2.716E-07	3.826E-11	0.000E+00	0.000E+00
PD111	0.000E+00	2.605E-03	5.658E-04	2.375E-04	5.202E-05	1.147E-05
PD111M	0.000E+00	3.240E-04	2.856E-04	2.518E-04	7.140E-05	1.574E-05
AG106	0.000E+00	1.023E-03	1.020E-03	1.016E-03	9.825E-04	9.432E-04
AG108	0.000E+00	1.665E+01	1.716E-03	1.715E-03	1.715E-03	1.715E-03
AG108M	0.000E+00	1.927E-02	1.927E-02	1.927E-02	1.927E-02	1.927E-02
AG109M	0.000E+00	1.791E+00	1.784E+00	1.778E+00	1.730E+00	1.696E+00
AG110	0.000E+00	2.226E+01	1.601E-02	1.600E-02	1.599E-02	1.596E-02
AG110M	0.000E+00	1.204E+00	1.203E+00	1.203E+00	1.202E+00	1.200E+00
AG111	0.000E+00	2.123E-01	2.115E-01	2.107E-01	2.027E-01	1.934E-01
AG111M	0.000E+00	1.064E-01	6.758E-04	3.208E-04	7.453E-05	1.643E-05
AG112	0.000E+00	3.496E-04	2.802E-04	2.245E-04	2.453E-05	1.721E-06
CD107	0.000E+00	1.583E+00	1.422E+00	1.278E+00	4.392E-01	1.219E-01
CD109	0.000E+00	1.661E+00	1.661E+00	1.661E+00	1.660E+00	1.658E+00
CD111M	0.000E+00	2.911E+00	1.239E+00	5.276E-01	1.032E-04	3.656E-09
CD115	0.000E+00	4.886E+02	4.823E+02	4.761E+02	4.182E+02	3.580E+02
CD115M	0.000E+00	3.590E+01	3.588E+01	3.585E+01	3.562E+01	3.535E+01

CD117	0.000E+00	1.463E+01	1.121E+01	8.586E+00	5.970E-01	2.436E-02
CD117M	0.000E+00	4.343E-01	3.542E-01	2.889E-01	3.761E-02	3.257E-03
CD119	0.000E+00	1.133E-06	1.357E-08	1.626E-10	9.918E-30	0.000E+00
IN113M	0.000E+00	1.178E+00	1.178E+00	1.178E+00	1.175E+00	1.172E+00
IN114	0.000E+00	4.085E+01	1.633E+01	1.632E+01	1.623E+01	1.612E+01
IN114M	0.000E+00	1.708E+01	1.707E+01	1.706E+01	1.696E+01	1.684E+01
IN115	1.192E-11	2.538E-14	2.539E-14	2.539E-14	2.545E-14	2.552E-14
IN116	0.000E+00	2.664E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	1.940E+01	9.000E+00	4.175E+00	1.928E-03	1.917E-07
IN117	0.000E+00	7.754E+00	7.583E+00	7.088E+00	9.684E-01	5.121E-02
IN117M	0.000E+00	1.380E+01	1.327E+01	1.205E+01	1.673E+00	8.497E-02
IN118	0.000E+00	1.772E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	0.000E+00	1.098E-04	1.258E-08	1.334E-09	1.252E-19	1.139E-31
IN119M	0.000E+00	1.133E-06	2.203E-07	2.315E-08	2.156E-18	1.961E-30
SN113	0.000E+00	1.178E+00	1.178E+00	1.178E+00	1.175E+00	1.171E+00
SN113M	0.000E+00	5.479E-01	6.848E-02	8.560E-03	7.972E-12	1.160E-22
SN117M	0.000E+00	4.323E+01	4.314E+01	4.305E+01	4.217E+01	4.114E+01
SN119M	0.000E+00	8.710E+00	8.709E+00	8.708E+00	8.697E+00	8.685E+00
SN121	0.000E+00	5.177E+00	5.045E+00	4.916E+00	3.795E+00	2.783E+00
SN121M	0.000E+00	1.080E-03	1.080E-03	1.080E-03	1.080E-03	1.080E-03
SN123	0.000E+00	4.590E-01	4.589E-01	4.588E-01	4.578E-01	4.566E-01
SN123M	0.000E+00	1.660E-03	5.881E-04	2.084E-04	6.498E-09	2.544E-14
SN125	0.000E+00	3.463E+00	3.453E+00	3.443E+00	3.341E+00	3.223E+00
SN125M	0.000E+00	2.401E+00	3.042E-02	3.854E-04	4.106E-23	0.000E+00
SB122	0.000E+00	1.194E+00	1.181E+00	1.169E+00	1.050E+00	9.237E-01
SB122M	0.000E+00	9.322E-03	4.668E-07	2.337E-11	0.000E+00	0.000E+00
SB124	0.000E+00	5.582E-02	5.580E-02	5.577E-02	5.550E-02	5.518E-02

OUTPUT UNIT =
6 PAGE 28
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SB124M	0.000E+00	1.596E-04	3.551E-16	7.899E-28	0.000E+00	0.000E+00
SB125	0.000E+00	2.742E+00	2.742E+00	2.743E+00	2.743E+00	2.743E+00
SB126	0.000E+00	1.236E-01	1.233E-01	1.231E-01	1.202E-01	1.169E-01
SB126M	0.000E+00	8.945E-03	1.002E-03	1.123E-04	3.500E-14	1.370E-25

TE123M	0.000E+00	1.550E-02	1.549E-02	1.549E-02	1.545E-02	1.541E-02
TE125M	0.000E+00	5.926E-01	5.926E-01	5.927E-01	5.928E-01	5.931E-01
TE127	0.000E+00	2.304E-03	2.149E-03	2.006E-03	1.028E-03	5.034E-04
TE127M	0.000E+00	1.417E-04	1.417E-04	1.417E-04	1.413E-04	1.408E-04
I128	0.000E+00	1.677E-04	3.175E-05	6.008E-06	3.542E-13	7.478E-22
PM150	0.000E+00	8.179E-07	6.315E-07	4.876E-07	3.671E-08	1.648E-09
PM151	0.000E+00	9.352E-07	9.126E-07	8.906E-07	6.977E-07	5.205E-07
SM153	0.000E+00	1.712E-06	1.686E-06	1.662E-06	1.432E-06	1.199E-06
EU152	0.000E+00	4.617E-07	4.617E-07	4.617E-07	4.616E-07	4.616E-07
EU154	0.000E+00	7.143E-02	7.143E-02	7.143E-02	7.142E-02	7.141E-02
EU155	0.000E+00	4.643E-02	4.643E-02	4.643E-02	4.642E-02	4.642E-02
EU156	0.000E+00	1.414E+00	1.411E+00	1.409E+00	1.382E+00	1.351E+00
GD152	1.053E-13	5.992E-14	5.992E-14	5.992E-14	5.992E-14	5.992E-14
GD153	0.000E+00	1.632E+00	1.632E+00	1.632E+00	1.630E+00	1.627E+00
GD155M	0.000E+00	8.787E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	0.000E+00	1.031E+02	9.930E+01	9.566E+01	6.590E+01	4.214E+01
GD161	0.000E+00	1.025E+01	1.346E-04	1.768E-09	0.000E+00	0.000E+00
GD162	0.000E+00	3.434E-03	5.366E-05	8.384E-07	7.272E-25	0.000E+00
TB160	0.000E+00	3.565E+01	3.563E+01	3.562E+01	3.548E+01	3.531E+01
TB161	0.000E+00	1.951E+01	1.943E+01	1.935E+01	1.856E+01	1.765E+01
TB162	0.000E+00	3.366E-03	1.699E-04	3.103E-06	2.817E-24	0.000E+00
DY165	0.000E+00	7.617E+00	5.703E+00	4.246E+00	2.223E-01	6.454E-03
DY165M	0.000E+00	4.832E+00	2.012E-14	8.380E-29	0.000E+00	0.000E+00
DY166	0.000E+00	3.358E-02	3.330E-02	3.302E-02	3.032E-02	2.738E-02
HO166	0.000E+00	1.585E+00	1.546E+00	1.507E+00	1.171E+00	8.660E-01
HO166M	0.000E+00	3.261E-05	3.261E-05	3.261E-05	3.261E-05	3.261E-05
ER167M	0.000E+00	2.904E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	0.000E+00	2.336E-04	2.329E-04	2.322E-04	2.252E-04	2.170E-04
TM170	0.000E+00	2.131E-05	2.131E-05	2.130E-05	2.126E-05	2.120E-05
TM170M	0.000E+00	3.464E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TM171	0.000E+00	2.887E-07	2.887E-07	2.887E-07	2.886E-07	2.884E-07
TA182	0.000E+00	5.135E-02	5.134E-02	5.132E-02	5.119E-02	5.104E-02
TA182M	0.000E+00	1.164E-04	9.361E-06	7.528E-07	8.514E-18	6.227E-31
TA183	0.000E+00	1.817E-01	1.807E-01	1.797E-01	1.698E-01	1.586E-01
W181	0.000E+00	4.174E-01	4.173E-01	4.172E-01	4.162E-01	4.150E-01
W183M	0.000E+00	3.897E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W185	0.000E+00	1.329E+01	1.329E+01	1.328E+01	1.323E+01	1.317E+01
W185M	0.000E+00	1.528E-02	2.337E-13	3.574E-24	0.000E+00	0.000E+00
W187	0.000E+00	1.794E+02	1.743E+02	1.693E+02	1.267E+02	8.945E+01
W188	0.000E+00	7.471E-01	7.468E-01	7.465E-01	7.434E-01	7.397E-01
RE186	0.000E+00	1.059E+01	1.051E+01	1.043E+01	9.659E+00	8.812E+00
RE188	0.000E+00	1.007E+02	9.826E+01	9.452E+01	6.311E+01	3.895E+01
RE188M	0.000E+00	9.781E+01	1.058E+01	1.145E+00	2.511E-10	6.449E-22
RE189	0.000E+00	5.997E-04	5.828E-04	5.664E-04	4.259E-04	3.024E-04
OS190M	0.000E+00	2.661E-05	3.987E-07	5.974E-09	3.404E-27	0.000E+00
OS191	0.000E+00	4.466E-02	4.463E-02	4.460E-02	4.418E-02	4.347E-02
OS191M	0.000E+00	3.125E-02	2.962E-02	2.808E-02	1.648E-02	8.690E-03

OUTPUT UNIT =
6 PAGE 29
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
OS193	0.000E+00	1.585E-06	1.550E-06	1.515E-06	1.212E-06	9.266E-07
IR192	0.000E+00	1.524E-02	1.524E-02	1.523E-02	1.517E-02	1.510E-02
IR194	0.000E+00	1.265E-03	1.220E-03	1.177E-03	8.196E-04	5.308E-04
IR194M	0.000E+00	6.667E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PT193	0.000E+00	2.375E-07	2.375E-07	2.375E-07	2.376E-07	2.377E-07
PT193M	0.000E+00	5.583E-05	5.546E-05	5.509E-05	5.151E-05	4.752E-05
PB204	1.726E-16	1.719E-16	1.719E-16	1.719E-16	1.719E-16	1.719E-16
PB209	0.000E+00	6.974E-04	5.652E-04	4.582E-04	5.608E-05	4.510E-06
BI210	0.000E+00	5.560E-02	5.529E-02	5.497E-02	5.189E-02	4.842E-02
PO210	0.000E+00	4.990E-02	4.990E-02	4.990E-02	4.991E-02	4.991E-02
PO211	0.000E+00	8.719E-07	5.899E-19	1.955E-27	0.000E+00	0.000E+00
SUMTOT	1.203E-11	4.450E+03	3.014E+03	2.847E+03	2.248E+03	1.949E+03
TOTAL	1.203E-11	4.450E+03	3.014E+03	2.847E+03	2.248E+03	1.949E+03

OUTPUT UNIT =
6 PAGE 30
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	0.000E+00	2.941E+02	2.869E+02	2.869E+02	2.869E+02	2.869E+02

HE	0.000E+00	3.363E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI	0.000E+00	3.034E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE	0.000E+00	3.084E+00	3.876E-06	3.876E-06	3.876E-06	3.876E-06
B	0.000E+00	2.177E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C	0.000E+00	4.794E+01	8.731E-01	8.731E-01	8.731E-01	8.731E-01
N	0.000E+00	2.948E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O	0.000E+00	5.463E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F	0.000E+00	5.180E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	2.444E+00	1.938E-29	0.000E+00	0.000E+00	0.000E+00
NA	0.000E+00	5.118E+02	3.459E+02	3.303E+02	2.081E+02	1.195E+02
MG	0.000E+00	3.715E+00	4.582E-02	5.651E-04	2.760E-09	1.854E-09
AL	0.000E+00	9.138E+01	1.714E-04	2.934E-07	2.765E-09	1.857E-09
SI	0.000E+00	6.501E+01	4.990E+01	3.831E+01	2.723E+00	1.141E-01
P	0.000E+00	1.128E+02	1.125E+02	1.122E+02	1.100E+02	1.073E+02
S	0.000E+00	3.152E+01	3.150E+01	3.149E+01	3.138E+01	3.126E+01
CL	0.000E+00	9.473E+00	3.073E+00	1.017E+00	1.679E-02	1.678E-02
AR	0.000E+00	6.577E-01	6.571E-01	6.565E-01	6.511E-01	6.447E-01
K	0.000E+00	1.399E-02	1.311E-02	1.239E-02	7.132E-03	3.689E-03
CA	0.000E+00	5.864E-01	5.298E-01	5.292E-01	5.282E-01	5.270E-01
SC	0.000E+00	2.200E-01	1.773E-01	1.584E-01	1.348E-01	1.281E-01
TI	0.000E+00	1.261E-01	9.228E-05	6.751E-08	0.000E+00	0.000E+00
V	1.315E-15	1.610E+02	2.456E-03	3.747E-08	1.017E-15	1.017E-15
CR	0.000E+00	2.864E+01	2.807E+01	2.804E+01	2.775E+01	2.740E+01
MN	0.000E+00	2.949E+02	2.258E+02	1.730E+02	1.338E+01	2.192E+00
FE	0.000E+00	1.412E+01	1.412E+01	1.412E+01	1.411E+01	1.409E+01
CO	0.000E+00	4.701E+02	2.590E+02	2.538E+02	2.511E+02	2.509E+02
NI	0.000E+00	5.910E+00	5.080E+00	4.449E+00	2.584E+00	2.461E+00
CU	0.000E+00	4.032E+01	3.044E+01	2.882E+01	1.670E+01	8.674E+00
ZN	0.000E+00	2.904E+02	2.275E+02	1.969E+02	1.626E+02	1.579E+02
GA	0.000E+00	2.732E+00	3.880E-01	6.106E-02	5.027E-03	2.787E-03
GE	0.000E+00	1.758E-02	1.621E-02	1.618E-02	1.578E-02	1.533E-02
SR	0.000E+00	2.062E-07	2.058E-07	2.055E-07	2.027E-07	2.004E-07
Y	0.000E+00	8.829E-04	8.749E-04	8.670E-04	7.929E-04	7.129E-04
ZR	0.000E+00	3.820E-03	3.808E-03	3.796E-03	3.689E-03	3.578E-03
NB	0.000E+00	1.932E-01	1.911E-01	1.898E-01	1.824E-01	1.752E-01
MO	0.000E+00	2.603E+02	2.461E+02	2.429E+02	2.186E+02	1.927E+02
TC	0.000E+00	2.322E+01	2.656E+00	2.586E-01	2.511E-04	2.512E-04
RU	0.000E+00	8.549E-03	8.543E-03	8.536E-03	8.474E-03	8.399E-03
RH	0.000E+00	4.302E-04	2.354E-07	2.235E-07	1.690E-07	1.309E-07
PD	0.000E+00	1.346E-01	1.241E-01	1.176E-01	7.009E-02	3.774E-02
AG	0.000E+00	4.224E+01	3.238E+00	3.230E+00	3.172E+00	3.128E+00
CD	0.000E+00	5.457E+02	5.341E+02	5.243E+02	4.566E+02	3.951E+02
IN	1.192E-11	1.267E+02	6.443E+01	5.787E+01	3.701E+01	3.426E+01
SN	0.000E+00	6.517E+01	6.208E+01	6.176E+01	5.964E+01	5.746E+01
SB	0.000E+00	4.134E+00	4.104E+00	4.090E+00	3.969E+00	3.839E+00
TE	0.000E+00	6.106E-01	6.104E-01	6.103E-01	6.095E-01	6.091E-01
I	0.000E+00	1.677E-04	3.175E-05	6.009E-06	3.198E-10	1.631E-10
PM	0.000E+00	1.761E-06	1.544E-06	1.378E-06	7.344E-07	5.221E-07

SM	0.000E+00	1.951E-06	1.724E-06	1.669E-06	1.434E-06	1.200E-06
EU	0.000E+00	1.532E+00	1.529E+00	1.527E+00	1.500E+00	1.469E+00
GD	1.053E-13	1.150E+02	1.009E+02	9.730E+01	6.753E+01	4.377E+01
TB	0.000E+00	5.516E+01	5.506E+01	5.497E+01	5.403E+01	5.296E+01
DY	0.000E+00	1.248E+01	5.736E+00	4.279E+00	2.527E-01	3.384E-02
HO	0.000E+00	1.585E+00	1.546E+00	1.507E+00	1.171E+00	8.660E-01
ER	0.000E+00	2.928E-02	2.329E-04	2.322E-04	2.252E-04	2.170E-04
TM	0.000E+00	2.510E-05	2.163E-05	2.163E-05	2.158E-05	2.152E-05
TA	0.000E+00	2.332E-01	2.320E-01	2.310E-01	2.210E-01	2.097E-01
W	0.000E+00	1.943E+02	1.887E+02	1.838E+02	1.411E+02	1.038E+02
RE	0.000E+00	2.091E+02	1.193E+02	1.061E+02	7.277E+01	4.777E+01
OS	0.000E+00	7.593E-02	7.426E-02	7.269E-02	6.066E-02	5.216E-02
IR	0.000E+00	1.658E-02	1.646E-02	1.641E-02	1.599E-02	1.563E-02
PT	0.000E+00	5.618E-05	5.581E-05	5.543E-05	5.185E-05	4.785E-05
PB	1.726E-16	6.974E-04	5.652E-04	4.582E-04	5.608E-05	4.513E-06
BI	0.000E+00	5.560E-02	5.529E-02	5.497E-02	5.189E-02	4.842E-02
PO	0.000E+00	4.990E-02	4.990E-02	4.990E-02	4.991E-02	4.991E-02
SUMTOT	1.203E-11	4.450E+03	3.014E+03	2.847E+03	2.248E+03	1.949E+03
TOTAL	1.203E-11	4.450E+03	3.014E+03	2.847E+03	2.248E+03	1.949E+03

CUMULATIVE TABLE TOTALS

AP+FP	1.203E-11	4.450E+03	3.014E+03	2.847E+03	2.248E+03	1.949E+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	4.450E+03	3.014E+03	2.847E+03	2.248E+03	1.949E+03

OUTPUT UNIT =
6 PAGE 31
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	0.000E+00	9.661E-03	9.661E-03	9.661E-03	9.660E-03	9.659E-03
HE 6	0.000E+00	3.126E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI 8	0.000E+00	1.131E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 8	0.000E+00	1.736E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 10	0.000E+00	4.653E-09	4.653E-09	4.653E-09	4.653E-09	4.653E-09

BE 11	0.000E+00	6.502E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B 12	0.000E+00	1.725E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 14	0.000E+00	2.560E-04	2.560E-04	2.560E-04	2.560E-04	2.560E-04
C 15	0.000E+00	8.010E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.277E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O 19	0.000E+00	1.560E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F 20	0.000E+00	2.159E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE 23	0.000E+00	2.996E-02	2.376E-31	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	1.004E+01	9.585E+00	9.152E+00	5.766E+00	3.311E+00
NA 24M	0.000E+00	4.184E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 25	0.000E+00	3.451E-04	2.264E-22	0.000E+00	0.000E+00	0.000E+00
MG 27	0.000E+00	3.508E-02	4.327E-04	5.336E-06	4.343E-25	0.000E+00
AL 28	0.000E+00	1.637E+00	1.422E-08	6.908E-11	4.959E-11	3.332E-11
AL 29	0.000E+00	1.400E-03	2.377E-06	4.035E-09	0.000E+00	0.000E+00
AL 30	0.000E+00	3.279E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SI 31	0.000E+00	2.298E-01	1.764E-01	1.355E-01	9.628E-03	4.033E-04
P 32	0.000E+00	1.142E+00	1.140E+00	1.138E+00	1.115E+00	1.088E+00
P 34	0.000E+00	2.416E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S 35	0.000E+00	3.127E-02	3.126E-02	3.125E-02	3.114E-02	3.102E-02
S 37	0.000E+00	4.582E-04	1.235E-07	3.326E-11	0.000E+00	0.000E+00
CL 36	0.000E+00	2.475E-05	2.475E-05	2.475E-05	2.475E-05	2.475E-05
CL 38	0.000E+00	1.671E-01	5.465E-02	1.787E-02	2.507E-07	3.761E-13
CL 38M	0.000E+00	4.445E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AR 37	0.000E+00	8.184E-06	8.177E-06	8.170E-06	8.103E-06	8.023E-06
AR 39	0.000E+00	3.449E-07	3.449E-07	3.449E-07	3.449E-07	3.449E-07
AR 41	0.000E+00	1.672E-06	1.144E-06	7.827E-07	1.761E-08	1.856E-10
K 42	0.000E+00	1.359E-04	1.285E-04	1.215E-04	6.933E-05	3.537E-05
K 43	0.000E+00	3.020E-06	2.929E-06	2.841E-06	2.090E-06	1.447E-06
K 44	0.000E+00	4.691E-06	7.084E-07	1.070E-07	6.598E-16	9.279E-26
CA 41	0.000E+00	4.387E-09	4.387E-09	4.387E-09	4.387E-09	4.387E-09
CA 45	0.000E+00	2.418E-04	2.418E-04	2.417E-04	2.413E-04	2.408E-04
CA 47	0.000E+00	5.647E-06	5.611E-06	5.576E-06	5.232E-06	4.847E-06
CA 49	0.000E+00	1.779E-03	1.577E-05	1.397E-07	4.173E-28	0.000E+00
SC 46	0.000E+00	9.174E-04	9.171E-04	9.168E-04	9.137E-04	9.099E-04
SC 46M	0.000E+00	1.151E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SC 47	0.000E+00	1.015E-04	1.007E-04	9.981E-05	9.165E-05	8.274E-05
SC 48	0.000E+00	1.299E-04	1.279E-04	1.259E-04	1.075E-04	8.887E-05
SC 49	0.000E+00	7.546E-04	4.245E-04	2.065E-04	1.492E-07	2.537E-11
SC 50	0.000E+00	2.867E-06	7.667E-17	2.051E-27	0.000E+00	0.000E+00
TI 51	0.000E+00	9.234E-04	6.755E-07	4.942E-10	0.000E+00	0.000E+00
V 50	1.450E-17	1.122E-17	1.122E-17	1.122E-17	1.122E-17	1.122E-17
V 52	0.000E+00	2.399E+00	3.660E-05	5.584E-10	0.000E+00	0.000E+00
V 53	0.000E+00	1.607E-05	9.719E-17	5.877E-28	0.000E+00	0.000E+00
V 54	0.000E+00	7.142E-07	1.413E-26	0.000E+00	0.000E+00	0.000E+00
CR 51	0.000E+00	6.029E-03	6.023E-03	6.017E-03	5.954E-03	5.880E-03
CR 55	0.000E+00	3.513E-03	2.869E-08	2.344E-13	0.000E+00	0.000E+00

OUTPUT UNIT =

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
MN 54	0.000E+00	8.627E-03	8.626E-03	8.625E-03	8.617E-03	8.608E-03
MN 56	0.000E+00	4.381E+00	3.348E+00	2.559E+00	1.740E-01	6.914E-03
MN 57	0.000E+00	4.817E-05	2.913E-16	1.761E-27	0.000E+00	0.000E+00
MN 58	0.000E+00	4.993E-07	1.266E-23	0.000E+00	0.000E+00	0.000E+00
FE 55	0.000E+00	4.464E-04	4.464E-04	4.464E-04	4.463E-04	4.461E-04
FE 59	0.000E+00	7.009E-03	7.004E-03	7.000E-03	6.955E-03	6.902E-03
CO 58	0.000E+00	1.367E-01	1.366E-01	1.366E-01	1.360E-01	1.353E-01
CO 60	0.000E+00	3.521E+00	3.521E+00	3.521E+00	3.520E+00	3.520E+00
CO 60M	0.000E+00	7.959E-02	1.499E-03	2.823E-05	1.584E-22	0.000E+00
CO 61	0.000E+00	1.886E-02	1.239E-02	8.143E-03	1.220E-04	7.888E-07
CO 62	0.000E+00	7.809E-05	7.102E-17	6.459E-29	0.000E+00	0.000E+00
NI 59	0.000E+00	5.480E-07	5.480E-07	5.480E-07	5.480E-07	5.480E-07
NI 63	0.000E+00	2.462E-04	2.462E-04	2.462E-04	2.462E-04	2.462E-04
NI 65	0.000E+00	2.418E-02	1.836E-02	1.395E-02	8.911E-04	3.284E-05
NI 66	0.000E+00	1.474E-08	1.455E-08	1.437E-08	1.266E-08	1.087E-08
CU 64	0.000E+00	5.964E-02	5.647E-02	5.347E-02	3.098E-02	1.609E-02
CU 66	0.000E+00	5.598E-02	1.634E-05	2.528E-07	2.185E-07	1.877E-07
CU 67	0.000E+00	2.641E-08	2.611E-08	2.582E-08	2.309E-08	2.018E-08
ZN 65	0.000E+00	5.354E-01	5.354E-01	5.353E-01	5.347E-01	5.339E-01
ZN 69	0.000E+00	2.446E-01	1.262E-01	6.869E-02	9.689E-03	5.270E-03
ZN 69M	0.000E+00	2.247E-02	2.137E-02	2.032E-02	1.228E-02	6.709E-03
ZN 71	0.000E+00	2.895E-03	1.286E-07	1.076E-07	1.837E-08	2.201E-09
ZN 71M	0.000E+00	3.205E-04	2.685E-04	2.250E-04	3.839E-05	4.600E-06
GA 70	0.000E+00	1.054E-02	1.469E-03	2.046E-04	5.634E-13	3.011E-23
GA 72	0.000E+00	1.724E-04	1.641E-04	1.562E-04	9.556E-05	5.297E-05
GA 72M	0.000E+00	1.993E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 71	0.000E+00	8.672E-07	8.650E-07	8.629E-07	8.421E-07	8.177E-07
GE 71M	0.000E+00	1.541E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 89M	0.000E+00	4.766E-06	4.725E-06	4.683E-06	4.287E-06	3.856E-06
Y 90	0.000E+00	2.428E-08	2.402E-08	2.376E-08	2.132E-08	1.872E-08
Y 92	0.000E+00	1.407E-08	1.157E-08	9.512E-09	1.342E-09	1.279E-10
ZR 89	0.000E+00	6.572E-06	6.514E-06	6.456E-06	5.910E-06	5.316E-06
ZR 95	0.000E+00	1.455E-05	1.454E-05	1.453E-05	1.447E-05	1.439E-05

ZR 97	0.000E+00	3.602E-07	3.457E-07	3.318E-07	2.202E-07	1.346E-07
NB 92	0.000E+00	1.565E-03	1.561E-03	1.556E-03	1.513E-03	1.462E-03
NB 94	0.000E+00	1.406E-08	1.406E-08	1.406E-08	1.406E-08	1.406E-08
NB 95	0.000E+00	4.090E-05	4.088E-05	4.086E-05	4.064E-05	4.037E-05
NB 95M	0.000E+00	2.819E-08	2.819E-08	2.819E-08	2.816E-08	2.812E-08
NB 96	0.000E+00	1.140E-04	1.107E-04	1.075E-04	7.985E-05	5.592E-05
NB 97	0.000E+00	1.677E-05	9.616E-06	5.590E-06	3.183E-07	1.731E-07
NB 97M	0.000E+00	2.879E-07	2.766E-07	2.655E-07	1.762E-07	1.077E-07
NB 98	0.000E+00	4.323E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	0.000E+00	4.280E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 93M	0.000E+00	7.105E-04	6.421E-04	5.803E-04	2.110E-04	6.264E-05
MO 93	0.000E+00	1.038E-07	1.038E-07	1.038E-07	1.038E-07	1.038E-07
MO 99	0.000E+00	7.964E-01	7.881E-01	7.799E-01	7.021E-01	6.190E-01
MO101	0.000E+00	1.399E-01	8.137E-03	4.732E-04	2.094E-16	3.132E-31
TC 99	0.000E+00	1.259E-07	1.259E-07	1.259E-07	1.259E-07	1.260E-07
TC100	0.000E+00	9.657E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC101	0.000E+00	5.879E-02	1.275E-02	1.240E-03	1.978E-15	3.991E-30
RU103	0.000E+00	2.860E-05	2.858E-05	2.856E-05	2.835E-05	2.810E-05

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
RH104	0.000E+00	2.345E-06	1.058E-11	7.288E-16	0.000E+00	0.000E+00
RH104M	0.000E+00	1.806E-08	1.245E-12	8.579E-17	0.000E+00	0.000E+00
RH106	0.000E+00	1.097E-07	2.064E-15	2.064E-15	2.062E-15	2.060E-15
PD109	0.000E+00	3.451E-04	3.278E-04	3.114E-04	1.861E-04	1.003E-04
PD109M	0.000E+00	2.148E-06	3.027E-10	4.264E-14	0.000E+00	0.000E+00
PD111	0.000E+00	1.385E-05	3.009E-06	1.263E-06	2.766E-07	6.096E-08
PD111M	0.000E+00	1.129E-06	9.954E-07	8.776E-07	2.489E-07	5.485E-08
AG106	0.000E+00	7.395E-06	7.370E-06	7.345E-06	7.099E-06	6.816E-06
AG108	0.000E+00	6.199E-02	6.387E-06	6.385E-06	6.385E-06	6.385E-06
AG108M	0.000E+00	1.866E-04	1.866E-04	1.866E-04	1.866E-04	1.866E-04
AG109M	0.000E+00	9.230E-04	9.196E-04	9.164E-04	8.916E-04	8.743E-04
AG110	0.000E+00	1.599E-01	1.150E-04	1.150E-04	1.148E-04	1.147E-04
AG110M	0.000E+00	2.010E-02	2.010E-02	2.009E-02	2.007E-02	2.004E-02

AG111	0.000E+00	4.755E-04	4.737E-04	4.719E-04	4.540E-04	4.333E-04
AG111M	0.000E+00	4.101E-05	2.604E-07	1.236E-07	2.871E-08	6.329E-09
AG112	0.000E+00	4.337E-06	3.476E-06	2.785E-06	3.043E-07	2.135E-08
CD107	0.000E+00	1.132E-03	1.018E-03	9.145E-04	3.142E-04	8.721E-05
CD109	0.000E+00	1.930E-04	1.930E-04	1.929E-04	1.928E-04	1.927E-04
CD111M	0.000E+00	6.834E-03	2.909E-03	1.239E-03	2.422E-07	8.582E-12
CD115	0.000E+00	1.551E+00	1.531E+00	1.511E+00	1.328E+00	1.136E+00
CD115M	0.000E+00	1.339E-01	1.338E-01	1.337E-01	1.329E-01	1.318E-01
CD117	0.000E+00	1.054E-01	8.073E-02	6.184E-02	4.300E-03	1.754E-04
CD117M	0.000E+00	3.529E-03	2.878E-03	2.348E-03	3.057E-04	2.647E-05
CD119	0.000E+00	1.242E-08	1.488E-10	1.783E-12	1.088E-31	0.000E+00
CD121	0.000E+00	5.616E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN113M	0.000E+00	2.745E-03	2.745E-03	2.745E-03	2.738E-03	2.730E-03
IN114	0.000E+00	1.945E-01	7.779E-02	7.775E-02	7.730E-02	7.676E-02
IN114M	0.000E+00	2.423E-02	2.422E-02	2.421E-02	2.406E-02	2.390E-02
IN115	1.710E-14	3.641E-17	3.642E-17	3.643E-17	3.651E-17	3.660E-17
IN116	0.000E+00	2.182E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	3.193E-01	1.481E-01	6.873E-02	3.174E-05	3.155E-09
IN117	0.000E+00	3.493E-02	3.416E-02	3.193E-02	4.363E-03	2.307E-04
IN117M	0.000E+00	5.211E-02	5.009E-02	4.550E-02	6.316E-03	3.208E-04
IN118	0.000E+00	2.140E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	0.000E+00	8.783E-07	1.006E-10	1.067E-11	1.001E-21	9.106E-34
IN119M	0.000E+00	9.567E-09	1.861E-09	1.956E-10	1.821E-20	1.656E-32
SN113	0.000E+00	1.963E-04	1.962E-04	1.962E-04	1.957E-04	1.951E-04
SN113M	0.000E+00	2.575E-04	3.219E-05	4.024E-06	3.747E-15	5.453E-26
SN117M	0.000E+00	8.018E-02	8.001E-02	7.985E-02	7.822E-02	7.631E-02
SN119M	0.000E+00	4.502E-03	4.501E-03	4.501E-03	4.496E-03	4.489E-03
SN121	0.000E+00	6.260E-03	6.100E-03	5.944E-03	4.590E-03	3.365E-03
SN121M	0.000E+00	2.164E-06	2.164E-06	2.164E-06	2.164E-06	2.164E-06
SN123	0.000E+00	1.434E-03	1.433E-03	1.433E-03	1.430E-03	1.426E-03
SN123M	0.000E+00	6.049E-06	2.143E-06	7.593E-07	2.368E-11	9.271E-17
SN125	0.000E+00	2.295E-02	2.288E-02	2.282E-02	2.214E-02	2.136E-02
SN125M	0.000E+00	1.615E-02	2.046E-04	2.593E-06	2.762E-25	0.000E+00
SB122	0.000E+00	7.120E-03	7.044E-03	6.969E-03	6.263E-03	5.508E-03
SB122M	0.000E+00	8.952E-06	4.483E-10	2.245E-14	0.000E+00	0.000E+00
SB124	0.000E+00	7.412E-04	7.408E-04	7.405E-04	7.369E-04	7.327E-04
SB124M	0.000E+00	4.104E-07	9.129E-19	2.031E-30	0.000E+00	0.000E+00
SB125	0.000E+00	8.574E-03	8.574E-03	8.574E-03	8.574E-03	8.575E-03

OUTPUT UNIT =
6 PAGE 34
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SB126	0.000E+00	2.284E-03	2.279E-03	2.274E-03	2.221E-03	2.160E-03
SB126M	0.000E+00	1.139E-04	1.276E-05	1.430E-06	4.457E-16	1.744E-27
TE123M	0.000E+00	2.257E-05	2.257E-05	2.256E-05	2.251E-05	2.244E-05
TE125M	0.000E+00	4.981E-04	4.981E-04	4.981E-04	4.983E-04	4.985E-04
TE127	0.000E+00	3.111E-06	2.903E-06	2.708E-06	1.388E-06	6.798E-07
TE127M	0.000E+00	7.623E-08	7.621E-08	7.619E-08	7.599E-08	7.575E-08
I128	0.000E+00	8.321E-07	1.575E-07	2.980E-08	1.757E-15	3.709E-24
PM150	0.000E+00	1.107E-08	8.546E-09	6.598E-09	4.968E-10	2.230E-11
PM151	0.000E+00	3.443E-09	3.360E-09	3.278E-09	2.568E-09	1.916E-09
SM153	0.000E+00	3.358E-09	3.309E-09	3.260E-09	2.810E-09	2.352E-09
EU152	0.000E+00	3.492E-09	3.492E-09	3.492E-09	3.492E-09	3.491E-09
EU154	0.000E+00	6.389E-04	6.389E-04	6.389E-04	6.388E-04	6.388E-04
EU155	0.000E+00	3.377E-05	3.377E-05	3.377E-05	3.377E-05	3.376E-05
EU156	0.000E+00	1.459E-02	1.457E-02	1.454E-02	1.426E-02	1.394E-02
GD152	1.371E-15	7.807E-16	7.807E-16	7.807E-16	7.807E-16	7.807E-16
GD153	0.000E+00	1.474E-03	1.474E-03	1.474E-03	1.472E-03	1.470E-03
GD155M	0.000E+00	6.328E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	0.000E+00	3.360E-01	3.237E-01	3.119E-01	2.149E-01	1.374E-01
GD161	0.000E+00	7.434E-02	9.769E-07	1.283E-11	0.000E+00	0.000E+00
GD162	0.000E+00	1.248E-05	1.950E-07	3.046E-09	2.642E-27	0.000E+00
TB160	0.000E+00	2.903E-01	2.902E-01	2.901E-01	2.889E-01	2.876E-01
TB161	0.000E+00	3.908E-02	3.892E-02	3.876E-02	3.718E-02	3.536E-02
TB162	0.000E+00	3.356E-05	1.694E-06	3.094E-08	2.808E-26	0.000E+00
DY165	0.000E+00	3.526E-02	2.640E-02	1.966E-02	1.029E-03	2.988E-05
DY165M	0.000E+00	3.609E-03	1.503E-17	6.259E-32	0.000E+00	0.000E+00
DY166	0.000E+00	3.922E-05	3.888E-05	3.855E-05	3.541E-05	3.198E-05
HO166	0.000E+00	6.794E-03	6.625E-03	6.459E-03	5.018E-03	3.712E-03
HO166M	0.000E+00	3.613E-07	3.613E-07	3.613E-07	3.613E-07	3.613E-07
ER167M	0.000E+00	3.581E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	0.000E+00	4.709E-07	4.694E-07	4.680E-07	4.538E-07	4.374E-07
TM170	0.000E+00	4.229E-08	4.228E-08	4.227E-08	4.217E-08	4.206E-08
TA182	0.000E+00	4.572E-04	4.571E-04	4.569E-04	4.558E-04	4.544E-04
TA182M	0.000E+00	3.471E-07	2.791E-08	2.244E-09	2.538E-20	1.857E-33
TA183	0.000E+00	1.153E-03	1.146E-03	1.140E-03	1.077E-03	1.006E-03
W181	0.000E+00	1.195E-04	1.195E-04	1.195E-04	1.192E-04	1.188E-04
W183M	0.000E+00	6.006E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W185	0.000E+00	1.001E-02	1.000E-02	9.998E-03	9.959E-03	9.914E-03
W185M	0.000E+00	1.784E-05	2.729E-16	4.174E-27	0.000E+00	0.000E+00
W187	0.000E+00	8.137E-01	7.904E-01	7.678E-01	5.745E-01	4.057E-01
W188	0.000E+00	4.468E-04	4.466E-04	4.465E-04	4.446E-04	4.424E-04
RE186	0.000E+00	2.264E-02	2.247E-02	2.229E-02	2.065E-02	1.884E-02

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RE188      0.000E+00 4.997E-01 4.875E-01 4.690E-01 3.131E-01 1.933E-01
RE188M     0.000E+00 9.972E-02 1.079E-02 1.167E-03 2.561E-13 6.575E-25
RE189      0.000E+00 3.590E-06 3.489E-06 3.391E-06 2.550E-06 1.811E-06
OS190M     0.000E+00 2.691E-07 4.032E-09 6.041E-11 3.442E-29 0.000E+00
OS191      0.000E+00 6.486E-05 6.482E-05 6.478E-05 6.416E-05 6.313E-05
OS191M     0.000E+00 1.371E-05 1.299E-05 1.232E-05 7.228E-06 3.812E-06
OS193      0.000E+00 1.063E-08 1.040E-08 1.017E-08 8.131E-09 6.217E-09
IR192      0.000E+00 9.335E-05 9.331E-05 9.327E-05 9.291E-05 9.248E-05
IR194      0.000E+00 6.752E-06 6.512E-06 6.281E-06 4.373E-06 2.833E-06
IR194M     0.000E+00 3.952E-08 0.000E+00 0.000E+00 0.000E+00 0.000E+00

         OUTPUT UNIT =
6                          PAGE   35
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

PT193M     0.000E+00 4.898E-08 4.865E-08 4.833E-08 4.519E-08 4.169E-08
PB204      2.660E-18 2.650E-18 2.650E-18 2.650E-18 2.650E-18 2.650E-18
PB209      0.000E+00 8.019E-07 6.500E-07 5.269E-07 6.449E-08 5.186E-09
BI210      0.000E+00 1.282E-04 1.275E-04 1.267E-04 1.196E-04 1.117E-04
PO210      0.000E+00 1.600E-03 1.600E-03 1.600E-03 1.600E-03 1.600E-03
PO211      0.000E+00 3.924E-08 2.655E-20 8.796E-29 0.000E+00 0.000E+00
SUMTOT     1.849E-14 4.574E+01 2.389E+01 2.229E+01 1.530E+01 1.194E+01

TOTAL      1.849E-14 4.574E+01 2.389E+01 2.229E+01 1.530E+01 1.194E+01

         OUTPUT UNIT =
6                          PAGE   36
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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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9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	0.000E+00	9.661E-03	9.661E-03	9.661E-03	9.660E-03	9.659E-03
HE	0.000E+00	3.126E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI	0.000E+00	1.131E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE	0.000E+00	1.737E-03	4.653E-09	4.653E-09	4.653E-09	4.653E-09
B	0.000E+00	1.725E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C	0.000E+00	8.012E-01	2.560E-04	2.560E-04	2.560E-04	2.560E-04
N	0.000E+00	1.277E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O	0.000E+00	1.560E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F	0.000E+00	2.159E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	0.000E+00	2.996E-02	2.376E-31	0.000E+00	0.000E+00	0.000E+00
NA	0.000E+00	1.046E+01	9.585E+00	9.152E+00	5.766E+00	3.311E+00
MG	0.000E+00	3.508E-02	4.327E-04	5.336E-06	2.508E-11	1.685E-11
AL	0.000E+00	1.639E+00	2.391E-06	4.104E-09	4.959E-11	3.332E-11
SI	0.000E+00	2.298E-01	1.764E-01	1.355E-01	9.628E-03	4.033E-04
P	0.000E+00	1.145E+00	1.140E+00	1.138E+00	1.115E+00	1.088E+00
S	0.000E+00	3.172E-02	3.126E-02	3.125E-02	3.114E-02	3.102E-02
CL	0.000E+00	1.675E-01	5.467E-02	1.790E-02	2.500E-05	2.475E-05
AR	0.000E+00	1.020E-05	9.666E-06	9.298E-06	8.466E-06	8.368E-06
K	0.000E+00	1.436E-04	1.321E-04	1.244E-04	7.142E-05	3.682E-05
CA	0.000E+00	2.027E-03	2.631E-04	2.474E-04	2.465E-04	2.456E-04
SC	0.000E+00	1.918E-03	1.570E-03	1.349E-03	1.113E-03	1.082E-03
TI	0.000E+00	9.234E-04	6.755E-07	4.942E-10	0.000E+00	0.000E+00
V	1.450E-17	2.399E+00	3.660E-05	5.584E-10	1.122E-17	1.122E-17
CR	0.000E+00	9.542E-03	6.023E-03	6.017E-03	5.954E-03	5.880E-03
MN	0.000E+00	4.389E+00	3.357E+00	2.567E+00	1.826E-01	1.552E-02
FE	0.000E+00	7.455E-03	7.451E-03	7.446E-03	7.401E-03	7.348E-03
CO	0.000E+00	3.756E+00	3.671E+00	3.666E+00	3.656E+00	3.655E+00
NI	0.000E+00	2.442E-02	1.861E-02	1.419E-02	1.138E-03	2.796E-04
CU	0.000E+00	1.156E-01	5.649E-02	5.347E-02	3.098E-02	1.609E-02
ZN	0.000E+00	8.057E-01	6.832E-01	6.245E-01	5.567E-01	5.459E-01
GA	0.000E+00	1.071E-02	1.633E-03	3.608E-04	9.556E-05	5.297E-05
GE	0.000E+00	2.408E-06	8.650E-07	8.629E-07	8.421E-07	8.177E-07
Y	0.000E+00	4.805E-06	4.760E-06	4.717E-06	4.310E-06	3.875E-06
ZR	0.000E+00	2.148E-05	2.140E-05	2.132E-05	2.060E-05	1.984E-05
NB	0.000E+00	1.742E-03	1.722E-03	1.711E-03	1.634E-03	1.559E-03
MO	0.000E+00	9.370E-01	7.969E-01	7.809E-01	7.023E-01	6.190E-01
TC	0.000E+00	1.554E-01	1.275E-02	1.240E-03	1.259E-07	1.260E-07
RU	0.000E+00	2.860E-05	2.858E-05	2.856E-05	2.835E-05	2.810E-05
RH	0.000E+00	2.474E-06	3.830E-10	3.421E-10	2.313E-10	1.811E-10
PD	0.000E+00	3.622E-04	3.318E-04	3.135E-04	1.866E-04	1.004E-04
AG	0.000E+00	2.436E-01	2.181E-02	2.180E-02	2.173E-02	2.166E-02
CD	0.000E+00	1.802E+00	1.753E+00	1.712E+00	1.466E+00	1.269E+00
IN	1.710E-14	8.461E-01	3.372E-01	2.509E-01	1.148E-01	1.039E-01

SN	0.000E+00	1.319E-01	1.154E-01	1.147E-01	1.111E-01	1.071E-01
SB	0.000E+00	1.884E-02	1.865E-02	1.856E-02	1.780E-02	1.698E-02
TE	0.000E+00	5.239E-04	5.237E-04	5.235E-04	5.223E-04	5.217E-04
I	0.000E+00	8.321E-07	1.575E-07	2.981E-08	4.601E-12	2.347E-12
PM	0.000E+00	1.459E-08	1.191E-08	9.877E-09	3.065E-09	1.938E-09
SM	0.000E+00	4.748E-09	3.522E-09	3.293E-09	2.810E-09	2.352E-09
EU	0.000E+00	1.527E-02	1.524E-02	1.521E-02	1.494E-02	1.461E-02
GD	1.371E-15	4.119E-01	3.252E-01	3.134E-01	2.163E-01	1.389E-01
TB	0.000E+00	3.294E-01	3.291E-01	3.289E-01	3.261E-01	3.229E-01
DY	0.000E+00	3.891E-02	2.644E-02	1.970E-02	1.065E-03	6.186E-05
HO	0.000E+00	6.795E-03	6.625E-03	6.460E-03	5.018E-03	3.712E-03
ER	0.000E+00	3.628E-05	4.694E-07	4.680E-07	4.538E-07	4.374E-07
TM	0.000E+00	4.274E-08	4.273E-08	4.272E-08	4.258E-08	4.242E-08
TA	0.000E+00	1.610E-03	1.603E-03	1.596E-03	1.533E-03	1.460E-03
W	0.000E+00	8.249E-01	8.010E-01	7.784E-01	5.851E-01	4.161E-01
RE	0.000E+00	6.220E-01	5.208E-01	4.925E-01	3.338E-01	2.121E-01
OS	0.000E+00	7.884E-05	7.783E-05	7.711E-05	7.140E-05	6.694E-05
IR	0.000E+00	1.001E-04	9.982E-05	9.955E-05	9.728E-05	9.531E-05
PT	0.000E+00	4.915E-08	4.882E-08	4.850E-08	4.534E-08	4.183E-08
PB	2.660E-18	8.019E-07	6.500E-07	5.269E-07	6.449E-08	5.186E-09
BI	0.000E+00	1.282E-04	1.275E-04	1.267E-04	1.197E-04	1.117E-04
PO	0.000E+00	1.600E-03	1.600E-03	1.600E-03	1.600E-03	1.600E-03
SUMTOT	1.849E-14	4.574E+01	2.389E+01	2.229E+01	1.530E+01	1.194E+01
TOTAL	1.849E-14	4.574E+01	2.389E+01	2.229E+01	1.530E+01	1.194E+01

CUMULATIVE TABLE TOTALS

AP+FP	1.849E-14	4.574E+01	2.389E+01	2.229E+01	1.530E+01	1.194E+01
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	4.574E+01	2.389E+01	2.229E+01	1.530E+01	1.194E+01

OUTPUT UNIT = 6 PAGE 37
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

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

```
HE  3      0.000E+00 2.109E-02 2.110E-02 2.112E-02 2.127E-02 2.146E-02
LI  6      3.921E-01 2.230E-02 2.230E-02 2.230E-02 2.230E-02 2.230E-02
 B 10      2.881E+00 1.284E-05 1.284E-05 1.284E-05 1.284E-05 1.284E-05
 N 14      1.807E-01 1.792E-01 1.792E-01 1.792E-01 1.792E-01 1.792E-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 3.044E-02 3.044E-02 3.044E-02 3.044E-02 3.044E-02
NA 23      2.701E-02 2.692E-02 2.692E-02 2.692E-02 2.692E-02 2.692E-02
CL 35      1.967E-01 1.717E-01 1.717E-01 1.717E-01 1.717E-01 1.717E-01
MN 55      2.257E-02 2.135E-02 2.135E-02 2.135E-02 2.135E-02 2.135E-02
FE 56      3.293E-02 3.284E-02 3.284E-02 3.284E-02 3.284E-02 3.284E-02
CO 59      6.490E-02 4.836E-02 4.836E-02 4.836E-02 4.836E-02 4.836E-02
NI 58      5.247E-02 5.169E-02 5.169E-02 5.169E-02 5.169E-02 5.169E-02
NI 59      0.000E+00 1.709E-02 1.709E-02 1.709E-02 1.709E-02 1.709E-02
MO 95      3.981E-02 3.295E-02 3.295E-02 3.295E-02 3.295E-02 3.295E-02
MO 98      1.920E-02 1.832E-02 1.832E-02 1.832E-02 1.832E-02 1.832E-02
CD110      3.435E-02 3.159E-02 3.159E-02 3.159E-02 3.159E-02 3.159E-02
CD111      5.215E-02 4.956E-02 4.956E-02 4.956E-02 4.956E-02 4.956E-02
CD112      2.913E-02 3.005E-02 3.005E-02 3.005E-02 3.005E-02 3.005E-02
CD113      4.923E+01 2.020E-02 2.020E-02 2.020E-02 2.020E-02 2.020E-02
CD114      2.769E-02 3.880E-02 3.880E-02 3.880E-02 3.880E-02 3.880E-02
IN115      1.596E+00 3.399E-03 3.400E-03 3.400E-03 3.408E-03 3.417E-03
GD155      2.528E+00 1.362E-03 1.362E-03 1.362E-03 1.362E-03 1.362E-03
GD157      1.135E+01 1.111E-02 1.111E-02 1.111E-02 1.111E-02 1.111E-02
SUMTOT     8.233E+01 1.441E+01 1.441E+01 1.441E+01 1.441E+01 1.441E+01

TOTAL      8.258E+01 1.467E+01 1.467E+01 1.467E+01 1.467E+01 1.467E+01
□
         OUTPUT UNIT =
6                          PAGE   38
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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,NEUTRON
S PER SECOND
                              1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE         0.000E+00 2.109E-02 2.110E-02 2.112E-02 2.127E-02 2.146E-02
LI         3.927E-01 2.305E-02 2.305E-02 2.305E-02 2.305E-02 2.305E-02
 B         2.881E+00 2.905E-05 2.905E-05 2.905E-05 2.905E-05 2.905E-05
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N	1.807E-01	1.792E-01	1.792E-01	1.792E-01	1.792E-01	1.792E-01
O	1.358E+01	1.358E+01	1.358E+01	1.358E+01	1.358E+01	1.358E+01
NA	2.701E-02	2.692E-02	2.692E-02	2.692E-02	2.692E-02	2.692E-02
CL	1.974E-01	1.781E-01	1.781E-01	1.781E-01	1.781E-01	1.781E-01
MN	2.257E-02	2.135E-02	2.135E-02	2.135E-02	2.135E-02	2.135E-02
FE	3.563E-02	3.580E-02	3.580E-02	3.580E-02	3.580E-02	3.580E-02
CO	6.490E-02	5.075E-02	5.075E-02	5.075E-02	5.074E-02	5.073E-02
NI	7.426E-02	9.101E-02	9.101E-02	9.101E-02	9.101E-02	9.101E-02
ZN	4.302E-02	4.273E-02	4.273E-02	4.273E-02	4.273E-02	4.273E-02
MO	7.160E-02	6.490E-02	6.490E-02	6.490E-02	6.490E-02	6.490E-02
CD	4.937E+01	1.720E-01	1.720E-01	1.719E-01	1.719E-01	1.719E-01
IN	1.601E+00	6.438E-03	6.439E-03	6.440E-03	6.447E-03	6.456E-03
GD	1.389E+01	3.310E-02	3.310E-02	3.310E-02	3.310E-02	3.310E-02
W	5.911E-02	3.804E-02	3.804E-02	3.803E-02	3.802E-02	3.801E-02
SUMTOT	8.250E+01	1.457E+01	1.457E+01	1.457E+01	1.457E+01	1.457E+01
TOTAL	8.258E+01	1.467E+01	1.467E+01	1.467E+01	1.467E+01	1.467E+01

CUMULATIVE TABLE TOTALS

AP+FP	8.258E+01	1.467E+01	1.467E+01	1.467E+01	1.467E+01	1.467E+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	1.467E+01	1.467E+01	1.467E+01	1.467E+01	1.467E+01

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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,FRACTIONAL NEUTRONS PER SECOND

1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
HE 3	0.000E+00	1.438E-03	1.439E-03	1.440E-03	1.450E-03	1.463E-03
LI 6	4.747E-03	1.520E-03	1.520E-03	1.520E-03	1.520E-03	1.520E-03
B 10	3.489E-02	8.754E-07	8.754E-07	8.754E-07	8.754E-07	8.754E-07
N 14	2.188E-03	1.222E-02	1.222E-02	1.222E-02	1.222E-02	1.222E-02
O 16	1.641E-01	9.236E-01	9.236E-01	9.236E-01	9.235E-01	9.235E-01
O 17	3.683E-04	2.075E-03	2.075E-03	2.075E-03	2.075E-03	2.075E-03

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NA 23      3.271E-04 1.835E-03 1.835E-03 1.835E-03 1.835E-03 1.835E-03
CL 35      2.382E-03 1.170E-02 1.170E-02 1.170E-02 1.170E-02 1.170E-02
MN 55      2.733E-04 1.455E-03 1.455E-03 1.455E-03 1.455E-03 1.455E-03
FE 56      3.988E-04 2.239E-03 2.239E-03 2.239E-03 2.239E-03 2.239E-03
CO 59      7.859E-04 3.297E-03 3.297E-03 3.297E-03 3.297E-03 3.297E-03
NI 58      6.353E-04 3.524E-03 3.524E-03 3.524E-03 3.524E-03 3.524E-03
NI 59      0.000E+00 1.165E-03 1.165E-03 1.165E-03 1.165E-03 1.165E-03
MO 95      4.821E-04 2.246E-03 2.246E-03 2.246E-03 2.246E-03 2.246E-03
MO 98      2.326E-04 1.249E-03 1.249E-03 1.249E-03 1.249E-03 1.249E-03
CD110      4.159E-04 2.154E-03 2.154E-03 2.154E-03 2.154E-03 2.154E-03
CD111      6.315E-04 3.379E-03 3.379E-03 3.379E-03 3.379E-03 3.379E-03
CD112      3.528E-04 2.049E-03 2.049E-03 2.049E-03 2.049E-03 2.048E-03
CD113      5.961E-01 1.377E-03 1.377E-03 1.377E-03 1.377E-03 1.377E-03
CD114      3.352E-04 2.645E-03 2.645E-03 2.645E-03 2.645E-03 2.645E-03
IN115      1.933E-02 2.317E-04 2.318E-04 2.318E-04 2.323E-04 2.330E-04
GD155      3.062E-02 9.284E-05 9.284E-05 9.284E-05 9.285E-05 9.286E-05
GD157      1.374E-01 7.577E-04 7.577E-04 7.577E-04 7.577E-04 7.577E-04
SUMTOT     9.970E-01 9.822E-01 9.822E-01 9.822E-01 9.822E-01 9.822E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE   40
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

HE         0.000E+00 1.438E-03 1.439E-03 1.440E-03 1.450E-03 1.463E-03
LI         4.756E-03 1.572E-03 1.572E-03 1.572E-03 1.572E-03 1.572E-03
 B         3.489E-02 1.981E-06 1.981E-06 1.981E-06 1.981E-06 1.981E-06
 N         2.188E-03 1.222E-02 1.222E-02 1.222E-02 1.222E-02 1.222E-02
 O         1.645E-01 9.259E-01 9.259E-01 9.259E-01 9.259E-01 9.259E-01
NA         3.271E-04 1.835E-03 1.835E-03 1.835E-03 1.835E-03 1.835E-03
CL         2.390E-03 1.214E-02 1.214E-02 1.214E-02 1.214E-02 1.214E-02
MN         2.733E-04 1.456E-03 1.456E-03 1.456E-03 1.456E-03 1.455E-03
FE         4.314E-04 2.441E-03 2.441E-03 2.441E-03 2.441E-03 2.441E-03
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CO	7.859E-04	3.460E-03	3.460E-03	3.460E-03	3.459E-03	3.459E-03
NI	8.992E-04	6.205E-03	6.205E-03	6.205E-03	6.204E-03	6.204E-03
ZN	5.209E-04	2.913E-03	2.913E-03	2.913E-03	2.913E-03	2.913E-03
MO	8.670E-04	4.425E-03	4.425E-03	4.425E-03	4.425E-03	4.425E-03
CD	5.979E-01	1.172E-02	1.172E-02	1.172E-02	1.172E-02	1.172E-02
IN	1.939E-02	4.389E-04	4.390E-04	4.390E-04	4.395E-04	4.402E-04
GD	1.682E-01	2.257E-03	2.257E-03	2.257E-03	2.256E-03	2.256E-03
W	7.157E-04	2.593E-03	2.593E-03	2.593E-03	2.592E-03	2.591E-03
SUMTOT	9.990E-01	9.930E-01	9.930E-01	9.930E-01	9.930E-01	9.930E-01
TOTAL	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT =
6 PAGE 41
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
HE 4	0.000E+00	1.264E+00	1.265E+00	1.265E+00	1.266E+00	1.267E+00
TH230	0.000E+00	1.866E-03	1.866E-03	1.866E-03	1.866E-03	1.867E-03
TH232	0.000E+00	5.171E-04	5.171E-04	5.171E-04	5.173E-04	5.175E-04
PA231	0.000E+00	6.599E-04	6.600E-04	6.601E-04	6.607E-04	6.613E-04
U232	0.000E+00	1.683E-03	1.683E-03	1.683E-03	1.685E-03	1.687E-03
U233	0.000E+00	1.917E-03	1.917E-03	1.917E-03	1.918E-03	1.918E-03
U234	3.838E+02	1.562E+02	1.562E+02	1.562E+02	1.562E+02	1.563E+02
U235	4.236E+04	4.653E+03	4.653E+03	4.653E+03	4.653E+03	4.653E+03
U236	0.000E+00	5.577E+03	5.577E+03	5.577E+03	5.577E+03	5.577E+03
U237	0.000E+00	2.124E+01	2.115E+01	2.106E+01	2.018E+01	1.917E+01
U238	9.573E+05	9.146E+05	9.146E+05	9.146E+05	9.146E+05	9.146E+05
U239	0.000E+00	8.009E-01	1.368E-01	2.337E-02	4.939E-10	3.045E-19
NP236	0.000E+00	1.148E-03	1.148E-03	1.148E-03	1.148E-03	1.148E-03
NP237	0.000E+00	1.076E+03	1.077E+03	1.077E+03	1.078E+03	1.079E+03
NP238	0.000E+00	4.267E+00	4.209E+00	4.152E+00	3.622E+00	3.075E+00
NP239	0.000E+00	1.152E+02	1.145E+02	1.132E+02	1.002E+02	8.645E+01
NP240	0.000E+00	3.327E-03	1.754E-03	9.252E-04	1.545E-06	7.151E-10
PU236	0.000E+00	3.699E-03	3.699E-03	3.700E-03	3.703E-03	3.705E-03
PU237	0.000E+00	9.150E-04	9.144E-04	9.138E-04	9.081E-04	9.012E-04
PU238	0.000E+00	5.494E+02	5.495E+02	5.496E+02	5.501E+02	5.507E+02

PU239	0.000E+00	7.207E+03	7.208E+03	7.210E+03	7.223E+03	7.237E+03
PU240	0.000E+00	3.879E+03	3.879E+03	3.879E+03	3.879E+03	3.879E+03
PU241	0.000E+00	1.669E+03	1.669E+03	1.669E+03	1.669E+03	1.669E+03
PU242	0.000E+00	8.713E+02	8.713E+02	8.713E+02	8.713E+02	8.713E+02
PU243	0.000E+00	3.205E-01	2.787E-01	2.423E-01	5.983E-02	1.117E-02
PU244	0.000E+00	1.499E-01	1.499E-01	1.499E-01	1.499E-01	1.499E-01
AM241	0.000E+00	6.184E+01	6.185E+01	6.186E+01	6.195E+01	6.206E+01
AM242M	0.000E+00	2.951E+00	2.951E+00	2.951E+00	2.951E+00	2.951E+00
AM242	0.000E+00	1.506E-01	1.443E-01	1.382E-01	8.964E-02	5.335E-02
AM243	0.000E+00	2.932E+02	2.932E+02	2.932E+02	2.934E+02	2.935E+02
AM244M	0.000E+00	1.535E-02	3.100E-03	6.261E-04	7.077E-11	3.263E-19
AM244	0.000E+00	1.876E-02	1.752E-02	1.636E-02	8.235E-03	3.614E-03
CM242	0.000E+00	2.607E+01	2.607E+01	2.607E+01	2.606E+01	2.604E+01
CM243	0.000E+00	1.351E+00	1.351E+00	1.351E+00	1.351E+00	1.351E+00
CM244	0.000E+00	1.831E+02	1.831E+02	1.831E+02	1.831E+02	1.831E+02
CM245	0.000E+00	1.063E+01	1.063E+01	1.063E+01	1.063E+01	1.063E+01
CM246	0.000E+00	2.132E+00	2.132E+00	2.132E+00	2.132E+00	2.132E+00
CM247	0.000E+00	3.757E-02	3.757E-02	3.757E-02	3.757E-02	3.757E-02
CM248	0.000E+00	3.892E-03	3.892E-03	3.892E-03	3.892E-03	3.892E-03
SUMTOT	1.000E+06	9.409E+05	9.409E+05	9.409E+05	9.409E+05	9.409E+05
TOTAL	1.000E+06	9.409E+05	9.409E+05	9.409E+05	9.409E+05	9.409E+05

OUTPUT UNIT = 6 PAGE 42
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
HE	0.000E+00	1.264E+00	1.265E+00	1.265E+00	1.266E+00	1.267E+00
TH	0.000E+00	2.414E-03	2.414E-03	2.414E-03	2.414E-03	2.414E-03
PA	0.000E+00	7.001E-04	7.001E-04	7.001E-04	7.001E-04	7.001E-04
U	1.000E+06	9.250E+05	9.250E+05	9.250E+05	9.250E+05	9.250E+05
NP	0.000E+00	1.196E+03	1.195E+03	1.194E+03	1.181E+03	1.168E+03
PU	0.000E+00	1.418E+04	1.418E+04	1.418E+04	1.419E+04	1.421E+04
AM	0.000E+00	3.581E+02	3.582E+02	3.582E+02	3.584E+02	3.585E+02
CM	0.000E+00	2.233E+02	2.233E+02	2.233E+02	2.233E+02	2.233E+02
SUMTOT	1.000E+06	9.409E+05	9.409E+05	9.409E+05	9.409E+05	9.409E+05

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TOTAL      1.000E+06 9.409E+05 9.409E+05 9.409E+05 9.409E+05 9.409E+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 9.409E+05 9.409E+05 9.409E+05 9.409E+05 9.409E+05
AP+ACT+FP  1.135E+06 1.076E+06 1.076E+06 1.076E+06 1.076E+06 1.076E+06
□
         OUTPUT UNIT =
6                          PAGE   43
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TL208      0.000E+00 3.327E-03 3.328E-03 3.418E-03 3.327E-03 3.485E-03
PB212      0.000E+00 9.260E-03 9.260E-03 9.260E-03 9.256E-03 9.252E-03
BI212      0.000E+00 9.260E-03 9.263E-03 9.265E-03 9.258E-03 9.699E-03
PO212      0.000E+00 5.933E-03 5.935E-03 5.936E-03 5.932E-03 6.214E-03
PO216      0.000E+00 9.260E-03 9.262E-03 9.261E-03 9.257E-03 9.254E-03
RN220      0.000E+00 9.260E-03 9.262E-03 9.261E-03 9.257E-03 9.254E-03
RA224      0.000E+00 9.260E-03 9.260E-03 9.259E-03 9.256E-03 9.253E-03
TH228      0.000E+00 9.203E-03 9.204E-03 9.205E-03 9.216E-03 9.230E-03
TH231      0.000E+00 1.515E+00 1.475E+00 1.436E+00 1.097E+00 7.945E-01
TH233      0.000E+00 5.115E-02 7.791E-03 1.187E-03 7.972E-12 1.242E-21
TH234      0.000E+00 3.080E-01 3.080E-01 3.080E-01 3.080E-01 3.080E-01
PA232      0.000E+00 1.410E+00 1.379E+00 1.349E+00 1.082E+00 8.306E-01
PA233      0.000E+00 7.666E-01 7.666E-01 7.666E-01 7.665E-01 7.665E-01
PA234M     0.000E+00 3.233E-01 3.080E-01 3.080E-01 3.080E-01 3.080E-01
PA234      0.000E+00 1.560E-02 1.410E-02 1.276E-02 4.791E-03 1.669E-03
 U232      0.000E+00 3.604E-02 3.604E-02 3.604E-02 3.608E-02 3.612E-02
 U234      2.399E+00 9.767E-01 9.767E-01 9.767E-01 9.767E-01 9.768E-01
 U235      9.161E-02 1.006E-02 1.006E-02 1.006E-02 1.006E-02 1.006E-02
 U236      0.000E+00 3.610E-01 3.610E-01 3.610E-01 3.610E-01 3.610E-01
 U237      0.000E+00 1.735E+06 1.727E+06 1.720E+06 1.648E+06 1.565E+06
 U238      3.220E-01 3.076E-01 3.076E-01 3.076E-01 3.076E-01 3.076E-01
 U239      0.000E+00 2.679E+07 4.575E+06 7.815E+05 1.652E-02 1.018E-11
 U240      0.000E+00 4.051E+01 3.857E+01 3.672E+01 2.246E+01 1.245E+01
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NP235	0.000E+00	1.756E-02	1.756E-02	1.756E-02	1.755E-02	1.753E-02
NP236M	0.000E+00	2.145E+01	2.080E+01	2.017E+01	1.482E+01	1.024E+01
NP237	0.000E+00	7.591E-01	7.592E-01	7.593E-01	7.599E-01	7.606E-01
NP238	0.000E+00	1.106E+06	1.091E+06	1.077E+06	9.392E+05	7.974E+05
NP239	0.000E+00	2.674E+07	2.657E+07	2.627E+07	2.324E+07	2.006E+07
NP240M	0.000E+00	8.256E+03	6.868E+01	3.715E+01	2.266E+01	1.256E+01
NP240	0.000E+00	4.011E+04	2.115E+04	1.116E+04	1.863E+01	8.623E-03
PU236	0.000E+00	1.966E+00	1.966E+00	1.967E+00	1.968E+00	1.970E+00
PU237	0.000E+00	1.106E+01	1.105E+01	1.105E+01	1.098E+01	1.089E+01
PU238	0.000E+00	9.410E+03	9.411E+03	9.412E+03	9.422E+03	9.432E+03
PU239	0.000E+00	4.482E+02	4.483E+02	4.483E+02	4.492E+02	4.500E+02
PU240	0.000E+00	8.842E+02	8.842E+02	8.842E+02	8.842E+02	8.842E+02
PU241	0.000E+00	1.720E+05	1.720E+05	1.720E+05	1.720E+05	1.720E+05
PU242	0.000E+00	3.328E+00	3.328E+00	3.328E+00	3.328E+00	3.328E+00
PU243	0.000E+00	8.345E+05	7.255E+05	6.308E+05	1.558E+05	2.907E+04
PU245	0.000E+00	5.365E+00	5.026E+00	4.708E+00	2.448E+00	1.117E+00
AM240	0.000E+00	6.798E-01	6.706E-01	6.615E-01	5.771E-01	4.900E-01
AM241	0.000E+00	2.123E+02	2.124E+02	2.124E+02	2.127E+02	2.131E+02
AM242M	0.000E+00	2.869E+01	2.869E+01	2.869E+01	2.869E+01	2.869E+01
AM242	0.000E+00	1.218E+05	1.167E+05	1.117E+05	7.250E+04	4.315E+04
AM243	0.000E+00	5.846E+01	5.847E+01	5.848E+01	5.852E+01	5.853E+01
AM244M	0.000E+00	4.551E+05	9.192E+04	1.857E+04	2.098E-03	9.675E-12
AM244	0.000E+00	2.387E+04	2.229E+04	2.081E+04	1.048E+04	4.598E+03
AM245	0.000E+00	5.365E+00	5.314E+00	5.183E+00	3.019E+00	1.388E+00
CM241	0.000E+00	4.558E-02	4.555E-02	4.551E-02	4.515E-02	4.471E-02
CM242	0.000E+00	8.623E+04	8.623E+04	8.623E+04	8.621E+04	8.613E+04
CM243	0.000E+00	6.976E+01	6.976E+01	6.976E+01	6.976E+01	6.976E+01
CM244	0.000E+00	1.482E+04	1.482E+04	1.482E+04	1.482E+04	1.482E+04

OUTPUT UNIT =
6 PAGE 44
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CM245	0.000E+00	1.826E+00	1.826E+00	1.826E+00	1.826E+00	1.826E+00
CM246	0.000E+00	6.550E-01	6.550E-01	6.550E-01	6.550E-01	6.550E-01
CM249	0.000E+00	7.754E-01	4.055E-01	2.121E-01	3.261E-04	1.415E-06

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BK249      0.000E+00 8.984E-02 8.989E-02 8.990E-02 8.985E-02 8.976E-02
BK250      0.000E+00 3.488E-01 2.813E-01 2.268E-01 2.640E-02 2.002E-03
CF252      0.000E+00 3.285E-03 3.285E-03 3.285E-03 3.284E-03 3.283E-03
SUMTOT     2.813E+00 5.814E+07 3.522E+07 3.092E+07 2.635E+07 2.279E+07

TOTAL      2.813E+00 5.814E+07 3.522E+07 3.092E+07 2.635E+07 2.279E+07
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         OUTPUT UNIT =
6                          PAGE   45
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  ORIGEN2 V2.2 - FUEL ONLY - 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

                     7 SUMMARY TABLE:  RADIOACTIVITY,  CURIES
                           1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TL         0.000E+00 3.329E-03 3.330E-03 3.420E-03 3.328E-03 3.486E-03
PB         0.000E+00 9.264E-03 9.264E-03 9.264E-03 9.260E-03 9.256E-03
BI         0.000E+00 9.264E-03 9.267E-03 9.268E-03 9.262E-03 9.703E-03
PO         0.000E+00 1.520E-02 1.520E-02 1.520E-02 1.519E-02 1.547E-02
RN         0.000E+00 9.262E-03 9.263E-03 9.263E-03 9.259E-03 9.256E-03
RA         0.000E+00 9.265E-03 9.264E-03 9.264E-03 9.260E-03 9.257E-03
TH         0.000E+00 1.884E+00 1.800E+00 1.754E+00 1.414E+00 1.112E+00
PA         0.000E+00 2.515E+00 2.468E+00 2.436E+00 2.161E+00 1.907E+00
 U         2.813E+00 2.852E+07 6.303E+06 2.501E+06 1.648E+06 1.565E+06
NP         0.000E+00 2.789E+07 2.768E+07 2.736E+07 2.418E+07 2.086E+07
PU         0.000E+00 1.017E+06 9.083E+05 8.136E+05 3.385E+05 2.118E+05
AM         0.000E+00 6.011E+05 2.312E+05 1.514E+05 8.328E+04 4.805E+04
CM         0.000E+00 1.011E+05 1.011E+05 1.011E+05 1.011E+05 1.010E+05
BK         0.000E+00 4.388E-01 3.713E-01 3.168E-01 1.163E-01 9.176E-02
CF         0.000E+00 5.192E-03 5.193E-03 5.193E-03 5.191E-03 5.182E-03
SUMTOT     2.813E+00 5.814E+07 3.522E+07 3.092E+07 2.635E+07 2.279E+07

TOTAL      2.813E+00 5.814E+07 3.522E+07 3.092E+07 2.635E+07 2.279E+07

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.203E-11 4.450E+03 3.014E+03 2.847E+03 2.248E+03 1.949E+03
ACT+FP     2.813E+00 5.814E+07 3.522E+07 3.092E+07 2.635E+07 2.279E+07
AP+ACT+FP  2.813E+00 5.814E+07 3.523E+07 3.093E+07 2.635E+07 2.279E+07
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OUTPUT UNIT = 6 PAGE 46
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
TL208	0.000E+00	7.830E-05	7.833E-05	8.044E-05	7.828E-05	8.201E-05
PB212	0.000E+00	1.763E-05	1.763E-05	1.763E-05	1.762E-05	1.762E-05
BI212	0.000E+00	1.575E-04	1.575E-04	1.576E-04	1.574E-04	1.649E-04
PO212	0.000E+00	3.144E-04	3.145E-04	3.146E-04	3.143E-04	3.293E-04
PO216	0.000E+00	3.791E-04	3.791E-04	3.791E-04	3.790E-04	3.788E-04
RN220	0.000E+00	3.516E-04	3.516E-04	3.516E-04	3.515E-04	3.514E-04
RA224	0.000E+00	3.178E-04	3.178E-04	3.178E-04	3.177E-04	3.176E-04
TH228	0.000E+00	3.010E-04	3.010E-04	3.010E-04	3.014E-04	3.018E-04
TH231	0.000E+00	8.503E-04	8.277E-04	8.057E-04	6.154E-04	4.458E-04
TH233	0.000E+00	1.295E-04	1.972E-05	3.003E-06	2.018E-14	3.144E-24
TH234	0.000E+00	1.249E-04	1.249E-04	1.249E-04	1.249E-04	1.249E-04
PA232	0.000E+00	9.217E-03	9.016E-03	8.820E-03	7.075E-03	5.431E-03
PA233	0.000E+00	1.740E-03	1.740E-03	1.740E-03	1.740E-03	1.740E-03
PA234M	0.000E+00	1.597E-03	1.522E-03	1.522E-03	1.522E-03	1.522E-03
PA234	0.000E+00	2.240E-04	2.025E-04	1.832E-04	6.881E-05	2.397E-05
U232	0.000E+00	1.157E-03	1.157E-03	1.157E-03	1.158E-03	1.159E-03
U234	6.910E-02	2.813E-02	2.813E-02	2.813E-02	2.813E-02	2.813E-02
U235	2.399E-03	2.635E-04	2.635E-04	2.635E-04	2.635E-04	2.635E-04
U236	0.000E+00	9.778E-03	9.778E-03	9.778E-03	9.778E-03	9.778E-03
U237	0.000E+00	3.282E+03	3.268E+03	3.254E+03	3.118E+03	2.962E+03
U238	8.166E-03	7.802E-03	7.802E-03	7.802E-03	7.802E-03	7.802E-03
U239	0.000E+00	7.210E+04	1.232E+04	2.104E+03	4.446E-05	2.742E-14
U240	0.000E+00	3.323E-02	3.164E-02	3.012E-02	1.842E-02	1.021E-02
NP236M	0.000E+00	1.695E-02	1.644E-02	1.594E-02	1.171E-02	8.092E-03
NP237	0.000E+00	2.320E-02	2.320E-02	2.321E-02	2.322E-02	2.325E-02
NP238	0.000E+00	5.299E+03	5.227E+03	5.156E+03	4.499E+03	3.819E+03
NP239	0.000E+00	6.464E+04	6.422E+04	6.350E+04	5.618E+04	4.850E+04
NP240M	0.000E+00	4.784E+01	3.980E-01	2.153E-01	1.313E-01	7.278E-02
NP240	0.000E+00	4.251E+02	2.242E+02	1.182E+02	1.974E-01	9.139E-05
PU236	0.000E+00	6.842E-02	6.843E-02	6.844E-02	6.850E-02	6.855E-02
PU237	0.000E+00	4.078E-03	4.075E-03	4.073E-03	4.047E-03	4.016E-03
PU238	0.000E+00	3.119E+02	3.119E+02	3.119E+02	3.123E+02	3.126E+02

PU239	0.000E+00	1.381E+01	1.381E+01	1.382E+01	1.384E+01	1.387E+01
PU240	0.000E+00	2.753E+01	2.753E+01	2.753E+01	2.753E+01	2.753E+01
PU241	0.000E+00	5.332E+00	5.332E+00	5.332E+00	5.332E+00	5.331E+00
PU242	0.000E+00	9.829E-02	9.829E-02	9.829E-02	9.829E-02	9.829E-02
PU243	0.000E+00	9.631E+02	8.374E+02	7.281E+02	1.798E+02	3.355E+01
PU245	0.000E+00	1.272E-02	1.192E-02	1.116E-02	5.804E-03	2.648E-03
AM240	0.000E+00	4.449E-03	4.388E-03	4.329E-03	3.777E-03	3.207E-03
AM241	0.000E+00	7.053E+00	7.055E+00	7.056E+00	7.066E+00	7.079E+00
AM242M	0.000E+00	1.133E-02	1.133E-02	1.133E-02	1.133E-02	1.133E-02
AM242	0.000E+00	1.383E+02	1.324E+02	1.268E+02	8.229E+01	4.898E+01
AM243	0.000E+00	1.879E+00	1.880E+00	1.880E+00	1.881E+00	1.881E+00
AM244M	0.000E+00	1.377E+03	2.780E+02	5.616E+01	6.347E-06	2.927E-14
AM244	0.000E+00	1.251E+02	1.168E+02	1.090E+02	5.490E+01	2.409E+01
AM245	0.000E+00	9.954E-03	9.859E-03	9.617E-03	5.601E-03	2.574E-03
AM246	0.000E+00	1.620E-05	1.618E-05	1.614E-05	1.571E-05	1.522E-05
CM241	0.000E+00	1.874E-04	1.872E-04	1.871E-04	1.856E-04	1.838E-04
CM242	0.000E+00	3.177E+03	3.177E+03	3.177E+03	3.177E+03	3.174E+03
CM243	0.000E+00	2.559E+00	2.559E+00	2.559E+00	2.559E+00	2.559E+00
CM244	0.000E+00	5.183E+02	5.183E+02	5.183E+02	5.183E+02	5.183E+02

OUTPUT UNIT = 6 PAGE 47

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CM245	0.000E+00	6.059E-02	6.059E-02	6.059E-02	6.059E-02	6.059E-02
CM246	0.000E+00	2.144E-02	2.144E-02	2.144E-02	2.144E-02	2.144E-02
CM249	0.000E+00	1.350E-03	7.057E-04	3.690E-04	5.676E-07	2.462E-09
BK249	0.000E+00	6.657E-05	6.660E-05	6.662E-05	6.658E-05	6.651E-05
BK250	0.000E+00	2.423E-03	1.954E-03	1.576E-03	1.834E-04	1.391E-05
CF250	0.000E+00	5.302E-05	5.309E-05	5.314E-05	5.335E-05	5.337E-05
CF252	0.000E+00	2.345E-04	2.345E-04	2.344E-04	2.344E-04	2.343E-04
CF254	0.000E+00	8.038E-06	8.034E-06	8.030E-06	7.992E-06	7.947E-06
SUMTOT	7.967E-02	1.525E+05	9.069E+04	7.922E+04	6.818E+04	5.945E+04
TOTAL	7.967E-02	1.525E+05	9.069E+04	7.922E+04	6.818E+04	5.945E+04

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         OUTPUT UNIT =
6                          PAGE   48
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

TL         0.000E+00 7.830E-05 7.833E-05 8.044E-05 7.829E-05 8.202E-05
PB         0.000E+00 1.764E-05 1.764E-05 1.764E-05 1.763E-05 1.762E-05
BI         0.000E+00 1.575E-04 1.576E-04 1.576E-04 1.575E-04 1.650E-04
PO         0.000E+00 6.937E-04 6.939E-04 6.939E-04 6.935E-04 7.084E-04
RN         0.000E+00 3.517E-04 3.517E-04 3.517E-04 3.515E-04 3.514E-04
RA         0.000E+00 3.179E-04 3.179E-04 3.179E-04 3.177E-04 3.176E-04
TH         0.000E+00 1.407E-03 1.274E-03 1.236E-03 1.043E-03 8.736E-04
PA         0.000E+00 1.278E-02 1.248E-02 1.227E-02 1.041E-02 8.717E-03
 U         7.967E-02 7.539E+04 1.558E+04 5.358E+03 3.118E+03 2.962E+03
NP         0.000E+00 7.041E+04 6.967E+04 6.877E+04 6.068E+04 5.232E+04
PU         0.000E+00 1.322E+03 1.196E+03 1.087E+03 5.389E+02 3.930E+02
AM         0.000E+00 1.649E+03 5.362E+02 3.010E+02 1.462E+02 8.205E+01
CM         0.000E+00 3.698E+03 3.698E+03 3.698E+03 3.698E+03 3.694E+03
BK         0.000E+00 2.491E-03 2.021E-03 1.643E-03 2.500E-04 8.041E-05
CF         0.000E+00 2.977E-04 2.978E-04 2.978E-04 2.979E-04 2.978E-04
SUMTOT     7.967E-02 1.525E+05 9.069E+04 7.922E+04 6.818E+04 5.945E+04

TOTAL      7.967E-02 1.525E+05 9.069E+04 7.922E+04 6.818E+04 5.945E+04

                                        CUMULATIVE TABLE TOTALS

AP+FP      1.849E-14 4.574E+01 2.389E+01 2.229E+01 1.530E+01 1.194E+01
ACT+FP     7.967E-02 1.525E+05 9.069E+04 7.922E+04 6.818E+04 5.945E+04
AP+ACT+FP  7.967E-02 1.525E+05 9.071E+04 7.924E+04 6.820E+04 5.946E+04
□
         OUTPUT UNIT =
6                          PAGE   49
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  ORIGEN2 V2.2 - FUEL ONLY - 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
1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	1.934E+01	7.875E+00	7.875E+00	7.875E+00	7.875E+00	7.876E+00
U235	5.067E+03	5.565E+02	5.565E+02	5.565E+02	5.565E+02	5.565E+02
U236	0.000E+00	1.209E+02	1.209E+02	1.209E+02	1.209E+02	1.209E+02
U238	2.317E+03	2.214E+03	2.214E+03	2.214E+03	2.214E+03	2.214E+03
NP237	0.000E+00	8.433E+01	8.434E+01	8.435E+01	8.442E+01	8.450E+01
PU238	0.000E+00	4.035E+01	4.036E+01	4.036E+01	4.040E+01	4.045E+01
PU239	0.000E+00	2.847E+03	2.848E+03	2.848E+03	2.853E+03	2.859E+03
PU240	0.000E+00	2.084E+03	2.084E+03	2.084E+03	2.084E+03	2.084E+03
PU241	0.000E+00	5.628E+02	5.628E+02	5.628E+02	5.627E+02	5.627E+02
PU242	0.000E+00	7.227E+01	7.227E+01	7.227E+01	7.227E+01	7.227E+01
AM241	0.000E+00	1.620E+01	1.621E+01	1.621E+01	1.623E+01	1.626E+01
AM243	0.000E+00	3.568E+01	3.568E+01	3.569E+01	3.571E+01	3.571E+01
SUMTOT	7.403E+03	8.642E+03	8.642E+03	8.643E+03	8.648E+03	8.654E+03
TOTAL	7.403E+03	8.662E+03	8.663E+03	8.663E+03	8.668E+03	8.673E+03

OUTPUT UNIT =
6 PAGE 50
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	7.403E+03	2.901E+03	2.901E+03	2.901E+03	2.901E+03	2.901E+03
NP	0.000E+00	8.946E+01	8.943E+01	8.937E+01	8.885E+01	8.830E+01
PU	0.000E+00	5.606E+03	5.607E+03	5.608E+03	5.613E+03	5.618E+03
AM	0.000E+00	5.515E+01	5.515E+01	5.516E+01	5.518E+01	5.520E+01
CM	0.000E+00	1.061E+01	1.061E+01	1.061E+01	1.061E+01	1.061E+01

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SUMTOT     7.403E+03 8.662E+03 8.663E+03 8.663E+03 8.668E+03 8.673E+03

TOTAL      7.403E+03 8.662E+03 8.663E+03 8.663E+03 8.668E+03 8.673E+03

                                          CUMULATIVE TABLE TOTALS

AP+FP      8.258E+01 1.467E+01 1.467E+01 1.467E+01 1.467E+01 1.467E+01
ACT+FP     7.403E+03 8.662E+03 8.663E+03 8.663E+03 8.668E+03 8.673E+03
AP+ACT+FP  7.485E+03 8.677E+03 8.678E+03 8.678E+03 8.683E+03 8.687E+03
□
         OUTPUT UNIT =
6                          PAGE   51
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U234      2.613E-03 9.091E-04 9.090E-04 9.090E-04 9.085E-04 9.081E-04
 U235      6.844E-01 6.424E-02 6.424E-02 6.424E-02 6.420E-02 6.417E-02
 U236      0.000E+00 1.396E-02 1.396E-02 1.396E-02 1.395E-02 1.394E-02
 U238      3.130E-01 2.555E-01 2.555E-01 2.555E-01 2.554E-01 2.552E-01
NP237      0.000E+00 9.736E-03 9.736E-03 9.736E-03 9.739E-03 9.743E-03
PU238      0.000E+00 4.658E-03 4.658E-03 4.659E-03 4.661E-03 4.664E-03
PU239      0.000E+00 3.287E-01 3.287E-01 3.287E-01 3.292E-01 3.296E-01
PU240      0.000E+00 2.406E-01 2.406E-01 2.406E-01 2.404E-01 2.403E-01
PU241      0.000E+00 6.497E-02 6.496E-02 6.496E-02 6.492E-02 6.488E-02
PU242      0.000E+00 8.343E-03 8.342E-03 8.342E-03 8.338E-03 8.333E-03
AM241      0.000E+00 1.871E-03 1.871E-03 1.871E-03 1.873E-03 1.875E-03
AM243      0.000E+00 4.118E-03 4.119E-03 4.119E-03 4.119E-03 4.118E-03
SUMTOT     1.000E+00 9.976E-01 9.976E-01 9.976E-01 9.977E-01 9.978E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE   52
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02
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    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         1.000E+00 3.349E-01 3.348E-01 3.348E-01 3.346E-01 3.344E-01
NP         0.000E+00 1.033E-02 1.032E-02 1.032E-02 1.025E-02 1.018E-02
PU         0.000E+00 6.472E-01 6.472E-01 6.473E-01 6.475E-01 6.478E-01
AM         0.000E+00 6.367E-03 6.366E-03 6.366E-03 6.366E-03 6.365E-03
CM         0.000E+00 1.225E-03 1.225E-03 1.225E-03 1.224E-03 1.224E-03
SUMTOT     1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
       

         OUTPUT UNIT =
6                         PAGE   53
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      4.098E+03 4.501E+02 4.501E+02 4.501E+02 4.501E+02 4.501E+02
 U238      2.346E+02 2.241E+02 2.241E+02 2.241E+02 2.241E+02 2.241E+02
PU238      0.000E+00 2.946E+00 2.946E+00 2.947E+00 2.950E+00 2.953E+00
PU239      0.000E+00 1.802E+03 1.802E+03 1.803E+03 1.806E+03 1.809E+03
PU240      0.000E+00 5.832E+00 5.832E+00 5.832E+00 5.832E+00 5.832E+00
PU241      0.000E+00 4.224E+02 4.224E+02 4.224E+02 4.224E+02 4.224E+02
CM245      0.000E+00 3.271E+00 3.271E+00 3.271E+00 3.271E+00 3.271E+00
SUMTOT     4.333E+03 2.911E+03 2.911E+03 2.911E+03 2.915E+03 2.918E+03
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TOTAL      4.333E+03 2.921E+03 2.922E+03 2.922E+03 2.925E+03 2.928E+03
□
         OUTPUT UNIT =
6                          PAGE   54
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         4.333E+03 6.773E+02 6.773E+02 6.773E+02 6.773E+02 6.773E+02
PU         0.000E+00 2.234E+03 2.234E+03 2.235E+03 2.238E+03 2.241E+03
AM         0.000E+00 3.174E+00 3.169E+00 3.166E+00 3.147E+00 3.133E+00
CM         0.000E+00 3.922E+00 3.922E+00 3.922E+00 3.922E+00 3.922E+00
SUMTOT     4.333E+03 2.918E+03 2.919E+03 2.919E+03 2.922E+03 2.926E+03

TOTAL      4.333E+03 2.921E+03 2.922E+03 2.922E+03 2.925E+03 2.928E+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 2.921E+03 2.922E+03 2.922E+03 2.925E+03 2.928E+03
AP+ACT+FP  4.333E+03 2.921E+03 2.922E+03 2.922E+03 2.925E+03 2.928E+03
□
         OUTPUT UNIT =
6                          PAGE   55
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
```

UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	9.458E-01	1.541E-01	1.541E-01	1.541E-01	1.539E-01	1.537E-01
U238	5.414E-02	7.672E-02	7.672E-02	7.671E-02	7.663E-02	7.654E-02
PU238	0.000E+00	1.008E-03	1.008E-03	1.008E-03	1.008E-03	1.008E-03
PU239	0.000E+00	6.168E-01	6.169E-01	6.169E-01	6.174E-01	6.179E-01
PU240	0.000E+00	1.996E-03	1.996E-03	1.996E-03	1.994E-03	1.992E-03
PU241	0.000E+00	1.446E-01	1.446E-01	1.446E-01	1.444E-01	1.442E-01
CM245	0.000E+00	1.120E-03	1.120E-03	1.120E-03	1.118E-03	1.117E-03
SUMTOT	9.999E-01	9.964E-01	9.964E-01	9.964E-01	9.964E-01	9.965E-01
TOTAL	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT =
6 PAGE 56
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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 FISSIONS PER SECOND
1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	1.000E+00	2.319E-01	2.318E-01	2.318E-01	2.316E-01	2.313E-01
PU	0.000E+00	7.647E-01	7.648E-01	7.648E-01	7.651E-01	7.654E-01
AM	0.000E+00	1.087E-03	1.085E-03	1.083E-03	1.076E-03	1.070E-03
CM	0.000E+00	1.342E-03	1.342E-03	1.342E-03	1.341E-03	1.339E-03
SUMTOT	1.000E+00	9.990E-01	9.990E-01	9.990E-01	9.991E-01	9.992E-01
TOTAL	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT =
6 PAGE 57
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	2.399E+00	9.767E-01	9.767E-01	9.767E-01	9.767E-01	9.768E-01
U235	9.161E-02	1.006E-02	1.006E-02	1.006E-02	1.006E-02	1.006E-02
U238	3.220E-01	3.076E-01	3.076E-01	3.076E-01	3.076E-01	3.076E-01
PU238	0.000E+00	9.410E+03	9.411E+03	9.412E+03	9.422E+03	9.432E+03
PU239	0.000E+00	4.482E+02	4.483E+02	4.483E+02	4.492E+02	4.500E+02
PU240	0.000E+00	8.842E+02	8.842E+02	8.842E+02	8.842E+02	8.842E+02
AM241	0.000E+00	2.123E+02	2.124E+02	2.124E+02	2.127E+02	2.131E+02
CM242	0.000E+00	8.623E+04	8.623E+04	8.623E+04	8.621E+04	8.613E+04
CM244	0.000E+00	1.482E+04	1.482E+04	1.482E+04	1.482E+04	1.482E+04
SUMTOT	2.813E+00	1.120E+05	1.120E+05	1.120E+05	1.120E+05	1.119E+05
TOTAL	2.813E+00	1.121E+05	1.121E+05	1.122E+05	1.121E+05	1.121E+05

OUTPUT UNIT = 6 PAGE 58

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	2.813E+00	1.691E+00	1.691E+00	1.691E+00	1.691E+00	1.692E+00
PU	0.000E+00	1.075E+04	1.075E+04	1.075E+04	1.076E+04	1.078E+04
AM	0.000E+00	2.709E+02	2.710E+02	2.710E+02	2.714E+02	2.718E+02
CM	0.000E+00	1.011E+05	1.011E+05	1.011E+05	1.011E+05	1.010E+05
SUMTOT	2.813E+00	1.121E+05	1.121E+05	1.121E+05	1.121E+05	1.121E+05
TOTAL	2.813E+00	1.121E+05	1.121E+05	1.122E+05	1.121E+05	1.121E+05

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 1.121E+05 1.121E+05 1.122E+05 1.121E+05 1.121E+05
AP+ACT+FP  2.813E+00 1.121E+05 1.121E+05 1.122E+05 1.121E+05 1.121E+05
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OUTPUT UNIT =
6 PAGE 59
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	0.000E+00	9.811E-02	9.811E-02	9.811E-02	9.810E-02	9.809E-02
LI 6	0.000E+00	2.159E-04	2.159E-04	2.159E-04	2.159E-04	2.159E-04
LI 7	0.000E+00	1.778E-05	1.778E-05	1.778E-05	1.778E-05	1.778E-05
BE 9	0.000E+00	3.418E-05	3.418E-05	3.418E-05	3.418E-05	3.418E-05
BE 10	0.000E+00	2.284E-04	2.284E-04	2.284E-04	2.284E-04	2.284E-04
C 14	0.000E+00	4.616E-05	4.616E-05	4.616E-05	4.616E-05	4.616E-05
ZN 68	0.000E+00	2.540E-03	2.540E-03	2.540E-03	2.540E-03	2.540E-03
GA 69	0.000E+00	8.649E-06	8.649E-06	8.650E-06	8.650E-06	8.650E-06
ZN 70	0.000E+00	9.088E-03	9.088E-03	9.088E-03	9.088E-03	9.088E-03
ZN 72	0.000E+00	9.425E-05	9.286E-05	9.149E-05	7.882E-05	6.591E-05
GA 72	0.000E+00	2.868E-05	2.867E-05	2.863E-05	2.746E-05	2.489E-05
GE 72	0.000E+00	3.930E-02	3.930E-02	3.930E-02	3.931E-02	3.933E-02
GA 73	0.000E+00	1.883E-05	1.636E-05	1.419E-05	3.429E-06	6.238E-07
GE 73	0.000E+00	7.711E-02	7.711E-02	7.711E-02	7.713E-02	7.713E-02
GE 74	0.000E+00	1.732E-01	1.732E-01	1.732E-01	1.732E-01	1.732E-01
GE 75	0.000E+00	2.060E-05	1.278E-05	7.732E-06	5.092E-08	1.228E-10
AS 75	0.000E+00	3.412E-01	3.412E-01	3.412E-01	3.413E-01	3.413E-01
GE 76	0.000E+00	8.552E-01	8.552E-01	8.552E-01	8.552E-01	8.552E-01
AS 76	0.000E+00	5.073E-05	4.941E-05	4.813E-05	3.698E-05	2.696E-05
SE 76	0.000E+00	1.769E-02	1.769E-02	1.769E-02	1.770E-02	1.771E-02
GE 77	0.000E+00	2.825E-04	2.659E-04	2.501E-04	1.354E-04	6.487E-05
AS 77	0.000E+00	2.611E-03	2.582E-03	2.552E-03	2.238E-03	1.869E-03
SE 77	0.000E+00	1.689E+00	1.689E+00	1.689E+00	1.690E+00	1.690E+00
GE 78	0.000E+00	2.269E-04	1.407E-04	8.726E-05	7.325E-07	2.364E-09
AS 78	0.000E+00	2.448E-04	2.227E-04	1.829E-04	5.732E-06	3.865E-08
SE 78	0.000E+00	4.262E+00	4.262E+00	4.262E+00	4.263E+00	4.263E+00
AS 79	0.000E+00	5.716E-05	6.053E-07	5.958E-09	5.087E-29	0.000E+00
SE 79	0.000E+00	1.014E+01	1.014E+01	1.014E+01	1.014E+01	1.014E+01

SE 79M	0.000E+00	2.483E-05	4.603E-07	4.546E-09	3.872E-29	0.000E+00
BR 79	0.000E+00	2.568E-04	2.568E-04	2.568E-04	2.569E-04	2.571E-04
SE 80	0.000E+00	2.299E+01	2.299E+01	2.299E+01	2.299E+01	2.299E+01
KR 80	0.000E+00	4.367E-04	4.367E-04	4.367E-04	4.367E-04	4.368E-04
AS 81	0.000E+00	1.122E-05	1.908E-39	0.000E+00	0.000E+00	0.000E+00
SE 81	0.000E+00	4.239E-04	5.230E-05	8.480E-06	2.664E-09	4.394E-13
SE 81M	0.000E+00	3.386E-05	1.639E-05	7.930E-06	5.586E-09	9.216E-13
BR 81	0.000E+00	3.568E+01	3.568E+01	3.568E+01	3.568E+01	3.568E+01
KR 81	0.000E+00	6.070E-05	6.070E-05	6.070E-05	6.070E-05	6.070E-05
SE 82	0.000E+00	5.706E+01	5.706E+01	5.706E+01	5.706E+01	5.706E+01
BR 82	0.000E+00	1.041E-02	1.021E-02	1.002E-02	8.231E-03	6.503E-03
BR 82M	0.000E+00	1.170E-05	1.323E-08	1.494E-11	0.000E+00	0.000E+00
KR 82	0.000E+00	2.814E+00	2.814E+00	2.814E+00	2.816E+00	2.818E+00
AS 83	0.000E+00	6.417E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	0.000E+00	4.531E-04	7.174E-05	1.130E-05	1.061E-13	2.470E-23
SE 83M	0.000E+00	3.324E-05	1.271E-20	4.192E-36	0.000E+00	0.000E+00
BR 83	0.000E+00	7.182E-03	5.721E-03	4.331E-03	2.390E-04	7.361E-06
KR 83	0.000E+00	5.917E+01	5.917E+01	5.918E+01	5.918E+01	5.919E+01
KR 83M	0.000E+00	5.541E-03	5.349E-03	4.859E-03	5.694E-04	2.180E-05
SE 84	0.000E+00	2.619E-04	8.885E-10	2.988E-15	0.000E+00	0.000E+00
BR 84	0.000E+00	2.646E-03	7.952E-04	2.150E-04	4.495E-10	6.869E-17
BR 84M	0.000E+00	2.371E-05	2.315E-08	2.261E-11	0.000E+00	0.000E+00
KR 84	0.000E+00	2.006E+02	2.006E+02	2.006E+02	2.006E+02	2.006E+02

OUTPUT UNIT =
6 PAGE 60
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SE 85	0.000E+00	2.853E-05	4.718E-33	0.000E+00	0.000E+00	0.000E+00
SE 85M	0.000E+00	1.045E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	0.000E+00	2.847E-04	1.671E-10	8.361E-17	0.000E+00	0.000E+00
KR 85	0.000E+00	3.746E+01	3.746E+01	3.746E+01	3.746E+01	3.746E+01
KR 85M	0.000E+00	2.714E-02	2.353E-02	2.016E-02	4.291E-03	6.704E-04
RB 85	0.000E+00	1.651E+02	1.651E+02	1.651E+02	1.651E+02	1.651E+02
SE 86	0.000E+00	2.281E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	0.000E+00	6.339E-05	1.579E-24	0.000E+00	0.000E+00	0.000E+00

KR	86	0.000E+00	3.157E+02	3.157E+02	3.157E+02	3.157E+02	3.157E+02
RB	86	0.000E+00	5.420E-02	5.412E-02	5.404E-02	5.321E-02	5.223E-02
SR	86	0.000E+00	1.302E+00	1.302E+00	1.302E+00	1.303E+00	1.304E+00
SE	87	0.000E+00	6.637E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR	87	0.000E+00	1.483E-04	5.901E-24	2.438E-43	0.000E+00	0.000E+00
KR	87	0.000E+00	1.447E-02	8.482E-03	4.918E-03	2.112E-05	3.041E-08
RB	87	0.000E+00	4.041E+02	4.041E+02	4.041E+02	4.041E+02	4.041E+02
SR	87	0.000E+00	1.284E-02	1.284E-02	1.284E-02	1.284E-02	1.284E-02
BR	88	0.000E+00	4.376E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR	88	0.000E+00	4.579E-02	3.591E-02	2.813E-02	2.448E-03	1.307E-04
RB	88	0.000E+00	4.901E-03	4.147E-03	3.278E-03	2.856E-04	1.525E-05
SR	88	0.000E+00	5.800E+02	5.800E+02	5.800E+02	5.801E+02	5.801E+02
BR	89	0.000E+00	7.876E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR	89	0.000E+00	1.014E-03	2.053E-09	4.117E-15	0.000E+00	0.000E+00
RB	89	0.000E+00	5.338E-03	4.297E-04	2.785E-05	3.648E-17	2.008E-31
SR	89	0.000E+00	2.683E+01	2.682E+01	2.681E+01	2.666E+01	2.647E+01
Y	89	0.000E+00	7.268E+02	7.268E+02	7.268E+02	7.269E+02	7.271E+02
KR	90	0.000E+00	1.710E-04	5.089E-38	0.000E+00	0.000E+00	0.000E+00
RB	90	0.000E+00	8.617E-04	1.725E-09	9.963E-14	0.000E+00	0.000E+00
RB	90M	0.000E+00	3.760E-04	2.522E-08	1.590E-12	0.000E+00	0.000E+00
SR	90	0.000E+00	8.590E+02	8.590E+02	8.590E+02	8.590E+02	8.590E+02
Y	90	0.000E+00	2.284E-01	2.282E-01	2.281E-01	2.268E-01	2.254E-01
ZR	90	0.000E+00	5.884E+01	5.884E+01	5.884E+01	5.887E+01	5.890E+01
KR	91	0.000E+00	3.460E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB	91	0.000E+00	4.309E-04	1.131E-22	2.716E-41	0.000E+00	0.000E+00
SR	91	0.000E+00	2.784E-01	2.593E-01	2.410E-01	1.162E-01	4.841E-02
Y	91	0.000E+00	4.298E+01	4.298E+01	4.298E+01	4.289E+01	4.271E+01
Y	91M	0.000E+00	1.410E-02	1.378E-02	1.310E-02	6.443E-03	2.683E-03
ZR	91	0.000E+00	9.376E+02	9.376E+02	9.377E+02	9.379E+02	9.381E+02
RB	92	0.000E+00	2.999E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR	92	0.000E+00	9.068E-02	7.024E-02	5.439E-02	4.214E-03	1.958E-04
Y	92	0.000E+00	1.192E-01	1.165E-01	1.101E-01	3.029E-02	3.767E-03
ZR	92	0.000E+00	1.076E+03	1.076E+03	1.077E+03	1.077E+03	1.077E+03
RB	93	0.000E+00	3.024E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR	93	0.000E+00	5.002E-03	1.966E-05	7.684E-08	0.000E+00	0.000E+00
Y	93	0.000E+00	4.169E-01	3.940E-01	3.678E-01	1.852E-01	8.128E-02
ZR	93	0.000E+00	1.205E+03	1.205E+03	1.205E+03	1.205E+03	1.205E+03
NB	93	0.000E+00	2.001E-04	2.001E-04	2.001E-04	2.002E-04	2.003E-04
NB	93M	0.000E+00	1.246E-03	1.246E-03	1.246E-03	1.247E-03	1.247E-03
RB	94	0.000E+00	7.638E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR	94	0.000E+00	8.135E-04	3.796E-18	1.756E-32	0.000E+00	0.000E+00
Y	94	0.000E+00	1.377E-02	1.660E-03	1.882E-04	6.578E-14	2.954E-25
ZR	94	0.000E+00	1.284E+03	1.284E+03	1.284E+03	1.284E+03	1.284E+03

OUTPUT UNIT =
6

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
NB 94	0.000E+00	1.417E-03	1.417E-03	1.417E-03	1.417E-03	1.417E-03
SR 95	0.000E+00	2.624E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	0.000E+00	8.448E-03	1.661E-04	3.164E-06	1.989E-23	0.000E+00
ZR 95	0.000E+00	7.718E+01	7.715E+01	7.712E+01	7.677E+01	7.636E+01
NB 95	0.000E+00	4.256E+01	4.256E+01	4.256E+01	4.255E+01	4.255E+01
NB 95M	0.000E+00	3.113E-02	3.112E-02	3.111E-02	3.106E-02	3.098E-02
MO 95	0.000E+00	1.119E+03	1.119E+03	1.119E+03	1.119E+03	1.120E+03
SR 96	0.000E+00	2.821E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	0.000E+00	1.783E-03	2.543E-11	3.567E-19	0.000E+00	0.000E+00
ZR 96	0.000E+00	1.378E+03	1.378E+03	1.378E+03	1.378E+03	1.378E+03
NB 96	0.000E+00	3.211E-03	3.117E-03	3.026E-03	2.249E-03	1.575E-03
MO 96	0.000E+00	1.223E+02	1.223E+02	1.223E+02	1.223E+02	1.223E+02
Y 97	0.000E+00	1.260E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	9.099E-01	8.734E-01	8.383E-01	5.562E-01	3.400E-01
NB 97	0.000E+00	6.541E-02	6.434E-02	6.263E-02	4.250E-02	2.434E-02
NB 97M	0.000E+00	8.513E-04	8.159E-04	7.831E-04	5.196E-04	3.176E-04
MO 97	0.000E+00	1.371E+03	1.371E+03	1.371E+03	1.371E+03	1.372E+03
ZR 98	0.000E+00	4.755E-04	5.277E-39	0.000E+00	0.000E+00	0.000E+00
NB 98	0.000E+00	4.386E-05	5.240E-40	0.000E+00	0.000E+00	0.000E+00
NB 98M	0.000E+00	5.778E-04	2.577E-04	1.149E-04	3.574E-08	2.211E-12
MO 98	0.000E+00	1.415E+03	1.415E+03	1.415E+03	1.415E+03	1.415E+03
TC 98	0.000E+00	1.575E-02	1.575E-02	1.575E-02	1.575E-02	1.575E-02
ZR 99	0.000E+00	3.683E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	2.300E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	0.000E+00	1.163E-04	1.314E-11	1.485E-18	0.000E+00	0.000E+00
MO 99	0.000E+00	4.318E+00	4.273E+00	4.229E+00	3.807E+00	3.356E+00
TC 99	0.000E+00	1.242E+03	1.242E+03	1.242E+03	1.242E+03	1.243E+03
TC 99M	0.000E+00	3.448E-01	3.446E-01	3.440E-01	3.258E-01	2.927E-01
RU 99	0.000E+00	9.652E-03	9.652E-03	9.653E-03	9.657E-03	9.663E-03
ZR100	0.000E+00	1.008E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	0.000E+00	2.202E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	0.000E+00	2.211E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO100	0.000E+00	1.635E+03	1.635E+03	1.635E+03	1.635E+03	1.635E+03
TC100	0.000E+00	1.289E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU100	0.000E+00	3.185E+02	3.185E+02	3.185E+02	3.185E+02	3.185E+02
ZR101	0.000E+00	2.994E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

NB101	0.000E+00	1.081E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	1.476E-02	8.665E-04	5.039E-05	2.229E-17	3.336E-32
TC101	0.000E+00	1.434E-02	3.131E-03	3.049E-04	4.869E-16	9.823E-31
RU101	0.000E+00	1.324E+03	1.324E+03	1.324E+03	1.324E+03	1.324E+03
ZR102	0.000E+00	1.515E-04	2.001E-42	0.000E+00	0.000E+00	0.000E+00
NB102	0.000E+00	4.062E-05	2.859E-43	0.000E+00	0.000E+00	0.000E+00
MO102	0.000E+00	1.109E-02	2.664E-04	6.286E-06	3.361E-22	1.001E-41
TC102	0.000E+00	8.806E-05	2.129E-06	5.023E-08	2.686E-24	1.429E-43
TC102M	0.000E+00	6.092E-06	4.292E-10	3.024E-14	0.000E+00	0.000E+00
RU102	0.000E+00	1.435E+03	1.435E+03	1.435E+03	1.435E+03	1.435E+03
RH102	0.000E+00	2.061E-03	2.061E-03	2.061E-03	2.060E-03	2.059E-03
NB103	0.000E+00	1.544E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	0.000E+00	1.024E-03	1.074E-21	9.317E-40	0.000E+00	0.000E+00
TC103	0.000E+00	8.688E-04	5.370E-21	4.659E-39	0.000E+00	0.000E+00
RU103	0.000E+00	5.941E+01	5.937E+01	5.933E+01	5.889E+01	5.838E+01

OUTPUT UNIT = 6 PAGE 62
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
RH103	0.000E+00	5.559E+02	5.559E+02	5.560E+02	5.564E+02	5.569E+02
RH103M	0.000E+00	5.309E-02	5.307E-02	5.305E-02	5.270E-02	5.222E-02
MO104	0.000E+00	1.378E-03	7.128E-15	3.667E-26	0.000E+00	0.000E+00
TC104	0.000E+00	1.686E-02	1.870E-03	1.903E-04	2.267E-14	2.796E-26
RU104	0.000E+00	1.025E+03	1.025E+03	1.025E+03	1.025E+03	1.025E+03
RH104	0.000E+00	6.434E-04	3.460E-09	2.385E-13	0.000E+00	0.000E+00
RH104M	0.000E+00	2.592E-04	1.786E-08	1.231E-12	0.000E+00	0.000E+00
PD104	0.000E+00	6.463E+02	6.463E+02	6.463E+02	6.463E+02	6.463E+02
MO105	0.000E+00	5.721E-04	4.913E-24	0.000E+00	0.000E+00	0.000E+00
TC105	0.000E+00	6.346E-03	3.864E-05	2.134E-07	0.000E+00	0.000E+00
RU105	0.000E+00	2.167E-01	1.915E-01	1.638E-01	3.438E-02	5.278E-03
RH105	0.000E+00	1.556E+00	1.558E+00	1.555E+00	1.393E+00	1.126E+00
RH105M	0.000E+00	1.709E-04	1.514E-04	1.296E-04	2.718E-05	4.173E-06
PD105	0.000E+00	7.113E+02	7.114E+02	7.114E+02	7.117E+02	7.120E+02
MO106	0.000E+00	5.268E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	0.000E+00	3.573E-04	2.194E-33	0.000E+00	0.000E+00	0.000E+00

RU106	0.000E+00	2.465E+02	2.465E+02	2.463E+02	2.461E+02
RH106	0.000E+00	2.596E-04	2.317E-04	2.315E-04	2.313E-04
RH106M	0.000E+00	3.369E-03	2.459E-03	1.794E-03	7.684E-05	1.752E-06
PD106	0.000E+00	4.964E+02	4.964E+02	4.966E+02	4.969E+02
MO107	0.000E+00	1.376E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	0.000E+00	1.569E-04	7.497E-42	0.000E+00	0.000E+00	0.000E+00
RU107	0.000E+00	2.115E-03	1.156E-07	5.786E-12	0.000E+00	0.000E+00
RH107	0.000E+00	1.098E-02	2.037E-03	2.997E-04	1.423E-12	1.463E-22
PD107	0.000E+00	4.357E+02	4.358E+02	4.358E+02	4.358E+02	4.358E+02
AG107	0.000E+00	7.666E-05	7.666E-05	7.667E-05	7.672E-05	7.678E-05
TC108	0.000E+00	1.663E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU108	0.000E+00	1.588E-03	1.556E-07	1.508E-11	0.000E+00	0.000E+00
RH108	0.000E+00	9.976E-05	1.032E-08	1.000E-12	0.000E+00	0.000E+00
RH108M	0.000E+00	2.018E-05	1.752E-08	1.522E-11	0.000E+00	0.000E+00
PD108	0.000E+00	2.994E+02	2.994E+02	2.994E+02	2.994E+02	2.994E+02
CD108	0.000E+00	1.055E-03	1.055E-03	1.055E-03	1.055E-03	1.055E-03
TC109	0.000E+00	7.628E-05	4.309E-26	0.000E+00	0.000E+00	0.000E+00
RU109	0.000E+00	1.283E-04	9.427E-26	0.000E+00	0.000E+00	0.000E+00
RH109	0.000E+00	3.438E-04	1.245E-15	1.133E-27	0.000E+00	0.000E+00
RH109M	0.000E+00	9.551E-05	2.150E-24	0.000E+00	0.000E+00	0.000E+00
PD109	0.000E+00	2.595E-01	2.478E-01	2.354E-01	1.407E-01	7.583E-02
PD109M	0.000E+00	5.441E-04	1.534E-07	2.161E-11	0.000E+00	0.000E+00
AG109	0.000E+00	1.284E+02	1.284E+02	1.285E+02	1.285E+02	1.286E+02
AG109M	0.000E+00	2.120E-04	2.026E-04	1.924E-04	1.150E-04	6.198E-05
RU110	0.000E+00	2.559E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	0.000E+00	5.004E-05	4.624E-42	0.000E+00	0.000E+00	0.000E+00
PD110	0.000E+00	1.004E+02	1.004E+02	1.004E+02	1.004E+02	1.004E+02
AG110	0.000E+00	8.709E-05	3.342E-08	3.342E-08	3.338E-08	3.334E-08
AG110M	0.000E+00	2.206E+00	2.206E+00	2.205E+00	2.203E+00	2.200E+00
CD110	0.000E+00	1.142E+02	1.142E+02	1.142E+02	1.143E+02	1.143E+02
RU111	0.000E+00	1.069E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	0.000E+00	5.988E-05	4.666E-22	2.932E-39	0.000E+00	0.000E+00
PD111	0.000E+00	1.303E-03	2.194E-04	4.320E-05	3.446E-06	7.594E-07
PD111M	0.000E+00	3.216E-04	2.838E-04	2.502E-04	7.094E-05	1.563E-05
AG111	0.000E+00	6.493E-01	6.480E-01	6.457E-01	6.214E-01	5.932E-01

OUTPUT UNIT =
6

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
AG111M	0.000E+00	6.457E-05	1.155E-05	2.458E-06	2.431E-07	5.357E-08
CD111	0.000E+00	5.597E+01	5.597E+01	5.597E+01	5.600E+01	5.603E+01
PD112	0.000E+00	3.654E-02	3.530E-02	3.411E-02	2.416E-02	1.597E-02
AG112	0.000E+00	5.714E-03	5.689E-03	5.632E-03	4.385E-03	2.941E-03
CD112	0.000E+00	3.335E+01	3.336E+01	3.336E+01	3.337E+01	3.338E+01
PD113	0.000E+00	3.563E-05	3.309E-17	3.009E-29	0.000E+00	0.000E+00
AG113	0.000E+00	6.810E-03	6.004E-03	5.268E-03	1.425E-03	2.965E-04
CD113	0.000E+00	1.861E-01	1.869E-01	1.876E-01	1.914E-01	1.925E-01
CD113M	0.000E+00	5.778E-01	5.778E-01	5.778E-01	5.778E-01	5.778E-01
IN113	0.000E+00	3.971E-02	3.971E-02	3.972E-02	3.975E-02	3.978E-02
PD114	0.000E+00	3.868E-05	1.173E-12	3.497E-20	0.000E+00	0.000E+00
CD114	0.000E+00	4.217E+01	4.217E+01	4.217E+01	4.217E+01	4.217E+01
IN114M	0.000E+00	5.177E-04	5.174E-04	5.171E-04	5.141E-04	5.105E-04
SN114	0.000E+00	7.480E-03	7.480E-03	7.481E-03	7.483E-03	7.487E-03
PD115	0.000E+00	9.742E-06	3.264E-34	0.000E+00	0.000E+00	0.000E+00
AG115	0.000E+00	2.307E-04	2.984E-05	3.730E-06	3.474E-15	5.055E-26
CD115	0.000E+00	5.068E-02	5.024E-02	4.962E-02	4.359E-02	3.731E-02
CD115M	0.000E+00	9.581E-02	9.575E-02	9.569E-02	9.508E-02	9.434E-02
IN115	0.000E+00	2.392E+00	2.393E+00	2.394E+00	2.400E+00	2.408E+00
IN115M	0.000E+00	4.084E-03	4.080E-03	4.070E-03	3.758E-03	3.255E-03
SN115	0.000E+00	5.813E-01	5.813E-01	5.813E-01	5.816E-01	5.818E-01
AG116	0.000E+00	1.730E-05	3.428E-12	6.245E-19	0.000E+00	0.000E+00
CD116	0.000E+00	1.499E+01	1.499E+01	1.499E+01	1.499E+01	1.499E+01
IN116M	0.000E+00	3.800E-04	1.763E-04	8.178E-05	3.777E-08	3.754E-12
SN116	0.000E+00	1.552E+01	1.552E+01	1.552E+01	1.552E+01	1.552E+01
AG117	0.000E+00	7.776E-06	1.293E-20	2.027E-35	0.000E+00	0.000E+00
CD117	0.000E+00	1.326E-03	1.021E-03	7.823E-04	5.439E-05	2.219E-06
CD117M	0.000E+00	9.395E-04	7.680E-04	6.264E-04	8.155E-05	7.063E-06
IN117	0.000E+00	3.451E-04	3.335E-04	3.060E-04	4.463E-05	3.088E-06
IN117M	0.000E+00	1.156E-03	1.115E-03	1.017E-03	1.546E-04	9.622E-06
SN117	0.000E+00	1.511E+01	1.511E+01	1.511E+01	1.511E+01	1.511E+01
SN117M	0.000E+00	3.416E-03	3.409E-03	3.402E-03	3.333E-03	3.251E-03
CD118	0.000E+00	6.494E-04	2.846E-04	1.245E-04	3.194E-08	1.568E-12
SN118	0.000E+00	1.530E+01	1.530E+01	1.530E+01	1.530E+01	1.530E+01
CD119	0.000E+00	6.122E-05	7.420E-07	8.891E-09	5.423E-28	0.000E+00
CD119M	0.000E+00	2.084E-05	4.906E-11	1.113E-16	0.000E+00	0.000E+00
IN119	0.000E+00	9.372E-06	2.394E-07	2.499E-08	2.337E-18	2.125E-30
IN119M	0.000E+00	1.759E-04	3.006E-05	3.118E-06	2.898E-16	2.636E-28
SN119	0.000E+00	1.516E+01	1.516E+01	1.516E+01	1.516E+01	1.516E+01
SN119M	0.000E+00	8.026E-02	8.025E-02	8.024E-02	8.014E-02	8.003E-02
CD120	0.000E+00	1.091E-05	5.235E-27	0.000E+00	0.000E+00	0.000E+00
SN120	0.000E+00	1.551E+01	1.551E+01	1.551E+01	1.551E+01	1.551E+01
IN121M	0.000E+00	8.974E-06	3.208E-11	1.079E-16	0.000E+00	0.000E+00
SN121	0.000E+00	2.204E-02	2.149E-02	2.094E-02	1.617E-02	1.185E-02

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SN121M     0.000E+00 6.573E-03 6.573E-03 6.573E-03 6.573E-03 6.572E-03
SB121      0.000E+00 1.412E+01 1.412E+01 1.412E+01 1.413E+01 1.413E+01
SN122      0.000E+00 1.701E+01 1.701E+01 1.701E+01 1.701E+01 1.701E+01
SB122      0.000E+00 1.322E-02 1.308E-02 1.294E-02 1.163E-02 1.023E-02
TE122      0.000E+00 1.842E+00 1.842E+00 1.842E+00 1.844E+00 1.845E+00
SN123      0.000E+00 5.579E-01 5.578E-01 5.577E-01 5.564E-01 5.549E-01
SN123M     0.000E+00 5.230E-04 1.869E-04 6.621E-05 2.065E-09 8.083E-15
□
         OUTPUT UNIT =
6                          PAGE   64
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SB123      0.000E+00 1.730E+01 1.730E+01 1.730E+01 1.730E+01 1.730E+01
TE123      0.000E+00 2.741E-02 2.741E-02 2.741E-02 2.743E-02 2.745E-02
TE123M     0.000E+00 7.881E-03 7.879E-03 7.877E-03 7.858E-03 7.835E-03
SN124      0.000E+00 2.283E+01 2.283E+01 2.283E+01 2.283E+01 2.283E+01
SB124      0.000E+00 1.985E-01 1.984E-01 1.983E-01 1.973E-01 1.962E-01
TE124      0.000E+00 1.288E+00 1.289E+00 1.289E+00 1.290E+00 1.291E+00
SN125      0.000E+00 1.649E-01 1.644E-01 1.639E-01 1.591E-01 1.535E-01
SN125M     0.000E+00 1.829E-04 2.344E-06 2.970E-08 3.164E-27 0.000E+00
SB125      0.000E+00 2.175E+01 2.175E+01 2.175E+01 2.175E+01 2.175E+01
TE125      0.000E+00 1.253E+01 1.253E+01 1.253E+01 1.254E+01 1.255E+01
TE125M     0.000E+00 2.698E-01 2.698E-01 2.698E-01 2.699E-01 2.700E-01
SN126      0.000E+00 5.050E+01 5.050E+01 5.050E+01 5.050E+01 5.050E+01
SB126      0.000E+00 2.286E-02 2.281E-02 2.275E-02 2.223E-02 2.162E-02
SB126M     0.000E+00 8.810E-06 1.003E-06 1.286E-07 1.824E-08 1.824E-08
TE126      0.000E+00 1.713E+00 1.713E+00 1.713E+00 1.713E+00 1.714E+00
SN127      0.000E+00 7.478E-03 5.377E-03 3.865E-03 1.425E-04 2.713E-06
SN127M     0.000E+00 1.177E-04 5.024E-09 2.144E-13 0.000E+00 0.000E+00
SB127      0.000E+00 5.216E-01 5.199E-01 5.175E-01 4.836E-01 4.421E-01
TE127      0.000E+00 5.221E-02 5.220E-02 5.218E-02 5.114E-02 4.856E-02
TE127M     0.000E+00 1.922E+00 1.922E+00 1.922E+00 1.923E+00 1.922E+00
 I127      0.000E+00 9.496E+01 9.497E+01 9.497E+01 9.501E+01 9.506E+01
XE127      0.000E+00 7.919E-06 7.912E-06 7.906E-06 7.844E-06 7.769E-06
SN128      0.000E+00 7.821E-03 3.865E-03 1.910E-03 1.659E-06 3.517E-10
SB128      0.000E+00 7.281E-03 6.742E-03 6.243E-03 2.893E-03 1.149E-03
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SB128M     0.000E+00 1.517E-03 8.243E-04 4.087E-04 3.549E-07 7.526E-11
TE128      0.000E+00 2.007E+02 2.007E+02 2.007E+02 2.007E+02 2.007E+02
 I128      0.000E+00 5.029E-04 9.518E-05 1.801E-05 1.062E-12 2.242E-21
XE128      0.000E+00 1.073E+01 1.073E+01 1.073E+01 1.073E+01 1.073E+01
SN129      0.000E+00 6.860E-04 2.680E-06 1.047E-08 0.000E+00 0.000E+00
SN129M     0.000E+00 2.426E-04 1.447E-11 8.622E-19 0.000E+00 0.000E+00
SB129      0.000E+00 6.939E-02 5.991E-02 5.103E-02 1.025E-02 1.495E-03
TE129      0.000E+00 1.837E-02 1.767E-02 1.629E-02 5.043E-03 2.239E-03
TE129M     0.000E+00 1.907E+00 1.907E+00 1.906E+00 1.895E+00 1.877E+00
 I129      0.000E+00 3.114E+02 3.114E+02 3.114E+02 3.114E+02 3.115E+02
XE129      0.000E+00 1.004E-01 1.004E-01 1.004E-01 1.004E-01 1.004E-01
XE129M     0.000E+00 2.100E-04 2.093E-04 2.085E-04 2.011E-04 1.926E-04
SN130      0.000E+00 1.033E-03 1.442E-08 2.012E-13 0.000E+00 0.000E+00
SB130      0.000E+00 3.561E-03 1.259E-03 4.451E-04 1.358E-08 5.182E-14
SB130M     0.000E+00 2.333E-03 6.564E-06 8.975E-09 0.000E+00 0.000E+00
TE130      0.000E+00 6.375E+02 6.375E+02 6.375E+02 6.375E+02 6.375E+02
 I130      0.000E+00 4.046E-02 3.840E-02 3.631E-02 2.073E-02 1.057E-02
 I130M     0.000E+00 1.941E-04 1.911E-06 1.881E-08 1.606E-28 0.000E+00
XE130      0.000E+00 3.457E+01 3.457E+01 3.457E+01 3.459E+01 3.460E+01
SN131      0.000E+00 2.438E-04 1.532E-21 9.630E-39 0.000E+00 0.000E+00
SB131      0.000E+00 1.456E-02 2.429E-03 3.983E-04 5.588E-12 2.107E-21
TE131      0.000E+00 1.715E-02 8.176E-03 2.783E-03 5.039E-04 3.819E-04
TE131M     0.000E+00 2.116E-01 2.076E-01 2.030E-01 1.612E-01 1.221E-01
 I131      0.000E+00 9.020E+00 9.013E+00 8.992E+00 8.719E+00 8.389E+00
XE131      0.000E+00 5.590E+02 5.590E+02 5.591E+02 5.594E+02 5.598E+02
XE131M     0.000E+00 1.494E-01 1.494E-01 1.494E-01 1.493E-01 1.490E-01
SN132      0.000E+00 7.919E-05 6.397E-32 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE   65
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SB132      0.000E+00 1.016E-03 3.969E-10 1.406E-16 0.000E+00 0.000E+00
SB132M     0.000E+00 1.024E-03 5.126E-08 2.567E-12 0.000E+00 0.000E+00
TE132      0.000E+00 5.140E+00 5.097E+00 5.052E+00 4.623E+00 4.157E+00
 I132      0.000E+00 1.542E-01 1.533E-01 1.522E-01 1.401E-01 1.260E-01
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XE132	0.000E+00	2.109E+03	2.109E+03	2.110E+03	2.110E+03
CS132	0.000E+00	3.120E-03	3.106E-03	2.957E-03	2.803E-03
BA132	0.000E+00	4.493E-03	4.493E-03	4.496E-03	4.499E-03
SB133	0.000E+00	9.576E-04	2.856E-11	8.513E-19	0.000E+00	0.000E+00
TE133	0.000E+00	1.119E-02	9.092E-04	2.549E-04	1.322E-07	1.618E-11
TE133M	0.000E+00	2.865E-02	1.353E-02	6.388E-03	3.508E-06	4.294E-10
I133	0.000E+00	1.909E+00	1.872E+00	1.818E+00	1.308E+00	8.769E-01
I133M	0.000E+00	8.066E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	0.000E+00	1.159E+01	1.159E+01	1.159E+01	1.148E+01	1.117E+01
XE133M	0.000E+00	1.551E-01	1.549E-01	1.546E-01	1.494E-01	1.390E-01
CS133	0.000E+00	1.725E+03	1.725E+03	1.725E+03	1.726E+03	1.727E+03
SB134	0.000E+00	1.355E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	0.000E+00	1.217E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	0.000E+00	4.853E-02	1.795E-02	6.638E-03	3.170E-07	2.069E-12
I134	0.000E+00	8.786E-02	6.001E-02	3.454E-02	2.309E-05	1.856E-09
I134M	0.000E+00	7.046E-04	9.255E-09	1.216E-13	0.000E+00	0.000E+00
XE134	0.000E+00	2.576E+03	2.576E+03	2.576E+03	2.576E+03	2.576E+03
CS134	0.000E+00	3.136E+02	3.136E+02	3.136E+02	3.135E+02	3.134E+02
CS134M	0.000E+00	1.250E-02	9.846E-03	7.752E-03	7.102E-04	4.034E-05
BA134	0.000E+00	1.684E+02	1.684E+02	1.685E+02	1.686E+02	1.687E+02
TE135	0.000E+00	2.021E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	5.768E-01	5.196E-01	4.679E-01	1.640E-01	4.660E-02
XE135	0.000E+00	1.819E-01	2.254E-01	2.590E-01	3.206E-01	1.986E-01
XE135M	0.000E+00	4.943E-03	3.299E-03	2.895E-03	1.012E-03	2.877E-04
CS135	0.000E+00	6.605E+02	6.605E+02	6.605E+02	6.607E+02	6.610E+02
CS135M	0.000E+00	3.352E-03	1.529E-03	6.978E-04	2.728E-07	2.220E-11
BA135	0.000E+00	2.333E+00	2.333E+00	2.333E+00	2.333E+00	2.333E+00
BA135M	0.000E+00	6.364E-04	6.212E-04	6.063E-04	4.762E-04	3.564E-04
TE136	0.000E+00	1.124E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	9.440E-04	9.599E-17	8.424E-30	0.000E+00	0.000E+00
I136M	0.000E+00	3.036E-04	8.382E-28	0.000E+00	0.000E+00	0.000E+00
XE136	0.000E+00	4.017E+03	4.017E+03	4.017E+03	4.017E+03	4.017E+03
CS136	0.000E+00	1.572E+00	1.569E+00	1.566E+00	1.531E+00	1.491E+00
BA136	0.000E+00	5.650E+01	5.651E+01	5.651E+01	5.655E+01	5.659E+01
I137	0.000E+00	2.649E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	5.231E-03	1.062E-07	2.043E-12	0.000E+00	0.000E+00
CS137	0.000E+00	2.058E+03	2.058E+03	2.058E+03	2.058E+03	2.058E+03
BA137	0.000E+00	1.143E+02	1.144E+02	1.144E+02	1.144E+02	1.145E+02
BA137M	0.000E+00	3.154E-04	3.149E-04	3.148E-04	3.148E-04	3.148E-04
I138	0.000E+00	3.373E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	0.000E+00	1.757E-02	9.354E-04	4.970E-05	8.909E-18	4.508E-33
CS138	0.000E+00	4.492E-02	1.936E-02	5.692E-03	1.421E-08	2.640E-15
CS138M	0.000E+00	2.120E-04	1.254E-10	7.413E-17	0.000E+00	0.000E+00
BA138	0.000E+00	2.220E+03	2.220E+03	2.220E+03	2.220E+03	2.220E+03
LA138	0.000E+00	7.450E-03	7.450E-03	7.450E-03	7.450E-03	7.450E-03
XE139	0.000E+00	6.293E-04	2.328E-31	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.248E-02	1.578E-04	1.890E-06	1.153E-25	0.000E+00

OUTPUT UNIT = 6 PAGE 66
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA139	0.000E+00	1.145E-01	7.804E-02	4.730E-02	3.097E-04	7.422E-07
LA139	0.000E+00	2.102E+03	2.102E+03	2.102E+03	2.103E+03	2.103E+03
XE140	0.000E+00	1.369E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	0.000E+00	1.277E-03	1.499E-20	1.548E-37	0.000E+00	0.000E+00
BA140	0.000E+00	2.474E+01	2.468E+01	2.463E+01	2.408E+01	2.343E+01
LA140	0.000E+00	3.439E+00	3.435E+00	3.432E+00	3.393E+00	3.341E+00
CE140	0.000E+00	2.132E+03	2.132E+03	2.132E+03	2.133E+03	2.134E+03
XE141	0.000E+00	6.177E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	0.000E+00	3.687E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	0.000E+00	2.322E-02	2.422E-03	2.486E-04	3.218E-14	4.387E-26
LA141	0.000E+00	3.014E-01	2.715E-01	2.296E-01	3.940E-02	4.748E-03
CE141	0.000E+00	6.048E+01	6.048E+01	6.047E+01	6.013E+01	5.952E+01
PR141	0.000E+00	1.852E+03	1.852E+03	1.852E+03	1.852E+03	1.853E+03
CS142	0.000E+00	1.480E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	0.000E+00	1.278E-02	2.624E-04	5.382E-06	7.091E-23	3.980E-43
LA142	0.000E+00	1.137E-01	8.153E-02	5.224E-02	5.883E-04	2.701E-06
CE142	0.000E+00	1.952E+03	1.952E+03	1.952E+03	1.952E+03	1.952E+03
PR142	0.000E+00	1.463E-01	1.415E-01	1.364E-01	9.497E-02	6.148E-02
PR142M	0.000E+00	3.647E-04	2.112E-05	1.224E-06	5.207E-19	7.435E-34
ND142	0.000E+00	7.714E+01	7.715E+01	7.715E+01	7.720E+01	7.723E+01
CS143	0.000E+00	6.956E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	0.000E+00	2.336E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	0.000E+00	1.612E-02	8.389E-04	4.301E-05	5.399E-18	1.781E-33
CE143	0.000E+00	2.300E+00	2.268E+00	2.221E+00	1.801E+00	1.399E+00
PR143	0.000E+00	2.250E+01	2.250E+01	2.250E+01	2.244E+01	2.227E+01
ND143	0.000E+00	1.102E+03	1.102E+03	1.102E+03	1.102E+03	1.103E+03
BA144	0.000E+00	1.388E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	0.000E+00	6.714E-04	6.986E-31	0.000E+00	0.000E+00	0.000E+00
CE144	0.000E+00	3.927E+02	3.927E+02	3.926E+02	3.922E+02	3.917E+02
PR144	0.000E+00	1.676E-02	1.660E-02	1.658E-02	1.656E-02	1.654E-02
PR144M	0.000E+00	8.299E-05	8.288E-05	8.287E-05	8.279E-05	8.269E-05
ND144	0.000E+00	2.106E+03	2.106E+03	2.106E+03	2.107E+03	2.107E+03

BA145	0.000E+00	4.184E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	0.000E+00	3.621E-04	1.768E-41	0.000E+00	0.000E+00	0.000E+00
CE145	0.000E+00	2.433E-03	2.781E-09	2.653E-15	0.000E+00	0.000E+00
PR145	0.000E+00	2.911E-01	2.618E-01	2.332E-01	7.317E-02	1.821E-02
ND145	0.000E+00	1.061E+03	1.062E+03	1.062E+03	1.062E+03	1.062E+03
LA146	0.000E+00	6.911E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	0.000E+00	9.450E-03	5.092E-04	2.722E-05	5.193E-18	2.831E-33
PR146	0.000E+00	1.618E-02	5.802E-03	1.196E-03	4.338E-11	4.798E-20
ND146	0.000E+00	1.303E+03	1.303E+03	1.303E+03	1.303E+03	1.303E+03
PM146	0.000E+00	1.095E-02	1.095E-02	1.095E-02	1.095E-02	1.095E-02
SM146	0.000E+00	1.669E-02	1.669E-02	1.669E-02	1.669E-02	1.669E-02
LA147	0.000E+00	4.144E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	0.000E+00	6.114E-04	2.182E-19	7.201E-35	0.000E+00	0.000E+00
PR147	0.000E+00	6.475E-03	2.250E-04	7.032E-06	6.245E-21	5.417E-39
ND147	0.000E+00	8.675E+00	8.659E+00	8.637E+00	8.414E+00	8.155E+00
PM147	0.000E+00	1.266E+02	1.266E+02	1.266E+02	1.268E+02	1.270E+02
SM147	0.000E+00	9.502E+01	9.503E+01	9.503E+01	9.507E+01	9.512E+01
CE148	0.000E+00	2.824E-04	1.790E-29	0.000E+00	0.000E+00	0.000E+00
PR148	0.000E+00	1.014E-03	2.004E-11	2.811E-19	0.000E+00	0.000E+00

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
ND148	0.000E+00	6.451E+02	6.451E+02	6.451E+02	6.451E+02	6.451E+02
PM148	0.000E+00	1.848E+00	1.838E+00	1.828E+00	1.733E+00	1.625E+00
PM148M	0.000E+00	1.415E+00	1.414E+00	1.413E+00	1.403E+00	1.391E+00
SM148	0.000E+00	3.761E+02	3.762E+02	3.762E+02	3.763E+02	3.764E+02
PR149	0.000E+00	7.350E-04	1.038E-11	1.457E-19	0.000E+00	0.000E+00
ND149	0.000E+00	3.627E-02	2.480E-02	1.661E-02	3.023E-04	2.468E-06
PM149	0.000E+00	1.829E+00	1.817E+00	1.802E+00	1.596E+00	1.365E+00
SM149	0.000E+00	2.732E+00	2.755E+00	2.779E+00	3.001E+00	3.233E+00
PR150	0.000E+00	4.642E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND150	0.000E+00	3.177E+02	3.177E+02	3.177E+02	3.177E+02	3.177E+02
PM150	0.000E+00	1.339E-03	1.034E-03	7.982E-04	6.010E-05	2.698E-06
SM150	0.000E+00	5.343E+02	5.343E+02	5.343E+02	5.343E+02	5.343E+02

PR151	0.000E+00	8.549E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	0.000E+00	2.437E-03	8.548E-05	2.987E-06	8.115E-21	2.692E-38
PM151	0.000E+00	3.347E-01	3.290E-01	3.211E-01	2.515E-01	1.877E-01
SM151	0.000E+00	2.272E+01	2.272E+01	2.273E+01	2.280E+01	2.286E+01
EU151	0.000E+00	1.357E-02	1.359E-02	1.361E-02	1.381E-02	1.406E-02
PR152	0.000E+00	8.034E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	0.000E+00	1.575E-03	4.260E-05	1.145E-06	2.254E-22	3.195E-41
PM152	0.000E+00	5.780E-04	2.359E-05	6.353E-07	1.249E-22	1.768E-41
PM152M	0.000E+00	2.070E-05	8.087E-08	3.159E-10	0.000E+00	0.000E+00
SM152	0.000E+00	1.855E+02	1.855E+02	1.855E+02	1.855E+02	1.855E+02
EU152	0.000E+00	5.186E-02	5.186E-02	5.186E-02	5.185E-02	5.185E-02
EU152M	0.000E+00	7.151E-05	6.638E-05	6.162E-05	2.929E-05	1.200E-05
GD152	0.000E+00	9.028E-02	9.028E-02	9.028E-02	9.031E-02	9.032E-02
ND153	0.000E+00	9.221E-05	8.557E-21	7.707E-37	0.000E+00	0.000E+00
PM153	0.000E+00	5.051E-04	2.825E-07	1.277E-10	0.000E+00	0.000E+00
SM153	0.000E+00	1.858E+00	1.831E+00	1.804E+00	1.555E+00	1.302E+00
EU153	0.000E+00	2.254E+02	2.254E+02	2.255E+02	2.257E+02	2.260E+02
GD153	0.000E+00	1.121E-02	1.121E-02	1.121E-02	1.119E-02	1.118E-02
ND154	0.000E+00	2.985E-05	2.421E-32	0.000E+00	0.000E+00	0.000E+00
PM154	0.000E+00	1.552E-04	7.067E-11	2.504E-17	0.000E+00	0.000E+00
PM154M	0.000E+00	1.745E-05	1.613E-15	1.490E-25	0.000E+00	0.000E+00
SM154	0.000E+00	7.192E+01	7.192E+01	7.192E+01	7.192E+01	7.192E+01
EU154	0.000E+00	8.510E+01	8.510E+01	8.510E+01	8.509E+01	8.508E+01
GD154	0.000E+00	9.244E+00	9.244E+00	9.245E+00	9.253E+00	9.262E+00
ND155	0.000E+00	7.705E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	0.000E+00	2.204E-05	1.117E-34	0.000E+00	0.000E+00	0.000E+00
SM155	0.000E+00	1.001E-03	1.585E-04	2.435E-05	1.780E-13	3.072E-23
EU155	0.000E+00	3.357E+01	3.357E+01	3.357E+01	3.356E+01	3.355E+01
GD155	0.000E+00	2.311E-01	2.316E-01	2.322E-01	2.375E-01	2.439E-01
ND156	0.000E+00	6.467E-06	1.918E-24	6.558E-43	0.000E+00	0.000E+00
SM156	0.000E+00	1.581E-02	1.469E-02	1.365E-02	6.529E-03	2.695E-03
EU156	0.000E+00	9.165E+00	9.148E+00	9.132E+00	8.967E+00	8.768E+00
GD156	0.000E+00	2.067E+02	2.067E+02	2.067E+02	2.069E+02	2.071E+02
PM157	0.000E+00	1.170E-05	1.384E-21	1.618E-37	0.000E+00	0.000E+00
SM157	0.000E+00	1.507E-04	9.087E-07	5.021E-09	0.000E+00	0.000E+00
EU157	0.000E+00	4.034E-02	3.870E-02	3.698E-02	2.344E-02	1.356E-02
GD157	0.000E+00	2.405E-01	2.423E-01	2.440E-01	2.575E-01	2.674E-01
SM158	0.000E+00	4.569E-04	1.776E-04	6.899E-05	5.398E-09	6.375E-14
EU158	0.000E+00	5.127E-04	3.785E-04	2.195E-04	8.808E-08	2.596E-12

OUTPUT UNIT =
6 PAGE 68
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
GD158	0.000E+00	4.992E+01	4.992E+01	4.992E+01	4.992E+01	4.992E+01
SM159	0.000E+00	1.347E-05	2.818E-12	5.871E-19	0.000E+00	0.000E+00
EU159	0.000E+00	1.094E-04	1.259E-05	1.265E-06	1.328E-16	1.408E-28
GD159	0.000E+00	1.145E-02	1.114E-02	1.075E-02	7.405E-03	4.735E-03
TB159	0.000E+00	5.402E+00	5.402E+00	5.403E+00	5.406E+00	5.409E+00
SM160	0.000E+00	1.056E-05	8.311E-09	6.537E-12	0.000E+00	0.000E+00
GD160	0.000E+00	2.563E+00	2.563E+00	2.563E+00	2.563E+00	2.563E+00
TB160	0.000E+00	2.531E-01	2.530E-01	2.529E-01	2.519E-01	2.507E-01
DY160	0.000E+00	6.352E-01	6.353E-01	6.354E-01	6.365E-01	6.377E-01
TB161	0.000E+00	2.071E-02	2.063E-02	2.054E-02	1.970E-02	1.874E-02
DY161	0.000E+00	8.606E-01	8.607E-01	8.608E-01	8.616E-01	8.626E-01
GD162	0.000E+00	6.518E-06	1.474E-07	2.307E-09	2.001E-27	0.000E+00
DY162	0.000E+00	7.106E-01	7.106E-01	7.106E-01	7.106E-01	7.106E-01
DY163	0.000E+00	7.355E-01	7.355E-01	7.355E-01	7.355E-01	7.355E-01
DY164	0.000E+00	1.849E-01	1.849E-01	1.849E-01	1.849E-01	1.849E-01
DY165	0.000E+00	1.932E-04	1.447E-04	1.078E-04	5.642E-06	1.638E-07
HO165	0.000E+00	4.638E-01	4.638E-01	4.639E-01	4.640E-01	4.640E-01
DY166	0.000E+00	2.122E-04	2.104E-04	2.087E-04	1.916E-04	1.731E-04
HO166	0.000E+00	6.762E-04	6.607E-04	6.456E-04	5.134E-04	3.924E-04
HO166M	0.000E+00	7.134E-03	7.134E-03	7.134E-03	7.134E-03	7.134E-03
ER166	0.000E+00	1.557E-01	1.557E-01	1.557E-01	1.559E-01	1.560E-01
ER167	0.000E+00	7.358E-03	7.358E-03	7.358E-03	7.358E-03	7.358E-03
ER168	0.000E+00	1.715E-02	1.715E-02	1.715E-02	1.715E-02	1.715E-02
ER169	0.000E+00	9.385E-06	9.356E-06	9.327E-06	9.045E-06	8.717E-06
TM169	0.000E+00	1.569E-04	1.569E-04	1.570E-04	1.573E-04	1.576E-04
TM170	0.000E+00	3.531E-05	3.531E-05	3.530E-05	3.522E-05	3.512E-05
YB170	0.000E+00	5.106E-05	5.107E-05	5.108E-05	5.115E-05	5.125E-05
SUMTOT	0.000E+00	5.994E+04	5.994E+04	5.994E+04	5.994E+04	5.994E+04
TOTAL	0.000E+00	5.994E+04	5.994E+04	5.994E+04	5.994E+04	5.994E+04

OUTPUT UNIT = 6 PAGE 69
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	0.000E+00	9.811E-02	9.811E-02	9.811E-02	9.810E-02	9.809E-02
LI	0.000E+00	2.337E-04	2.337E-04	2.337E-04	2.337E-04	2.337E-04
BE	0.000E+00	2.625E-04	2.625E-04	2.625E-04	2.625E-04	2.625E-04
C	0.000E+00	4.616E-05	4.616E-05	4.616E-05	4.616E-05	4.616E-05
ZN	0.000E+00	1.172E-02	1.172E-02	1.172E-02	1.171E-02	1.169E-02
GA	0.000E+00	6.124E-05	5.665E-05	5.444E-05	4.251E-05	3.713E-05
GE	0.000E+00	1.145E+00	1.145E+00	1.145E+00	1.145E+00	1.145E+00
AS	0.000E+00	3.442E-01	3.441E-01	3.440E-01	3.435E-01	3.432E-01
SE	0.000E+00	9.616E+01	9.616E+01	9.616E+01	9.616E+01	9.616E+01
BR	0.000E+00	3.570E+01	3.570E+01	3.569E+01	3.569E+01	3.569E+01
KR	0.000E+00	6.159E+02	6.159E+02	6.158E+02	6.158E+02	6.158E+02
RB	0.000E+00	5.693E+02	5.693E+02	5.693E+02	5.693E+02	5.693E+02
SR	0.000E+00	1.468E+03	1.467E+03	1.467E+03	1.467E+03	1.467E+03
Y	0.000E+00	7.705E+02	7.705E+02	7.705E+02	7.703E+02	7.702E+02
ZR	0.000E+00	6.018E+03	6.018E+03	6.018E+03	6.018E+03	6.017E+03
NB	0.000E+00	4.266E+01	4.266E+01	4.266E+01	4.263E+01	4.261E+01
MO	0.000E+00	5.667E+03	5.667E+03	5.667E+03	5.667E+03	5.667E+03
TC	0.000E+00	1.242E+03	1.242E+03	1.242E+03	1.243E+03	1.243E+03
RU	0.000E+00	4.409E+03	4.409E+03	4.409E+03	4.408E+03	4.407E+03
RH	0.000E+00	5.575E+02	5.575E+02	5.576E+02	5.578E+02	5.581E+02
PD	0.000E+00	2.690E+03	2.690E+03	2.690E+03	2.690E+03	2.691E+03
AG	0.000E+00	1.313E+02	1.313E+02	1.313E+02	1.314E+02	1.314E+02
CD	0.000E+00	2.616E+02	2.616E+02	2.617E+02	2.617E+02	2.617E+02
IN	0.000E+00	2.439E+00	2.439E+00	2.439E+00	2.445E+00	2.451E+00
SN	0.000E+00	1.684E+02	1.684E+02	1.684E+02	1.684E+02	1.683E+02
SB	0.000E+00	5.403E+01	5.400E+01	5.399E+01	5.391E+01	5.386E+01
TE	0.000E+00	8.652E+02	8.651E+02	8.650E+02	8.645E+02	8.640E+02
I	0.000E+00	4.181E+02	4.180E+02	4.178E+02	4.168E+02	4.160E+02
XE	0.000E+00	9.319E+03	9.319E+03	9.319E+03	9.320E+03	9.320E+03
CS	0.000E+00	4.759E+03	4.759E+03	4.759E+03	4.759E+03	4.760E+03
BA	0.000E+00	2.587E+03	2.587E+03	2.587E+03	2.586E+03	2.586E+03
LA	0.000E+00	2.106E+03	2.106E+03	2.106E+03	2.106E+03	2.106E+03
CE	0.000E+00	4.540E+03	4.540E+03	4.540E+03	4.540E+03	4.539E+03
PR	0.000E+00	1.875E+03	1.875E+03	1.875E+03	1.875E+03	1.875E+03
ND	0.000E+00	6.621E+03	6.621E+03	6.621E+03	6.622E+03	6.622E+03
PM	0.000E+00	1.320E+02	1.320E+02	1.320E+02	1.318E+02	1.316E+02
SM	0.000E+00	1.290E+03	1.290E+03	1.290E+03	1.290E+03	1.291E+03
EU	0.000E+00	3.533E+02	3.533E+02	3.534E+02	3.534E+02	3.534E+02
GD	0.000E+00	2.690E+02	2.690E+02	2.690E+02	2.692E+02	2.694E+02
TB	0.000E+00	5.676E+00	5.676E+00	5.676E+00	5.678E+00	5.678E+00
DY	0.000E+00	3.127E+00	3.127E+00	3.128E+00	3.129E+00	3.131E+00

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HO          0.000E+00 4.716E-01 4.716E-01 4.716E-01 4.716E-01 4.715E-01
ER          0.000E+00 1.802E-01 1.802E-01 1.802E-01 1.804E-01 1.805E-01
TM          0.000E+00 1.971E-04 1.971E-04 1.971E-04 1.973E-04 1.976E-04
YB          0.000E+00 5.617E-05 5.618E-05 5.619E-05 5.627E-05 5.636E-05
SUMTOT      0.000E+00 5.994E+04 5.994E+04 5.994E+04 5.994E+04 5.994E+04

TOTAL       0.000E+00 5.994E+04 5.994E+04 5.994E+04 5.994E+04 5.994E+04

                                                CUMULATIVE TABLE TOTALS

AP+FP       1.348E+05 1.948E+05 1.948E+05 1.948E+05 1.948E+05 1.948E+05
ACT+FP      1.000E+06 1.001E+06 1.001E+06 1.001E+06 1.001E+06 1.001E+06
AP+ACT+FP   1.135E+06 1.136E+06 1.136E+06 1.136E+06 1.136E+06 1.136E+06
□
         OUTPUT UNIT =
6                           PAGE   70
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
            FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3       0.000E+00 9.471E+02 9.471E+02 9.471E+02 9.471E+02 9.470E+02
ZN 69       0.000E+00 4.145E-02 2.139E-02 1.164E-02 1.642E-03 8.933E-04
CO 72       0.000E+00 1.996E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 72       0.000E+00 3.764E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 72       0.000E+00 7.432E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 72       0.000E+00 8.826E+01 8.696E+01 8.567E+01 7.381E+01 6.172E+01
GA 72       0.000E+00 8.858E+01 8.853E+01 8.843E+01 8.481E+01 7.687E+01
CO 73       0.000E+00 6.551E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 73       0.000E+00 3.166E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 73       0.000E+00 9.448E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 73       0.000E+00 1.565E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 73       0.000E+00 1.657E+02 1.439E+02 1.249E+02 3.018E+01 5.489E+00
GE 73M      0.000E+00 1.658E+02 1.439E+02 1.249E+02 3.018E+01 5.490E+00
CO 74       0.000E+00 1.237E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 74       0.000E+00 1.817E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 74       0.000E+00 1.191E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 74       0.000E+00 2.838E+02 1.114E-09 4.359E-21 0.000E+00 0.000E+00
GA 74       0.000E+00 3.059E+02 2.209E+00 1.301E-02 0.000E+00 0.000E+00
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NI 75       0.000E+00 7.312E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 75       0.000E+00 1.149E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 75       0.000E+00 5.012E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 75       0.000E+00 6.142E+02 2.051E-07 6.395E-17 0.000E+00 0.000E+00
GE 75       0.000E+00 6.239E+02 3.870E+02 2.342E+02 1.543E+00 3.721E-03
GE 75M      0.000E+00 2.906E+01 1.437E-08 4.479E-18 0.000E+00 0.000E+00
NI 76       0.000E+00 1.834E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 76       0.000E+00 8.148E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 76       0.000E+00 7.798E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 76       0.000E+00 1.224E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 76       0.000E+00 7.951E+01 7.744E+01 7.543E+01 5.797E+01 4.226E+01
NI 77       0.000E+00 3.187E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 77       0.000E+00 3.798E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 77       0.000E+00 8.392E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 77       0.000E+00 2.123E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 77       0.000E+00 1.018E+03 9.582E+02 9.012E+02 4.880E+02 2.338E+02
GE 77M      0.000E+00 2.162E+03 3.059E-17 0.000E+00 0.000E+00 0.000E+00
AS 77       0.000E+00 2.739E+03 2.709E+03 2.677E+03 2.349E+03 1.961E+03
SE 77M      0.000E+00 9.559E+00 6.719E+00 6.641E+00 5.825E+00 4.865E+00
NI 78       0.000E+00 3.710E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 78       0.000E+00 1.337E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 78       0.000E+00 7.653E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 78       0.000E+00 3.468E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 78       0.000E+00 6.289E+03 3.901E+03 2.419E+03 2.030E+01 6.554E-02
AS 78       0.000E+00 6.510E+03 5.922E+03 4.864E+03 1.524E+02 1.028E+00
CU 79       0.000E+00 4.442E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 79       0.000E+00 5.766E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 79       0.000E+00 4.164E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 79       0.000E+00 1.299E+04 8.341E-22 0.000E+00 0.000E+00 0.000E+00
AS 79       0.000E+00 1.512E+04 1.602E+02 1.576E+00 1.346E-20 0.000E+00
SE 79       0.000E+00 7.066E-01 7.066E-01 7.066E-01 7.066E-01 7.066E-01
SE 79M      0.000E+00 1.520E+04 2.818E+02 2.783E+00 2.370E-20 0.000E+00
BR 79M      0.000E+00 2.623E-02 0.000E+00 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 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
```

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CU 80	0.000E+00	4.569E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 80	0.000E+00	1.954E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 80	0.000E+00	3.707E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 80	0.000E+00	2.323E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 80	0.000E+00	3.183E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 80	0.000E+00	1.256E+00	7.584E-01	6.194E-01	1.284E-01	1.954E-02
BR 80M	0.000E+00	7.876E-01	6.733E-01	5.756E-01	1.199E-01	1.826E-02
CU 81	0.000E+00	3.474E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 81	0.000E+00	4.766E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 81	0.000E+00	2.238E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 81	0.000E+00	2.621E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 81	0.000E+00	4.884E+04	8.307E-30	0.000E+00	0.000E+00	0.000E+00
SE 81	0.000E+00	5.321E+04	6.566E+03	1.064E+03	3.344E-01	5.516E-05
SE 81M	0.000E+00	1.372E+03	6.641E+02	3.214E+02	2.264E-01	3.735E-05
KR 81M	0.000E+00	6.142E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 82	0.000E+00	6.492E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 82	0.000E+00	8.628E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 82	0.000E+00	2.151E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82	0.000E+00	3.845E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82M	0.000E+00	1.692E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 82	0.000E+00	1.127E+04	1.106E+04	1.085E+04	8.913E+03	7.042E+03
BR 82M	0.000E+00	4.378E+03	4.953E+00	5.591E-03	0.000E+00	0.000E+00
ZN 83	0.000E+00	6.213E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 83	0.000E+00	2.457E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 83	0.000E+00	1.516E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 83	0.000E+00	6.463E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	0.000E+00	4.564E+04	7.227E+03	1.138E+03	1.068E-05	2.487E-15
SE 83M	0.000E+00	6.458E+04	2.468E-11	8.144E-27	0.000E+00	0.000E+00
BR 83	0.000E+00	1.135E+05	9.042E+04	6.845E+04	3.777E+03	1.163E+02
KR 83M	0.000E+00	1.144E+05	1.104E+05	1.003E+05	1.175E+04	4.500E+02
GA 84	0.000E+00	3.645E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 84	0.000E+00	5.743E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 84	0.000E+00	5.382E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	0.000E+00	1.777E+05	6.029E-01	2.028E-06	0.000E+00	0.000E+00
BR 84	0.000E+00	1.863E+05	5.600E+04	1.514E+04	3.165E-02	4.837E-09
BR 84M	0.000E+00	8.848E+03	8.641E+00	8.439E-03	0.000E+00	0.000E+00
GE 85	0.000E+00	1.300E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 85	0.000E+00	2.942E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 85	0.000E+00	9.714E+04	1.606E-23	0.000E+00	0.000E+00	0.000E+00
SE 85M	0.000E+00	7.303E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	0.000E+00	2.198E+05	1.290E-01	6.454E-08	0.000E+00	0.000E+00
KR 85	0.000E+00	1.470E+04	1.470E+04	1.470E+04	1.470E+04	1.470E+04
KR 85M	0.000E+00	2.234E+05	1.937E+05	1.659E+05	3.533E+04	5.519E+03
GE 86	0.000E+00	2.512E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 86	0.000E+00	1.522E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 86	0.000E+00	1.804E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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BR 86       0.000E+00 1.513E+05 3.767E-15 0.000E+00 0.000E+00 0.000E+00
BR 86M      0.000E+00 1.516E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 86       0.000E+00 4.413E+03 4.406E+03 4.399E+03 4.332E+03 4.252E+03
RB 86M      0.000E+00 4.272E+02 7.730E-16 1.295E-33 0.000E+00 0.000E+00
GE 87       0.000E+00 3.287E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE   72
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

AS 87       0.000E+00 6.824E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 87       0.000E+00 1.538E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 87       0.000E+00 3.447E+05 1.372E-14 5.669E-34 0.000E+00 0.000E+00
KR 87       0.000E+00 4.102E+05 2.404E+05 1.394E+05 5.984E+02 8.618E-01
SR 87M      0.000E+00 1.996E+01 1.559E+01 1.218E+01 1.029E+00 5.308E-02
GE 88       0.000E+00 1.663E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 88       0.000E+00 7.563E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 88       0.000E+00 5.799E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 88       0.000E+00 3.443E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 88       0.000E+00 5.747E+05 4.506E+05 3.530E+05 3.072E+04 1.640E+03
RB 88       0.000E+00 5.886E+05 4.980E+05 3.937E+05 3.430E+04 1.832E+03
AS 89       0.000E+00 8.493E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 89       0.000E+00 1.738E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 89       0.000E+00 2.219E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 89       0.000E+00 6.759E+05 1.369E+00 2.745E-06 0.000E+00 0.000E+00
RB 89       0.000E+00 7.422E+05 5.975E+04 3.873E+03 5.073E-09 2.792E-23
SR 89       0.000E+00 7.799E+05 7.796E+05 7.792E+05 7.748E+05 7.695E+05
 Y 89M      0.000E+00 7.182E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 90       0.000E+00 4.923E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 90       0.000E+00 1.334E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 90       0.000E+00 6.637E+05 1.974E-28 0.000E+00 0.000E+00 0.000E+00
RB 90       0.000E+00 7.063E+05 1.414E+00 8.166E-05 0.000E+00 0.000E+00
RB 90M      0.000E+00 1.828E+05 1.226E+01 7.728E-04 0.000E+00 0.000E+00
SR 90       0.000E+00 1.172E+05 1.172E+05 1.172E+05 1.172E+05 1.172E+05
 Y 90       0.000E+00 1.243E+05 1.242E+05 1.241E+05 1.234E+05 1.227E+05
 Y 90M      0.000E+00 2.473E+01 1.977E+01 1.581E+01 1.690E+00 1.155E-01
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SE 91	0.000E+00	8.457E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 91	0.000E+00	4.995E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 91	0.000E+00	4.932E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	0.000E+00	9.184E+05	2.410E-13	5.788E-32	0.000E+00	0.000E+00
SR 91	0.000E+00	1.010E+06	9.403E+05	8.741E+05	4.214E+05	1.756E+05
Y 91	0.000E+00	1.055E+06	1.054E+06	1.054E+06	1.052E+06	1.048E+06
Y 91M	0.000E+00	5.864E+05	5.731E+05	5.449E+05	2.679E+05	1.116E+05
SE 92	0.000E+00	5.563E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 92	0.000E+00	7.547E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 92	0.000E+00	2.600E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	0.000E+00	8.213E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 92	0.000E+00	1.140E+06	8.833E+05	6.839E+05	5.299E+04	2.462E+03
Y 92	0.000E+00	1.148E+06	1.122E+06	1.060E+06	2.917E+05	3.628E+04
BR 93	0.000E+00	1.231E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 93	0.000E+00	9.909E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 93	0.000E+00	6.327E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 93	0.000E+00	1.349E+06	5.303E+03	2.072E+01	0.000E+00	0.000E+00
Y 93	0.000E+00	1.391E+06	1.315E+06	1.228E+06	6.181E+05	2.713E+05
ZR 93	0.000E+00	3.029E+00	3.029E+00	3.029E+00	3.029E+00	3.029E+00
NB 93M	0.000E+00	3.523E-01	3.523E-01	3.523E-01	3.525E-01	3.527E-01
BR 94	0.000E+00	1.087E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 94	0.000E+00	3.069E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 94	0.000E+00	3.409E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 94	0.000E+00	1.292E+06	6.030E-09	2.790E-23	0.000E+00	0.000E+00
Y 94	0.000E+00	1.443E+06	1.740E+05	1.971E+04	6.892E-06	3.095E-17

OUTPUT UNIT = 6

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
NB 94M	0.000E+00	1.619E+00	2.108E-03	2.741E-06	0.000E+00	0.000E+00
BR 95	0.000E+00	1.028E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 95	0.000E+00	5.737E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 95	0.000E+00	1.653E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 95	0.000E+00	1.199E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	0.000E+00	1.593E+06	3.133E+04	5.967E+02	3.750E-15	0.000E+00

ZR 95	0.000E+00	1.659E+06	1.658E+06	1.657E+06	1.650E+06	1.641E+06
NB 95	0.000E+00	1.665E+06	1.665E+06	1.665E+06	1.665E+06	1.664E+06
NB 95M	0.000E+00	1.186E+04	1.186E+04	1.186E+04	1.183E+04	1.181E+04
BR 96	0.000E+00	5.455E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 96	0.000E+00	8.743E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 96	0.000E+00	5.291E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 96	0.000E+00	8.291E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	0.000E+00	1.519E+06	2.166E-02	3.039E-10	0.000E+00	0.000E+00
NB 96	0.000E+00	4.491E+03	4.360E+03	4.232E+03	3.145E+03	2.203E+03
KR 97	0.000E+00	5.674E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 97	0.000E+00	1.035E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 97	0.000E+00	4.414E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 97	0.000E+00	1.321E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	1.740E+06	1.670E+06	1.603E+06	1.064E+06	6.503E+05
NB 97	0.000E+00	1.759E+06	1.731E+06	1.684E+06	1.143E+06	6.547E+05
NB 97M	0.000E+00	1.651E+06	1.582E+06	1.519E+06	1.008E+06	6.160E+05
KR 98	0.000E+00	6.547E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 98	0.000E+00	2.488E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 98	0.000E+00	1.777E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 98	0.000E+00	9.323E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 98	0.000E+00	1.767E+06	1.961E-29	0.000E+00	0.000E+00	0.000E+00
NB 98	0.000E+00	1.804E+06	2.155E-29	0.000E+00	0.000E+00	0.000E+00
NB 98M	0.000E+00	2.153E+04	9.603E+03	4.283E+03	1.332E+00	8.241E-05
RB 99	0.000E+00	2.565E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 99	0.000E+00	5.161E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 99	0.000E+00	5.343E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 99	0.000E+00	1.750E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	1.834E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	0.000E+00	8.496E+04	9.602E-03	1.085E-09	0.000E+00	0.000E+00
MO 99	0.000E+00	2.072E+06	2.050E+06	2.029E+06	1.827E+06	1.610E+06
TC 99	0.000E+00	2.106E+01	2.106E+01	2.106E+01	2.107E+01	2.108E+01
TC 99M	0.000E+00	1.814E+06	1.813E+06	1.810E+06	1.714E+06	1.540E+06
RB100	0.000E+00	2.365E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR100	0.000E+00	1.058E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y100	0.000E+00	2.404E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR100	0.000E+00	1.603E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	0.000E+00	1.035E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	0.000E+00	1.035E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC100	0.000E+00	9.205E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR101	0.000E+00	1.519E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y101	0.000E+00	7.852E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	0.000E+00	1.014E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB101	0.000E+00	1.726E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	1.880E+06	1.104E+05	6.419E+03	2.840E-09	4.249E-24
TC101	0.000E+00	1.881E+06	4.106E+05	3.998E+04	6.387E-08	1.288E-22

OUTPUT UNIT =
6 PAGE 74

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SR102	0.000E+00	1.452E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y102	0.000E+00	2.035E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR102	0.000E+00	5.857E+05	7.737E-33	0.000E+00	0.000E+00	0.000E+00
NB102	0.000E+00	1.498E+06	1.054E-32	0.000E+00	0.000E+00	0.000E+00
MO102	0.000E+00	1.843E+06	4.426E+04	1.044E+03	5.584E-14	1.662E-33
TC102	0.000E+00	1.846E+06	4.462E+04	1.053E+03	5.629E-14	2.995E-33
TC102M	0.000E+00	2.583E+03	1.820E-01	1.282E-05	0.000E+00	0.000E+00
RH102	0.000E+00	2.492E+00	2.491E+00	2.491E+00	2.491E+00	2.490E+00
SR103	0.000E+00	5.002E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y103	0.000E+00	3.135E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR103	0.000E+00	2.263E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB103	0.000E+00	1.079E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	0.000E+00	1.871E+06	1.962E-12	1.702E-30	0.000E+00	0.000E+00
TC103	0.000E+00	1.904E+06	1.177E-11	1.021E-29	0.000E+00	0.000E+00
RU103	0.000E+00	1.918E+06	1.917E+06	1.915E+06	1.901E+06	1.885E+06
RH103M	0.000E+00	1.728E+06	1.727E+06	1.726E+06	1.715E+06	1.699E+06
SR104	0.000E+00	2.150E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y104	0.000E+00	2.998E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR104	0.000E+00	5.667E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB104	0.000E+00	5.372E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	0.000E+00	1.558E+06	8.058E-06	4.146E-17	0.000E+00	0.000E+00
TC104	0.000E+00	1.675E+06	1.859E+05	1.891E+04	2.253E-06	2.779E-18
RH104	0.000E+00	1.651E+06	8.878E+00	6.118E-04	0.000E+00	0.000E+00
RH104M	0.000E+00	1.080E+05	7.445E+00	5.131E-04	0.000E+00	0.000E+00
Y105	0.000E+00	1.456E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR105	0.000E+00	7.711E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB105	0.000E+00	1.866E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO105	0.000E+00	1.139E+06	9.779E-15	0.000E+00	0.000E+00	0.000E+00
TC105	0.000E+00	1.421E+06	8.653E+03	4.779E+01	0.000E+00	0.000E+00
RU105	0.000E+00	1.458E+06	1.288E+06	1.102E+06	2.312E+05	3.550E+04
RH105	0.000E+00	1.314E+06	1.315E+06	1.313E+06	1.176E+06	9.507E+05
RH105M	0.000E+00	4.081E+05	3.617E+05	3.095E+05	6.493E+04	9.969E+03
ZR106	0.000E+00	7.854E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB106	0.000E+00	4.794E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

MO106	0.000E+00	6.233E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	0.000E+00	1.028E+06	6.315E-24	0.000E+00	0.000E+00	0.000E+00
RU106	0.000E+00	8.252E+05	8.252E+05	8.251E+05	8.244E+05	8.237E+05
RH106	0.000E+00	9.244E+05	8.252E+05	8.251E+05	8.244E+05	8.237E+05
RH106M	0.000E+00	4.530E+04	3.306E+04	2.412E+04	1.033E+03	2.356E+01
ZR107	0.000E+00	3.513E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB107	0.000E+00	7.311E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO107	0.000E+00	2.271E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	0.000E+00	5.708E+05	2.727E-32	0.000E+00	0.000E+00	0.000E+00
RU107	0.000E+00	8.852E+05	4.837E+01	2.422E-03	0.000E+00	0.000E+00
RH107	0.000E+00	8.898E+05	1.650E+05	2.428E+04	1.153E-04	1.185E-14
PD107	0.000E+00	2.242E-01	2.242E-01	2.242E-01	2.242E-01	2.242E-01
PD107M	0.000E+00	2.427E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR108	0.000E+00	1.211E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB108	0.000E+00	1.586E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO108	0.000E+00	6.430E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC108	0.000E+00	3.342E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 75
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
RU108	0.000E+00	6.146E+05	6.023E+01	5.835E-03	0.000E+00	0.000E+00
RH108	0.000E+00	6.206E+05	6.422E+01	6.222E-03	0.000E+00	0.000E+00
RH108M	0.000E+00	5.958E+03	5.173E+00	4.492E-03	0.000E+00	0.000E+00
AG108	0.000E+00	3.488E+00	6.018E-06	5.933E-06	5.933E-06	5.933E-06
ZR109	0.000E+00	9.021E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB109	0.000E+00	3.171E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO109	0.000E+00	2.061E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC109	0.000E+00	1.549E+05	8.750E-17	0.000E+00	0.000E+00	0.000E+00
RU109	0.000E+00	3.796E+05	2.789E-16	0.000E+00	0.000E+00	0.000E+00
RH109	0.000E+00	3.956E+05	1.433E-06	1.303E-18	0.000E+00	0.000E+00
RH109M	0.000E+00	1.978E+05	4.452E-15	0.000E+00	0.000E+00	0.000E+00
PD109	0.000E+00	5.545E+05	5.296E+05	5.030E+05	3.006E+05	1.620E+05
PD109M	0.000E+00	2.002E+05	5.643E+01	7.950E-03	0.000E+00	0.000E+00
AG109M	0.000E+00	5.542E+05	5.297E+05	5.032E+05	3.007E+05	1.621E+05

CD109	0.000E+00	5.101E-03	5.101E-03	5.101E-03	5.098E-03	5.094E-03
NB110	0.000E+00	3.572E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO110	0.000E+00	3.980E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC110	0.000E+00	3.744E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU110	0.000E+00	1.641E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	0.000E+00	1.770E+05	1.636E-32	0.000E+00	0.000E+00	0.000E+00
RH110M	0.000E+00	1.297E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110	0.000E+00	3.632E+05	1.394E+02	1.394E+02	1.392E+02	1.390E+02
AG110M	0.000E+00	1.048E+04	1.048E+04	1.048E+04	1.047E+04	1.045E+04
NB111	0.000E+00	3.037E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO111	0.000E+00	8.119E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC111	0.000E+00	1.178E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU111	0.000E+00	7.048E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	0.000E+00	9.664E+04	7.531E-13	4.733E-30	0.000E+00	0.000E+00
PD111	0.000E+00	1.004E+05	1.690E+04	3.328E+03	2.654E+02	5.850E+01
PD111M	0.000E+00	1.651E+03	1.457E+03	1.285E+03	3.643E+02	8.029E+01
AG111	0.000E+00	1.026E+05	1.024E+05	1.020E+05	9.816E+04	9.370E+04
AG111M	0.000E+00	1.010E+05	1.807E+04	3.845E+03	3.803E+02	8.381E+01
CD111M	0.000E+00	1.184E+02	5.038E+01	2.145E+01	4.194E-03	1.486E-07
MO112	0.000E+00	1.481E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	0.000E+00	3.892E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	0.000E+00	2.946E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	0.000E+00	4.742E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD112	0.000E+00	5.089E+04	4.917E+04	4.750E+04	3.364E+04	2.224E+04
AG112	0.000E+00	5.109E+04	5.087E+04	5.036E+04	3.921E+04	2.630E+04
MO113	0.000E+00	1.053E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC113	0.000E+00	1.025E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU113	0.000E+00	1.544E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH113	0.000E+00	3.266E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD113	0.000E+00	3.955E+04	3.672E-08	3.340E-20	0.000E+00	0.000E+00
AG113	0.000E+00	3.565E+04	3.143E+04	2.758E+04	7.457E+03	1.552E+03
AG113M	0.000E+00	4.012E+03	1.377E-08	1.252E-20	0.000E+00	0.000E+00
CD113M	0.000E+00	1.254E+02	1.254E+02	1.254E+02	1.254E+02	1.254E+02
MO114	0.000E+00	1.076E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC114	0.000E+00	2.297E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU114	0.000E+00	6.846E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH114	0.000E+00	1.831E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 76
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
PD114	0.000E+00	2.660E+04	8.067E-04	2.404E-11	0.000E+00	0.000E+00
AG114	0.000E+00	2.699E+04	8.328E-04	2.482E-11	0.000E+00	0.000E+00
IN114	0.000E+00	3.098E+01	1.146E+01	1.145E+01	1.139E+01	1.131E+01
IN114M	0.000E+00	1.198E+01	1.197E+01	1.197E+01	1.190E+01	1.181E+01
MO115	0.000E+00	7.204E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC115	0.000E+00	4.846E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU115	0.000E+00	3.214E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH115	0.000E+00	1.376E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD115	0.000E+00	2.516E+04	8.430E-25	0.000E+00	0.000E+00	0.000E+00
AG115	0.000E+00	1.887E+04	2.440E+03	3.051E+02	2.841E-07	4.134E-18
AG115M	0.000E+00	7.283E+03	4.119E-25	0.000E+00	0.000E+00	0.000E+00
CD115	0.000E+00	2.584E+04	2.561E+04	2.530E+04	2.222E+04	1.902E+04
CD115M	0.000E+00	2.441E+03	2.439E+03	2.437E+03	2.422E+03	2.403E+03
IN115M	0.000E+00	2.589E+04	2.587E+04	2.581E+04	2.383E+04	2.064E+04
TC116	0.000E+00	3.003E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU116	0.000E+00	7.176E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH116	0.000E+00	6.506E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD116	0.000E+00	1.870E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG116	0.000E+00	1.047E+04	2.074E-03	3.779E-10	0.000E+00	0.000E+00
AG116M	0.000E+00	1.047E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116	0.000E+00	1.562E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	1.138E+04	5.279E+03	2.449E+03	1.131E+00	1.124E-04
TC117	0.000E+00	1.271E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU117	0.000E+00	1.041E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH117	0.000E+00	3.235E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD117	0.000E+00	1.620E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG117	0.000E+00	1.025E+04	1.704E-11	2.671E-26	0.000E+00	0.000E+00
AG117M	0.000E+00	1.024E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD117	0.000E+00	1.367E+04	1.053E+04	8.062E+03	5.606E+02	2.287E+01
CD117M	0.000E+00	7.405E+03	6.053E+03	4.936E+03	6.427E+02	5.566E+01
IN117	0.000E+00	1.261E+04	1.219E+04	1.118E+04	1.631E+03	1.128E+02
IN117M	0.000E+00	1.597E+04	1.540E+04	1.405E+04	2.136E+03	1.329E+02
SN117M	0.000E+00	2.724E+02	2.718E+02	2.712E+02	2.657E+02	2.592E+02
RU118	0.000E+00	7.076E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH118	0.000E+00	5.516E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD118	0.000E+00	1.374E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118	0.000E+00	1.345E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118M	0.000E+00	9.408E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD118	0.000E+00	2.058E+04	9.020E+03	3.946E+03	1.012E+00	4.970E-05
IN118	0.000E+00	2.059E+04	9.035E+03	3.952E+03	1.014E+00	4.978E-05
IN118M	0.000E+00	9.391E+00	8.200E-04	7.161E-08	0.000E+00	0.000E+00
RH119	0.000E+00	4.564E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PD119	0.000E+00	1.034E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG119	0.000E+00	1.905E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD119	0.000E+00	1.029E+04	1.248E+02	1.495E+00	9.120E-20	0.000E+00
CD119M	0.000E+00	1.029E+04	2.423E-02	5.497E-08	0.000E+00	0.000E+00
IN119	0.000E+00	5.926E+03	1.514E+02	1.580E+01	1.478E-09	1.344E-21
IN119M	0.000E+00	1.545E+04	2.640E+03	2.738E+02	2.545E-08	2.315E-20
SN119M	0.000E+00	3.596E+02	3.595E+02	3.595E+02	3.591E+02	3.586E+02
RU120	0.000E+00	1.480E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH120	0.000E+00	6.719E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 77
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
PD120	0.000E+00	3.787E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG120	0.000E+00	1.291E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD120	0.000E+00	2.020E+04	9.692E-18	0.000E+00	0.000E+00	0.000E+00
IN120	0.000E+00	1.032E+04	3.844E-17	0.000E+00	0.000E+00	0.000E+00
IN120M	0.000E+00	1.032E+04	5.159E-18	0.000E+00	0.000E+00	0.000E+00
RH121	0.000E+00	1.063E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD121	0.000E+00	1.486E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG121	0.000E+00	8.987E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD121	0.000E+00	1.994E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121	0.000E+00	1.700E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121M	0.000E+00	4.228E+03	1.511E-02	5.082E-08	0.000E+00	0.000E+00
SN121	0.000E+00	2.130E+04	2.078E+04	2.025E+04	1.563E+04	1.146E+04
SN121M	0.000E+00	3.888E-01	3.888E-01	3.888E-01	3.888E-01	3.887E-01
RH122	0.000E+00	1.287E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD122	0.000E+00	4.564E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG122	0.000E+00	5.583E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD122	0.000E+00	1.899E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122	0.000E+00	2.049E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122M	0.000E+00	1.506E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB122	0.000E+00	5.242E+03	5.187E+03	5.131E+03	4.611E+03	4.055E+03
SB122M	0.000E+00	4.111E+01	2.058E-03	1.031E-07	0.000E+00	0.000E+00
RH123	0.000E+00	1.097E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PD123	0.000E+00	1.031E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG123	0.000E+00	2.914E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD123	0.000E+00	1.804E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123	0.000E+00	1.688E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123M	0.000E+00	7.138E+03	2.127E-19	0.000E+00	0.000E+00	0.000E+00
SN123	0.000E+00	4.587E+03	4.586E+03	4.585E+03	4.575E+03	4.563E+03
SN123M	0.000E+00	1.996E+04	7.130E+03	2.526E+03	7.878E-02	3.084E-07
TE123M	0.000E+00	6.994E+01	6.992E+01	6.990E+01	6.973E+01	6.953E+01
PD124	0.000E+00	1.929E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG124	0.000E+00	1.329E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD124	0.000E+00	1.635E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN124	0.000E+00	2.693E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	0.000E+00	3.474E+03	3.472E+03	3.470E+03	3.454E+03	3.434E+03
SB124M	0.000E+00	1.927E+01	4.286E-11	9.534E-23	0.000E+00	0.000E+00
AG125	0.000E+00	4.179E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD125	0.000E+00	1.200E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125	0.000E+00	1.773E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125M	0.000E+00	1.301E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN125	0.000E+00	1.788E+04	1.782E+04	1.777E+04	1.725E+04	1.664E+04
SN125M	0.000E+00	2.891E+04	3.705E+02	4.694E+00	5.001E-19	0.000E+00
SB125	0.000E+00	2.247E+04	2.247E+04	2.247E+04	2.247E+04	2.247E+04
TE125M	0.000E+00	4.861E+03	4.861E+03	4.862E+03	4.863E+03	4.865E+03
PD126	0.000E+00	2.895E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG126	0.000E+00	1.291E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD126	0.000E+00	8.707E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN126	0.000E+00	3.812E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN126	0.000E+00	1.433E+00	1.433E+00	1.433E+00	1.433E+00	1.433E+00
SB126	0.000E+00	1.912E+03	1.907E+03	1.903E+03	1.859E+03	1.808E+03
SB126M	0.000E+00	6.922E+02	7.883E+01	1.011E+01	1.433E+00	1.433E+00

OUTPUT UNIT =
6 PAGE 78
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CD127	0.000E+00	4.983E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127	0.000E+00	2.274E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

IN127M	0.000E+00	2.274E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN127	0.000E+00	8.790E+04	6.320E+04	4.543E+04	1.675E+03	3.190E+01
SN127M	0.000E+00	4.219E+04	1.800E+00	7.683E-05	0.000E+00	0.000E+00
SB127	0.000E+00	1.394E+05	1.389E+05	1.383E+05	1.292E+05	1.181E+05
TE127	0.000E+00	1.378E+05	1.378E+05	1.378E+05	1.350E+05	1.282E+05
TE127M	0.000E+00	1.814E+04	1.814E+04	1.814E+04	1.814E+04	1.814E+04
XE127	0.000E+00	2.237E-01	2.235E-01	2.233E-01	2.216E-01	2.195E-01
AG128	0.000E+00	5.492E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD128	0.000E+00	1.871E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN128	0.000E+00	3.526E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN128	0.000E+00	1.948E+05	9.628E+04	4.758E+04	4.131E+01	8.760E-03
SB128	0.000E+00	1.979E+04	1.833E+04	1.697E+04	7.863E+03	3.124E+03
SB128M	0.000E+00	2.143E+05	1.165E+05	5.775E+04	5.015E+01	1.063E-02
I128	0.000E+00	2.958E+04	5.599E+03	1.060E+03	6.246E-05	1.319E-13
CD129	0.000E+00	7.908E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN129	0.000E+00	3.036E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN129	0.000E+00	1.334E+05	5.211E+02	2.035E+00	0.000E+00	0.000E+00
SN129M	0.000E+00	1.415E+05	8.438E-03	5.029E-10	0.000E+00	0.000E+00
SB129	0.000E+00	3.904E+05	3.371E+05	2.871E+05	5.769E+04	8.411E+03
TE129	0.000E+00	3.848E+05	3.701E+05	3.413E+05	1.056E+05	4.690E+04
TE129M	0.000E+00	5.748E+04	5.747E+04	5.746E+04	5.712E+04	5.657E+04
I129	0.000E+00	5.499E-02	5.499E-02	5.499E-02	5.500E-02	5.501E-02
XE129M	0.000E+00	2.659E+01	2.649E+01	2.639E+01	2.546E+01	2.438E+01
CD130	0.000E+00	6.454E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN130	0.000E+00	2.976E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN130	0.000E+00	4.020E+05	5.610E+00	7.827E-05	0.000E+00	0.000E+00
SB130	0.000E+00	1.288E+05	4.555E+04	1.610E+04	4.914E-01	1.875E-06
SB130M	0.000E+00	5.359E+05	1.508E+03	2.061E+00	0.000E+00	0.000E+00
I130	0.000E+00	7.893E+04	7.492E+04	7.084E+04	4.043E+04	2.063E+04
I130M	0.000E+00	3.121E+04	3.072E+02	3.024E+00	2.582E-20	0.000E+00
CD131	0.000E+00	1.066E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN131	0.000E+00	1.087E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN131	0.000E+00	3.334E+05	2.096E-12	1.317E-29	0.000E+00	0.000E+00
SB131	0.000E+00	9.092E+05	1.517E+05	2.487E+04	3.489E-04	1.316E-13
TE131	0.000E+00	9.848E+05	4.696E+05	1.598E+05	2.895E+04	2.194E+04
TE131M	0.000E+00	1.688E+05	1.656E+05	1.620E+05	1.286E+05	9.744E+04
I131	0.000E+00	1.119E+06	1.118E+06	1.115E+06	1.081E+06	1.040E+06
XE131M	0.000E+00	1.252E+04	1.252E+04	1.252E+04	1.251E+04	1.249E+04
CD132	0.000E+00	9.710E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN132	0.000E+00	2.674E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN132	0.000E+00	1.693E+05	1.367E-22	0.000E+00	0.000E+00	0.000E+00
SB132	0.000E+00	5.173E+05	2.020E-01	7.157E-08	0.000E+00	0.000E+00
SB132M	0.000E+00	3.474E+05	1.739E+01	8.709E-04	0.000E+00	0.000E+00
TE132	0.000E+00	1.561E+06	1.548E+06	1.534E+06	1.404E+06	1.263E+06
I132	0.000E+00	1.592E+06	1.583E+06	1.572E+06	1.446E+06	1.301E+06
CS132	0.000E+00	4.769E+02	4.748E+02	4.727E+02	4.520E+02	4.285E+02
IN133	0.000E+00	3.283E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN133	0.000E+00	5.073E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

SB133 0.000E+00 5.643E+05 1.683E-02 5.017E-10 0.000E+00 0.000E+00

OUTPUT UNIT =
6 PAGE 79
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
TE133	0.000E+00	1.271E+06	1.033E+05	2.895E+04	1.502E+01	1.838E-03
TE133M	0.000E+00	7.314E+05	3.455E+05	1.631E+05	8.957E+01	1.096E-02
I133	0.000E+00	2.163E+06	2.122E+06	2.061E+06	1.482E+06	9.938E+05
I133M	0.000E+00	7.605E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	0.000E+00	2.171E+06	2.171E+06	2.170E+06	2.149E+06	2.091E+06
XE133M	0.000E+00	6.957E+04	6.947E+04	6.935E+04	6.702E+04	6.234E+04
IN134	0.000E+00	1.986E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN134	0.000E+00	7.968E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134	0.000E+00	1.037E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	0.000E+00	9.577E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	0.000E+00	1.630E+06	6.029E+05	2.229E+05	1.065E+01	6.950E-05
I134	0.000E+00	2.345E+06	1.601E+06	9.219E+05	6.161E+02	4.953E-02
I134M	0.000E+00	2.673E+05	3.511E+00	4.612E-05	0.000E+00	0.000E+00
XE134M	0.000E+00	1.952E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	0.000E+00	4.060E+05	4.060E+05	4.060E+05	4.058E+05	4.056E+05
CS134M	0.000E+00	1.009E+05	7.943E+04	6.255E+04	5.730E+03	3.255E+02
SN135	0.000E+00	8.921E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB135	0.000E+00	5.230E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE135	0.000E+00	8.798E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	2.026E+06	1.825E+06	1.644E+06	5.760E+05	1.637E+05
XE135	0.000E+00	4.649E+05	5.759E+05	6.618E+05	8.191E+05	5.073E+05
XE135M	0.000E+00	4.505E+05	3.006E+05	2.638E+05	9.227E+04	2.622E+04
CS135	0.000E+00	7.608E-01	7.608E-01	7.608E-01	7.611E-01	7.614E-01
CS135M	0.000E+00	8.813E+04	4.021E+04	1.835E+04	7.172E+00	5.837E-04
BA135M	0.000E+00	5.150E+02	5.027E+02	4.907E+02	3.854E+02	2.884E+02
SN136	0.000E+00	8.219E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB136	0.000E+00	1.088E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE136	0.000E+00	4.442E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	9.439E+05	9.598E-08	8.423E-21	0.000E+00	0.000E+00
I136M	0.000E+00	5.477E+05	1.512E-18	0.000E+00	0.000E+00	0.000E+00

CS136	0.000E+00	1.153E+05	1.150E+05	1.148E+05	1.123E+05	1.093E+05
BA136M	0.000E+00	1.900E+04	1.896E+04	1.891E+04	1.850E+04	1.802E+04
SB137	0.000E+00	1.786E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE137	0.000E+00	1.325E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I137	0.000E+00	8.872E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.875E+06	3.807E+01	7.323E-04	0.000E+00	0.000E+00
CS137	0.000E+00	1.791E+05	1.791E+05	1.791E+05	1.791E+05	1.791E+05
BA137M	0.000E+00	1.697E+05	1.695E+05	1.694E+05	1.694E+05	1.694E+05
SB138	0.000E+00	2.314E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE138	0.000E+00	3.369E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I138	0.000E+00	4.310E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	0.000E+00	1.690E+06	8.998E+04	4.781E+03	8.570E-10	4.337E-25
CS138	0.000E+00	1.901E+06	8.197E+05	2.410E+05	6.018E-01	1.118E-07
CS138M	0.000E+00	9.966E+04	5.893E-02	3.484E-08	0.000E+00	0.000E+00
SB139	0.000E+00	1.733E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE139	0.000E+00	6.808E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I139	0.000E+00	1.893E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE139	0.000E+00	1.294E+06	4.786E-22	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.797E+06	2.271E+04	2.721E+02	1.660E-17	0.000E+00
BA139	0.000E+00	1.873E+06	1.277E+06	7.740E+05	5.067E+03	1.214E+01
TE140	0.000E+00	8.596E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 80
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
I140	0.000E+00	5.134E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE140	0.000E+00	8.116E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	0.000E+00	1.614E+06	1.894E-11	1.956E-28	0.000E+00	0.000E+00
BA140	0.000E+00	1.805E+06	1.801E+06	1.797E+06	1.757E+06	1.710E+06
LA140	0.000E+00	1.914E+06	1.913E+06	1.911E+06	1.889E+06	1.860E+06
PR140	0.000E+00	4.568E+01	2.143E-04	1.007E-09	0.000E+00	0.000E+00
TE141	0.000E+00	3.986E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I141	0.000E+00	8.791E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE141	0.000E+00	2.875E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	0.000E+00	1.180E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

BA141	0.000E+00	1.696E+06	1.769E+05	1.815E+04	2.350E-06	3.204E-18
LA141	0.000E+00	1.705E+06	1.536E+06	1.299E+06	2.229E+05	2.686E+04
CE141	0.000E+00	1.724E+06	1.723E+06	1.723E+06	1.713E+06	1.696E+06
TE142	0.000E+00	4.534E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I142	0.000E+00	1.439E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE142	0.000E+00	9.924E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS142	0.000E+00	6.918E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	0.000E+00	1.582E+06	3.248E+04	6.663E+02	8.779E-15	4.927E-35
LA142	0.000E+00	1.625E+06	1.165E+06	7.465E+05	8.407E+03	3.860E+01
PR142	0.000E+00	1.689E+05	1.632E+05	1.575E+05	1.096E+05	7.096E+04
PR142M	0.000E+00	3.309E+04	1.917E+03	1.110E+02	4.724E-11	6.746E-26
I143	0.000E+00	9.915E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE143	0.000E+00	1.768E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS143	0.000E+00	3.230E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	0.000E+00	1.356E+06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	0.000E+00	1.514E+06	7.882E+04	4.041E+03	5.073E-10	1.674E-25
CE143	0.000E+00	1.528E+06	1.507E+06	1.476E+06	1.196E+06	9.297E+05
PR143	0.000E+00	1.515E+06	1.515E+06	1.515E+06	1.511E+06	1.500E+06
I144	0.000E+00	8.335E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE144	0.000E+00	3.261E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS144	0.000E+00	1.034E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA144	0.000E+00	9.891E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	0.000E+00	1.316E+06	1.369E-21	0.000E+00	0.000E+00	0.000E+00
CE144	0.000E+00	1.253E+06	1.253E+06	1.253E+06	1.252E+06	1.250E+06
PR144	0.000E+00	1.266E+06	1.254E+06	1.253E+06	1.252E+06	1.250E+06
PR144M	0.000E+00	1.506E+04	1.504E+04	1.504E+04	1.502E+04	1.500E+04
XE145	0.000E+00	3.978E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS145	0.000E+00	2.647E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA145	0.000E+00	5.253E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	0.000E+00	9.720E+05	4.745E-32	0.000E+00	0.000E+00	0.000E+00
CE145	0.000E+00	1.052E+06	1.203E+00	1.147E-06	0.000E+00	0.000E+00
PR145	0.000E+00	1.053E+06	9.465E+05	8.430E+05	2.645E+05	6.583E+04
XE146	0.000E+00	2.511E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS146	0.000E+00	4.020E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA146	0.000E+00	1.984E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA146	0.000E+00	6.437E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	0.000E+00	8.574E+05	4.621E+04	2.470E+03	4.711E-10	2.568E-25
PR146	0.000E+00	8.612E+05	3.089E+05	6.365E+04	2.310E-03	2.554E-12
PM146	0.000E+00	4.877E+00	4.877E+00	4.877E+00	4.876E+00	4.875E+00
XE147	0.000E+00	2.283E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS147	0.000E+00	7.081E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA147	0.000E+00	4.739E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA147	0.000E+00	3.182E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	0.000E+00	6.706E+05	2.394E-10	7.898E-26	0.000E+00	0.000E+00
PR147	0.000E+00	6.905E+05	2.399E+04	7.498E+02	6.660E-13	5.776E-31
ND147	0.000E+00	6.970E+05	6.957E+05	6.939E+05	6.761E+05	6.552E+05
PM147	0.000E+00	1.174E+05	1.174E+05	1.174E+05	1.176E+05	1.178E+05
CS148	0.000E+00	4.712E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA148	0.000E+00	8.876E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA148	0.000E+00	1.227E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	0.000E+00	5.008E+05	3.175E-20	0.000E+00	0.000E+00	0.000E+00
PR148	0.000E+00	5.603E+05	1.107E-02	1.554E-10	0.000E+00	0.000E+00
PM148	0.000E+00	3.036E+05	3.020E+05	3.004E+05	2.848E+05	2.671E+05
PM148M	0.000E+00	3.024E+04	3.022E+04	3.020E+04	2.999E+04	2.973E+04
BA149	0.000E+00	1.061E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA149	0.000E+00	3.181E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE149	0.000E+00	2.839E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	0.000E+00	4.034E+05	5.699E-03	7.995E-11	0.000E+00	0.000E+00
ND149	0.000E+00	4.411E+05	3.017E+05	2.021E+05	3.677E+03	3.002E+01
PM149	0.000E+00	7.248E+05	7.202E+05	7.141E+05	6.325E+05	5.409E+05
CS150	0.000E+00	4.515E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA150	0.000E+00	8.111E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA150	0.000E+00	6.341E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE150	0.000E+00	1.370E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR150	0.000E+00	2.817E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM150	0.000E+00	1.044E+04	8.063E+03	6.225E+03	4.687E+02	2.104E+01
LA151	0.000E+00	8.301E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE151	0.000E+00	4.190E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR151	0.000E+00	1.598E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	0.000E+00	2.448E+05	8.588E+03	3.001E+02	8.153E-13	2.705E-30
PM151	0.000E+00	2.448E+05	2.406E+05	2.348E+05	1.840E+05	1.372E+05
SM151	0.000E+00	5.979E+02	5.981E+02	5.983E+02	6.001E+02	6.018E+02
BA152	0.000E+00	2.209E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA152	0.000E+00	9.593E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE152	0.000E+00	9.363E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR152	0.000E+00	7.172E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	0.000E+00	1.695E+05	4.584E+03	1.232E+02	2.425E-14	3.438E-33
PM152	0.000E+00	1.745E+05	7.121E+03	1.918E+02	3.769E-14	5.336E-33
PM152M	0.000E+00	3.416E+03	1.334E+01	5.213E-02	0.000E+00	0.000E+00

EU152	0.000E+00	8.972E+00	8.972E+00	8.972E+00	8.971E+00	8.970E+00
EU152M	0.000E+00	1.583E+02	1.469E+02	1.364E+02	6.483E+01	2.655E+01
LA153	0.000E+00	1.013E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE153	0.000E+00	1.698E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR153	0.000E+00	2.317E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND153	0.000E+00	1.007E+05	9.346E-12	8.418E-28	0.000E+00	0.000E+00
PM153	0.000E+00	1.150E+05	6.432E+01	2.908E-02	0.000E+00	0.000E+00
SM153	0.000E+00	8.154E+05	8.036E+05	7.918E+05	6.826E+05	5.712E+05
GD153	0.000E+00	3.954E+01	3.954E+01	3.953E+01	3.948E+01	3.943E+01
LA154	0.000E+00	4.704E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE154	0.000E+00	2.003E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR154	0.000E+00	5.740E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND154	0.000E+00	5.470E+04	4.436E-23	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT = 6 PAGE 82
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
PM154	0.000E+00	6.772E+04	3.083E-02	1.092E-08	0.000E+00	0.000E+00
PM154M	0.000E+00	1.184E+04	1.094E-06	1.011E-16	0.000E+00	0.000E+00
EU154	0.000E+00	2.298E+04	2.298E+04	2.298E+04	2.298E+04	2.298E+04
CE155	0.000E+00	2.323E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR155	0.000E+00	1.167E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND155	0.000E+00	2.153E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	0.000E+00	4.389E+04	2.225E-25	0.000E+00	0.000E+00	0.000E+00
SM155	0.000E+00	5.473E+04	8.665E+03	1.331E+03	9.733E-06	1.679E-15
EU155	0.000E+00	1.562E+04	1.562E+04	1.562E+04	1.561E+04	1.561E+04
GD155M	0.000E+00	2.763E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE156	0.000E+00	2.202E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR156	0.000E+00	2.230E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND156	0.000E+00	8.000E+03	2.372E-15	8.112E-34	0.000E+00	0.000E+00
PM156	0.000E+00	2.522E+04	3.057E-15	1.207E-33	0.000E+00	0.000E+00
SM156	0.000E+00	3.379E+04	3.141E+04	2.918E+04	1.396E+04	5.762E+03
EU156	0.000E+00	5.054E+05	5.045E+05	5.036E+05	4.945E+05	4.835E+05
CE157	0.000E+00	1.705E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR157	0.000E+00	3.376E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ND157	0.000E+00	2.265E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	0.000E+00	1.237E+04	1.463E-12	1.710E-28	0.000E+00	0.000E+00
SM157	0.000E+00	2.257E+04	1.361E+02	7.520E-01	0.000E+00	0.000E+00
EU157	0.000E+00	5.300E+04	5.085E+04	4.858E+04	3.079E+04	1.781E+04
PR158	0.000E+00	2.449E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	0.000E+00	3.441E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM158	0.000E+00	4.054E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	0.000E+00	1.237E+04	4.807E+03	1.867E+03	1.461E-01	1.725E-06
EU158	0.000E+00	1.330E+04	9.816E+03	5.693E+03	2.285E+00	6.733E-05
PR159	0.000E+00	9.487E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	0.000E+00	3.357E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	0.000E+00	9.284E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	0.000E+00	5.896E+03	1.233E-03	2.569E-10	0.000E+00	0.000E+00
EU159	0.000E+00	7.152E+03	8.231E+02	8.271E+01	8.683E-09	9.205E-21
GD159	0.000E+00	1.214E+04	1.181E+04	1.139E+04	7.850E+03	5.019E+03
ND160	0.000E+00	2.422E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM160	0.000E+00	1.497E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	0.000E+00	2.135E+03	1.679E+00	1.321E-03	0.000E+00	0.000E+00
EU160	0.000E+00	3.276E+03	1.967E+00	1.547E-03	0.000E+00	0.000E+00
TB160	0.000E+00	2.858E+03	2.857E+03	2.856E+03	2.844E+03	2.831E+03
ND161	0.000E+00	1.704E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	0.000E+00	1.753E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	0.000E+00	5.847E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU161	0.000E+00	1.425E+03	2.888E-23	0.000E+00	0.000E+00	0.000E+00
GD161	0.000E+00	1.685E+03	2.710E-02	3.559E-07	0.000E+00	0.000E+00
TB161	0.000E+00	2.428E+03	2.419E+03	2.409E+03	2.310E+03	2.197E+03
PM162	0.000E+00	7.328E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM162	0.000E+00	7.272E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU162	0.000E+00	4.108E+02	4.008E-02	3.857E-06	0.000E+00	0.000E+00
GD162	0.000E+00	7.568E+02	1.711E+01	2.679E-01	2.323E-19	0.000E+00
TB162	0.000E+00	7.496E+02	5.115E+01	9.793E-01	8.999E-19	0.000E+00
TB162M	0.000E+00	2.308E+01	1.801E+01	1.322E+01	5.907E-01	1.417E-02
SM163	0.000E+00	7.964E+00	0.000E+00	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 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
EU163	0.000E+00	9.433E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD163	0.000E+00	3.010E+02	6.645E-10	1.383E-21	0.000E+00	0.000E+00
TB163	0.000E+00	3.256E+02	4.181E+01	4.955E+00	2.708E-09	2.078E-20
SM164	0.000E+00	6.775E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU164	0.000E+00	1.854E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD164	0.000E+00	1.178E+02	1.731E+01	2.543E+00	1.190E-08	1.201E-18
TB164	0.000E+00	1.468E+02	2.014E+01	2.951E+00	1.381E-08	1.394E-18
SM165	0.000E+00	4.144E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU165	0.000E+00	2.845E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD165	0.000E+00	3.897E+01	5.972E-10	9.134E-21	0.000E+00	0.000E+00
TB165	0.000E+00	6.413E+01	8.872E-10	1.357E-20	0.000E+00	0.000E+00
DY165	0.000E+00	1.562E+03	1.170E+03	8.713E+02	4.562E+01	1.324E+00
DY165M	0.000E+00	9.777E+02	1.793E-09	2.737E-20	0.000E+00	0.000E+00
DY166	0.000E+00	4.918E+01	4.877E+01	4.835E+01	4.441E+01	4.010E+01
HO166	0.000E+00	4.765E+02	4.656E+02	4.549E+02	3.618E+02	2.765E+02
HO166M	0.000E+00	1.281E-02	1.281E-02	1.281E-02	1.281E-02	1.281E-02
ER167M	0.000E+00	1.398E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	0.000E+00	7.717E-01	7.693E-01	7.670E-01	7.438E-01	7.168E-01
TM170	0.000E+00	2.110E-01	2.110E-01	2.109E-01	2.105E-01	2.099E-01
TM170M	0.000E+00	2.309E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TM171	0.000E+00	5.305E-03	5.305E-03	5.305E-03	5.303E-03	5.300E-03
SUMTOT	0.000E+00	1.877E+08	7.073E+07	6.316E+07	4.675E+07	4.002E+07
TOTAL	0.000E+00	1.877E+08	7.073E+07	6.316E+07	4.675E+07	4.002E+07

OUTPUT UNIT =
6 PAGE 84
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	0.000E+00	9.471E+02	9.471E+02	9.471E+02	9.471E+02	9.470E+02
CO	0.000E+00	2.791E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI	0.000E+00	9.697E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU	0.000E+00	5.406E+02	1.966E-08	1.393E-10	1.195E-10	1.044E-10
ZN	0.000E+00	4.241E+03	8.698E+01	8.568E+01	7.381E+01	6.172E+01

GA	0.000E+00	1.924E+04	2.347E+02	2.133E+02	1.150E+02	8.236E+01
GE	0.000E+00	1.167E+05	5.391E+03	3.679E+03	5.400E+02	2.393E+02
AS	0.000E+00	3.313E+05	8.869E+03	7.618E+03	2.559E+03	2.005E+03
SE	0.000E+00	9.432E+05	1.475E+04	2.534E+03	7.093E+00	5.571E+00
BR	0.000E+00	1.950E+06	1.575E+05	9.444E+04	1.269E+04	7.159E+03
KR	0.000E+00	3.567E+06	1.010E+06	7.733E+05	9.310E+04	2.231E+04
RB	0.000E+00	5.169E+06	5.622E+05	4.020E+05	3.863E+04	6.084E+03
SR	0.000E+00	8.399E+06	2.726E+06	2.455E+06	1.366E+06	1.065E+06
Y	0.000E+00	1.199E+07	4.394E+06	4.032E+06	2.354E+06	1.590E+06
ZR	0.000E+00	1.041E+07	3.328E+06	3.261E+06	2.714E+06	2.291E+06
NB	0.000E+00	1.599E+07	5.003E+06	4.888E+06	3.830E+06	2.949E+06
MO	0.000E+00	1.130E+07	2.205E+06	2.036E+06	1.827E+06	1.610E+06
TC	0.000E+00	1.361E+07	2.463E+06	1.870E+06	1.714E+06	1.540E+06
RU	0.000E+00	6.372E+06	4.030E+06	3.843E+06	2.957E+06	2.744E+06
RH	0.000E+00	8.702E+06	4.427E+06	4.222E+06	3.782E+06	3.484E+06
PD	0.000E+00	1.064E+06	5.972E+05	5.551E+05	3.348E+05	1.844E+05
AG	0.000E+00	1.391E+06	7.455E+05	6.979E+05	4.565E+05	2.943E+05
CD	0.000E+00	2.134E+05	5.395E+04	4.483E+04	2.597E+04	2.163E+04
IN	0.000E+00	4.619E+05	7.058E+04	5.775E+04	2.762E+04	2.090E+04
SN	0.000E+00	1.657E+06	2.113E+05	1.388E+05	3.979E+04	3.331E+04
SB	0.000E+00	4.065E+06	8.426E+05	5.741E+05	2.272E+05	1.614E+05
TE	0.000E+00	8.448E+06	3.824E+06	2.831E+06	1.883E+06	1.637E+06
I	0.000E+00	1.279E+07	8.330E+06	7.385E+06	4.627E+06	3.519E+06
XE	0.000E+00	9.266E+06	3.219E+06	3.182E+06	3.140E+06	2.700E+06
CS	0.000E+00	8.632E+06	1.663E+06	1.022E+06	7.033E+05	6.948E+05
BA	0.000E+00	1.027E+07	3.476E+06	2.778E+06	1.950E+06	1.897E+06
LA	0.000E+00	1.017E+07	4.693E+06	3.960E+06	2.121E+06	1.887E+06
CE	0.000E+00	8.060E+06	4.529E+06	4.454E+06	4.161E+06	3.876E+06
PR	0.000E+00	7.110E+06	4.229E+06	3.848E+06	3.152E+06	2.902E+06
ND	0.000E+00	1.740E+06	1.011E+06	8.964E+05	6.797E+05	6.552E+05
PM	0.000E+00	1.890E+06	1.426E+06	1.403E+06	1.249E+06	1.093E+06
SM	0.000E+00	9.481E+05	8.493E+05	8.248E+05	6.971E+05	5.776E+05
EU	0.000E+00	6.228E+05	6.047E+05	5.967E+05	5.639E+05	5.400E+05
GD	0.000E+00	1.508E+04	1.189E+04	1.144E+04	7.889E+03	5.059E+03
TB	0.000E+00	6.595E+03	5.406E+03	5.286E+03	5.155E+03	5.028E+03
DY	0.000E+00	2.589E+03	1.219E+03	9.196E+02	9.003E+01	4.143E+01
HO	0.000E+00	4.765E+02	4.656E+02	4.550E+02	3.618E+02	2.765E+02
ER	0.000E+00	1.475E+01	7.693E-01	7.670E-01	7.438E-01	7.168E-01
TM	0.000E+00	2.401E-01	2.170E-01	2.169E-01	2.164E-01	2.157E-01
SUMTOT	0.000E+00	1.877E+08	7.073E+07	6.316E+07	4.675E+07	4.002E+07
TOTAL	0.000E+00	1.877E+08	7.073E+07	6.316E+07	4.675E+07	4.002E+07

CUMULATIVE TABLE TOTALS

AP+FP	1.203E-11	1.877E+08	7.073E+07	6.316E+07	4.675E+07	4.002E+07
ACT+FP	2.813E+00	2.458E+08	1.060E+08	9.409E+07	7.310E+07	6.280E+07
AP+ACT+FP	2.813E+00	2.458E+08	1.060E+08	9.409E+07	7.310E+07	6.280E+07

OUTPUT UNIT = 6 PAGE 85
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	0.000E+00	3.189E-02	3.189E-02	3.189E-02	3.189E-02	3.188E-02
CO 72	0.000E+00	1.015E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 72	0.000E+00	7.156E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 72	0.000E+00	2.067E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 72	0.000E+00	1.336E-01	1.316E-01	1.296E-01	1.117E-01	9.340E-02
GA 72	0.000E+00	1.684E+00	1.683E+00	1.681E+00	1.612E+00	1.461E+00
CO 73	0.000E+00	2.961E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 73	0.000E+00	1.009E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 73	0.000E+00	1.937E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 73	0.000E+00	2.278E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 73	0.000E+00	7.493E-01	6.510E-01	5.648E-01	1.365E-01	2.483E-02
GE 73M	0.000E+00	6.585E-02	5.716E-02	4.960E-02	1.199E-02	2.180E-03
CO 74	0.000E+00	6.994E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 74	0.000E+00	4.577E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 74	0.000E+00	3.959E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 74	0.000E+00	1.823E+00	7.157E-12	2.801E-23	0.000E+00	0.000E+00
GA 74	0.000E+00	7.871E+00	5.684E-02	3.348E-04	0.000E+00	0.000E+00
CO 75	0.000E+00	8.298E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 75	0.000E+00	2.782E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 75	0.000E+00	3.068E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 75	0.000E+00	9.739E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 75	0.000E+00	5.028E+00	1.679E-09	5.235E-19	0.000E+00	0.000E+00
GE 75	0.000E+00	1.723E+00	1.069E+00	6.469E-01	4.261E-03	1.028E-05
GE 75M	0.000E+00	2.394E-02	1.184E-11	3.691E-21	0.000E+00	0.000E+00
NI 76	0.000E+00	5.730E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 76	0.000E+00	3.202E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 76	0.000E+00	1.016E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 76	0.000E+00	3.534E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 76	0.000E+00	7.041E-01	6.858E-01	6.680E-01	5.133E-01	3.742E-01
NI 77	0.000E+00	1.396E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 77	0.000E+00	1.243E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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ZN 77      0.000E+00 2.103E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 77      0.000E+00 3.220E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 77      0.000E+00 1.046E+01 9.844E+00 9.258E+00 5.013E+00 2.401E+00
GE 77M     0.000E+00 1.325E+01 1.875E-19 0.000E+00 0.000E+00 0.000E+00
AS 77      0.000E+00 3.858E+00 3.815E+00 3.771E+00 3.308E+00 2.762E+00
SE 77M     0.000E+00 1.417E-02 9.957E-03 9.841E-03 8.633E-03 7.209E-03
NI 78      0.000E+00 1.386E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 78      0.000E+00 6.018E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 78      0.000E+00 1.404E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 78      0.000E+00 9.422E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 78      0.000E+00 1.920E+01 1.191E+01 7.384E+00 6.198E-02 2.001E-04
AS 78      0.000E+00 1.018E+02 9.257E+01 7.603E+01 2.382E+00 1.606E-02
CU 79      0.000E+00 1.722E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 79      0.000E+00 1.798E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 79      0.000E+00 8.643E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 79      0.000E+00 1.651E+02 1.060E-23 0.000E+00 0.000E+00 0.000E+00
AS 79      0.000E+00 7.879E+01 8.345E-01 8.214E-03 7.012E-23 0.000E+00
SE 79      0.000E+00 1.759E-04 1.759E-04 1.759E-04 1.759E-04 1.759E-04
SE 79M     0.000E+00 8.559E+00 1.587E-01 1.567E-03 1.335E-23 0.000E+00
CU 80      0.000E+00 2.583E-02 0.000E+00 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 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

ZN 80      0.000E+00 4.709E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 80      0.000E+00 1.235E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 80      0.000E+00 1.417E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 80      0.000E+00 5.904E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 80      0.000E+00 5.969E-03 3.603E-03 2.943E-03 6.098E-04 9.286E-05
BR 80M     0.000E+00 3.946E-04 3.374E-04 2.884E-04 6.009E-05 9.151E-06
CU 81      0.000E+00 1.877E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 81      0.000E+00 2.053E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 81      0.000E+00 5.942E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GE 81      0.000E+00 5.045E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AS 81      0.000E+00 4.831E+02 8.219E-32 0.000E+00 0.000E+00 0.000E+00
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SE 81	0.000E+00	1.934E+02	2.386E+01	3.868E+00	1.215E-03	2.004E-07
SE 81M	0.000E+00	8.379E-01	4.055E-01	1.962E-01	1.382E-04	2.281E-08
ZN 82	0.000E+00	2.589E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 82	0.000E+00	3.882E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 82	0.000E+00	2.632E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82	0.000E+00	7.953E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82M	0.000E+00	5.720E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 82	0.000E+00	1.856E+02	1.822E+02	1.787E+02	1.468E+02	1.160E+02
BR 82M	0.000E+00	2.027E+00	2.293E-03	2.589E-06	0.000E+00	0.000E+00
ZN 83	0.000E+00	3.029E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 83	0.000E+00	1.040E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 83	0.000E+00	4.531E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 83	0.000E+00	1.020E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	0.000E+00	8.119E+02	1.286E+02	2.025E+01	1.901E-07	4.425E-17
SE 83M	0.000E+00	8.463E+02	3.235E-13	1.067E-28	0.000E+00	0.000E+00
BR 83	0.000E+00	2.211E+02	1.761E+02	1.333E+02	7.357E+00	2.266E-01
KR 83M	0.000E+00	2.763E+01	2.667E+01	2.423E+01	2.840E+00	1.087E-01
GA 84	0.000E+00	1.846E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 84	0.000E+00	1.476E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 84	0.000E+00	1.871E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	0.000E+00	9.892E+02	3.356E-03	1.129E-08	0.000E+00	0.000E+00
BR 84	0.000E+00	3.353E+03	1.008E+03	2.725E+02	5.696E-04	8.706E-11
BR 84M	0.000E+00	1.922E+02	1.877E-01	1.833E-04	0.000E+00	0.000E+00
GE 85	0.000E+00	4.676E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 85	0.000E+00	8.784E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 85	0.000E+00	1.931E+03	3.194E-25	0.000E+00	0.000E+00	0.000E+00
SE 85M	0.000E+00	1.513E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	0.000E+00	1.356E+03	7.958E-04	3.983E-10	0.000E+00	0.000E+00
KR 85	0.000E+00	2.202E+01	2.202E+01	2.202E+01	2.202E+01	2.202E+01
KR 85M	0.000E+00	5.471E+02	4.743E+02	4.063E+02	8.650E+01	1.351E+01
GE 86	0.000E+00	8.273E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 86	0.000E+00	6.142E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 86	0.000E+00	2.608E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	0.000E+00	4.567E+03	1.137E-16	0.000E+00	0.000E+00	0.000E+00
BR 86M	0.000E+00	4.270E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 86	0.000E+00	1.994E+01	1.991E+01	1.988E+01	1.957E+01	1.921E+01
RB 86M	0.000E+00	1.418E+00	2.566E-18	4.298E-36	0.000E+00	0.000E+00
GE 87	0.000E+00	1.388E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 87	0.000E+00	2.385E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 87	0.000E+00	3.863E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 87	0.000E+00	7.892E+03	3.140E-16	1.298E-35	0.000E+00	0.000E+00
KR 87	0.000E+00	5.155E+03	3.021E+03	1.751E+03	7.520E+00	1.083E-02
SR 87M	0.000E+00	4.577E-02	3.575E-02	2.792E-02	2.361E-03	1.217E-04
GE 88	0.000E+00	6.406E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 88	0.000E+00	3.544E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 88	0.000E+00	1.281E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 88	0.000E+00	5.162E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	0.000E+00	7.900E+03	6.194E+03	4.852E+03	4.223E+02	2.255E+01
RB 88	0.000E+00	9.364E+03	7.923E+03	6.264E+03	5.458E+02	2.914E+01
AS 89	0.000E+00	3.692E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 89	0.000E+00	5.248E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 89	0.000E+00	6.311E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	0.000E+00	1.281E+04	2.595E-02	5.204E-08	0.000E+00	0.000E+00
RB 89	0.000E+00	1.363E+04	1.098E+03	7.114E+01	9.319E-11	5.129E-25
SR 89	0.000E+00	2.696E+03	2.695E+03	2.694E+03	2.678E+03	2.660E+03
Y 89M	0.000E+00	3.903E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 90	0.000E+00	1.339E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 90	0.000E+00	4.487E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 90	0.000E+00	1.019E+04	3.032E-30	0.000E+00	0.000E+00	0.000E+00
RB 90	0.000E+00	1.683E+04	3.369E-02	1.946E-06	0.000E+00	0.000E+00
RB 90M	0.000E+00	4.845E+03	3.250E-01	2.049E-05	0.000E+00	0.000E+00
SR 90	0.000E+00	1.360E+02	1.360E+02	1.360E+02	1.360E+02	1.360E+02
Y 90	0.000E+00	6.889E+02	6.885E+02	6.881E+02	6.841E+02	6.799E+02
Y 90M	0.000E+00	1.001E-01	8.005E-02	6.401E-02	6.842E-03	4.676E-04
SE 91	0.000E+00	3.281E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 91	0.000E+00	1.597E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 91	0.000E+00	9.651E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	0.000E+00	2.214E+04	5.810E-15	1.395E-33	0.000E+00	0.000E+00
SR 91	0.000E+00	8.092E+03	7.536E+03	7.005E+03	3.377E+03	1.407E+03
Y 91	0.000E+00	3.787E+03	3.787E+03	3.787E+03	3.780E+03	3.764E+03
Y 91M	0.000E+00	1.938E+03	1.894E+03	1.801E+03	8.855E+02	3.688E+02
SE 92	0.000E+00	1.837E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 92	0.000E+00	2.993E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 92	0.000E+00	4.916E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	0.000E+00	1.818E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 92	0.000E+00	1.038E+04	8.037E+03	6.223E+03	4.822E+02	2.240E+01
Y 92	0.000E+00	1.155E+04	1.129E+04	1.067E+04	2.936E+03	3.651E+02
BR 93	0.000E+00	4.789E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 93	0.000E+00	2.818E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

RB 93	0.000E+00	1.291E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 93	0.000E+00	2.044E+04	8.034E+01	3.140E-01	0.000E+00	0.000E+00
Y 93	0.000E+00	1.041E+04	9.837E+03	9.185E+03	4.624E+03	2.029E+03
ZR 93	0.000E+00	3.519E-04	3.519E-04	3.519E-04	3.519E-04	3.520E-04
NB 93M	0.000E+00	6.242E-05	6.242E-05	6.243E-05	6.245E-05	6.248E-05
BR 94	0.000E+00	5.451E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 94	0.000E+00	7.038E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 94	0.000E+00	9.569E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 94	0.000E+00	1.617E+04	7.549E-11	3.492E-25	0.000E+00	0.000E+00
Y 94	0.000E+00	2.404E+04	2.898E+03	3.285E+02	1.148E-07	5.157E-19
NB 94M	0.000E+00	4.520E-04	5.887E-07	7.653E-10	0.000E+00	0.000E+00
BR 95	0.000E+00	4.569E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 88
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 95	0.000E+00	2.003E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 95	0.000E+00	4.431E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 95	0.000E+00	2.346E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	0.000E+00	2.110E+04	4.149E+02	7.902E+00	4.966E-17	0.000E+00
ZR 95	0.000E+00	8.402E+03	8.399E+03	8.395E+03	8.357E+03	8.312E+03
NB 95	0.000E+00	7.985E+03	7.985E+03	7.985E+03	7.985E+03	7.984E+03
NB 95M	0.000E+00	1.648E+01	1.648E+01	1.647E+01	1.644E+01	1.640E+01
BR 96	0.000E+00	3.030E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 96	0.000E+00	2.515E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 96	0.000E+00	1.935E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 96	0.000E+00	1.215E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	0.000E+00	3.484E+04	4.968E-04	6.970E-12	0.000E+00	0.000E+00
NB 96	0.000E+00	7.467E+01	7.249E+01	7.037E+01	5.229E+01	3.662E+01
KR 97	0.000E+00	2.353E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 97	0.000E+00	3.208E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 97	0.000E+00	1.096E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 97	0.000E+00	2.425E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	9.068E+03	8.704E+03	8.354E+03	5.544E+03	3.389E+03
NB 97	0.000E+00	1.171E+04	1.152E+04	1.121E+04	7.609E+03	4.358E+03

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NB 97M     0.000E+00 7.268E+03 6.966E+03 6.686E+03 4.436E+03 2.712E+03
KR 98      0.000E+00 2.215E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 98      0.000E+00 1.004E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 98      0.000E+00 3.356E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 98      0.000E+00 2.646E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 98      0.000E+00 9.456E+03 1.049E-31 0.000E+00 0.000E+00 0.000E+00
NB 98      0.000E+00 2.226E+04 2.660E-31 0.000E+00 0.000E+00 0.000E+00
NB 98M     0.000E+00 4.142E+02 1.847E+02 8.238E+01 2.563E-02 1.585E-06
RB 99      0.000E+00 9.155E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 99      0.000E+00 1.592E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 99      0.000E+00 1.184E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR 99      0.000E+00 2.504E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99      0.000E+00 1.693E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB 99M     0.000E+00 1.092E+03 1.235E-04 1.395E-11 0.000E+00 0.000E+00
MO 99      0.000E+00 6.654E+03 6.585E+03 6.516E+03 5.867E+03 5.172E+03
TC 99      0.000E+00 1.056E-02 1.056E-02 1.056E-02 1.057E-02 1.057E-02
TC 99M     0.000E+00 1.529E+03 1.528E+03 1.526E+03 1.445E+03 1.298E+03
RB100      0.000E+00 1.186E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR100      0.000E+00 2.486E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y100      0.000E+00 8.304E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR100      0.000E+00 1.301E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100      0.000E+00 2.443E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB100M     0.000E+00 2.138E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC100      0.000E+00 8.103E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR101      0.000E+00 5.485E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y101      0.000E+00 2.147E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZR101      0.000E+00 1.877E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB101      0.000E+00 2.282E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO101      0.000E+00 2.148E+04 1.261E+03 7.333E+01 3.244E-11 4.854E-26
TC101      0.000E+00 9.028E+03 1.971E+03 1.919E+02 3.065E-10 6.184E-25
SR102      0.000E+00 4.199E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y102      0.000E+00 8.124E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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         OUTPUT UNIT =
6                          PAGE   89
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
```

ZR102	0.000E+00	7.534E+03	9.952E-35	0.000E+00	0.000E+00	0.000E+00
NB102	0.000E+00	3.708E+04	2.609E-34	0.000E+00	0.000E+00	0.000E+00
MO102	0.000E+00	3.397E+03	8.160E+01	1.925E+00	1.029E-16	3.064E-36
TC102	0.000E+00	1.904E+04	4.602E+02	1.086E+01	5.806E-16	3.090E-35
TC102M	0.000E+00	4.902E+01	3.454E-03	2.433E-07	0.000E+00	0.000E+00
RH102	0.000E+00	3.178E-02	3.178E-02	3.178E-02	3.177E-02	3.176E-02
SR103	0.000E+00	2.082E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y103	0.000E+00	1.029E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR103	0.000E+00	5.548E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB103	0.000E+00	1.996E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	0.000E+00	2.544E+04	2.668E-14	2.314E-32	0.000E+00	0.000E+00
TC103	0.000E+00	1.385E+04	8.559E-14	7.426E-32	0.000E+00	0.000E+00
RU103	0.000E+00	6.418E+03	6.413E+03	6.408E+03	6.361E+03	6.306E+03
RH103M	0.000E+00	3.977E+02	3.976E+02	3.974E+02	3.948E+02	3.911E+02
SR104	0.000E+00	7.611E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y104	0.000E+00	1.355E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR104	0.000E+00	1.000E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB104	0.000E+00	1.623E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	0.000E+00	9.560E+03	4.944E-08	2.544E-19	0.000E+00	0.000E+00
TC104	0.000E+00	3.643E+04	4.041E+03	4.112E+02	4.898E-08	6.042E-20
RH104	0.000E+00	9.760E+03	5.249E-02	3.617E-06	0.000E+00	0.000E+00
RH104M	0.000E+00	8.965E+01	6.179E-03	4.258E-07	0.000E+00	0.000E+00
Y105	0.000E+00	5.736E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR105	0.000E+00	2.290E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB105	0.000E+00	4.375E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO105	0.000E+00	2.103E+04	1.806E-16	0.000E+00	0.000E+00	0.000E+00
TC105	0.000E+00	1.568E+04	9.545E+01	5.272E-01	0.000E+00	0.000E+00
RU105	0.000E+00	1.023E+04	9.040E+03	7.735E+03	1.623E+03	2.492E+02
RH105	0.000E+00	1.798E+03	1.800E+03	1.797E+03	1.610E+03	1.301E+03
RH105M	0.000E+00	3.119E+02	2.764E+02	2.365E+02	4.961E+01	7.617E+00
ZR106	0.000E+00	1.844E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB106	0.000E+00	1.706E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO106	0.000E+00	6.632E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	0.000E+00	2.370E+04	1.455E-25	0.000E+00	0.000E+00	0.000E+00
RU106	0.000E+00	4.906E+01	4.906E+01	4.906E+01	4.902E+01	4.897E+01
RH106	0.000E+00	8.865E+03	7.914E+03	7.913E+03	7.907E+03	7.900E+03
RH106M	0.000E+00	8.633E+02	6.300E+02	4.597E+02	1.969E+01	4.489E-01
Y107	0.000E+00	3.055E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR107	0.000E+00	1.249E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB107	0.000E+00	2.153E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO107	0.000E+00	4.972E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	0.000E+00	9.476E+03	4.528E-34	0.000E+00	0.000E+00	0.000E+00
RU107	0.000E+00	7.619E+03	4.163E-01	2.084E-05	0.000E+00	0.000E+00
RH107	0.000E+00	4.256E+03	7.892E+02	1.161E+02	5.514E-07	5.668E-17
PD107M	0.000E+00	3.021E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR108	0.000E+00	3.487E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB108	0.000E+00	6.595E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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MO108      0.000E+00 1.026E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC108      0.000E+00 9.154E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU108      0.000E+00 1.880E+03 1.842E-01 1.785E-05 0.000E+00 0.000E+00
RH108      0.000E+00 8.579E+03 8.878E-01 8.601E-05 0.000E+00 0.000E+00
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OUTPUT UNIT =
6 PAGE 90
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

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

RH108M     0.000E+00 1.123E+02 9.749E-02 8.465E-05 0.000E+00 0.000E+00
AG108      0.000E+00 1.299E-02 2.240E-08 2.209E-08 2.209E-08 2.209E-08
ZR109      0.000E+00 3.669E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NB109      0.000E+00 1.108E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO109      0.000E+00 5.611E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC109      0.000E+00 3.418E+03 1.931E-18 0.000E+00 0.000E+00 0.000E+00
RU109      0.000E+00 5.359E+03 3.938E-18 0.000E+00 0.000E+00 0.000E+00
RH109      0.000E+00 2.990E+03 1.083E-08 9.848E-21 0.000E+00 0.000E+00
RH109M     0.000E+00 2.931E+02 6.598E-18 0.000E+00 0.000E+00 0.000E+00
PD109      0.000E+00 1.475E+03 1.408E+03 1.338E+03 7.992E+02 4.308E+02
PD109M     0.000E+00 2.231E+02 6.289E-02 8.860E-06 0.000E+00 0.000E+00
AG109M     0.000E+00 2.857E+02 2.731E+02 2.594E+02 1.550E+02 8.354E+01
NB110      0.000E+00 1.659E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO110      0.000E+00 8.275E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC110      0.000E+00 1.251E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU110      0.000E+00 1.497E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH110      0.000E+00 3.792E+03 3.504E-34 0.000E+00 0.000E+00 0.000E+00
RH110M     0.000E+00 1.951E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG110      0.000E+00 2.610E+03 1.002E+00 1.001E+00 1.000E+00 9.989E-01
AG110M     0.000E+00 1.751E+02 1.750E+02 1.750E+02 1.748E+02 1.746E+02
NB111      0.000E+00 1.219E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
MO111      0.000E+00 2.636E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TC111      0.000E+00 3.189E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RU111      0.000E+00 1.354E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RH111      0.000E+00 1.303E+03 1.016E-14 6.383E-32 0.000E+00 0.000E+00
PD111      0.000E+00 5.337E+02 8.986E+01 1.769E+01 1.411E+00 3.110E-01
PD111M     0.000E+00 5.756E+00 5.079E+00 4.478E+00 1.270E+00 2.798E-01
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AG111	0.000E+00	2.297E+02	2.293E+02	2.285E+02	2.199E+02	2.099E+02
AG111M	0.000E+00	3.892E+01	6.962E+00	1.481E+00	1.465E-01	3.229E-02
CD111M	0.000E+00	2.778E-01	1.183E-01	5.035E-02	9.845E-06	3.489E-10
MO112	0.000E+00	3.805E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	0.000E+00	1.511E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	0.000E+00	3.852E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	0.000E+00	1.145E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD112	0.000E+00	4.675E+01	4.517E+01	4.364E+01	3.091E+01	2.044E+01
AG112	0.000E+00	6.338E+02	6.311E+02	6.248E+02	4.864E+02	3.263E+02
MO113	0.000E+00	4.001E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC113	0.000E+00	3.298E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU113	0.000E+00	3.700E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH113	0.000E+00	5.832E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD113	0.000E+00	4.655E+02	4.323E-10	3.932E-22	0.000E+00	0.000E+00
AG113	0.000E+00	2.225E+02	1.962E+02	1.721E+02	4.655E+01	9.689E+00
AG113M	0.000E+00	2.809E+01	9.640E-11	8.768E-23	0.000E+00	0.000E+00
CD113M	0.000E+00	2.110E-01	2.110E-01	2.110E-01	2.110E-01	2.110E-01
MO114	0.000E+00	3.314E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC114	0.000E+00	1.019E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU114	0.000E+00	1.195E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH114	0.000E+00	5.273E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD114	0.000E+00	1.849E+02	5.609E-06	1.672E-13	0.000E+00	0.000E+00
AG114	0.000E+00	3.280E+02	1.012E-05	3.016E-13	0.000E+00	0.000E+00
IN114	0.000E+00	1.476E-01	5.458E-02	5.455E-02	5.423E-02	5.385E-02

OUTPUT UNIT = 6 PAGE 91
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
IN114M	0.000E+00	1.700E-02	1.699E-02	1.698E-02	1.688E-02	1.677E-02
MO115	0.000E+00	3.082E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC115	0.000E+00	1.816E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU115	0.000E+00	9.317E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH115	0.000E+00	3.087E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD115	0.000E+00	3.847E+02	1.289E-26	0.000E+00	0.000E+00	0.000E+00
AG115	0.000E+00	1.929E+02	2.495E+01	3.119E+00	2.905E-09	4.227E-20

AG115M	0.000E+00	8.237E+01	4.658E-27	0.000E+00	0.000E+00	0.000E+00
CD115	0.000E+00	8.202E+01	8.130E+01	8.029E+01	7.054E+01	6.038E+01
CD115M	0.000E+00	9.102E+00	9.097E+00	9.091E+00	9.032E+00	8.962E+00
IN115M	0.000E+00	5.163E+01	5.158E+01	5.146E+01	4.751E+01	4.115E+01
TC116	0.000E+00	1.471E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU116	0.000E+00	1.586E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH116	0.000E+00	2.213E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD116	0.000E+00	1.739E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG116	0.000E+00	2.125E+02	4.209E-05	7.669E-12	0.000E+00	0.000E+00
AG116M	0.000E+00	2.489E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116	0.000E+00	1.280E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	1.873E+02	8.689E+01	4.031E+01	1.862E-02	1.851E-06
TC117	0.000E+00	5.291E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU117	0.000E+00	3.591E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH117	0.000E+00	8.798E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD117	0.000E+00	3.235E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG117	0.000E+00	1.506E+02	2.503E-13	3.924E-28	0.000E+00	0.000E+00
AG117M	0.000E+00	1.579E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD117	0.000E+00	9.844E+01	7.580E+01	5.807E+01	4.037E+00	1.647E-01
CD117M	0.000E+00	6.018E+01	4.919E+01	4.012E+01	5.223E+00	4.524E-01
IN117	0.000E+00	5.681E+01	5.490E+01	5.037E+01	7.347E+00	5.083E-01
IN117M	0.000E+00	6.030E+01	5.814E+01	5.306E+01	8.064E+00	5.018E-01
SN117M	0.000E+00	5.052E-01	5.041E-01	5.031E-01	4.928E-01	4.808E-01
RU118	0.000E+00	1.858E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH118	0.000E+00	2.187E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD118	0.000E+00	1.838E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118	0.000E+00	2.538E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118M	0.000E+00	1.184E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD118	0.000E+00	5.355E+01	2.347E+01	1.027E+01	2.634E-03	1.293E-07
IN118	0.000E+00	2.486E+02	1.091E+02	4.772E+01	1.224E-02	6.011E-07
IN118M	0.000E+00	1.839E-01	1.606E-05	1.403E-09	0.000E+00	0.000E+00
RH119	0.000E+00	1.438E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD119	0.000E+00	2.624E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG119	0.000E+00	3.591E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD119	0.000E+00	1.129E+02	1.368E+00	1.640E-02	1.000E-21	0.000E+00
CD119M	0.000E+00	1.260E+02	2.965E-04	6.725E-10	0.000E+00	0.000E+00
IN119	0.000E+00	4.738E+01	1.210E+00	1.264E-01	1.182E-11	1.075E-23
IN119M	0.000E+00	1.305E+02	2.230E+01	2.313E+00	2.150E-10	1.955E-22
SN119M	0.000E+00	1.859E-01	1.858E-01	1.858E-01	1.856E-01	1.853E-01
RU120	0.000E+00	4.668E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH120	0.000E+00	2.940E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD120	0.000E+00	6.624E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG120	0.000E+00	1.966E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD120	0.000E+00	1.135E+02	5.447E-20	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6

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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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
          FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

IN120     0.000E+00 2.389E+02 8.900E-19 0.000E+00 0.000E+00 0.000E+00
IN120M    0.000E+00 1.653E+02 8.266E-20 0.000E+00 0.000E+00 0.000E+00
RH121     0.000E+00 3.927E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD121     0.000E+00 4.369E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG121     0.000E+00 2.057E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD121     0.000E+00 3.304E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121     0.000E+00 2.047E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN121M    0.000E+00 5.446E+01 1.947E-04 6.546E-10 0.000E+00 0.000E+00
SN121     0.000E+00 2.576E+01 2.512E+01 2.448E+01 1.890E+01 1.386E+01
SN121M    0.000E+00 7.789E-04 7.789E-04 7.789E-04 7.789E-04 7.789E-04
RH122     0.000E+00 6.081E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD122     0.000E+00 1.019E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG122     0.000E+00 1.945E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD122     0.000E+00 1.631E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN122     0.000E+00 5.648E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN122M    0.000E+00 2.953E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB122     0.000E+00 3.126E+01 3.093E+01 3.060E+01 2.750E+01 2.418E+01
SB122M    0.000E+00 3.948E-02 1.977E-06 9.897E-11 0.000E+00 0.000E+00
RH123     0.000E+00 4.499E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
PD123     0.000E+00 3.478E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG123     0.000E+00 8.117E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD123     0.000E+00 3.602E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN123     0.000E+00 2.343E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN123M    0.000E+00 1.150E+02 3.427E-21 0.000E+00 0.000E+00 0.000E+00
SN123     0.000E+00 1.433E+01 1.432E+01 1.432E+01 1.429E+01 1.425E+01
SN123M    0.000E+00 7.272E+01 2.598E+01 9.206E+00 2.871E-04 1.124E-09
TE123M    0.000E+00 1.019E-01 1.018E-01 1.018E-01 1.016E-01 1.013E-01
PD124     0.000E+00 5.167E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG124     0.000E+00 5.227E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD124     0.000E+00 2.216E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN124     0.000E+00 7.111E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB124     0.000E+00 4.612E+01 4.610E+01 4.608E+01 4.586E+01 4.559E+01
SB124M    0.000E+00 4.953E-02 1.102E-13 2.451E-25 0.000E+00 0.000E+00
AG125     0.000E+00 1.357E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD125     0.000E+00 2.874E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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IN125      0.000E+00 3.396E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN125M     0.000E+00 2.585E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN125      0.000E+00 1.185E+02 1.181E+02 1.178E+02 1.143E+02 1.103E+02
SN125M     0.000E+00 1.945E+02 2.493E+00 3.158E-02 3.365E-21 0.000E+00
SB125      0.000E+00 7.025E+01 7.025E+01 7.025E+01 7.024E+01 7.024E+01
TE125M     0.000E+00 4.086E+00 4.086E+00 4.086E+00 4.088E+00 4.089E+00
PD126      0.000E+00 9.151E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AG126      0.000E+00 5.562E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD126      0.000E+00 1.528E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN126      0.000E+00 1.160E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN126      0.000E+00 1.788E-03 1.788E-03 1.788E-03 1.788E-03 1.788E-03
SB126      0.000E+00 3.532E+01 3.524E+01 3.516E+01 3.435E+01 3.340E+01
SB126M     0.000E+00 8.814E+00 1.004E+00 1.287E-01 1.825E-02 1.825E-02
CD127      0.000E+00 1.376E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127      0.000E+00 5.480E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN127M     0.000E+00 5.727E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE   93
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

SN127      0.000E+00 1.272E+03 9.149E+02 6.577E+02 2.424E+01 4.617E-01
SN127M     0.000E+00 4.071E+02 1.737E-02 7.415E-07 0.000E+00 0.000E+00
SB127      0.000E+00 8.269E+02 8.243E+02 8.205E+02 7.668E+02 7.010E+02
TE127      0.000E+00 1.861E+02 1.861E+02 1.860E+02 1.823E+02 1.731E+02
TE127M     0.000E+00 9.757E+00 9.757E+00 9.758E+00 9.758E+00 9.757E+00
XE127      0.000E+00 4.098E-04 4.095E-04 4.092E-04 4.060E-04 4.021E-04
AG128      0.000E+00 2.569E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CD128      0.000E+00 4.098E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN128      0.000E+00 1.227E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN128      0.000E+00 9.399E+02 4.646E+02 2.296E+02 1.993E-01 4.227E-05
SB128      0.000E+00 4.085E+02 3.783E+02 3.503E+02 1.623E+02 6.448E+01
SB128M     0.000E+00 3.760E+03 2.044E+03 1.013E+03 8.800E-01 1.866E-04
 I128      0.000E+00 1.467E+02 2.777E+01 5.256E+00 3.098E-07 6.541E-16
CD129      0.000E+00 2.544E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN129      0.000E+00 8.312E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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SN129      0.000E+00 2.000E+03 7.815E+00 3.052E-02 0.000E+00 0.000E+00
SN129M     0.000E+00 2.253E+03 1.344E-04 8.010E-12 0.000E+00 0.000E+00
SB129      0.000E+00 4.362E+03 3.766E+03 3.208E+03 6.447E+02 9.398E+01
TE129      0.000E+00 1.375E+03 1.322E+03 1.219E+03 3.774E+02 1.676E+02
TE129M     0.000E+00 1.008E+02 1.008E+02 1.007E+02 1.002E+02 9.919E+01
 I129      0.000E+00 2.544E-05 2.544E-05 2.544E-05 2.544E-05 2.545E-05
XE129M     0.000E+00 3.719E-02 3.706E-02 3.692E-02 3.561E-02 3.410E-02
CD130      0.000E+00 1.751E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN130      0.000E+00 9.479E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN130      0.000E+00 3.134E+03 4.373E-02 6.101E-07 0.000E+00 0.000E+00
SB130      0.000E+00 3.016E+03 1.066E+03 3.769E+02 1.150E-02 4.388E-08
SB130M     0.000E+00 1.181E+04 3.321E+01 4.541E-02 0.000E+00 0.000E+00
 I130      0.000E+00 1.136E+03 1.079E+03 1.020E+03 5.822E+02 2.971E+02
 I130M     0.000E+00 5.690E+01 5.601E-01 5.514E-03 4.707E-23 0.000E+00
CD131      0.000E+00 4.677E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN131      0.000E+00 3.490E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN131      0.000E+00 5.952E+03 3.741E-14 2.351E-31 0.000E+00 0.000E+00
SB131      0.000E+00 1.316E+04 2.195E+03 3.599E+02 5.050E-06 1.904E-15
TE131      0.000E+00 6.649E+03 3.171E+03 1.079E+03 1.954E+02 1.481E+02
TE131M     0.000E+00 1.623E+03 1.593E+03 1.557E+03 1.236E+03 9.369E+02
 I131      0.000E+00 3.799E+03 3.796E+03 3.788E+03 3.673E+03 3.534E+03
XE131M     0.000E+00 1.204E+01 1.204E+01 1.204E+01 1.204E+01 1.201E+01
CD132      0.000E+00 3.850E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
IN132      0.000E+00 1.345E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN132      0.000E+00 2.069E+03 1.671E-24 0.000E+00 0.000E+00 0.000E+00
SB132      0.000E+00 1.207E+04 4.713E-03 1.670E-09 0.000E+00 0.000E+00
SB132M     0.000E+00 8.095E+03 4.053E-01 2.029E-05 0.000E+00 0.000E+00
TE132      0.000E+00 3.093E+03 3.067E+03 3.040E+03 2.782E+03 2.501E+03
 I132      0.000E+00 2.618E+04 2.601E+04 2.584E+04 2.378E+04 2.138E+04
CS132      0.000E+00 2.059E+00 2.050E+00 2.040E+00 1.951E+00 1.850E+00
IN133      0.000E+00 1.519E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SN133      0.000E+00 1.470E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB133      0.000E+00 1.238E+04 3.692E-04 1.100E-11 0.000E+00 0.000E+00
TE133      0.000E+00 1.316E+04 1.069E+03 2.997E+02 1.554E-01 1.902E-05
TE133M     0.000E+00 1.293E+04 6.107E+03 2.883E+03 1.583E+00 1.938E-04
 I133      0.000E+00 1.299E+04 1.274E+04 1.237E+04 8.901E+03 5.967E+03

         OUTPUT UNIT =
6                          PAGE   94
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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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9 SUMMARY TABLE: THERMAL POWER, WATTS
1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
I133M	0.000E+00	7.353E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	0.000E+00	2.325E+03	2.325E+03	2.325E+03	2.302E+03	2.240E+03
XE133M	0.000E+00	9.555E+01	9.541E+01	9.524E+01	9.205E+01	8.562E+01
IN134	0.000E+00	1.077E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN134	0.000E+00	1.953E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134	0.000E+00	3.031E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	0.000E+00	2.866E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	0.000E+00	1.142E+04	4.225E+03	1.562E+03	7.459E-02	4.869E-07
I134	0.000E+00	4.515E+04	3.083E+04	1.775E+04	1.186E+01	9.536E-04
I134M	0.000E+00	5.495E+02	7.218E-03	9.481E-08	0.000E+00	0.000E+00
XE134M	0.000E+00	2.203E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	0.000E+00	4.132E+03	4.132E+03	4.132E+03	4.130E+03	4.128E+03
CS134M	0.000E+00	8.085E+01	6.366E+01	5.013E+01	4.592E+00	2.608E-01
SN135	0.000E+00	2.983E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB135	0.000E+00	1.511E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE135	0.000E+00	1.620E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	2.325E+04	2.095E+04	1.886E+04	6.611E+03	1.879E+03
XE135	0.000E+00	1.555E+03	1.927E+03	2.214E+03	2.741E+03	1.698E+03
XE135M	0.000E+00	1.406E+03	9.386E+02	8.236E+02	2.881E+02	8.186E+01
CS135	0.000E+00	2.539E-04	2.539E-04	2.539E-04	2.540E-04	2.541E-04
CS135M	0.000E+00	8.458E+02	3.859E+02	1.761E+02	6.883E-02	5.602E-06
BA135M	0.000E+00	8.139E-01	7.945E-01	7.755E-01	6.091E-01	4.558E-01
SN136	0.000E+00	2.386E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB136	0.000E+00	4.243E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE136	0.000E+00	7.480E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	2.381E+04	2.421E-09	2.125E-22	0.000E+00	0.000E+00
I136M	0.000E+00	1.241E+04	3.428E-20	0.000E+00	0.000E+00	0.000E+00
CS136	0.000E+00	1.572E+03	1.568E+03	1.565E+03	1.531E+03	1.491E+03
BA136M	0.000E+00	2.297E+02	2.292E+02	2.287E+02	2.237E+02	2.179E+02
SB137	0.000E+00	6.189E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE137	0.000E+00	3.371E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I137	0.000E+00	1.863E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	2.182E+04	4.429E-01	8.520E-06	0.000E+00	0.000E+00
CS137	0.000E+00	1.981E+02	1.981E+02	1.981E+02	1.981E+02	1.981E+02
BA137M	0.000E+00	6.663E+02	6.654E+02	6.652E+02	6.651E+02	6.651E+02
SB138	0.000E+00	1.022E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE138	0.000E+00	7.166E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I138	0.000E+00	1.022E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	0.000E+00	1.804E+04	9.606E+02	5.104E+01	9.149E-12	4.630E-27
CS138	0.000E+00	4.010E+04	1.729E+04	5.082E+03	1.269E-02	2.357E-09
CS138M	0.000E+00	5.517E+02	3.262E-04	1.929E-10	0.000E+00	0.000E+00
SB139	0.000E+00	6.674E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE139	0.000E+00	2.119E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

I139	0.000E+00	4.739E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE139	0.000E+00	2.049E+04	7.581E-24	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	2.128E+04	2.689E+02	3.221E+00	1.965E-19	0.000E+00
BA139	0.000E+00	1.043E+04	7.111E+03	4.310E+03	2.822E+01	6.763E-02
TE140	0.000E+00	2.162E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I140	0.000E+00	1.528E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE140	0.000E+00	1.079E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	0.000E+00	3.886E+04	4.561E-13	4.711E-30	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 95
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA140	0.000E+00	5.036E+03	5.024E+03	5.013E+03	4.901E+03	4.770E+03
LA140	0.000E+00	3.209E+04	3.206E+04	3.203E+04	3.167E+04	3.118E+04
PR140	0.000E+00	1.896E-01	8.892E-07	4.179E-12	0.000E+00	0.000E+00
TE141	0.000E+00	1.420E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I141	0.000E+00	2.519E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE141	0.000E+00	6.545E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	0.000E+00	2.240E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	0.000E+00	1.738E+04	1.813E+03	1.861E+02	2.409E-08	3.284E-20
LA141	0.000E+00	1.001E+04	9.021E+03	7.626E+03	1.309E+03	1.577E+02
CE141	0.000E+00	2.523E+03	2.523E+03	2.523E+03	2.509E+03	2.483E+03
TE142	0.000E+00	1.245E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I142	0.000E+00	5.830E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE142	0.000E+00	1.684E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS142	0.000E+00	1.882E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	0.000E+00	1.377E+04	2.829E+02	5.802E+00	7.645E-17	4.290E-37
LA142	0.000E+00	3.440E+04	2.467E+04	1.581E+04	1.780E+02	8.173E-01
PR142	0.000E+00	8.680E+02	8.391E+02	8.093E+02	5.633E+02	3.647E+02
PR142M	0.000E+00	4.903E+01	2.840E+00	1.645E-01	7.001E-14	9.997E-29
I143	0.000E+00	3.239E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE143	0.000E+00	4.703E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS143	0.000E+00	7.146E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	0.000E+00	2.137E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	0.000E+00	1.770E+04	9.214E+02	4.724E+01	5.930E-12	1.957E-27

CE143	0.000E+00	6.436E+03	6.345E+03	6.215E+03	5.038E+03	3.915E+03
PR143	0.000E+00	2.823E+03	2.823E+03	2.823E+03	2.816E+03	2.795E+03
I144	0.000E+00	3.566E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE144	0.000E+00	6.194E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS144	0.000E+00	3.303E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA144	0.000E+00	9.932E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	0.000E+00	2.688E+04	2.797E-23	0.000E+00	0.000E+00	0.000E+00
CE144	0.000E+00	8.313E+02	8.312E+02	8.311E+02	8.303E+02	8.293E+02
PR144	0.000E+00	9.309E+03	9.220E+03	9.211E+03	9.201E+03	9.190E+03
PR144M	0.000E+00	5.152E+00	5.145E+00	5.145E+00	5.139E+00	5.133E+00
XE145	0.000E+00	1.187E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS145	0.000E+00	6.310E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA145	0.000E+00	9.990E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	0.000E+00	1.485E+04	7.251E-34	0.000E+00	0.000E+00	0.000E+00
CE145	0.000E+00	9.261E+03	1.059E-02	1.010E-08	0.000E+00	0.000E+00
PR145	0.000E+00	4.314E+03	3.880E+03	3.455E+03	1.084E+03	2.698E+02
XE146	0.000E+00	5.883E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS146	0.000E+00	1.383E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA146	0.000E+00	2.281E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA146	0.000E+00	1.574E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	0.000E+00	2.232E+03	1.203E+02	6.430E+00	1.226E-12	6.685E-28
PR146	0.000E+00	1.308E+04	4.693E+03	9.671E+02	3.509E-05	3.881E-14
PM146	0.000E+00	2.460E-02	2.460E-02	2.460E-02	2.459E-02	2.459E-02
XE147	0.000E+00	7.735E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS147	0.000E+00	2.059E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA147	0.000E+00	1.028E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA147	0.000E+00	5.423E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	0.000E+00	8.439E+03	3.012E-12	9.940E-28	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 96
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
PR147	0.000E+00	6.418E+03	2.230E+02	6.969E+00	6.190E-15	5.369E-33
ND147	0.000E+00	1.682E+03	1.679E+03	1.674E+03	1.631E+03	1.581E+03
PM147	0.000E+00	4.211E+01	4.211E+01	4.212E+01	4.218E+01	4.225E+01

CS148	0.000E+00	1.834E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA148	0.000E+00	1.379E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA148	0.000E+00	3.345E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	0.000E+00	2.927E+03	1.855E-22	0.000E+00	0.000E+00	0.000E+00
PR148	0.000E+00	9.370E+03	1.852E-04	2.598E-12	0.000E+00	0.000E+00
PM148	0.000E+00	2.338E+03	2.326E+03	2.313E+03	2.193E+03	2.056E+03
PM148M	0.000E+00	3.834E+02	3.831E+02	3.829E+02	3.802E+02	3.770E+02
BA149	0.000E+00	2.708E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA149	0.000E+00	6.754E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE149	0.000E+00	4.231E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	0.000E+00	3.369E+03	4.760E-05	6.677E-13	0.000E+00	0.000E+00
ND149	0.000E+00	2.327E+03	1.591E+03	1.066E+03	1.940E+01	1.584E-01
PM149	0.000E+00	1.619E+03	1.609E+03	1.595E+03	1.413E+03	1.208E+03
CS150	0.000E+00	1.943E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA150	0.000E+00	1.640E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA150	0.000E+00	1.981E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE150	0.000E+00	1.234E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR150	0.000E+00	5.363E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM150	0.000E+00	1.413E+02	1.091E+02	8.425E+01	6.343E+00	2.847E-01
LA151	0.000E+00	2.165E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE151	0.000E+00	7.695E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR151	0.000E+00	2.251E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	0.000E+00	2.152E+03	7.549E+01	2.638E+00	7.167E-15	2.378E-32
PM151	0.000E+00	9.011E+02	8.856E+02	8.645E+02	6.772E+02	5.052E+02
SM151	0.000E+00	7.010E-02	7.012E-02	7.015E-02	7.036E-02	7.056E-02
BA152	0.000E+00	5.489E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA152	0.000E+00	3.453E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE152	0.000E+00	1.241E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR152	0.000E+00	1.695E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	0.000E+00	5.646E+02	1.527E+01	4.105E-01	8.079E-17	1.145E-35
PM152	0.000E+00	1.786E+03	7.289E+01	1.963E+00	3.858E-16	5.463E-35
PM152M	0.000E+00	3.457E+01	1.350E-01	5.275E-04	0.000E+00	0.000E+00
EU152	0.000E+00	6.786E-02	6.786E-02	6.786E-02	6.785E-02	6.785E-02
EU152M	0.000E+00	7.602E-01	7.057E-01	6.552E-01	3.114E-01	1.276E-01
LA153	0.000E+00	3.126E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE153	0.000E+00	3.835E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR153	0.000E+00	4.318E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND153	0.000E+00	1.247E+03	1.157E-13	1.042E-29	0.000E+00	0.000E+00
PM153	0.000E+00	5.113E+02	2.859E-01	1.293E-04	0.000E+00	0.000E+00
SM153	0.000E+00	1.600E+03	1.577E+03	1.554E+03	1.339E+03	1.121E+03
GD153	0.000E+00	3.572E-02	3.572E-02	3.571E-02	3.567E-02	3.562E-02
LA154	0.000E+00	1.905E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE154	0.000E+00	3.504E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR154	0.000E+00	1.607E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND154	0.000E+00	3.498E+02	2.837E-25	0.000E+00	0.000E+00	0.000E+00
PM154	0.000E+00	1.062E+03	4.833E-04	1.712E-10	0.000E+00	0.000E+00
PM154M	0.000E+00	1.794E+02	1.658E-08	1.532E-18	0.000E+00	0.000E+00
EU154	0.000E+00	2.056E+02	2.056E+02	2.055E+02	2.055E+02	2.055E+02

OUTPUT UNIT = 6 PAGE 97
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
CE155	0.000E+00	6.295E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR155	0.000E+00	2.686E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND155	0.000E+00	3.258E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	0.000E+00	5.102E+02	2.586E-27	0.000E+00	0.000E+00	0.000E+00
SM155	0.000E+00	3.192E+02	5.054E+01	7.764E+00	5.677E-08	9.794E-18
EU155	0.000E+00	1.136E+01	1.136E+01	1.136E+01	1.136E+01	1.135E+01
GD155M	0.000E+00	1.990E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE156	0.000E+00	5.000E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR156	0.000E+00	7.282E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND156	0.000E+00	8.180E+01	2.425E-17	8.295E-36	0.000E+00	0.000E+00
PM156	0.000E+00	4.805E+02	5.825E-17	2.301E-35	0.000E+00	0.000E+00
SM156	0.000E+00	8.554E+01	7.951E+01	7.386E+01	3.533E+01	1.458E+01
EU156	0.000E+00	5.215E+03	5.206E+03	5.197E+03	5.103E+03	4.990E+03
CE157	0.000E+00	5.410E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR157	0.000E+00	9.581E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND157	0.000E+00	4.357E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	0.000E+00	1.925E+02	2.277E-14	2.662E-30	0.000E+00	0.000E+00
SM157	0.000E+00	2.035E+02	1.227E+00	6.780E-03	0.000E+00	0.000E+00
EU157	0.000E+00	2.363E+02	2.267E+02	2.166E+02	1.373E+02	7.941E+01
PR158	0.000E+00	9.173E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	0.000E+00	5.173E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM158	0.000E+00	9.960E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	0.000E+00	5.183E+01	2.015E+01	7.826E+00	6.124E-04	7.231E-09
EU158	0.000E+00	1.679E+02	1.239E+02	7.188E+01	2.885E-02	8.501E-07
PR159	0.000E+00	3.221E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	0.000E+00	7.877E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	0.000E+00	1.901E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	0.000E+00	6.910E+01	1.445E-05	3.011E-12	0.000E+00	0.000E+00
EU159	0.000E+00	6.707E+01	7.719E+00	7.757E-01	8.143E-11	8.632E-23
GD159	0.000E+00	3.958E+01	3.851E+01	3.714E+01	2.559E+01	1.636E+01
ND160	0.000E+00	4.841E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PM160	0.000E+00	4.341E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	0.000E+00	2.266E+01	1.783E-02	1.402E-05	0.000E+00	0.000E+00
EU160	0.000E+00	4.406E+01	2.645E-02	2.080E-05	0.000E+00	0.000E+00
TB160	0.000E+00	2.328E+01	2.327E+01	2.326E+01	2.316E+01	2.305E+01
ND161	0.000E+00	4.916E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	0.000E+00	4.491E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	0.000E+00	9.518E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU161	0.000E+00	1.754E+01	3.555E-25	0.000E+00	0.000E+00	0.000E+00
GD161	0.000E+00	1.222E+01	1.966E-04	2.582E-09	0.000E+00	0.000E+00
TB161	0.000E+00	4.865E+00	4.846E+00	4.826E+00	4.628E+00	4.402E+00
PM162	0.000E+00	2.527E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM162	0.000E+00	9.393E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU162	0.000E+00	8.156E+00	7.957E-04	7.656E-08	0.000E+00	0.000E+00
GD162	0.000E+00	2.750E+00	6.217E-02	9.733E-04	8.442E-22	0.000E+00
TB162	0.000E+00	7.474E+00	5.100E-01	9.764E-03	8.973E-21	0.000E+00
TB162M	0.000E+00	2.507E-01	1.956E-01	1.436E-01	6.415E-03	1.539E-04
SM163	0.000E+00	1.690E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU163	0.000E+00	1.682E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD163	0.000E+00	2.975E+00	6.566E-12	1.367E-23	0.000E+00	0.000E+00
TB163	0.000E+00	1.965E+00	2.523E-01	2.990E-02	1.634E-11	1.254E-22

OUTPUT UNIT =
6 PAGE 98
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM BURN UP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
SM164	0.000E+00	1.180E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU164	0.000E+00	4.847E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD164	0.000E+00	7.506E-01	1.103E-01	1.620E-02	7.582E-11	7.656E-21
TB164	0.000E+00	2.056E+00	2.821E-01	4.133E-02	1.934E-10	1.953E-20
SM165	0.000E+00	1.078E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU165	0.000E+00	6.374E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD165	0.000E+00	5.375E-01	8.237E-12	1.260E-22	0.000E+00	0.000E+00
TB165	0.000E+00	6.474E-01	8.956E-12	1.370E-22	0.000E+00	0.000E+00
DY165	0.000E+00	7.233E+00	5.417E+00	4.034E+00	2.112E-01	6.131E-03
DY165M	0.000E+00	7.302E-01	1.339E-12	2.044E-23	0.000E+00	0.000E+00
DY166	0.000E+00	5.743E-02	5.695E-02	5.647E-02	5.186E-02	4.683E-02

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HO166      0.000E+00 2.042E+00 1.996E+00 1.950E+00 1.551E+00 1.185E+00
HO166M     0.000E+00 1.419E-04 1.419E-04 1.419E-04 1.419E-04 1.419E-04
ER167M     0.000E+00 1.724E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ER169      0.000E+00 1.555E-03 1.550E-03 1.546E-03 1.499E-03 1.445E-03
TM170      0.000E+00 4.187E-04 4.186E-04 4.185E-04 4.176E-04 4.164E-04
SUMTOT     0.000E+00 2.185E+06 4.488E+05 3.605E+05 2.182E+05 1.798E+05

TOTAL      0.000E+00 2.185E+06 4.488E+05 3.605E+05 2.182E+05 1.798E+05
□
         OUTPUT UNIT =
6                          PAGE   99
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H         0.000E+00 3.189E-02 3.189E-02 3.189E-02 3.189E-02 3.188E-02
CO         0.000E+00 1.389E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI         0.000E+00 2.533E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU         0.000E+00 1.628E+01 1.339E-10 2.530E-13 1.919E-13 1.677E-13
ZN         0.000E+00 8.423E+01 1.317E-01 1.297E-01 1.117E-01 9.340E-02
GA         0.000E+00 4.975E+02 2.391E+00 2.246E+00 1.749E+00 1.486E+00
GE         0.000E+00 1.776E+03 2.288E+01 1.734E+01 5.091E+00 2.404E+00
AS         0.000E+00 7.287E+03 9.790E+01 8.048E+01 6.204E+00 3.153E+00
SE         0.000E+00 1.474E+04 1.530E+02 2.432E+01 1.016E-02 7.385E-03
BR         0.000E+00 3.995E+04 1.366E+03 5.845E+02 1.542E+02 1.162E+02
KR         0.000E+00 5.497E+04 9.738E+03 7.056E+03 5.411E+02 5.821E+01
RB         0.000E+00 1.143E+05 9.041E+03 6.355E+03 5.653E+02 4.836E+01
SR         0.000E+00 1.097E+05 1.848E+04 1.606E+04 6.674E+03 4.226E+03
 Y         0.000E+00 1.823E+05 3.081E+04 2.647E+04 1.291E+04 7.207E+03
ZR         0.000E+00 9.807E+04 1.710E+04 1.675E+04 1.390E+04 1.170E+04
NB         0.000E+00 2.160E+05 2.674E+04 2.605E+04 2.010E+04 1.511E+04
MO         0.000E+00 1.009E+05 7.928E+03 6.591E+03 5.867E+03 5.172E+03
TC         0.000E+00 1.512E+05 8.096E+03 2.140E+03 1.445E+03 1.298E+03
RU         0.000E+00 3.541E+04 1.550E+04 1.419E+04 8.033E+03 6.604E+03
RH         0.000E+00 4.672E+04 1.181E+04 1.092E+04 9.981E+03 9.600E+03
PD         0.000E+00 4.387E+03 1.548E+03 1.403E+03 8.328E+02 4.519E+02
AG         0.000E+00 7.078E+03 1.538E+03 1.465E+03 1.084E+03 8.050E+02
CD         0.000E+00 2.398E+03 2.406E+02 1.981E+02 8.905E+01 7.017E+01
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IN         0.000E+00 9.587E+03 3.842E+02 2.454E+02 6.302E+01 4.223E+01
SN         0.000E+00 2.015E+04 1.574E+03 1.054E+03 1.726E+02 1.395E+02
SB         0.000E+00 7.798E+04 1.049E+04 6.311E+03 1.753E+03 1.033E+03
TE         0.000E+00 7.855E+04 2.085E+04 1.194E+04 4.889E+03 4.040E+03
 I         0.000E+00 1.857E+05 9.544E+04 7.963E+04 4.355E+04 3.306E+04
XE         0.000E+00 8.553E+04 6.259E+03 5.521E+03 5.435E+03 4.117E+03
CS         0.000E+00 1.601E+05 2.391E+04 1.121E+04 5.866E+03 5.819E+03
BA         0.000E+00 9.228E+04 1.513E+04 1.041E+04 5.819E+03 5.654E+03
LA         0.000E+00 1.614E+05 6.667E+04 5.551E+04 3.316E+04 3.134E+04
CE         0.000E+00 3.905E+04 9.820E+03 9.576E+03 8.377E+03 7.228E+03
PR         0.000E+00 5.955E+04 2.169E+04 1.728E+04 1.367E+04 1.262E+04
ND         0.000E+00 8.779E+03 3.361E+03 2.743E+03 1.650E+03 1.581E+03
PM         0.000E+00 1.031E+04 5.428E+03 5.284E+03 4.712E+03 4.190E+03
SM         0.000E+00 2.362E+03 1.728E+03 1.643E+03 1.375E+03 1.135E+03
EU         0.000E+00 5.976E+03 5.782E+03 5.704E+03 5.458E+03 5.286E+03
GD         0.000E+00 5.886E+01 3.872E+01 3.720E+01 2.563E+01 1.640E+01
TB         0.000E+00 4.053E+01 2.935E+01 2.831E+01 2.780E+01 2.746E+01
DY         0.000E+00 8.021E+00 5.474E+00 4.090E+00 2.631E-01 5.296E-02
HO         0.000E+00 2.043E+00 1.996E+00 1.950E+00 1.551E+00 1.185E+00
ER         0.000E+00 1.880E-02 1.551E-03 1.546E-03 1.499E-03 1.445E-03
TM         0.000E+00 4.271E-04 4.269E-04 4.268E-04 4.250E-04 4.231E-04
SUMTOT     0.000E+00 2.185E+06 4.488E+05 3.605E+05 2.182E+05 1.798E+05

TOTAL      0.000E+00 2.185E+06 4.488E+05 3.605E+05 2.182E+05 1.798E+05

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.849E-14 2.185E+06 4.488E+05 3.605E+05 2.182E+05 1.798E+05
ACT+FP     7.967E-02 2.338E+06 5.395E+05 4.397E+05 2.864E+05 2.392E+05
AP+ACT+FP  7.967E-02 2.338E+06 5.395E+05 4.397E+05 2.864E+05 2.393E+05
□
         OUTPUT UNIT =
6                          PAGE  100
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR
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KR 83	0.000E+00	7.146E+00	7.146E+00	7.146E+00	7.147E+00	7.147E+00
ZR 91	0.000E+00	1.631E+00	1.631E+00	1.631E+00	1.631E+00	1.632E+00
ZR 93	0.000E+00	7.881E+00	7.881E+00	7.882E+00	7.883E+00	7.883E+00
MO 95	0.000E+00	2.832E+01	2.832E+01	2.832E+01	2.833E+01	2.834E+01
ZR 96	0.000E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00	1.608E+00
MO 97	0.000E+00	5.725E+00	5.725E+00	5.726E+00	5.727E+00	5.728E+00
MO 98	0.000E+00	1.105E+01	1.105E+01	1.105E+01	1.105E+01	1.105E+01
TC 99	0.000E+00	6.797E+01	6.797E+01	6.797E+01	6.800E+01	6.802E+01
MO100	0.000E+00	1.490E+00	1.490E+00	1.490E+00	1.490E+00	1.490E+00
RU100	0.000E+00	1.270E+00	1.270E+00	1.270E+00	1.270E+00	1.270E+00
RU101	0.000E+00	2.340E+01	2.340E+01	2.340E+01	2.340E+01	2.340E+01
RU102	0.000E+00	2.041E+00	2.041E+00	2.041E+00	2.041E+00	2.041E+00
RH103	0.000E+00	1.219E+02	1.219E+02	1.219E+02	1.220E+02	1.221E+02
RU104	0.000E+00	1.568E+00	1.568E+00	1.568E+00	1.568E+00	1.568E+00
PD104	0.000E+00	2.503E+00	2.503E+00	2.503E+00	2.503E+00	2.503E+00
RH105	0.000E+00	1.064E+01	1.066E+01	1.064E+01	9.528E+00	7.702E+00
PD105	0.000E+00	1.456E+01	1.456E+01	1.456E+01	1.457E+01	1.457E+01
PD107	0.000E+00	6.495E+00	6.495E+00	6.495E+00	6.495E+00	6.495E+00
PD108	0.000E+00	1.172E+01	1.172E+01	1.172E+01	1.172E+01	1.172E+01
AG109	0.000E+00	2.812E+01	2.812E+01	2.812E+01	2.814E+01	2.816E+01
CD110	0.000E+00	1.284E+00	1.284E+00	1.284E+00	1.284E+00	1.284E+00
CD113	0.000E+00	2.990E+00	3.003E+00	3.015E+00	3.076E+00	3.094E+00
IN115	0.000E+00	1.994E+00	1.994E+00	1.995E+00	2.000E+00	2.006E+00
I127	0.000E+00	2.183E+00	2.183E+00	2.183E+00	2.184E+00	2.185E+00
I129	0.000E+00	6.143E+00	6.144E+00	6.144E+00	6.145E+00	6.146E+00
XE131	0.000E+00	7.367E+01	7.368E+01	7.368E+01	7.372E+01	7.377E+01
CS133	0.000E+00	8.639E+01	8.639E+01	8.639E+01	8.642E+01	8.646E+01
CS134	0.000E+00	1.880E+01	1.880E+01	1.880E+01	1.879E+01	1.878E+01
XE135	0.000E+00	1.331E+02	1.649E+02	1.895E+02	2.345E+02	1.453E+02
CS135	0.000E+00	6.836E+00	6.836E+00	6.837E+00	6.839E+00	6.842E+00
LA139	0.000E+00	7.766E+00	7.766E+00	7.766E+00	7.767E+00	7.767E+00
PR141	0.000E+00	1.248E+01	1.248E+01	1.248E+01	1.248E+01	1.248E+01
ND143	0.000E+00	9.924E+01	9.924E+01	9.925E+01	9.929E+01	9.934E+01
ND144	0.000E+00	3.503E+00	3.503E+00	3.504E+00	3.504E+00	3.505E+00
ND145	0.000E+00	3.735E+01	3.735E+01	3.736E+01	3.736E+01	3.736E+01
PM147	0.000E+00	4.549E+01	4.550E+01	4.551E+01	4.557E+01	4.565E+01
SM147	0.000E+00	8.973E+00	8.973E+00	8.973E+00	8.977E+00	8.981E+00
ND148	0.000E+00	2.207E+00	2.207E+00	2.207E+00	2.207E+00	2.207E+00
PM148	0.000E+00	9.030E+00	8.982E+00	8.934E+00	8.468E+00	7.942E+00
PM148M	0.000E+00	1.266E+01	1.265E+01	1.264E+01	1.255E+01	1.245E+01
SM148	0.000E+00	1.713E+00	1.713E+00	1.713E+00	1.713E+00	1.714E+00
SM149	0.000E+00	5.523E+01	5.571E+01	5.619E+01	6.068E+01	6.536E+01
SM150	0.000E+00	2.804E+01	2.804E+01	2.804E+01	2.804E+01	2.804E+01
SM151	0.000E+00	4.530E+01	4.531E+01	4.533E+01	4.547E+01	4.559E+01
SM152	0.000E+00	5.204E+01	5.204E+01	5.204E+01	5.204E+01	5.204E+01
EU153	0.000E+00	4.544E+01	4.545E+01	4.545E+01	4.550E+01	4.555E+01
EU154	0.000E+00	3.605E+01	3.605E+01	3.604E+01	3.604E+01	3.604E+01
EU155	0.000E+00	3.571E+01	3.571E+01	3.571E+01	3.571E+01	3.570E+01

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GD155      0.000E+00 1.603E+00 1.607E+00 1.610E+00 1.647E+00 1.692E+00
EU156      0.000E+00 2.220E+00 2.216E+00 2.212E+00 2.172E+00 2.124E+00
GD156      0.000E+00 3.050E+00 3.051E+00 3.051E+00 3.054E+00 3.057E+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

                     19 SUMMARY TABLE:  NEUTRON ABSORPTION RATE,NEUTRON
S PER SECOND
                                1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

GD157      0.000E+00 6.966E+00 7.018E+00 7.068E+00 7.460E+00 7.746E+00
SUMTOT     0.000E+00 1.242E+03 1.275E+03 1.300E+03 1.349E+03 1.263E+03

TOTAL      0.000E+00 1.266E+03 1.299E+03 1.324E+03 1.372E+03 1.286E+03
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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, 57469.5 MWD/MTIHM BURN
UP, 3 CYCLE
           FUEL CHG  FUEL DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR         0.000E+00 7.668E+00 7.667E+00 7.666E+00 7.666E+00 7.666E+00
ZR         0.000E+00 1.214E+01 1.214E+01 1.214E+01 1.214E+01 1.214E+01
MO         0.000E+00 4.714E+01 4.714E+01 4.714E+01 4.715E+01 4.716E+01
TC         0.000E+00 6.797E+01 6.797E+01 6.797E+01 6.800E+01 6.802E+01
RU         0.000E+00 2.929E+01 2.929E+01 2.929E+01 2.928E+01 2.928E+01
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RH	0.000E+00	1.326E+02	1.326E+02	1.316E+02	1.298E+02
PD	0.000E+00	3.626E+01	3.627E+01	3.627E+01	3.628E+01
AG	0.000E+00	2.826E+01	2.826E+01	2.827E+01	2.829E+01	2.830E+01
CD	0.000E+00	5.534E+00	5.547E+00	5.559E+00	5.620E+00	5.639E+00
IN	0.000E+00	1.996E+00	1.997E+00	1.997E+00	2.003E+00	2.009E+00
I	0.000E+00	8.341E+00	8.341E+00	8.341E+00	8.343E+00	8.343E+00
XE	0.000E+00	2.097E+02	2.415E+02	2.661E+02	3.111E+02	2.219E+02
CS	0.000E+00	1.122E+02	1.123E+02	1.123E+02	1.123E+02	1.123E+02
BA	0.000E+00	1.277E+00	1.277E+00	1.277E+00	1.276E+00	1.275E+00
LA	0.000E+00	7.800E+00	7.800E+00	7.800E+00	7.800E+00	7.800E+00
CE	0.000E+00	2.006E+00	2.006E+00	2.006E+00	1.999E+00	1.990E+00
PR	0.000E+00	1.345E+01	1.345E+01	1.345E+01	1.345E+01	1.344E+01
ND	0.000E+00	1.454E+02	1.454E+02	1.454E+02	1.454E+02	1.455E+02
PM	0.000E+00	6.805E+01	6.799E+01	6.793E+01	6.733E+01	6.666E+01
SM	0.000E+00	1.923E+02	1.928E+02	1.933E+02	1.978E+02	2.026E+02
EU	0.000E+00	1.195E+02	1.195E+02	1.195E+02	1.195E+02	1.195E+02
GD	0.000E+00	1.239E+01	1.244E+01	1.250E+01	1.293E+01	1.326E+01
SUMTOT	0.000E+00	1.261E+03	1.294E+03	1.319E+03	1.367E+03	1.281E+03
TOTAL	0.000E+00	1.266E+03	1.299E+03	1.324E+03	1.372E+03	1.286E+03

CUMULATIVE TABLE TOTALS

AP+FP	8.258E+01	1.281E+03	1.313E+03	1.338E+03	1.387E+03	1.301E+03
ACT+FP	7.403E+03	9.929E+03	9.962E+03	9.987E+03	1.004E+04	9.959E+03
AP+ACT+FP	7.485E+03	9.943E+03	9.976E+03	1.000E+04	1.006E+04	9.973E+03

OUTPUT UNIT =
6 PAGE 103
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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,FRACTIONAL NEUTRONS PER SECOND

1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR 83	0.000E+00	5.643E-03	5.503E-03	5.398E-03	5.208E-03	5.558E-03
ZR 91	0.000E+00	1.288E-03	1.256E-03	1.232E-03	1.189E-03	1.269E-03
ZR 93	0.000E+00	6.224E-03	6.069E-03	5.954E-03	5.744E-03	6.131E-03

MO 95	0.000E+00	2.236E-02	2.181E-02	2.139E-02	2.064E-02	2.204E-02
ZR 96	0.000E+00	1.270E-03	1.238E-03	1.215E-03	1.172E-03	1.251E-03
MO 97	0.000E+00	4.521E-03	4.409E-03	4.325E-03	4.173E-03	4.454E-03
MO 98	0.000E+00	8.723E-03	8.506E-03	8.345E-03	8.049E-03	8.591E-03
TC 99	0.000E+00	5.367E-02	5.234E-02	5.135E-02	4.955E-02	5.290E-02
MO100	0.000E+00	1.177E-03	1.148E-03	1.126E-03	1.086E-03	1.159E-03
RU100	0.000E+00	1.003E-03	9.781E-04	9.596E-04	9.256E-04	9.878E-04
RU101	0.000E+00	1.848E-02	1.802E-02	1.767E-02	1.705E-02	1.819E-02
RU102	0.000E+00	1.612E-03	1.572E-03	1.542E-03	1.487E-03	1.587E-03
RH103	0.000E+00	9.627E-02	9.388E-02	9.211E-02	8.891E-02	9.498E-02
RU104	0.000E+00	1.239E-03	1.208E-03	1.185E-03	1.143E-03	1.220E-03
PD104	0.000E+00	1.976E-03	1.927E-03	1.891E-03	1.824E-03	1.946E-03
RH105	0.000E+00	8.406E-03	8.205E-03	8.035E-03	6.943E-03	5.990E-03
PD105	0.000E+00	1.150E-02	1.121E-02	1.100E-02	1.061E-02	1.133E-02
PD107	0.000E+00	5.129E-03	5.001E-03	4.907E-03	4.733E-03	5.051E-03
PD108	0.000E+00	9.258E-03	9.027E-03	8.856E-03	8.542E-03	9.117E-03
AG109	0.000E+00	2.220E-02	2.165E-02	2.124E-02	2.051E-02	2.190E-02
CD110	0.000E+00	1.014E-03	9.889E-04	9.702E-04	9.358E-04	9.988E-04
CD113	0.000E+00	2.361E-03	2.313E-03	2.278E-03	2.241E-03	2.406E-03
IN115	0.000E+00	1.574E-03	1.536E-03	1.507E-03	1.458E-03	1.560E-03
I127	0.000E+00	1.724E-03	1.681E-03	1.649E-03	1.591E-03	1.699E-03
I129	0.000E+00	4.851E-03	4.731E-03	4.641E-03	4.478E-03	4.779E-03
XE131	0.000E+00	5.818E-02	5.673E-02	5.566E-02	5.372E-02	5.737E-02
CS133	0.000E+00	6.822E-02	6.652E-02	6.526E-02	6.297E-02	6.724E-02
CS134	0.000E+00	1.484E-02	1.447E-02	1.420E-02	1.369E-02	1.460E-02
XE135	0.000E+00	1.051E-01	1.270E-01	1.432E-01	1.709E-01	1.130E-01
CS135	0.000E+00	5.399E-03	5.264E-03	5.165E-03	4.983E-03	5.320E-03
LA139	0.000E+00	6.133E-03	5.980E-03	5.867E-03	5.659E-03	6.040E-03
PR141	0.000E+00	9.852E-03	9.607E-03	9.425E-03	9.094E-03	9.708E-03
ND143	0.000E+00	7.837E-02	7.642E-02	7.497E-02	7.235E-02	7.725E-02
ND144	0.000E+00	2.767E-03	2.698E-03	2.647E-03	2.553E-03	2.726E-03
ND145	0.000E+00	2.950E-02	2.876E-02	2.822E-02	2.722E-02	2.906E-02
PM147	0.000E+00	3.593E-02	3.504E-02	3.438E-02	3.321E-02	3.550E-02
SM147	0.000E+00	7.086E-03	6.909E-03	6.779E-03	6.541E-03	6.984E-03
ND148	0.000E+00	1.743E-03	1.700E-03	1.668E-03	1.609E-03	1.717E-03
PM148	0.000E+00	7.131E-03	6.916E-03	6.749E-03	6.171E-03	6.176E-03
PM148M	0.000E+00	9.998E-03	9.742E-03	9.551E-03	9.148E-03	9.682E-03
SM148	0.000E+00	1.353E-03	1.319E-03	1.294E-03	1.249E-03	1.333E-03
SM149	0.000E+00	4.362E-02	4.290E-02	4.245E-02	4.422E-02	5.083E-02
SM150	0.000E+00	2.214E-02	2.159E-02	2.118E-02	2.043E-02	2.181E-02
SM151	0.000E+00	3.577E-02	3.489E-02	3.424E-02	3.313E-02	3.546E-02
SM152	0.000E+00	4.109E-02	4.007E-02	3.931E-02	3.792E-02	4.047E-02
EU153	0.000E+00	3.588E-02	3.499E-02	3.434E-02	3.316E-02	3.542E-02
EU154	0.000E+00	2.846E-02	2.776E-02	2.723E-02	2.626E-02	2.802E-02
EU155	0.000E+00	2.820E-02	2.750E-02	2.698E-02	2.602E-02	2.776E-02
GD155	0.000E+00	1.266E-03	1.237E-03	1.216E-03	1.200E-03	1.316E-03
EU156	0.000E+00	1.753E-03	1.707E-03	1.671E-03	1.583E-03	1.652E-03
GD156	0.000E+00	2.409E-03	2.349E-03	2.305E-03	2.225E-03	2.377E-03

OUTPUT UNIT =
6 PAGE 104
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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,FRACTIONAL NEUTRONS PER SECOND

1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
GD157	0.000E+00	5.501E-03	5.404E-03	5.339E-03	5.436E-03	6.024E-03
SUMTOT	0.000E+00	9.812E-01	9.817E-01	9.820E-01	9.828E-01	9.819E-01
TOTAL	0.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT =
6 PAGE 105
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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,FRACTIONAL NEUTRONS PER SECOND

1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
KR	0.000E+00	6.055E-03	5.904E-03	5.791E-03	5.586E-03	5.961E-03
ZR	0.000E+00	9.587E-03	9.349E-03	9.172E-03	8.848E-03	9.443E-03
MO	0.000E+00	3.722E-02	3.630E-02	3.561E-02	3.435E-02	3.667E-02
TC	0.000E+00	5.367E-02	5.234E-02	5.135E-02	4.955E-02	5.290E-02
RU	0.000E+00	2.313E-02	2.256E-02	2.213E-02	2.134E-02	2.277E-02
RH	0.000E+00	1.047E-01	1.021E-01	1.001E-01	9.586E-02	1.010E-01

PD	0.000E+00	2.864E-02	2.793E-02	2.740E-02	2.643E-02	2.821E-02
AG	0.000E+00	2.232E-02	2.176E-02	2.135E-02	2.061E-02	2.201E-02
CD	0.000E+00	4.370E-03	4.271E-03	4.199E-03	4.095E-03	4.385E-03
IN	0.000E+00	1.576E-03	1.537E-03	1.509E-03	1.459E-03	1.562E-03
I	0.000E+00	6.587E-03	6.423E-03	6.301E-03	6.079E-03	6.488E-03
XE	0.000E+00	1.656E-01	1.859E-01	2.010E-01	2.267E-01	1.725E-01
CS	0.000E+00	8.864E-02	8.644E-02	8.480E-02	8.182E-02	8.734E-02
BA	0.000E+00	1.008E-03	9.832E-04	9.645E-04	9.298E-04	9.918E-04
LA	0.000E+00	6.160E-03	6.006E-03	5.893E-03	5.684E-03	6.065E-03
CE	0.000E+00	1.584E-03	1.545E-03	1.515E-03	1.457E-03	1.548E-03
PR	0.000E+00	1.062E-02	1.035E-02	1.016E-02	9.799E-03	1.046E-02
ND	0.000E+00	1.148E-01	1.120E-01	1.098E-01	1.060E-01	1.131E-01
PM	0.000E+00	5.374E-02	5.235E-02	5.132E-02	4.906E-02	5.184E-02
SM	0.000E+00	1.519E-01	1.485E-01	1.460E-01	1.442E-01	1.575E-01
EU	0.000E+00	9.437E-02	9.202E-02	9.028E-02	8.708E-02	9.293E-02
GD	0.000E+00	9.783E-03	9.582E-03	9.442E-03	9.422E-03	1.032E-02
SUMTOT	0.000E+00	9.960E-01	9.961E-01	9.961E-01	9.963E-01	9.960E-01
TOTAL	0.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT =
6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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

(ALPHA,N) NEUTRON SOURCE, NEUTRONS/SEC

BASIS=1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U234	1.333E+03	5.425E+02	5.425E+02	5.425E+02	5.425E+02	5.425E+02
U235	3.349E+01	3.678E+00	3.678E+00	3.678E+00	3.678E+00	3.678E+00
U238	1.013E+02	9.675E+01	9.675E+01	9.675E+01	9.675E+01	9.675E+01
PU238	0.000E+00	8.953E+06	8.954E+06	8.955E+06	8.964E+06	8.974E+06
PU239	0.000E+00	3.264E+05	3.265E+05	3.266E+05	3.272E+05	3.278E+05
PU240	0.000E+00	6.700E+05	6.700E+05	6.700E+05	6.700E+05	6.700E+05
AM241	0.000E+00	2.037E+05	2.037E+05	2.037E+05	2.040E+05	2.044E+05
CM242	0.000E+00	1.158E+08	1.158E+08	1.158E+08	1.157E+08	1.156E+08
CM244	0.000E+00	1.691E+07	1.691E+07	1.691E+07	1.691E+07	1.691E+07
TOTALS						
TABLE	1.467E+03	1.430E+08	1.430E+08	1.430E+08	1.430E+08	1.429E+08
ACTUAL	1.467E+03	1.430E+08	1.430E+08	1.430E+08	1.430E+08	1.429E+08

OUTPUT UNIT =

6 PAGE 107
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02
ORIGEN2 V2.2 - FUEL ONLY - EXTENDED BU
RNUP (PWRUE)
SPONTANEOUS FISSION NEUTRON SOURCE, NEUTRO
NS/SEC
BASIS=1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM
BURNUP, 3 CYCLE

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	1.493E+01	1.640E+00	1.640E+00	1.640E+00	1.640E+00	1.640E+00
U238	1.215E+04	1.160E+04	1.160E+04	1.160E+04	1.160E+04	1.160E+04
PU240	0.000E+00	3.532E+06	3.532E+06	3.532E+06	3.532E+06	3.532E+06
CM242	0.000E+00	5.617E+08	5.617E+08	5.617E+08	5.616E+08	5.610E+08
CM244	0.000E+00	2.036E+09	2.036E+09	2.036E+09	2.036E+09	2.036E+09
CM246	0.000E+00	1.897E+07	1.897E+07	1.897E+07	1.897E+07	1.897E+07
CF252	0.000E+00	1.403E+07	1.403E+07	1.403E+07	1.403E+07	1.402E+07
TOTALS						
TABLE	1.216E+04	2.638E+09	2.638E+09	2.638E+09	2.638E+09	2.638E+09
ACTUAL	1.216E+04	2.638E+09	2.638E+09	2.638E+09	2.638E+09	2.638E+09
OVERALL TOTALS						
TABLE	1.363E+04	2.781E+09	2.781E+09	2.781E+09	2.781E+09	2.781E+09
ACTUAL	1.363E+04	2.781E+09	2.781E+09	2.781E+09	2.781E+09	2.781E+09

OUTPUT UNIT =
6 PAGE 108
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02
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, 57469.5 MWD
/MTIHM BURNUP, 3 CYCLE

EMEAN

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	3.854E-02	5.964E+13	2.537E+13	2.340E+13	1.629E+13	1.327E+13
2.500E-02	7.143E-03	1.397E+13	6.849E+12	6.439E+12	4.875E+12	4.176E+12
3.750E-02	4.312E-03	7.972E+12	3.184E+12	2.924E+12	1.967E+12	1.573E+12
5.750E-02	5.379E-03	1.406E+13	6.522E+12	6.040E+12	4.100E+12	3.136E+12
8.500E-02	2.562E-03	8.069E+12	3.321E+12	3.074E+12	2.091E+12	1.633E+12
1.250E-01	1.270E-03	6.080E+12	2.729E+12	2.549E+12	1.805E+12	1.415E+12
2.250E-01	8.334E-04	1.032E+13	5.086E+12	4.851E+12	3.886E+12	3.395E+12
3.750E-01	4.850E-05	4.915E+12	1.546E+12	1.316E+12	8.265E+11	6.368E+11
5.750E-01	1.878E-09	1.533E+13	1.278E+13	1.248E+13	1.023E+13	8.252E+12
8.500E-01	1.302E-11	1.567E+13	1.196E+13	9.967E+12	3.856E+12	3.214E+12
1.250E+00	7.409E-12	4.345E+13	3.444E+13	3.353E+13	2.832E+13	2.473E+13
1.750E+00	3.712E-12	7.155E+12	2.437E+12	1.839E+12	1.422E+11	2.353E+10
2.250E+00	1.860E-12	1.897E+12	1.229E+12	9.048E+11	6.918E+10	1.301E+10
2.750E+00	9.320E-13	1.377E+13	1.295E+13	1.234E+13	7.704E+12	4.420E+12
3.500E+00	6.863E-13	1.557E+11	2.228E+10	1.866E+10	5.970E+09	3.056E+09
5.000E+00	2.043E-13	4.799E+10	9.120E+07	8.702E+07	5.480E+07	3.147E+07
7.000E+00	1.326E-14	7.154E+12	6.276E-03	6.276E-03	6.277E-03	6.277E-03
9.500E+00	8.384E-16	7.454E+09	3.968E-04	3.969E-04	3.969E-04	3.969E-04
TOTAL	6.009E-02	2.296E+14	1.304E+14	1.217E+14	8.618E+13	6.989E+13
MEV/SEC	1.617E-03	1.897E+14	1.066E+14	9.982E+13	6.836E+13	5.243E+13

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

BASIS=1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

EMEAN

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	3.854E-10	5.964E+05	2.537E+05	2.340E+05	1.629E+05	1.327E+05
2.500E-02	1.786E-10	3.492E+05	1.712E+05	1.610E+05	1.219E+05	1.044E+05
3.750E-02	1.617E-10	2.989E+05	1.194E+05	1.097E+05	7.377E+04	5.898E+04
5.750E-02	3.093E-10	8.085E+05	3.750E+05	3.473E+05	2.358E+05	1.803E+05
8.500E-02	2.178E-10	6.859E+05	2.823E+05	2.613E+05	1.778E+05	1.388E+05
1.250E-01	1.587E-10	7.600E+05	3.411E+05	3.186E+05	2.256E+05	1.769E+05
2.250E-01	1.875E-10	2.322E+06	1.144E+06	1.091E+06	8.745E+05	7.638E+05
3.750E-01	1.819E-11	1.843E+06	5.797E+05	4.936E+05	3.099E+05	2.388E+05
5.750E-01	1.080E-15	8.813E+06	7.349E+06	7.174E+06	5.883E+06	4.745E+06
8.500E-01	1.107E-17	1.332E+07	1.017E+07	8.472E+06	3.278E+06	2.732E+06
1.250E+00	9.261E-18	5.431E+07	4.305E+07	4.192E+07	3.541E+07	3.092E+07
1.750E+00	6.497E-18	1.252E+07	4.264E+06	3.218E+06	2.488E+05	4.117E+04
2.250E+00	4.185E-18	4.268E+06	2.766E+06	2.036E+06	1.557E+05	2.927E+04
2.750E+00	2.563E-18	3.785E+07	3.562E+07	3.392E+07	2.119E+07	1.216E+07
3.500E+00	2.402E-18	5.449E+05	7.799E+04	6.531E+04	2.089E+04	1.069E+04

5.000E+00	1.022E-18	2.399E+05	4.560E+02	4.351E+02	2.740E+02	1.574E+02
7.000E+00	9.281E-20	5.007E+07	4.393E-08	4.393E-08	4.394E-08	4.394E-08
9.500E+00	7.965E-21	7.082E+04	3.770E-09	3.770E-09	3.771E-09	3.771E-09
TOTAL	1.617E-09	1.897E+08	1.066E+08	9.982E+07	6.836E+07	5.243E+07
GAM POW	2.592E-16	3.041E+01	1.708E+01	1.600E+01	1.096E+01	8.404E+00

OUTPUT UNIT =
6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	2.855E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.668E+13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	4.341E+12	4.145E+12	3.958E+12	2.493E+12	1.432E+12
AL 28	0.000E+00	2.482E+12	2.156E+04	1.047E+02	7.517E+01	5.050E+01
SI 31	0.000E+00	8.416E+11	6.461E+11	4.960E+11	3.525E+10	1.477E+09
P 32	0.000E+00	1.705E+12	1.701E+12	1.698E+12	1.664E+12	1.624E+12
V 52	0.000E+00	3.770E+12	5.750E+07	8.774E+02	0.000E+00	0.000E+00
MN 56	0.000E+00	5.324E+12	4.069E+12	3.110E+12	2.115E+11	8.403E+09
CO 58	0.000E+00	1.910E+11	1.909E+11	1.909E+11	1.901E+11	1.892E+11
CO 60	0.000E+00	4.477E+11	4.477E+11	4.477E+11	4.476E+11	4.475E+11
CO 60M	0.000E+00	1.749E+12	3.294E+10	6.204E+08	3.481E-09	0.000E+00
ZN 65	0.000E+00	1.817E+12	1.816E+12	1.816E+12	1.814E+12	1.811E+12
ZN 69	0.000E+00	8.940E+11	4.612E+11	2.511E+11	3.542E+10	1.927E+10
MO 99	0.000E+00	2.660E+12	2.632E+12	2.605E+12	2.345E+12	2.067E+12
MO101	0.000E+00	8.020E+11	4.664E+10	2.712E+09	1.200E-03	1.795E-18
CD115	0.000E+00	3.235E+12	3.194E+12	3.152E+12	2.769E+12	2.370E+12
CD115M	0.000E+00	4.794E+11	4.791E+11	4.788E+11	4.757E+11	4.720E+11
IN114	0.000E+00	6.905E+11	2.761E+11	2.759E+11	2.743E+11	2.724E+11
IN115	3.854E-02	8.206E-05	8.207E-05	8.209E-05	8.228E-05	8.249E-05
IN116	0.000E+00	7.971E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	0.000E+00	6.672E+11	6.428E+11	6.192E+11	4.266E+11	2.728E+11
TB160	0.000E+00	2.492E+11	2.491E+11	2.490E+11	2.480E+11	2.468E+11
W187	0.000E+00	1.526E+12	1.483E+12	1.440E+12	1.078E+12	7.610E+11
RE188	0.000E+00	1.799E+12	1.755E+12	1.689E+12	1.127E+12	6.960E+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	6.442E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	3.772E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	9.018E+11	8.611E+11	8.222E+11	5.179E+11	2.975E+11
AL 28	0.000E+00	5.402E+11	4.693E+03	2.279E+01	1.636E+01	1.099E+01
SI 31	0.000E+00	1.755E+11	1.347E+11	1.034E+11	7.353E+09	3.080E+08
P 32	0.000E+00	3.597E+11	3.590E+11	3.582E+11	3.511E+11	3.427E+11
V 52	0.000E+00	8.160E+11	1.245E+07	1.899E+02	0.000E+00	0.000E+00
MN 56	0.000E+00	1.139E+12	8.702E+11	6.650E+11	4.523E+10	1.797E+09
CO 60	0.000E+00	7.738E+10	7.738E+10	7.737E+10	7.736E+10	7.735E+10
ZN 69	0.000E+00	1.793E+11	9.250E+10	5.036E+10	7.103E+09	3.863E+09
MO 99	0.000E+00	4.779E+11	4.729E+11	4.680E+11	4.213E+11	3.714E+11
CD109	0.000E+00	5.664E+10	5.664E+10	5.664E+10	5.660E+10	5.656E+10
CD115	0.000E+00	1.285E+12	1.269E+12	1.252E+12	1.100E+12	9.415E+11
CD115M	0.000E+00	1.004E+11	1.003E+11	1.003E+11	9.961E+10	9.884E+10
IN114	0.000E+00	1.571E+11	6.283E+10	6.280E+10	6.243E+10	6.200E+10
IN114M	0.000E+00	2.287E+11	2.285E+11	2.284E+11	2.271E+11	2.255E+11

OUTPUT UNIT =
6 PAGE 110
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

IN115	7.143E-03	1.521E-05	1.521E-05	1.522E-05	1.525E-05	1.529E-05
IN116	0.000E+00	1.744E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN117M	0.000E+00	1.084E+12	1.082E+12	1.080E+12	1.058E+12	1.032E+12
SN119M	0.000E+00	1.411E+11	1.411E+11	1.411E+11	1.409E+11	1.407E+11
SB125	0.000E+00	4.291E+10	4.291E+10	4.291E+10	4.291E+10	4.292E+10
GD159	0.000E+00	1.327E+11	1.278E+11	1.231E+11	8.483E+10	5.424E+10
W187	0.000E+00	2.051E+11	1.992E+11	1.935E+11	1.448E+11	1.022E+11
RE188	0.000E+00	3.609E+11	3.522E+11	3.388E+11	2.262E+11	1.396E+11

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
C 15	0.000E+00	4.405E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	2.573E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	5.856E+11	5.591E+11	5.339E+11	3.363E+11	1.932E+11
AL 28	0.000E+00	3.613E+11	3.138E+03	1.524E+01	1.094E+01	7.351E+00
SI 31	0.000E+00	1.145E+11	8.786E+10	6.745E+10	4.795E+09	2.008E+08
P 32	0.000E+00	2.359E+11	2.354E+11	2.350E+11	2.303E+11	2.247E+11
V 52	0.000E+00	5.426E+11	8.276E+06	1.263E+02	0.000E+00	0.000E+00
MN 56	0.000E+00	7.568E+11	5.784E+11	4.421E+11	3.007E+10	1.195E+09
CO 60	0.000E+00	4.418E+10	4.418E+10	4.418E+10	4.417E+10	4.416E+10
ZN 69	0.000E+00	1.137E+11	5.864E+10	3.192E+10	4.503E+09	2.449E+09
MO 99	0.000E+00	3.889E+11	3.849E+11	3.808E+11	3.429E+11	3.023E+11
AG110	0.000E+00	8.397E+10	6.039E+07	6.038E+07	6.031E+07	6.023E+07

CD115	0.000E+00	4.862E+11	4.799E+11	4.737E+11	4.162E+11	3.562E+11
CD115M	0.000E+00	6.560E+10	6.556E+10	6.552E+10	6.509E+10	6.459E+10
IN114	0.000E+00	9.654E+10	3.861E+10	3.858E+10	3.836E+10	3.809E+10
IN115	4.312E-03	9.182E-06	9.184E-06	9.186E-06	9.207E-06	9.231E-06
IN116	0.000E+00	1.172E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD153	0.000E+00	6.459E+10	6.458E+10	6.457E+10	6.450E+10	6.441E+10
GD159	0.000E+00	8.387E+10	8.080E+10	7.785E+10	5.363E+10	3.429E+10
TB160	0.000E+00	1.886E+10	1.885E+10	1.884E+10	1.877E+10	1.868E+10
W187	0.000E+00	1.294E+11	1.257E+11	1.221E+11	9.138E+10	6.452E+10
RE188	0.000E+00	2.376E+11	2.319E+11	2.231E+11	1.489E+11	9.193E+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	6.790E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	3.958E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	8.321E+11	7.945E+11	7.586E+11	4.779E+11	2.745E+11
AL 28	0.000E+00	5.368E+11	4.664E+03	2.265E+01	1.626E+01	1.092E+01
SI 31	0.000E+00	1.635E+11	1.255E+11	9.636E+10	6.849E+09	2.869E+08
P 32	0.000E+00	3.401E+11	3.394E+11	3.387E+11	3.320E+11	3.240E+11
V 52	0.000E+00	7.981E+11	1.217E+07	1.857E+02	0.000E+00	0.000E+00
MN 56	0.000E+00	1.106E+12	8.453E+11	6.460E+11	4.394E+10	1.746E+09
CO 60	0.000E+00	4.984E+10	4.984E+10	4.984E+10	4.983E+10	4.982E+10
CO 60M	0.000E+00	1.663E+11	3.131E+09	5.896E+07	3.308E-10	0.000E+00

OUTPUT UNIT =
6 PAGE 111
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

CO 61	0.000E+00	2.285E+11	1.501E+11	9.864E+10	1.478E+09	9.556E+06
ZN 69	0.000E+00	1.550E+11	7.998E+10	4.355E+10	6.142E+09	3.341E+09
MO 99	0.000E+00	3.834E+11	3.794E+11	3.754E+11	3.380E+11	2.980E+11
CD115	0.000E+00	5.567E+11	5.495E+11	5.424E+11	4.765E+11	4.078E+11
CD115M	0.000E+00	9.389E+10	9.382E+10	9.376E+10	9.316E+10	9.244E+10
IN114	0.000E+00	1.402E+11	5.607E+10	5.603E+10	5.571E+10	5.532E+10
IN115	5.379E-03	1.145E-05	1.146E-05	1.146E-05	1.148E-05	1.152E-05
IN116	0.000E+00	1.744E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	0.000E+00	1.140E+11	1.098E+11	1.058E+11	7.289E+10	4.661E+10
TB160	0.000E+00	2.505E+11	2.504E+11	2.503E+11	2.493E+11	2.481E+11
W187	0.000E+00	2.097E+12	2.037E+12	1.979E+12	1.481E+12	1.046E+12
RE188	0.000E+00	4.954E+11	4.834E+11	4.650E+11	3.105E+11	1.916E+11

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
C 15	0.000E+00	4.509E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	2.628E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	4.944E+11	4.721E+11	4.508E+11	2.840E+11	1.631E+11
AL 28	0.000E+00	3.410E+11	2.962E+03	1.439E+01	1.033E+01	6.939E+00
SI 31	0.000E+00	9.762E+10	7.494E+10	5.753E+10	4.089E+09	1.713E+08
P 32	0.000E+00	2.063E+11	2.059E+11	2.055E+11	2.014E+11	1.965E+11
V 52	0.000E+00	5.027E+11	7.667E+06	1.170E+02	0.000E+00	0.000E+00
MN 56	0.000E+00	6.918E+11	5.287E+11	4.041E+11	2.748E+10	1.092E+09
CO 60	0.000E+00	1.960E+10	1.960E+10	1.960E+10	1.959E+10	1.959E+10
ZN 69	0.000E+00	8.607E+10	4.441E+10	2.418E+10	3.410E+09	1.855E+09
MO 99	0.000E+00	2.211E+11	2.188E+11	2.165E+11	1.949E+11	1.718E+11
CD115	0.000E+00	3.091E+11	3.051E+11	3.012E+11	2.645E+11	2.264E+11
CD115M	0.000E+00	5.644E+10	5.640E+10	5.636E+10	5.600E+10	5.557E+10
IN114	0.000E+00	8.597E+10	3.438E+10	3.436E+10	3.416E+10	3.392E+10
IN115	2.562E-03	5.455E-06	5.456E-06	5.457E-06	5.469E-06	5.484E-06
IN116	0.000E+00	1.113E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD153	0.000E+00	2.064E+10	2.064E+10	2.064E+10	2.062E+10	2.059E+10
GD159	0.000E+00	6.290E+10	6.060E+10	5.839E+10	4.022E+10	2.572E+10
TB160	0.000E+00	1.912E+11	1.911E+11	1.910E+11	1.903E+11	1.894E+11
W187	0.000E+00	7.698E+11	7.478E+11	7.265E+11	5.436E+11	3.838E+11
RE188	0.000E+00	2.432E+11	2.373E+11	2.283E+11	1.524E+11	9.409E+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	3.221E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.875E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	3.149E+11	3.007E+11	2.871E+11	1.809E+11	1.039E+11
AL 28	0.000E+00	2.323E+11	2.018E+03	9.801E+00	7.036E+00	4.727E+00
SI 31	0.000E+00	6.276E+10	4.818E+10	3.698E+10	2.629E+09	1.101E+08
P 32	0.000E+00	1.342E+11	1.339E+11	1.337E+11	1.310E+11	1.279E+11
V 52	0.000E+00	3.395E+11	5.178E+06	7.901E+01	0.000E+00	0.000E+00

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OUTPUT UNIT =
6 PAGE 112
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

MN 56	0.000E+00	4.641E+11	3.547E+11	2.711E+11	1.844E+10	7.325E+08
MO 99	0.000E+00	6.458E+11	6.390E+11	6.323E+11	5.693E+11	5.019E+11
CD115	0.000E+00	1.844E+11	1.820E+11	1.796E+11	1.578E+11	1.351E+11
CD115M	0.000E+00	3.639E+10	3.636E+10	3.634E+10	3.610E+10	3.582E+10
IN114	0.000E+00	5.681E+10	2.272E+10	2.270E+10	2.257E+10	2.241E+10
IN115	1.270E-03	2.704E-06	2.705E-06	2.705E-06	2.711E-06	2.718E-06
IN116	0.000E+00	7.675E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GD159	0.000E+00	3.717E+10	3.581E+10	3.450E+10	2.377E+10	1.520E+10
W187	0.000E+00	7.367E+11	7.156E+11	6.951E+11	5.201E+11	3.673E+11
RE188	0.000E+00	1.397E+11	1.363E+11	1.311E+11	8.754E+10	5.403E+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	5.205E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	3.020E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	3.939E+11	3.762E+11	3.592E+11	2.263E+11	1.300E+11
AL 28	0.000E+00	3.376E+11	2.933E+03	1.425E+01	1.023E+01	6.870E+00
SI 31	0.000E+00	8.007E+10	6.147E+10	4.719E+10	3.354E+09	1.405E+08
P 32	0.000E+00	1.776E+11	1.772E+11	1.768E+11	1.733E+11	1.692E+11
V 52	0.000E+00	4.860E+11	7.413E+06	1.131E+02	0.000E+00	0.000E+00
MN 56	0.000E+00	6.571E+11	5.022E+11	3.838E+11	2.611E+10	1.037E+09
MO 99	0.000E+00	6.091E+11	6.027E+11	5.964E+11	5.369E+11	4.734E+11
CD115	0.000E+00	8.350E+11	8.243E+11	8.137E+11	7.147E+11	6.118E+11
CD115M	0.000E+00	4.727E+10	4.724E+10	4.721E+10	4.691E+10	4.655E+10
IN114M	0.000E+00	8.212E+10	8.207E+10	8.202E+10	8.154E+10	8.098E+10
IN115	8.334E-04	1.774E-06	1.775E-06	1.775E-06	1.779E-06	1.784E-06
IN116	0.000E+00	1.143E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN117M	0.000E+00	9.962E+11	9.941E+11	9.921E+11	9.718E+11	9.481E+11
TB160	0.000E+00	5.881E+11	5.878E+11	5.876E+11	5.853E+11	5.825E+11
W187	0.000E+00	8.428E+10	8.187E+10	7.953E+10	5.951E+10	4.202E+10
RE188	0.000E+00	5.736E+11	5.597E+11	5.384E+11	3.595E+11	2.219E+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
LI 8	0.000E+00	5.072E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 15	0.000E+00	3.047E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.755E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	1.420E+11	1.356E+11	1.295E+11	8.158E+10	4.685E+10
AL 28	0.000E+00	1.671E+11	1.452E+03	7.052E+00	5.062E+00	3.401E+00
SI 31	0.000E+00	3.006E+10	2.307E+10	1.771E+10	1.259E+09	5.274E+07
P 32	0.000E+00	7.210E+10	7.196E+10	7.181E+10	7.038E+10	6.869E+10
V 52	0.000E+00	2.305E+11	3.516E+06	5.364E+01	0.000E+00	0.000E+00
CR 51	0.000E+00	8.689E+10	8.680E+10	8.671E+10	8.581E+10	8.474E+10
MN 56	0.000E+00	3.090E+11	2.362E+11	1.805E+11	1.228E+10	4.878E+08
ZN 69M	0.000E+00	3.547E+11	3.373E+11	3.207E+11	1.938E+11	1.059E+11
MO 99	0.000E+00	1.605E+11	1.588E+11	1.572E+11	1.415E+11	1.248E+11

OUTPUT UNIT =
6 PAGE 113
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

TC101	0.000E+00	3.317E+11	7.191E+10	6.995E+09	1.116E-02	2.251E-17
CD115	0.000E+00	5.422E+10	5.352E+10	5.283E+10	4.641E+10	3.973E+10
CD115M	0.000E+00	1.846E+10	1.845E+10	1.843E+10	1.832E+10	1.817E+10
IN114	0.000E+00	3.309E+10	1.323E+10	1.322E+10	1.315E+10	1.305E+10
IN115	4.850E-05	1.033E-07	1.033E-07	1.033E-07	1.036E-07	1.038E-07
IN116	0.000E+00	5.921E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	0.000E+00	2.418E+11	1.122E+11	5.205E+10	2.404E+07	2.389E+03
SN125M	0.000E+00	8.081E+10	1.024E+09	1.297E+07	1.382E-12	0.000E+00
SB125	0.000E+00	3.662E+10	3.662E+10	3.662E+10	3.662E+10	3.663E+10
TB160	0.000E+00	3.336E+10	3.335E+10	3.333E+10	3.320E+10	3.304E+10
W187	0.000E+00	1.626E+10	1.579E+10	1.534E+10	1.148E+10	8.106E+09
RE188	0.000E+00	8.306E+10	8.105E+10	7.797E+10	5.206E+10	3.213E+10

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	2.263E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.297E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MN 56	0.000E+00	1.746E+11	1.334E+11	1.020E+11	6.936E+09	2.755E+08
CO 58	0.000E+00	2.257E+11	2.256E+11	2.255E+11	2.246E+11	2.235E+11
CU 64	0.000E+00	3.793E+11	3.591E+11	3.401E+11	1.970E+11	1.024E+11
ZN 65	0.000E+00	1.471E+11	1.471E+11	1.471E+11	1.469E+11	1.467E+11
MO101	0.000E+00	2.071E+11	1.204E+10	7.003E+08	3.098E-04	4.636E-19
CD115	0.000E+00	7.049E+12	6.958E+12	6.868E+12	6.033E+12	5.164E+12
IN115	1.878E-09	4.000E-12	4.000E-12	4.001E-12	4.010E-12	4.021E-12
W187	0.000E+00	4.586E+12	4.455E+12	4.327E+12	3.238E+12	2.286E+12
RE188	0.000E+00	1.389E+11	1.356E+11	1.304E+11	8.707E+10	5.375E+10

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	6.629E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MN 54	0.000E+00	6.295E+10	6.294E+10	6.294E+10	6.288E+10	6.281E+10
MN 56	0.000E+00	1.075E+13	8.213E+12	6.277E+12	4.269E+11	1.696E+10
CO 58	0.000E+00	8.072E+11	8.069E+11	8.065E+11	8.032E+11	7.993E+11
MO 99	0.000E+00	1.358E+12	1.343E+12	1.329E+12	1.197E+12	1.055E+12
AG110M	0.000E+00	7.079E+10	7.078E+10	7.077E+10	7.069E+10	7.059E+10
GD152	1.300E-11	7.402E-12	7.402E-12	7.402E-12	7.402E-12	7.402E-12
TB160	0.000E+00	9.507E+11	9.503E+11	9.499E+11	9.461E+11	9.416E+11

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 W187      0.000E+00 3.225E+11 3.133E+11 3.044E+11 2.277E+11 1.608E+11
□
         OUTPUT UNIT =
6                          PAGE  114
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

                    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

 N 16      0.000E+00 4.994E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 24      0.000E+00 1.461E+13 1.395E+13 1.332E+13 8.389E+12 4.818E+12
 V 52      0.000E+00 6.909E+12 1.054E+08 1.608E+03 0.000E+00 0.000E+00
CO 60      0.000E+00 1.689E+13 1.689E+13 1.689E+13 1.689E+13 1.689E+13
ZN 65      0.000E+00 2.564E+12 2.563E+12 2.563E+12 2.560E+12 2.556E+12
IN116M     0.000E+00 9.831E+11 4.561E+11 2.116E+11 9.772E+07 9.713E+03
GD152      7.397E-12 4.211E-12 4.211E-12 4.211E-12 4.211E-12 4.211E-12
TB160      0.000E+00 3.982E+11 3.980E+11 3.979E+11 3.963E+11 3.944E+11

                    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 3.053E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AL 28      0.000E+00 3.444E+12 2.992E+04 1.453E+02 1.043E+02 7.008E+01
CL 38      0.000E+00 1.078E+11 3.528E+10 1.154E+10 1.618E+05 2.428E-01
MN 56      0.000E+00 3.058E+12 2.337E+12 1.786E+12 1.215E+11 4.826E+09
CO 58      0.000E+00 4.184E+09 4.182E+09 4.180E+09 4.163E+09 4.143E+09
AG110M     0.000E+00 5.521E+09 5.520E+09 5.519E+09 5.513E+09 5.505E+09
IN116M     0.000E+00 7.893E+10 3.662E+10 1.699E+10 7.846E+06 7.799E+02
SN125      0.000E+00 3.331E+08 3.321E+08 3.311E+08 3.213E+08 3.100E+08
SB124      0.000E+00 9.870E+08 9.865E+08 9.860E+08 9.813E+08 9.757E+08
EU156      0.000E+00 5.006E+09 4.996E+09 4.987E+09 4.893E+09 4.782E+09
GD152      3.706E-12 2.110E-12 2.110E-12 2.110E-12 2.110E-12 2.110E-12
RE188      0.000E+00 7.226E+09 7.051E+09 6.783E+09 4.529E+09 2.795E+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

 N 16      0.000E+00 1.046E+11 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CL 38      0.000E+00 1.472E+11 4.816E+10 1.575E+10 2.209E+05 3.315E-01
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MN 56	0.000E+00	1.464E+12	1.119E+12	8.551E+11	5.815E+10	2.310E+09
MO101	0.000E+00	4.005E+10	2.329E+09	1.355E+08	5.993E-05	8.967E-20
IN116M	0.000E+00	1.048E+11	4.860E+10	2.255E+10	1.041E+07	1.035E+03
SN125	0.000E+00	2.729E+09	2.721E+09	2.712E+09	2.632E+09	2.539E+09
EU156	0.000E+00	8.264E+09	8.249E+09	8.233E+09	8.078E+09	7.895E+09
GD152	1.857E-12	1.057E-12	1.057E-12	1.057E-12	1.057E-12	1.057E-12

OUTPUT UNIT =
6 PAGE 115
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	1.461E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	1.340E+13	1.279E+13	1.222E+13	7.696E+12	4.420E+12
MN 56	0.000E+00	2.049E+11	1.566E+11	1.197E+11	8.142E+09	3.235E+08
GD152	9.305E-13	5.297E-13	5.297E-13	5.297E-13	5.297E-13	5.297E-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	7.238E+09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 15	0.000E+00	1.640E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	1.050E+11	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	9.179E+09	8.764E+09	8.368E+09	5.272E+09	3.028E+09
MN 56	0.000E+00	1.757E+10	1.343E+10	1.026E+10	6.979E+08	2.773E+07
GD152	6.852E-13	3.901E-13	3.901E-13	3.901E-13	3.901E-13	3.901E-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	3.400E+09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 15	0.000E+00	5.240E+09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	3.925E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA 24	0.000E+00	9.540E+07	9.110E+07	8.698E+07	5.480E+07	3.147E+07
GD152	2.040E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13	1.161E-13

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
N 16	0.000E+00	7.152E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD152	1.324E-14	7.535E-15	7.535E-15	7.535E-15	7.535E-15	7.535E-15
PO210	0.000E+00	6.276E-03	6.276E-03	6.276E-03	6.277E-03	6.277E-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	1.212E+08	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	0.000E+00	7.327E+09	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD152	8.370E-16	4.765E-16	4.765E-16	4.765E-16	4.765E-16	4.765E-16
PO210	0.000E+00	3.968E-04	3.968E-04	3.969E-04	3.969E-04	3.969E-04

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

EMEAN	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	1.545E+10	1.462E+18	1.079E+18	1.003E+18	8.741E+17	7.572E+17
2.500E-02	0.000E+00	6.492E+16	2.393E+16	1.671E+16	1.334E+16	1.159E+16
3.750E-02	3.094E+06	9.267E+16	2.384E+16	1.191E+16	8.092E+15	6.914E+15
5.750E-02	1.045E+08	9.262E+16	5.582E+16	4.914E+16	4.389E+16	3.987E+16
8.500E-02	2.643E+08	6.445E+17	2.598E+17	1.917E+17	1.549E+17	1.337E+17
1.250E-01	5.562E+08	5.097E+17	4.922E+17	4.843E+17	4.292E+17	3.721E+17
2.250E-01	1.847E+09	3.615E+17	3.435E+17	3.370E+17	2.986E+17	2.590E+17
3.750E-01	4.608E+06	3.949E+16	3.379E+16	3.241E+16	2.838E+16	2.454E+16
5.750E-01	2.671E+05	7.204E+15	1.769E+15	7.018E+14	2.437E+14	2.081E+14
8.500E-01	5.853E+04	2.342E+16	1.551E+16	1.382E+16	1.157E+16	9.822E+15

1.250E+00	1.183E+04	8.780E+15	8.516E+15	8.358E+15	7.261E+15	6.165E+15
1.750E+00	5.789E+03	3.268E+12	2.815E+10	1.567E+10	9.910E+09	5.907E+09
2.250E+00	3.348E+03	5.270E+08	5.270E+08	5.270E+08	5.270E+08	5.268E+08
2.750E+00	1.942E+03	4.219E+08	4.220E+08	4.251E+08	4.219E+08	4.274E+08
3.500E+00	1.734E+03	2.746E+08	2.746E+08	2.746E+08	2.746E+08	2.745E+08
5.000E+00	7.432E+02	1.175E+08	1.175E+08	1.175E+08	1.175E+08	1.175E+08
7.000E+00	8.536E+01	1.353E+07	1.354E+07	1.354E+07	1.354E+07	1.353E+07
9.500E+00	9.801E+00	1.557E+06	1.557E+06	1.557E+06	1.557E+06	1.556E+06
TOTAL	1.823E+10	3.307E+18	2.338E+18	2.149E+18	1.870E+18	1.621E+18
MEV/SEC	6.702E+08	2.747E+17	2.139E+17	2.011E+17	1.756E+17	1.519E+17

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

BASIS=1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

EMEAN	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	1.545E+02	1.462E+10	1.079E+10	1.003E+10	8.741E+09	7.572E+09
2.500E-02	0.000E+00	1.623E+09	5.983E+08	4.177E+08	3.336E+08	2.897E+08
3.750E-02	1.160E-01	3.475E+09	8.940E+08	4.468E+08	3.035E+08	2.593E+08
5.750E-02	6.010E+00	5.326E+09	3.210E+09	2.826E+09	2.523E+09	2.293E+09
8.500E-02	2.247E+01	5.478E+10	2.208E+10	1.629E+10	1.317E+10	1.137E+10
1.250E-01	6.952E+01	6.371E+10	6.152E+10	6.053E+10	5.365E+10	4.651E+10
2.250E-01	4.155E+02	8.133E+10	7.728E+10	7.582E+10	6.719E+10	5.827E+10
3.750E-01	1.728E+00	1.481E+10	1.267E+10	1.216E+10	1.064E+10	9.201E+09
5.750E-01	1.536E-01	4.142E+09	1.017E+09	4.035E+08	1.401E+08	1.196E+08
8.500E-01	4.975E-02	1.991E+10	1.318E+10	1.175E+10	9.834E+09	8.349E+09
1.250E+00	1.479E-02	1.098E+10	1.064E+10	1.045E+10	9.076E+09	7.706E+09
1.750E+00	1.013E-02	5.720E+06	4.926E+04	2.742E+04	1.734E+04	1.034E+04
2.250E+00	7.533E-03	1.186E+03	1.186E+03	1.186E+03	1.186E+03	1.185E+03
2.750E+00	5.342E-03	1.160E+03	1.160E+03	1.169E+03	1.160E+03	1.175E+03
3.500E+00	6.068E-03	9.611E+02	9.612E+02	9.612E+02	9.611E+02	9.609E+02
5.000E+00	3.716E-03	5.874E+02	5.874E+02	5.874E+02	5.874E+02	5.873E+02
7.000E+00	5.975E-04	9.474E+01	9.475E+01	9.475E+01	9.475E+01	9.472E+01
9.500E+00	9.311E-05	1.479E+01	1.479E+01	1.479E+01	1.479E+01	1.478E+01
TOTAL	6.702E+02	2.747E+11	2.139E+11	2.011E+11	1.756E+11	1.519E+11
GAM POW	1.074E-04	4.404E+04	3.429E+04	3.224E+04	2.815E+04	2.436E+04

OUTPUT UNIT = 6

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
U234	1.207E+10	4.913E+09	4.913E+09	4.913E+09	4.913E+09	4.914E+09
U235	2.026E+09	2.226E+08	2.226E+08	2.226E+08	2.226E+08	2.226E+08
U237	0.000E+00	5.358E+16	5.335E+16	5.312E+16	5.090E+16	4.835E+16
U238	1.358E+09	1.297E+09	1.297E+09	1.297E+09	1.297E+09	1.297E+09
U239	0.000E+00	4.459E+17	7.616E+16	1.301E+16	2.749E+08	1.695E-01
NP238	0.000E+00	2.738E+16	2.701E+16	2.664E+16	2.324E+16	1.973E+16
NP239	0.000E+00	9.159E+17	9.100E+17	8.998E+17	7.961E+17	6.872E+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	1.989E+15	1.981E+15	1.972E+15	1.890E+15	1.795E+15
U239	0.000E+00	4.815E+16	8.225E+15	1.405E+15	2.969E+07	1.831E-02
NP238	0.000E+00	1.068E+15	1.054E+15	1.039E+15	9.068E+14	7.698E+14
NP239	0.000E+00	1.197E+16	1.189E+16	1.176E+16	1.040E+16	8.979E+15
PU243	0.000E+00	5.432E+14	4.723E+14	4.107E+14	1.014E+14	1.893E+13
AM244M	0.000E+00	1.047E+15	2.115E+14	4.272E+13	4.828E+06	2.226E-02

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	3.398E+05	3.398E+05	3.398E+05	3.398E+05	3.398E+05
U237	0.000E+00	2.823E+14	2.811E+14	2.799E+14	2.682E+14	2.548E+14
U239	0.000E+00	8.214E+16	1.403E+16	2.396E+15	5.065E+07	3.123E-02
NP238	0.000E+00	7.202E+14	7.105E+14	7.008E+14	6.115E+14	5.191E+14
NP239	0.000E+00	8.130E+15	8.078E+15	7.987E+15	7.067E+15	6.100E+15
PU243	0.000E+00	6.173E+14	5.367E+14	4.667E+14	1.152E+14	2.151E+13

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	3.938E+07	3.938E+07	3.938E+07	3.938E+07	3.938E+07
U237	0.000E+00	2.515E+16	2.505E+16	2.494E+16	2.389E+16	2.270E+16
U238	7.181E+06	6.861E+06	6.861E+06	6.861E+06	6.861E+06	6.861E+06

U239	0.000E+00	4.300E+16	7.345E+15	1.255E+15	2.652E+07	1.635E-02
NP238	0.000E+00	9.126E+14	9.002E+14	8.880E+14	7.747E+14	6.577E+14
NP239	0.000E+00	2.196E+16	2.182E+16	2.157E+16	1.909E+16	1.647E+16
AM244M	0.000E+00	9.612E+14	1.941E+14	3.921E+13	4.432E+06	2.043E-02

OUTPUT UNIT =
6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	2.903E+07	2.903E+07	2.903E+07	2.903E+07	2.903E+07
U237	0.000E+00	1.168E+16	1.163E+16	1.158E+16	1.109E+16	1.054E+16
U239	0.000E+00	4.607E+17	7.870E+16	1.344E+16	2.841E+08	1.752E-01
NP239	0.000E+00	1.632E+17	1.621E+17	1.603E+17	1.419E+17	1.224E+17
PU243	0.000E+00	7.223E+15	6.280E+15	5.460E+15	1.348E+15	2.516E+14

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	1.398E+07	1.398E+07	1.398E+07	1.398E+07	1.398E+07
U235	5.218E+08	5.732E+07	5.732E+07	5.732E+07	5.732E+07	5.732E+07
U237	0.000E+00	2.034E+16	2.025E+16	2.017E+16	1.932E+16	1.836E+16
U239	0.000E+00	1.675E+16	2.860E+15	4.885E+14	1.033E+07	6.367E-03
NP239	0.000E+00	4.708E+17	4.678E+17	4.625E+17	4.092E+17	3.532E+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	2.028E+08	2.028E+08	2.028E+08	2.028E+08	2.028E+08
U237	0.000E+00	1.534E+16	1.527E+16	1.521E+16	1.457E+16	1.384E+16
U239	0.000E+00	1.833E+16	3.131E+15	5.348E+14	1.130E+07	6.970E-03
NP239	0.000E+00	3.264E+17	3.243E+17	3.207E+17	2.837E+17	2.449E+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	5.062E+05	5.062E+05	5.062E+05	5.062E+05	5.062E+05
U237	0.000E+00	9.048E+14	9.009E+14	8.970E+14	8.595E+14	8.165E+14
U239	0.000E+00	6.213E+15	1.061E+15	1.812E+14	3.831E+06	2.362E-03
NP239	0.000E+00	3.145E+16	3.125E+16	3.090E+16	2.734E+16	2.360E+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	1.644E+04	1.644E+04	1.644E+04	1.644E+04	1.644E+04
U235	2.267E+05	2.490E+04	2.490E+04	2.490E+04	2.490E+04	2.490E+04
U239	0.000E+00	5.846E+15	9.985E+14	1.706E+14	3.605E+06	2.223E-03
NP238	0.000E+00	1.473E+14	1.453E+14	1.434E+14	1.251E+14	1.062E+14
NP239	0.000E+00	1.355E+14	1.346E+14	1.331E+14	1.178E+14	1.017E+14
NP240M	0.000E+00	1.124E+14	9.349E+11	5.057E+11	3.084E+11	1.710E+11
NP240	0.000E+00	9.051E+14	4.773E+14	2.517E+14	4.203E+11	1.946E+08

□

OUTPUT UNIT =
6 PAGE 119
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	1.066E+03	1.066E+03	1.066E+03	1.066E+03	1.066E+03
U235	3.090E+04	3.394E+03	3.394E+03	3.394E+03	3.394E+03	3.394E+03
U238	2.501E+04	2.389E+04	2.389E+04	2.389E+04	2.389E+04	2.389E+04
U239	0.000E+00	8.660E+15	1.479E+15	2.526E+14	5.340E+06	3.293E-03
NP238	0.000E+00	1.363E+16	1.344E+16	1.326E+16	1.157E+16	9.822E+15
NP240	0.000E+00	1.105E+15	5.830E+14	3.074E+14	5.133E+11	2.376E+08

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	6.936E+01	6.936E+01	6.936E+01	6.937E+01	6.937E+01
U238	1.163E+04	1.112E+04	1.112E+04	1.112E+04	1.112E+04	1.112E+04
U239	0.000E+00	1.021E+14	1.743E+13	2.977E+12	6.293E+04	3.880E-05
NP238	0.000E+00	8.553E+15	8.437E+15	8.322E+15	7.261E+15	6.164E+15

NP240	0.000E+00	1.165E+14	6.143E+13	3.239E+13	5.409E+10	2.504E+07

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
U234	8.528E+01	3.472E+01	3.472E+01	3.472E+01	3.472E+01	3.472E+01
U238	5.692E+03	5.439E+03	5.439E+03	5.439E+03	5.439E+03	5.439E+03
NP240M	0.000E+00	3.267E+12	2.718E+10	1.470E+10	8.967E+09	4.971E+09
CM242	0.000E+00	2.057E+08	2.057E+08	2.057E+08	2.057E+08	2.055E+08
CM244	0.000E+00	6.906E+08	6.906E+08	6.906E+08	6.906E+08	6.906E+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
U234	4.286E+01	1.745E+01	1.745E+01	1.745E+01	1.745E+01	1.745E+01
U238	3.299E+03	3.152E+03	3.152E+03	3.152E+03	3.152E+03	3.152E+03
CM242	0.000E+00	1.193E+08	1.193E+08	1.193E+08	1.193E+08	1.192E+08
CM244	0.000E+00	4.001E+08	4.001E+08	4.001E+08	4.001E+08	4.001E+08

OUTPUT UNIT =
6 PAGE 120
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	1.168E+08	1.168E+08	1.200E+08	1.168E+08	1.223E+08
U234	2.156E+01	8.779E+00	8.779E+00	8.779E+00	8.779E+00	8.780E+00
U238	1.917E+03	1.832E+03	1.832E+03	1.832E+03	1.832E+03	1.832E+03
CM242	0.000E+00	6.889E+07	6.890E+07	6.890E+07	6.888E+07	6.881E+07
CM244	0.000E+00	2.318E+08	2.319E+08	2.319E+08	2.319E+08	2.319E+08

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	1.638E+03	1.638E+03	1.638E+03	1.638E+03	1.638E+03

CM242	0.000E+00	6.188E+07	6.188E+07	6.188E+07	6.187E+07	6.181E+07
CM244	0.000E+00	2.088E+08	2.088E+08	2.088E+08	2.088E+08	2.088E+08

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
U238	7.372E+02	7.043E+02	7.043E+02	7.043E+02	7.043E+02	7.043E+02
CM242	0.000E+00	2.647E+07	2.647E+07	2.647E+07	2.647E+07	2.644E+07
CM244	0.000E+00	8.934E+07	8.934E+07	8.934E+07	8.935E+07	8.934E+07

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	8.112E+01	8.112E+01	8.112E+01	8.112E+01	8.112E+01
CM242	0.000E+00	3.040E+06	3.040E+06	3.040E+06	3.039E+06	3.036E+06
CM244	0.000E+00	1.030E+07	1.030E+07	1.030E+07	1.030E+07	1.030E+07

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	9.330E+00	9.330E+00	9.330E+00	9.330E+00	9.330E+00
CM242	0.000E+00	3.509E+05	3.509E+05	3.509E+05	3.508E+05	3.504E+05
CM244	0.000E+00	1.184E+06	1.184E+06	1.184E+06	1.184E+06	1.184E+06

OUTPUT UNIT =
6 PAGE 121
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02
PHOTON SPECTRUM FOR FISSION PRODUCTS

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, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

EMEAN

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	0.000E+00	2.319E+18	7.089E+17	5.877E+17	3.636E+17	2.934E+17
2.500E-02	0.000E+00	6.133E+17	2.318E+17	1.992E+17	1.349E+17	1.119E+17
3.750E-02	0.000E+00	4.995E+17	2.251E+17	2.040E+17	1.587E+17	1.385E+17
5.750E-02	0.000E+00	4.998E+17	1.510E+17	1.271E+17	8.018E+16	6.454E+16
8.500E-02	0.000E+00	3.663E+17	1.286E+17	1.100E+17	7.870E+16	6.916E+16
1.250E-01	0.000E+00	3.987E+17	2.005E+17	1.771E+17	1.432E+17	1.285E+17
2.250E-01	0.000E+00	8.391E+17	2.675E+17	2.239E+17	1.576E+17	1.230E+17
3.750E-01	0.000E+00	6.428E+17	1.868E+17	1.355E+17	8.791E+16	7.668E+16
5.750E-01	0.000E+00	1.062E+18	5.929E+17	5.240E+17	3.752E+17	3.082E+17
8.500E-01	0.000E+00	1.077E+18	5.694E+17	4.630E+17	2.959E+17	2.586E+17
1.250E+00	0.000E+00	5.905E+17	2.244E+17	1.614E+17	6.149E+16	3.977E+16
1.750E+00	0.000E+00	2.231E+17	1.196E+17	1.025E+17	7.179E+16	6.547E+16
2.250E+00	0.000E+00	1.095E+17	4.269E+16	2.786E+16	6.498E+15	5.034E+15
2.750E+00	0.000E+00	4.631E+16	1.684E+16	1.034E+16	2.463E+15	2.314E+15
3.500E+00	0.000E+00	2.209E+16	4.271E+15	2.438E+15	5.335E+13	2.029E+13
5.000E+00	0.000E+00	8.918E+15	3.926E+13	2.537E+13	1.979E+12	1.057E+11
7.000E+00	0.000E+00	8.329E+13	2.090E-05	6.166E-06	6.166E-06	6.166E-06
9.500E+00	0.000E+00	1.816E+10	3.899E-07	3.899E-07	3.899E-07	3.899E-07
TOTAL	0.000E+00	9.318E+18	3.670E+18	3.056E+18	2.018E+18	1.685E+18
MEV/SEC	0.000E+00	3.748E+18	1.668E+18	1.334E+18	8.019E+17	6.721E+17

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

BASIS=1 MTIHM 4.236% UO2, 57469.5 MWD/MTIHM BURNUP, 3 CYCLE

EMEAN

	FUEL CHG	FUEL DIS	1.0HR	2.0HR	12.0HR	24.0HR
1.000E-02	0.000E+00	2.319E+10	7.089E+09	5.877E+09	3.636E+09	2.934E+09
2.500E-02	0.000E+00	1.533E+10	5.795E+09	4.979E+09	3.373E+09	2.797E+09
3.750E-02	0.000E+00	1.873E+10	8.442E+09	7.649E+09	5.950E+09	5.192E+09
5.750E-02	0.000E+00	2.874E+10	8.684E+09	7.310E+09	4.610E+09	3.711E+09
8.500E-02	0.000E+00	3.113E+10	1.093E+10	9.346E+09	6.690E+09	5.878E+09
1.250E-01	0.000E+00	4.983E+10	2.506E+10	2.214E+10	1.790E+10	1.607E+10
2.250E-01	0.000E+00	1.888E+11	6.018E+10	5.039E+10	3.547E+10	2.767E+10
3.750E-01	0.000E+00	2.410E+11	7.003E+10	5.083E+10	3.296E+10	2.876E+10
5.750E-01	0.000E+00	6.107E+11	3.409E+11	3.013E+11	2.157E+11	1.772E+11
8.500E-01	0.000E+00	9.156E+11	4.840E+11	3.936E+11	2.515E+11	2.198E+11
1.250E+00	0.000E+00	7.382E+11	2.805E+11	2.017E+11	7.687E+10	4.972E+10
1.750E+00	0.000E+00	3.904E+11	2.093E+11	1.794E+11	1.256E+11	1.146E+11
2.250E+00	0.000E+00	2.463E+11	9.606E+10	6.268E+10	1.462E+10	1.133E+10
2.750E+00	0.000E+00	1.274E+11	4.632E+10	2.845E+10	6.774E+09	6.364E+09
3.500E+00	0.000E+00	7.733E+10	1.495E+10	8.534E+09	1.867E+08	7.101E+07

5.000E+00	0.000E+00	4.459E+10	1.963E+08	1.269E+08	9.897E+06	5.285E+05
7.000E+00	0.000E+00	5.830E+08	1.463E-10	4.316E-11	4.316E-11	4.317E-11
9.500E+00	0.000E+00	1.725E+05	3.704E-12	3.704E-12	3.704E-12	3.704E-12
TOTAL	0.000E+00	3.748E+12	1.668E+12	1.334E+12	8.019E+11	6.721E+11
GAM POW	0.000E+00	6.008E+05	2.674E+05	2.139E+05	1.285E+05	1.077E+05

OUTPUT UNIT =
6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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
RB 88	0.000E+00	2.613E+16	2.211E+16	1.747E+16	1.523E+15	8.131E+13
SR 89	0.000E+00	1.015E+16	1.015E+16	1.015E+16	1.009E+16	1.002E+16
RB 90	0.000E+00	2.822E+16	5.647E+10	3.262E+06	0.000E+00	0.000E+00
SR 91	0.000E+00	1.457E+16	1.356E+16	1.261E+16	6.079E+15	2.533E+15
Y 91	0.000E+00	1.416E+16	1.416E+16	1.416E+16	1.413E+16	1.407E+16
RB 92	0.000E+00	5.954E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	3.659E+16	3.577E+16	3.381E+16	9.300E+15	1.157E+15
Y 93	0.000E+00	3.628E+16	3.429E+16	3.202E+16	1.612E+16	7.074E+15
RB 94	0.000E+00	2.737E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	5.337E+16	6.434E+15	7.292E+14	2.549E+05	1.145E-06
ZR 95	0.000E+00	4.000E+15	3.999E+15	3.997E+15	3.979E+15	3.958E+15
Y 96	0.000E+00	8.991E+16	1.282E+09	1.799E+01	0.000E+00	0.000E+00
ZR 97	0.000E+00	2.671E+16	2.564E+16	2.461E+16	1.633E+16	9.983E+15
NB 97	0.000E+00	1.816E+16	1.786E+16	1.738E+16	1.180E+16	6.757E+15
NB 98	0.000E+00	7.740E+16	9.249E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	6.247E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	2.222E+16	2.199E+16	2.176E+16	1.959E+16	1.727E+16
TC 99M	0.000E+00	7.716E+15	7.712E+15	7.699E+15	7.291E+15	6.550E+15
TC100	0.000E+00	2.826E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	0.000E+00	5.999E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	1.231E+17	7.227E+15	4.203E+14	1.859E+02	2.782E-13
TC102	0.000E+00	6.335E+16	1.532E+15	3.614E+13	1.932E-03	1.028E-22
TC104	0.000E+00	6.259E+16	6.944E+15	7.066E+14	8.416E+04	1.038E-07
RH104	0.000E+00	3.609E+16	1.941E+11	1.337E+07	0.000E+00	0.000E+00
RU105	0.000E+00	1.272E+16	1.124E+16	9.621E+15	2.019E+15	3.099E+14
RH105	0.000E+00	4.257E+15	4.262E+15	4.254E+15	3.811E+15	3.081E+15
RH106	0.000E+00	2.862E+16	2.555E+16	2.555E+16	2.552E+16	2.550E+16
RU107	0.000E+00	2.348E+16	1.283E+12	6.423E+07	0.000E+00	0.000E+00
RH108	0.000E+00	2.433E+16	2.518E+12	2.440E+08	0.000E+00	0.000E+00
TE131	0.000E+00	1.530E+16	7.296E+15	2.483E+15	4.497E+14	3.408E+14

I131	0.000E+00	4.469E+15	4.465E+15	4.455E+15	4.320E+15	4.156E+15
I132	0.000E+00	1.702E+16	1.692E+16	1.680E+16	1.546E+16	1.391E+16
I133	0.000E+00	1.928E+16	1.891E+16	1.837E+16	1.321E+16	8.859E+15
XE133	0.000E+00	6.584E+15	6.584E+15	6.583E+15	6.518E+15	6.344E+15
I134	0.000E+00	3.209E+16	2.192E+16	1.262E+16	8.432E+12	6.778E+08
TE135	0.000E+00	4.589E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	1.596E+16	1.438E+16	1.295E+16	4.538E+15	1.290E+15
XE135	0.000E+00	3.112E+15	3.856E+15	4.431E+15	5.484E+15	3.397E+15
I136	0.000E+00	4.260E+16	4.331E+03	3.801E-10	0.000E+00	0.000E+00
I136M	0.000E+00	2.613E+16	7.216E-08	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	7.283E+16	1.478E+12	2.844E+07	0.000E+00	0.000E+00
I138	0.000E+00	2.918E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	0.000E+00	2.657E+16	1.415E+15	7.516E+13	1.347E+01	6.818E-15
CS138	0.000E+00	5.008E+16	2.159E+16	6.346E+15	1.585E+10	2.944E+03
XE139	0.000E+00	4.928E+16	1.823E-11	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6

CS139	0.000E+00	6.635E+16	8.385E+14	1.005E+13	6.128E-07	0.000E+00
BA139	0.000E+00	3.693E+16	2.518E+16	1.526E+16	9.991E+13	2.394E+11
BA140	0.000E+00	1.716E+16	1.712E+16	1.708E+16	1.670E+16	1.625E+16
LA140	0.000E+00	2.309E+16	2.306E+16	2.304E+16	2.278E+16	2.243E+16
BA141	0.000E+00	3.300E+16	3.442E+15	3.532E+14	4.573E+04	6.234E-08
LA141	0.000E+00	3.564E+16	3.210E+16	2.714E+16	4.659E+15	5.613E+14
CE141	0.000E+00	6.159E+15	6.158E+15	6.157E+15	6.122E+15	6.061E+15
LA142	0.000E+00	3.029E+16	2.172E+16	1.392E+16	1.567E+14	7.196E+11
CE143	0.000E+00	1.617E+16	1.594E+16	1.561E+16	1.265E+16	9.835E+15
PR143	0.000E+00	1.043E+16	1.043E+16	1.043E+16	1.040E+16	1.032E+16
PR144	0.000E+00	3.363E+16	3.331E+16	3.328E+16	3.324E+16	3.320E+16
PR145	0.000E+00	1.577E+16	1.418E+16	1.263E+16	3.963E+15	9.862E+14
ND147	0.000E+00	4.615E+15	4.607E+15	4.595E+15	4.476E+15	4.338E+15
PM148	0.000E+00	4.841E+15	4.815E+15	4.789E+15	4.540E+15	4.258E+15
PM149	0.000E+00	5.818E+15	5.781E+15	5.732E+15	5.077E+15	4.342E+15
SM153	0.000E+00	6.092E+15	6.005E+15	5.916E+15	5.100E+15	4.268E+15
EU156	0.000E+00	4.879E+15	4.870E+15	4.862E+15	4.774E+15	4.668E+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
RB 88	0.000E+00	5.857E+15	4.955E+15	3.917E+15	3.413E+14	1.823E+13
SR 89	0.000E+00	2.120E+15	2.120E+15	2.118E+15	2.106E+15	2.092E+15
RB 90	0.000E+00	6.296E+15	1.260E+10	7.280E+05	0.000E+00	0.000E+00
SR 91	0.000E+00	3.081E+15	2.869E+15	2.668E+15	1.286E+15	5.358E+14
Y 91	0.000E+00	2.968E+15	2.968E+15	2.968E+15	2.963E+15	2.950E+15

RB 92	0.000E+00	1.355E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	8.065E+15	7.883E+15	7.451E+15	2.050E+15	2.549E+14
Y 93	0.000E+00	7.875E+15	7.442E+15	6.949E+15	3.498E+15	1.535E+15
RB 94	0.000E+00	6.268E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	1.185E+16	1.428E+15	1.619E+14	5.659E+04	2.541E-07
Y 96	0.000E+00	2.023E+16	2.885E+08	4.047E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	5.632E+15	5.406E+15	5.189E+15	3.443E+15	2.105E+15
NB 97	0.000E+00	3.709E+15	3.649E+15	3.551E+15	2.410E+15	1.380E+15
NB 98	0.000E+00	1.715E+16	2.049E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	1.377E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	3.993E+15	3.951E+15	3.910E+15	3.520E+15	3.103E+15
TC100	0.000E+00	6.197E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	0.000E+00	1.354E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC102	0.000E+00	1.399E+16	3.383E+14	7.983E+12	4.268E-04	2.271E-23
RH103M	0.000E+00	4.039E+15	4.038E+15	4.036E+15	4.010E+15	3.973E+15
TC104	0.000E+00	1.370E+16	1.519E+15	1.546E+14	1.842E+04	2.271E-08
RH104	0.000E+00	7.755E+15	4.170E+10	2.874E+06	0.000E+00	0.000E+00
RU105	0.000E+00	2.858E+15	2.525E+15	2.161E+15	4.533E+14	6.960E+13
RH105M	0.000E+00	5.133E+15	4.549E+15	3.892E+15	8.166E+14	1.254E+14
RH106	0.000E+00	6.291E+15	5.616E+15	5.616E+15	5.611E+15	5.606E+15
PD109	0.000E+00	7.323E+15	6.993E+15	6.642E+15	3.969E+15	2.140E+15
AG109M	0.000E+00	6.417E+15	6.133E+15	5.825E+15	3.481E+15	1.876E+15
TE129	0.000E+00	3.388E+15	3.258E+15	3.004E+15	9.301E+14	4.129E+14

OUTPUT UNIT =
6

SN130	0.000E+00	8.089E+15	1.129E+11	1.575E+06	0.000E+00	0.000E+00
TE131	0.000E+00	7.577E+15	3.613E+15	1.230E+15	2.227E+14	1.688E+14
I131	0.000E+00	2.752E+15	2.749E+15	2.743E+15	2.660E+15	2.559E+15
SB132M	0.000E+00	6.310E+15	3.159E+11	1.582E+07	0.000E+00	0.000E+00
TE132	0.000E+00	3.783E+16	3.751E+16	3.718E+16	3.402E+16	3.059E+16
I132	0.000E+00	4.058E+15	4.033E+15	4.006E+15	3.686E+15	3.315E+15
I133	0.000E+00	3.937E+15	3.861E+15	3.750E+15	2.698E+15	1.809E+15
XE133M	0.000E+00	1.405E+15	1.403E+15	1.401E+15	1.354E+15	1.259E+15
TE134	0.000E+00	1.869E+16	6.914E+15	2.556E+15	1.221E+11	7.969E+05
I134	0.000E+00	7.676E+15	5.242E+15	3.018E+15	2.017E+12	1.621E+08
I134M	0.000E+00	6.823E+15	8.962E+10	1.177E+06	0.000E+00	0.000E+00
TE135	0.000E+00	1.028E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	3.238E+15	2.917E+15	2.626E+15	9.205E+14	2.616E+14
I136	0.000E+00	9.497E+15	9.656E+02	8.474E-11	0.000E+00	0.000E+00
I136M	0.000E+00	7.495E+15	2.070E-08	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.609E+16	3.267E+11	6.284E+06	0.000E+00	0.000E+00
I138	0.000E+00	6.649E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	1.090E+16	4.700E+15	1.382E+15	3.450E+09	6.408E+02
XE139	0.000E+00	1.091E+16	4.036E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.469E+16	1.857E+14	2.225E+12	1.357E-07	0.000E+00
BA139	0.000E+00	7.830E+15	5.338E+15	3.235E+15	2.118E+13	5.076E+10

BA140	0.000E+00	1.369E+16	1.366E+16	1.362E+16	1.332E+16	1.296E+16
LA140	0.000E+00	4.787E+15	4.782E+15	4.777E+15	4.724E+15	4.651E+15
BA141	0.000E+00	7.027E+15	7.329E+14	7.521E+13	9.737E+03	1.327E-08
LA141	0.000E+00	7.632E+15	6.875E+15	5.812E+15	9.977E+14	1.202E+14
LA142	0.000E+00	6.490E+15	4.654E+15	2.982E+15	3.359E+13	1.542E+11
CE143	0.000E+00	2.747E+15	2.708E+15	2.653E+15	2.150E+15	1.671E+15
PR143	0.000E+00	2.085E+15	2.085E+15	2.085E+15	2.080E+15	2.064E+15
PR144	0.000E+00	7.308E+15	7.238E+15	7.231E+15	7.223E+15	7.214E+15
PR145	0.000E+00	3.317E+15	2.983E+15	2.657E+15	8.336E+14	2.075E+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	3.984E+15	3.371E+15	2.665E+15	2.322E+14	1.240E+13
Y 91	0.000E+00	1.939E+15	1.939E+15	1.938E+15	1.935E+15	1.927E+15
RB 92	0.000E+00	9.296E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	5.391E+15	5.269E+15	4.981E+15	1.370E+15	1.704E+14
Y 93	0.000E+00	5.250E+15	4.961E+15	4.632E+15	2.332E+15	1.024E+15
Y 94	0.000E+00	8.006E+15	9.652E+14	1.094E+14	3.824E+04	1.717E-07
Y 96	0.000E+00	1.382E+16	1.971E+08	2.765E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	3.695E+15	3.546E+15	3.404E+15	2.259E+15	1.381E+15
NB 97	0.000E+00	2.395E+15	2.356E+15	2.293E+15	1.556E+15	8.912E+14
NB 98	0.000E+00	1.161E+16	1.387E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	9.293E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	3.249E+15	3.216E+15	3.182E+15	2.865E+15	2.526E+15
ZR101	0.000E+00	9.262E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC102	0.000E+00	9.421E+15	2.278E+14	5.374E+12	2.873E-04	1.529E-23
TC104	0.000E+00	9.172E+15	1.017E+15	1.035E+14	1.233E+04	1.521E-08

RH104	0.000E+00	5.117E+15	2.752E+10	1.896E+06	0.000E+00	0.000E+00
RH106	0.000E+00	4.206E+15	3.754E+15	3.754E+15	3.751E+15	3.747E+15
TE132	0.000E+00	6.584E+15	6.528E+15	6.471E+15	5.922E+15	5.324E+15
I132	0.000E+00	2.380E+15	2.365E+15	2.349E+15	2.162E+15	1.944E+15
I133	0.000E+00	2.528E+15	2.480E+15	2.409E+15	1.733E+15	1.162E+15
XE133	0.000E+00	3.212E+16	3.212E+16	3.211E+16	3.180E+16	3.094E+16
I134	0.000E+00	4.562E+15	3.116E+15	1.794E+15	1.199E+12	9.636E+07
TE135	0.000E+00	6.997E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE135	0.000E+00	1.118E+15	1.385E+15	1.591E+15	1.969E+15	1.220E+15
I136	0.000E+00	6.459E+15	6.568E+02	5.764E-11	0.000E+00	0.000E+00
XE137	0.000E+00	1.110E+16	2.253E+11	4.334E+06	0.000E+00	0.000E+00
XE138	0.000E+00	5.302E+15	2.822E+14	1.500E+13	2.688E+00	1.360E-15
CS138	0.000E+00	7.315E+15	3.153E+15	9.270E+14	2.315E+09	4.300E+02

XE139	0.000E+00	7.369E+15	2.726E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	9.906E+15	1.252E+14	1.500E+12	9.149E-08	0.000E+00
BA139	0.000E+00	7.899E+15	5.385E+15	3.264E+15	2.137E+13	5.121E+10
BA140	0.000E+00	2.370E+15	2.365E+15	2.359E+15	2.307E+15	2.245E+15
LA140	0.000E+00	4.157E+15	4.153E+15	4.148E+15	4.102E+15	4.038E+15
BA141	0.000E+00	8.344E+15	8.704E+14	8.931E+13	1.156E+04	1.576E-08
LA141	0.000E+00	5.078E+15	4.574E+15	3.867E+15	6.638E+14	7.998E+13
CE141	0.000E+00	1.128E+16	1.128E+16	1.128E+16	1.122E+16	1.111E+16
BA142	0.000E+00	1.235E+16	2.535E+14	5.200E+12	6.852E-05	3.845E-25
LA142	0.000E+00	4.435E+15	3.180E+15	2.038E+15	2.295E+13	1.054E+11
CE143	0.000E+00	3.606E+16	3.555E+16	3.483E+16	2.823E+16	2.194E+16
CE144	0.000E+00	5.007E+15	5.006E+15	5.006E+15	5.000E+15	4.994E+15
PR144	0.000E+00	4.872E+15	4.825E+15	4.821E+15	4.815E+15	4.810E+15
CE145	0.000E+00	2.203E+16	2.518E+10	2.401E+04	0.000E+00	0.000E+00
ND147	0.000E+00	1.266E+16	1.264E+16	1.260E+16	1.228E+16	1.190E+16
ND149	0.000E+00	6.119E+15	4.184E+15	2.803E+15	5.100E+13	4.164E+11
SM153	0.000E+00	1.662E+16	1.638E+16	1.614E+16	1.391E+16	1.164E+16
EU156	0.000E+00	2.823E+15	2.818E+15	2.813E+15	2.762E+15	2.701E+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	2.625E+15	1.538E+15	8.918E+14	3.829E+12	5.515E+09
RB 88	0.000E+00	6.052E+15	5.121E+15	4.048E+15	3.527E+14	1.884E+13
SR 89	0.000E+00	1.976E+15	1.975E+15	1.974E+15	1.963E+15	1.950E+15
RB 90	0.000E+00	6.505E+15	1.302E+10	7.521E+05	0.000E+00	0.000E+00
SR 91	0.000E+00	2.932E+15	2.730E+15	2.538E+15	1.224E+15	5.098E+14
Y 91	0.000E+00	2.773E+15	2.773E+15	2.773E+15	2.768E+15	2.756E+15
RB 92	0.000E+00	1.437E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	8.107E+15	7.925E+15	7.490E+15	2.061E+15	2.563E+14
Y 93	0.000E+00	7.823E+15	7.393E+15	6.903E+15	3.475E+15	1.525E+15
RB 94	0.000E+00	6.696E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	1.206E+16	1.454E+15	1.648E+14	5.761E+04	2.587E-07
Y 96	0.000E+00	2.119E+16	3.021E+08	4.238E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	5.343E+15	5.128E+15	4.922E+15	3.266E+15	1.997E+15
NB 97	0.000E+00	3.371E+15	3.316E+15	3.227E+15	2.190E+15	1.254E+15

OUTPUT UNIT =
6 PAGE 126
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

NB 98	0.000E+00	1.762E+16	2.105E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	1.391E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	3.203E+15	3.170E+15	3.137E+15	2.824E+15	2.490E+15
TC100	0.000E+00	6.197E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	0.000E+00	1.417E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TC102	0.000E+00	1.413E+16	3.416E+14	8.061E+12	4.310E-04	2.294E-23
TC104	0.000E+00	1.382E+16	1.533E+15	1.560E+14	1.858E+04	2.292E-08
RH104	0.000E+00	7.511E+15	4.039E+10	2.783E+06	0.000E+00	0.000E+00
RU105	0.000E+00	2.329E+15	2.058E+15	1.761E+15	3.695E+14	5.673E+13
RH106	0.000E+00	6.291E+15	5.616E+15	5.616E+15	5.611E+15	5.606E+15
RU107	0.000E+00	5.075E+15	2.773E+11	1.388E+07	0.000E+00	0.000E+00
RH108	0.000E+00	5.509E+15	5.701E+11	5.524E+07	0.000E+00	0.000E+00
SN130	0.000E+00	7.034E+15	9.814E+10	1.369E+06	0.000E+00	0.000E+00
TE132	0.000E+00	7.334E+15	7.273E+15	7.209E+15	6.597E+15	5.931E+15
I132	0.000E+00	3.246E+15	3.226E+15	3.203E+15	2.948E+15	2.651E+15
I133	0.000E+00	3.536E+15	3.469E+15	3.369E+15	2.424E+15	1.625E+15
I134	0.000E+00	6.315E+15	4.312E+15	2.482E+15	1.659E+12	1.334E+08
TE135	0.000E+00	1.071E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	2.878E+15	2.593E+15	2.335E+15	8.182E+14	2.325E+14
XE135	0.000E+00	5.262E+14	6.519E+14	7.491E+14	9.271E+14	5.742E+14
I136	0.000E+00	9.776E+15	9.940E+02	8.723E-11	0.000E+00	0.000E+00
I136M	0.000E+00	6.037E+15	1.667E-08	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.644E+16	3.337E+11	6.419E+06	0.000E+00	0.000E+00
I138	0.000E+00	7.015E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	1.083E+16	4.669E+15	1.373E+15	3.428E+09	6.367E+02
XE139	0.000E+00	1.115E+16	4.125E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.496E+16	1.890E+14	2.265E+12	1.382E-07	0.000E+00
BA139	0.000E+00	7.622E+15	5.196E+15	3.149E+15	2.062E+13	4.941E+10
BA140	0.000E+00	1.956E+15	1.952E+15	1.947E+15	1.904E+15	1.853E+15
LA140	0.000E+00	4.490E+15	4.485E+15	4.481E+15	4.431E+15	4.362E+15
BA141	0.000E+00	6.776E+15	7.068E+14	7.253E+13	9.389E+03	1.280E-08
LA141	0.000E+00	7.443E+15	6.705E+15	5.668E+15	9.730E+14	1.172E+14
CE141	0.000E+00	7.332E+14	7.331E+14	7.330E+14	7.288E+14	7.215E+14
LA142	0.000E+00	6.310E+15	4.525E+15	2.899E+15	3.265E+13	1.499E+11
CE143	0.000E+00	9.044E+15	8.916E+15	8.734E+15	7.079E+15	5.502E+15
PR143	0.000E+00	1.805E+15	1.805E+15	1.805E+15	1.800E+15	1.787E+15
PR144	0.000E+00	7.261E+15	7.192E+15	7.185E+15	7.177E+15	7.168E+15
CE145	0.000E+00	8.561E+15	9.788E+09	9.334E+03	0.000E+00	0.000E+00
PR145	0.000E+00	3.150E+15	2.832E+15	2.522E+15	7.916E+14	1.970E+14
PM148	0.000E+00	9.861E+14	9.809E+14	9.756E+14	9.248E+14	8.673E+14
PM149	0.000E+00	1.048E+15	1.042E+15	1.033E+15	9.148E+14	7.823E+14
SM153	0.000E+00	5.580E+15	5.499E+15	5.418E+15	4.671E+15	3.909E+15
EU156	0.000E+00	1.247E+15	1.245E+15	1.242E+15	1.220E+15	1.193E+15

OUTPUT UNIT =
6 PAGE 127
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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

RB 88	0.000E+00	3.962E+15	3.353E+15	2.650E+15	2.309E+14	1.233E+13
SR 89	0.000E+00	1.183E+15	1.182E+15	1.182E+15	1.175E+15	1.167E+15
RB 90	0.000E+00	4.258E+15	8.522E+09	4.924E+05	0.000E+00	0.000E+00
SR 91	0.000E+00	1.789E+15	1.666E+15	1.549E+15	7.466E+14	3.111E+14
Y 91	0.000E+00	1.666E+15	1.665E+15	1.665E+15	1.662E+15	1.655E+15
RB 92	0.000E+00	9.630E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	5.221E+15	5.103E+15	4.824E+15	1.327E+15	1.650E+14
Y 93	0.000E+00	4.946E+15	4.674E+15	4.364E+15	2.197E+15	9.643E+14
RB 94	0.000E+00	4.515E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	7.792E+15	9.394E+14	1.065E+14	3.722E+04	1.671E-07
Y 96	0.000E+00	1.405E+16	2.003E+08	2.810E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	3.257E+15	3.126E+15	3.001E+15	1.991E+15	1.217E+15
NB 97	0.000E+00	1.965E+15	1.933E+15	1.882E+15	1.277E+15	7.314E+14
NB 98	0.000E+00	1.148E+16	1.371E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	8.954E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	1.847E+15	1.828E+15	1.809E+15	1.628E+15	1.436E+15
TC100	0.000E+00	3.984E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	0.000E+00	9.412E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	5.056E+15	2.968E+14	1.726E+13	7.637E+00	1.143E-14
TC102	0.000E+00	9.079E+15	2.195E+14	5.179E+12	2.769E-04	1.474E-23
TC104	0.000E+00	8.924E+15	9.900E+14	1.007E+14	1.200E+04	1.480E-08
RH104	0.000E+00	4.702E+15	2.529E+10	1.742E+06	0.000E+00	0.000E+00
RU105	0.000E+00	1.515E+15	1.339E+15	1.146E+15	2.404E+14	3.690E+13
RH106	0.000E+00	4.035E+15	3.602E+15	3.601E+15	3.599E+15	3.595E+15
PD109	0.000E+00	1.231E+15	1.175E+15	1.116E+15	6.671E+14	3.596E+14
I131	0.000E+00	1.353E+15	1.352E+15	1.349E+15	1.308E+15	1.258E+15
I132	0.000E+00	1.920E+15	1.908E+15	1.895E+15	1.744E+15	1.569E+15
TE133M	0.000E+00	3.787E+15	1.789E+15	8.446E+14	4.638E+11	5.676E+07
I133	0.000E+00	2.040E+15	2.001E+15	1.944E+15	1.398E+15	9.374E+14
XE133	0.000E+00	2.874E+16	2.874E+16	2.874E+16	2.846E+16	2.770E+16
TE134	0.000E+00	1.272E+16	4.706E+15	1.740E+15	8.309E+10	5.424E+05
I134	0.000E+00	3.808E+15	2.600E+15	1.497E+15	1.000E+12	8.043E+07
TE135	0.000E+00	7.062E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	1.649E+15	1.485E+15	1.337E+15	4.688E+14	1.332E+14
I136	0.000E+00	6.424E+15	6.532E+02	5.732E-11	0.000E+00	0.000E+00
I136M	0.000E+00	3.950E+15	1.091E-08	0.000E+00	0.000E+00	0.000E+00
XE137	0.000E+00	1.068E+16	2.168E+11	4.171E+06	0.000E+00	0.000E+00
I138	0.000E+00	4.688E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	6.858E+15	2.956E+15	8.690E+14	2.170E+09	4.031E+02
XE139	0.000E+00	7.321E+15	2.709E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	9.707E+15	1.227E+14	1.470E+12	8.965E-08	0.000E+00
BA139	0.000E+00	4.719E+15	3.217E+15	1.950E+15	1.276E+13	3.059E+10
BA140	0.000E+00	1.081E+15	1.079E+15	1.077E+15	1.053E+15	1.024E+15
LA140	0.000E+00	2.641E+15	2.639E+15	2.636E+15	2.607E+15	2.566E+15
BA141	0.000E+00	4.210E+15	4.391E+14	4.506E+13	5.834E+03	7.953E-09

OUTPUT UNIT =

LA141	0.000E+00	4.649E+15	4.188E+15	3.540E+15	6.077E+14	7.322E+13
BA142	0.000E+00	8.016E+15	1.646E+14	3.376E+12	4.449E-05	2.497E-25
LA142	0.000E+00	3.930E+15	2.818E+15	1.806E+15	2.034E+13	9.338E+10
CE143	0.000E+00	1.419E+15	1.399E+15	1.370E+15	1.111E+15	8.632E+14
PR143	0.000E+00	1.003E+15	1.003E+15	1.003E+15	1.001E+15	9.932E+14
CE144	0.000E+00	1.150E+15	1.150E+15	1.149E+15	1.148E+15	1.147E+15
PR144	0.000E+00	4.605E+15	4.561E+15	4.557E+15	4.551E+15	4.546E+15
PR145	0.000E+00	1.970E+15	1.772E+15	1.578E+15	4.951E+14	1.232E+14
ND147	0.000E+00	8.018E+15	8.004E+15	7.983E+15	7.777E+15	7.537E+15
EU156	0.000E+00	2.225E+15	2.221E+15	2.217E+15	2.177E+15	2.128E+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	2.809E+15	2.376E+15	1.879E+15	1.637E+14	8.741E+12
KR 90	0.000E+00	1.041E+16	3.097E-18	0.000E+00	0.000E+00	0.000E+00
KR 92	0.000E+00	5.175E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	0.000E+00	6.927E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	3.604E+15	3.523E+15	3.330E+15	9.160E+14	1.139E+14
Y 93	0.000E+00	3.371E+15	3.186E+15	2.975E+15	1.498E+15	6.573E+14
Y 94	0.000E+00	5.444E+15	6.563E+14	7.438E+13	2.600E+04	1.168E-07
Y 96	0.000E+00	1.000E+16	1.426E+08	2.001E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	2.163E+15	2.076E+15	1.993E+15	1.322E+15	8.082E+14
NB 98	0.000E+00	8.074E+15	9.647E-20	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	6.200E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	5.395E+15	5.339E+15	5.284E+15	4.757E+15	4.194E+15
TC 99M	0.000E+00	6.710E+16	6.706E+16	6.695E+16	6.340E+16	5.696E+16
ZR101	0.000E+00	6.712E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC102	0.000E+00	6.308E+15	1.525E+14	3.598E+12	1.924E-04	1.024E-23
TC104	0.000E+00	6.321E+15	7.012E+14	7.136E+13	8.500E+03	1.048E-08
RH105M	0.000E+00	3.216E+15	2.850E+15	2.438E+15	5.116E+14	7.854E+13
RH106	0.000E+00	2.783E+15	2.485E+15	2.484E+15	2.482E+15	2.480E+15
TE131	0.000E+00	3.129E+16	1.492E+16	5.079E+15	9.197E+14	6.970E+14
SB132M	0.000E+00	4.665E+15	2.336E+11	1.169E+07	0.000E+00	0.000E+00
TE132	0.000E+00	2.010E+15	1.993E+15	1.975E+15	1.808E+15	1.625E+15
I134	0.000E+00	6.662E+15	4.549E+15	2.619E+15	1.750E+12	1.407E+08
TE135	0.000E+00	4.979E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	4.504E+15	4.580E+02	4.019E-11	0.000E+00	0.000E+00
XE137	0.000E+00	7.422E+15	1.507E+11	2.898E+06	0.000E+00	0.000E+00
CS138	0.000E+00	5.915E+15	2.550E+15	7.496E+14	1.872E+09	3.477E+02
XE139	0.000E+00	5.359E+15	1.983E-12	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	6.715E+15	8.486E+13	1.017E+12	6.202E-08	0.000E+00
BA139	0.000E+00	3.153E+15	2.149E+15	1.303E+15	8.529E+12	2.044E+10

LA140	0.000E+00	2.167E+15	2.165E+15	2.163E+15	2.138E+15	2.105E+15
LA141	0.000E+00	3.116E+15	2.807E+15	2.373E+15	4.073E+14	4.908E+13
CE141	0.000E+00	3.577E+16	3.576E+16	3.576E+16	3.555E+16	3.520E+16
CE144	0.000E+00	5.377E+15	5.377E+15	5.376E+15	5.371E+15	5.364E+15
PR144	0.000E+00	3.143E+15	3.113E+15	3.110E+15	3.107E+15	3.103E+15
ND149	0.000E+00	3.296E+15	2.254E+15	1.510E+15	2.747E+13	2.243E+11

OUTPUT UNIT =
6 PAGE 129
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

SM153	0.000E+00	7.238E+15	7.134E+15	7.029E+15	6.059E+15	5.071E+15

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	4.239E+15	3.676E+15	3.149E+15	6.703E+14	1.047E+14
KR 88	0.000E+00	5.782E+15	4.534E+15	3.552E+15	3.091E+14	1.650E+13
RB 88	0.000E+00	4.398E+15	3.721E+15	2.942E+15	2.563E+14	1.369E+13
KR 89	0.000E+00	8.575E+15	1.736E+10	3.483E+04	0.000E+00	0.000E+00
Y 91	0.000E+00	1.389E+15	1.389E+15	1.388E+15	1.386E+15	1.380E+15
RB 92	0.000E+00	1.127E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	5.433E+15	5.311E+15	5.020E+15	1.381E+15	1.718E+14
Y 93	0.000E+00	9.058E+15	8.560E+15	7.993E+15	4.024E+15	1.766E+15
Y 96	0.000E+00	1.602E+16	2.284E+08	3.204E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	4.197E+15	4.028E+15	3.866E+15	2.566E+15	1.568E+15
NB 98	0.000E+00	1.248E+16	1.491E-19	0.000E+00	0.000E+00	0.000E+00
NB 99	0.000E+00	9.361E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	5.089E+15	5.036E+15	4.983E+15	4.487E+15	3.955E+15
ZR101	0.000E+00	5.962E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	0.000E+00	1.530E+16	8.983E+14	5.224E+13	2.311E+01	3.458E-14
TC102	0.000E+00	9.557E+15	2.311E+14	5.452E+12	2.915E-04	1.551E-23
TC104	0.000E+00	1.320E+16	1.464E+15	1.490E+14	1.775E+04	2.189E-08
RU105	0.000E+00	5.715E+15	5.051E+15	4.321E+15	9.067E+14	1.392E+14
RH106	0.000E+00	4.137E+15	3.693E+15	3.693E+15	3.690E+15	3.687E+15
SN130	0.000E+00	1.282E+16	1.789E+11	2.496E+06	0.000E+00	0.000E+00
I131	0.000E+00	3.422E+15	3.419E+15	3.412E+15	3.308E+15	3.183E+15
TE132	0.000E+00	5.163E+16	5.120E+16	5.074E+16	4.644E+16	4.175E+16
I132	0.000E+00	3.346E+15	3.325E+15	3.302E+15	3.039E+15	2.733E+15
TE133M	0.000E+00	9.901E+15	4.677E+15	2.208E+15	1.213E+12	1.484E+08
TE134	0.000E+00	4.371E+16	1.617E+16	5.978E+15	2.855E+11	1.864E+06
I134	0.000E+00	6.106E+15	4.170E+15	2.401E+15	1.604E+12	1.290E+08
I134M	0.000E+00	9.582E+15	1.259E+11	1.653E+06	0.000E+00	0.000E+00
TE135	0.000E+00	1.259E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	0.000E+00	6.154E+15	5.543E+15	4.991E+15	1.749E+15	4.971E+14
XE135	0.000E+00	1.737E+16	2.152E+16	2.472E+16	3.060E+16	1.895E+16

I136M	0.000E+00	1.704E+16	4.704E-08	0.000E+00	0.000E+00	0.000E+00
CS136	0.000E+00	1.518E+15	1.515E+15	1.511E+15	1.478E+15	1.440E+15
XE137	0.000E+00	1.151E+16	2.337E+11	4.496E+06	0.000E+00	0.000E+00
XE138	0.000E+00	3.064E+16	1.631E+15	8.665E+13	1.553E+01	7.861E-15
CS138	0.000E+00	8.510E+15	3.669E+15	1.078E+15	2.693E+09	5.002E+02
XE139	0.000E+00	6.029E+16	2.231E-11	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.037E+16	1.311E+14	1.570E+12	9.579E-08	0.000E+00
BA139	0.000E+00	1.566E+16	1.068E+16	6.471E+15	4.236E+13	1.015E+11
BA140	0.000E+00	3.398E+15	3.390E+15	3.383E+15	3.307E+15	3.219E+15
LA140	0.000E+00	2.896E+15	2.893E+15	2.890E+15	2.858E+15	2.814E+15
BA141	0.000E+00	4.693E+16	4.895E+15	5.023E+14	6.503E+04	8.866E-08
LA141	0.000E+00	4.396E+15	3.960E+15	3.348E+15	5.747E+14	6.925E+13
BA142	0.000E+00	2.492E+16	5.119E+14	1.050E+13	1.383E-04	7.764E-25
LA142	0.000E+00	3.768E+15	2.702E+15	1.731E+15	1.950E+13	8.953E+10

CE143	0.000E+00	3.420E+16	3.371E+16	3.303E+16	2.677E+16	2.081E+16
PR144	0.000E+00	4.591E+15	4.547E+15	4.543E+15	4.538E+15	4.532E+15
ND149	0.000E+00	1.124E+16	7.688E+15	5.150E+15	9.370E+13	7.650E+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	8.952E+15	5.246E+15	3.042E+15	1.306E+13	1.881E+10
RB 88	0.000E+00	2.460E+15	2.082E+15	1.646E+15	1.434E+14	7.657E+12
RB 92	0.000E+00	6.775E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	3.998E+15	3.908E+15	3.694E+15	1.016E+15	1.264E+14
Y 93	0.000E+00	2.424E+15	2.291E+15	2.139E+15	1.077E+15	4.726E+14
Y 96	0.000E+00	9.216E+15	1.314E+08	1.844E+00	0.000E+00	0.000E+00
ZR 97	0.000E+00	2.871E+15	2.756E+15	2.645E+15	1.755E+15	1.073E+15
NB 98	0.000E+00	6.873E+15	8.212E-20	0.000E+00	0.000E+00	0.000E+00
MO 99	0.000E+00	1.341E+15	1.327E+15	1.313E+15	1.182E+15	1.042E+15
ZR101	0.000E+00	1.219E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC101	0.000E+00	5.093E+16	1.112E+16	1.083E+15	1.729E+03	3.488E-12
TC104	0.000E+00	5.968E+16	6.621E+15	6.737E+14	8.025E+04	9.898E-08
RU105	0.000E+00	1.127E+16	9.958E+15	8.520E+15	1.788E+15	2.745E+14
RH105	0.000E+00	1.001E+16	1.002E+16	1.000E+16	8.962E+15	7.244E+15
RH106	0.000E+00	2.202E+15	1.966E+15	1.965E+15	1.964E+15	1.962E+15
RH107	0.000E+00	2.709E+16	5.023E+15	7.391E+14	3.510E+06	3.607E-04
RH108	0.000E+00	1.347E+16	1.394E+12	1.351E+08	0.000E+00	0.000E+00
SB128M	0.000E+00	6.555E+15	3.563E+15	1.767E+15	1.534E+12	3.253E+08
I131	0.000E+00	3.285E+16	3.283E+16	3.275E+16	3.176E+16	3.056E+16
I132	0.000E+00	2.368E+15	2.353E+15	2.337E+15	2.151E+15	1.934E+15

TE133	0.000E+00	4.467E+16	3.629E+15	1.017E+15	5.278E+11	6.459E+07
TE133M	0.000E+00	5.492E+15	2.594E+15	1.225E+15	6.726E+11	8.231E+07
TE134	0.000E+00	1.338E+16	4.951E+15	1.831E+15	8.742E+10	5.707E+05
I134	0.000E+00	1.370E+16	9.359E+15	5.388E+15	3.601E+12	2.895E+08
I135	0.000E+00	4.744E+15	4.274E+15	3.848E+15	1.349E+15	3.833E+14
I136M	0.000E+00	2.633E+16	7.272E-08	0.000E+00	0.000E+00	0.000E+00
CS136	0.000E+00	1.834E+15	1.830E+15	1.825E+15	1.786E+15	1.739E+15
XE138	0.000E+00	2.195E+16	1.168E+15	6.207E+13	1.113E+01	5.631E-15
CS138	0.000E+00	7.807E+15	3.366E+15	9.894E+14	2.471E+09	4.589E+02
XE139	0.000E+00	8.134E+15	3.010E-12	0.000E+00	0.000E+00	0.000E+00
BA140	0.000E+00	5.154E+15	5.142E+15	5.131E+15	5.016E+15	4.882E+15
LA140	0.000E+00	1.466E+16	1.464E+16	1.463E+16	1.447E+16	1.424E+16
BA141	0.000E+00	2.428E+16	2.533E+15	2.599E+14	3.365E+04	4.587E-08
LA141	0.000E+00	2.037E+15	1.835E+15	1.552E+15	2.663E+14	3.209E+13
BA142	0.000E+00	1.077E+16	2.211E+14	4.535E+12	5.975E-05	3.353E-25
CE143	0.000E+00	2.272E+15	2.240E+15	2.194E+15	1.779E+15	1.382E+15
PR144	0.000E+00	2.267E+15	2.246E+15	2.243E+15	2.241E+15	2.238E+15
CE145	0.000E+00	8.483E+15	9.699E+09	9.249E+03	0.000E+00	0.000E+00
CE146	0.000E+00	8.500E+15	4.580E+14	2.449E+13	4.671E+00	2.546E-15
ND147	0.000E+00	1.103E+15	1.101E+15	1.099E+15	1.070E+15	1.037E+15
PR148	0.000E+00	1.681E+16	3.322E+08	4.660E+00	0.000E+00	0.000E+00
ND149	0.000E+00	3.378E+15	2.310E+15	1.547E+15	2.815E+13	2.298E+11

OUTPUT UNIT =
6 PAGE 131
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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
Y 91M	0.000E+00	2.000E+16	1.954E+16	1.858E+16	9.136E+15	3.805E+15
NB 97	0.000E+00	7.354E+16	7.233E+16	7.041E+16	4.778E+16	2.737E+16
MO101	0.000E+00	3.179E+16	1.866E+15	1.085E+14	4.801E+01	7.183E-14
TC102	0.000E+00	4.977E+16	1.203E+15	2.839E+13	1.518E-03	8.077E-23
RU103	0.000E+00	6.010E+16	6.006E+16	6.001E+16	5.957E+16	5.905E+16
TC104	0.000E+00	2.752E+16	3.052E+15	3.106E+14	3.700E+04	4.564E-08
RU105	0.000E+00	2.362E+16	2.087E+16	1.786E+16	3.746E+15	5.752E+14
RH106	0.000E+00	1.149E+16	1.026E+16	1.025E+16	1.025E+16	1.024E+16
SB127	0.000E+00	4.140E+15	4.126E+15	4.107E+15	3.838E+15	3.509E+15
I130	0.000E+00	6.160E+15	5.848E+15	5.529E+15	3.156E+15	1.610E+15
SB131	0.000E+00	1.439E+16	2.401E+15	3.937E+14	5.523E+06	2.083E-03
I131	0.000E+00	3.563E+15	3.560E+15	3.552E+15	3.444E+15	3.314E+15
SB132	0.000E+00	2.334E+16	9.116E+09	3.230E+03	0.000E+00	0.000E+00
SB132M	0.000E+00	1.748E+16	8.750E+11	4.381E+07	0.000E+00	0.000E+00
I132	0.000E+00	9.896E+16	9.835E+16	9.767E+16	8.988E+16	8.084E+16

TE133M	0.000E+00	1.244E+16	5.879E+15	2.775E+15	1.524E+12	1.865E+08
I133	0.000E+00	6.633E+16	6.506E+16	6.319E+16	4.546E+16	3.047E+16
TE134	0.000E+00	2.152E+16	7.962E+15	2.944E+15	1.406E+11	9.177E+05
I134	0.000E+00	4.294E+16	2.932E+16	1.688E+16	1.128E+13	9.069E+08
CS134	0.000E+00	1.907E+16	1.907E+16	1.907E+16	1.906E+16	1.906E+16
TE135	0.000E+00	3.095E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE135M	0.000E+00	1.240E+16	8.274E+15	7.260E+15	2.539E+15	7.216E+14
XE137	0.000E+00	2.067E+16	4.196E+11	8.072E+06	0.000E+00	0.000E+00
BA137M	0.000E+00	6.466E+15	6.456E+15	6.454E+15	6.454E+15	6.454E+15
I138	0.000E+00	2.408E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	2.701E+16	1.164E+16	3.423E+15	8.547E+09	1.588E+03
BA140	0.000E+00	1.248E+16	1.246E+16	1.243E+16	1.215E+16	1.183E+16
LA140	0.000E+00	2.613E+16	2.610E+16	2.608E+16	2.579E+16	2.539E+16
BA141	0.000E+00	1.744E+16	1.819E+15	1.867E+14	2.417E+04	3.295E-08
LA142	0.000E+00	3.726E+16	2.672E+16	1.712E+16	1.928E+14	8.853E+11
CE143	0.000E+00	5.110E+15	5.038E+15	4.935E+15	4.000E+15	3.109E+15
ND147	0.000E+00	3.506E+15	3.500E+15	3.491E+15	3.401E+15	3.296E+15

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	1.227E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 91	0.000E+00	9.711E+15	9.043E+15	8.407E+15	4.053E+15	1.689E+15
Y 92	0.000E+00	8.065E+15	7.883E+15	7.451E+15	2.050E+15	2.549E+14
RB 94	0.000E+00	1.375E+16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	4.499E+16	5.424E+15	6.147E+14	2.149E+05	9.650E-07
ZR 95	0.000E+00	5.332E+16	5.330E+16	5.327E+16	5.303E+16	5.275E+16
NB 95	0.000E+00	5.548E+16	5.548E+16	5.548E+16	5.548E+16	5.547E+16
NB 97M	0.000E+00	5.234E+16	5.016E+16	4.814E+16	3.194E+16	1.953E+16

OUTPUT UNIT =
6

MO 99	0.000E+00	1.134E+16	1.122E+16	1.111E+16	1.000E+16	8.816E+15
MO101	0.000E+00	1.141E+16	6.696E+14	3.894E+13	1.723E+01	2.578E-14
TC104	0.000E+00	1.791E+16	1.987E+15	2.022E+14	2.408E+04	2.970E-08
RU105	0.000E+00	2.680E+16	2.368E+16	2.026E+16	4.251E+15	6.527E+14
SB128M	0.000E+00	1.490E+16	8.100E+15	4.016E+15	3.488E+12	7.395E+08
SB129	0.000E+00	1.209E+16	1.044E+16	8.889E+15	1.786E+15	2.604E+14
SB130	0.000E+00	1.148E+16	4.060E+15	1.436E+15	4.381E+10	1.671E+05
SB130M	0.000E+00	4.084E+16	1.149E+14	1.571E+11	0.000E+00	0.000E+00
SB131	0.000E+00	2.966E+16	4.948E+15	8.112E+14	1.138E+07	4.292E-03
TE131M	0.000E+00	5.789E+15	5.680E+15	5.554E+15	4.409E+15	3.341E+15
SB132	0.000E+00	2.870E+16	1.121E+10	3.971E+03	0.000E+00	0.000E+00
SB132M	0.000E+00	1.568E+16	7.849E+11	3.930E+07	0.000E+00	0.000E+00

I132	0.000E+00	6.420E+16	6.381E+16	6.337E+16	5.832E+16	5.245E+16
TE133M	0.000E+00	4.599E+16	2.173E+16	1.026E+16	5.632E+12	6.893E+08
I133	0.000E+00	6.393E+15	6.271E+15	6.091E+15	4.381E+15	2.937E+15
TE134	0.000E+00	2.870E+16	1.062E+16	3.925E+15	1.874E+11	1.224E+06
I134	0.000E+00	1.631E+17	1.114E+17	6.411E+16	4.284E+13	3.444E+09
CS134	0.000E+00	1.325E+16	1.324E+16	1.324E+16	1.324E+16	1.323E+16
I135	0.000E+00	7.720E+15	6.954E+15	6.262E+15	2.195E+15	6.237E+14
CS136	0.000E+00	4.094E+15	4.084E+15	4.075E+15	3.987E+15	3.883E+15
LA140	0.000E+00	2.946E+16	2.943E+16	2.940E+16	2.907E+16	2.862E+16
BA142	0.000E+00	1.749E+16	3.593E+14	7.369E+12	9.710E-05	5.449E-25
LA142	0.000E+00	8.053E+15	5.775E+15	3.700E+15	4.167E+13	1.913E+11
CE145	0.000E+00	2.494E+16	2.852E+10	2.720E+04	0.000E+00	0.000E+00
EU156	0.000E+00	4.300E+15	4.292E+15	4.284E+15	4.207E+15	4.114E+15

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	6.200E+15	1.256E+10	2.518E+04	0.000E+00	0.000E+00
RB 89	0.000E+00	2.529E+16	2.035E+15	1.319E+14	1.728E+02	9.512E-13
KR 90	0.000E+00	1.002E+16	2.980E-18	0.000E+00	0.000E+00	0.000E+00
SR 91	0.000E+00	1.124E+16	1.047E+16	9.732E+15	4.692E+15	1.955E+15
SR 92	0.000E+00	4.302E+16	3.333E+16	2.580E+16	1.999E+15	9.288E+13
Y 92	0.000E+00	2.784E+15	2.722E+15	2.573E+15	7.078E+14	8.802E+13
Y 94	0.000E+00	8.006E+15	9.652E+14	1.094E+14	3.824E+04	1.717E-07
ZR 97	0.000E+00	3.946E+15	3.787E+15	3.635E+15	2.412E+15	1.475E+15
MO101	0.000E+00	2.532E+16	1.486E+15	8.643E+13	3.824E+01	5.721E-14
TC102	0.000E+00	7.851E+15	1.898E+14	4.478E+12	2.394E-04	1.274E-23
TC104	0.000E+00	1.252E+16	1.389E+15	1.413E+14	1.683E+04	2.076E-08
RH106	0.000E+00	8.753E+14	7.814E+14	7.813E+14	7.807E+14	7.800E+14
SB129	0.000E+00	2.469E+15	2.132E+15	1.816E+15	3.649E+14	5.320E+13
SB130M	0.000E+00	9.694E+15	2.727E+13	3.729E+10	0.000E+00	0.000E+00
SB131	0.000E+00	8.844E+15	1.475E+15	2.419E+14	3.394E+06	1.280E-03
TE131M	0.000E+00	1.674E+15	1.642E+15	1.606E+15	1.275E+15	9.660E+14
I132	0.000E+00	1.378E+16	1.370E+16	1.360E+16	1.252E+16	1.126E+16
TE133	0.000E+00	1.077E+16	8.749E+14	2.453E+14	1.272E+11	1.557E+07
I133	0.000E+00	3.737E+15	3.665E+15	3.560E+15	2.561E+15	1.717E+15
I134	0.000E+00	2.767E+16	1.890E+16	1.088E+16	7.270E+12	5.844E+08

OUTPUT UNIT =
6 PAGE 133
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

CS134	0.000E+00	8.755E+14	8.755E+14	8.755E+14	8.751E+14	8.747E+14
I135	0.000E+00	5.539E+16	4.989E+16	4.493E+16	1.575E+16	4.475E+15
I136	0.000E+00	3.526E+16	3.586E+03	3.147E-10	0.000E+00	0.000E+00
I136M	0.000E+00	2.188E+16	6.041E-08	0.000E+00	0.000E+00	0.000E+00

CS136	0.000E+00	3.684E+15	3.676E+15	3.668E+15	3.588E+15	3.494E+15
CS138	0.000E+00	8.229E+16	3.548E+16	1.043E+16	2.604E+10	4.837E+03
CS139	0.000E+00	7.513E+15	9.494E+13	1.137E+12	6.939E-08	0.000E+00
BA141	0.000E+00	8.783E+15	9.162E+14	9.401E+13	1.217E+04	1.659E-08
BA142	0.000E+00	2.762E+16	5.672E+14	1.163E+13	1.533E-04	8.602E-25
LA142	0.000E+00	1.088E+16	7.800E+15	4.998E+15	5.629E+13	2.584E+11
PR148	0.000E+00	6.031E+15	1.192E+08	1.672E+00	0.000E+00	0.000E+00
PM148	0.000E+00	2.931E+15	2.916E+15	2.900E+15	2.749E+15	2.578E+15
EU154	0.000E+00	4.480E+14	4.480E+14	4.480E+14	4.479E+14	4.479E+14
EU156	0.000E+00	7.982E+15	7.968E+15	7.954E+15	7.810E+15	7.637E+15

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
KR 88	0.000E+00	2.764E+15	2.167E+15	1.697E+15	1.477E+14	7.888E+12
RB 88	0.000E+00	5.225E+15	4.421E+15	3.495E+15	3.045E+14	1.626E+13
KR 89	0.000E+00	5.125E+15	1.038E+10	2.082E+04	0.000E+00	0.000E+00
KR 90	0.000E+00	4.762E+15	1.417E-18	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	3.661E+15	4.414E+14	5.002E+13	1.749E+04	7.853E-08
MO101	0.000E+00	9.111E+15	5.349E+14	3.111E+13	1.376E+01	2.059E-14
TC104	0.000E+00	1.741E+16	1.932E+15	1.966E+14	2.342E+04	2.888E-08
SB129	0.000E+00	2.224E+15	1.920E+15	1.636E+15	3.287E+14	4.791E+13
SB131	0.000E+00	5.851E+15	9.762E+14	1.600E+14	2.245E+06	8.467E-04
SB132	0.000E+00	2.373E+15	9.266E+08	3.283E+02	0.000E+00	0.000E+00
I132	0.000E+00	1.278E+15	1.270E+15	1.262E+15	1.161E+15	1.044E+15
TE133	0.000E+00	2.892E+15	2.350E+14	6.586E+13	3.417E+10	4.181E+06
TE133M	0.000E+00	3.003E+15	1.419E+15	6.696E+14	3.678E+11	4.501E+07
I134	0.000E+00	1.249E+16	8.530E+15	4.910E+15	3.282E+12	2.638E+08
I135	0.000E+00	1.806E+16	1.627E+16	1.465E+16	5.135E+15	1.459E+15
XE138	0.000E+00	1.250E+16	6.657E+14	3.537E+13	6.340E+00	3.208E-15
XE139	0.000E+00	3.794E+15	1.404E-12	0.000E+00	0.000E+00	0.000E+00
LA140	0.000E+00	6.175E+16	6.169E+16	6.163E+16	6.094E+16	5.999E+16
BA141	0.000E+00	3.062E+15	3.194E+14	3.277E+13	4.243E+03	5.784E-09
LA142	0.000E+00	1.322E+16	9.481E+15	6.075E+15	6.842E+13	3.141E+11
EU156	0.000E+00	1.789E+15	1.786E+15	1.783E+15	1.750E+15	1.712E+15

OUTPUT UNIT =
6

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	1.312E+16	1.028E+16	8.056E+15	7.011E+14	3.744E+13
KR 89	0.000E+00	1.473E+15	2.982E+09	5.981E+03	0.000E+00	0.000E+00
RB 89	0.000E+00	4.310E+15	3.470E+14	2.249E+13	2.946E+01	1.622E-13
Y 93	0.000E+00	1.765E+14	1.668E+14	1.558E+14	7.842E+13	3.442E+13
Y 94	0.000E+00	1.329E+15	1.602E+14	1.816E+13	6.348E+03	2.850E-08
MO101	0.000E+00	6.148E+15	3.609E+14	2.099E+13	9.287E+00	1.389E-14
TC104	0.000E+00	4.623E+15	5.129E+14	5.219E+13	6.216E+03	7.668E-09
SB131	0.000E+00	2.818E+15	4.701E+14	7.708E+13	1.081E+06	4.078E-04
TE131M	0.000E+00	1.568E+14	1.538E+14	1.504E+14	1.194E+14	9.047E+13
I132	0.000E+00	1.019E+15	1.013E+15	1.006E+15	9.256E+14	8.324E+14
TE133M	0.000E+00	1.794E+15	8.473E+14	4.000E+14	2.197E+11	2.688E+07
I134	0.000E+00	9.281E+14	6.338E+14	3.649E+14	2.438E+11	1.960E+07
I135	0.000E+00	1.956E+15	1.762E+15	1.587E+15	5.561E+14	1.580E+14
I136	0.000E+00	6.634E+15	6.745E+02	5.919E-11	0.000E+00	0.000E+00
XE138	0.000E+00	1.294E+16	6.890E+14	3.661E+13	6.562E+00	3.321E-15
CS138	0.000E+00	1.104E+16	4.760E+15	1.399E+15	3.495E+09	6.491E+02
XE139	0.000E+00	2.503E+15	9.259E-13	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	1.649E+15	2.084E+13	2.496E+11	1.523E-08	0.000E+00
LA140	0.000E+00	6.487E+14	6.480E+14	6.474E+14	6.401E+14	6.302E+14
LA142	0.000E+00	2.133E+16	1.530E+16	9.803E+15	1.104E+14	5.069E+11
PR144	0.000E+00	3.565E+14	3.531E+14	3.527E+14	3.524E+14	3.519E+14
EU156	0.000E+00	2.954E+15	2.948E+15	2.943E+15	2.890E+15	2.826E+15

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	1.927E+15	1.129E+15	6.547E+14	2.811E+12	4.049E+09
BR 88	0.000E+00	9.756E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	5.116E+14	4.329E+14	3.422E+14	2.982E+13	1.592E+12
KR 89	0.000E+00	1.405E+15	2.845E+09	5.707E+03	0.000E+00	0.000E+00
RB 89	0.000E+00	3.102E+15	2.497E+14	1.619E+13	2.120E+01	1.167E-13
RB 90M	0.000E+00	1.102E+15	7.392E+10	4.659E+06	0.000E+00	0.000E+00
RB 92	0.000E+00	5.438E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 94	0.000E+00	7.205E+14	8.686E+13	9.845E+12	3.442E+03	1.545E-08
NB 99M	0.000E+00	5.625E+14	6.358E+07	7.185E+00	0.000E+00	0.000E+00
TC104	0.000E+00	4.115E+15	4.565E+14	4.645E+13	5.533E+03	6.825E-09
SB132	0.000E+00	4.650E+14	1.816E+08	6.433E+01	0.000E+00	0.000E+00
SB132M	0.000E+00	4.986E+14	2.496E+10	1.250E+06	0.000E+00	0.000E+00
I136	0.000E+00	4.085E+15	4.154E+02	3.645E-11	0.000E+00	0.000E+00
CS138	0.000E+00	5.514E+15	2.377E+15	6.988E+14	1.745E+09	3.241E+02
XE139	0.000E+00	1.412E+15	5.223E-13	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	8.111E+14	1.025E+13	1.228E+11	7.491E-09	0.000E+00
LA140	0.000E+00	2.351E+15	2.349E+15	2.346E+15	2.320E+15	2.284E+15
LA142	0.000E+00	1.286E+16	9.222E+15	5.909E+15	6.655E+13	3.056E+11

OUTPUT UNIT =
6 PAGE 135
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	1.020E+15	3.066E+14	8.290E+13	1.733E+08	2.648E+01
KR 87	0.000E+00	7.601E+13	4.455E+13	2.583E+13	1.109E+11	1.597E+08
BR 88	0.000E+00	1.554E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	1.478E+14	1.251E+14	9.888E+13	8.615E+12	4.601E+11
KR 89	0.000E+00	2.403E+15	4.865E+09	9.758E+03	0.000E+00	0.000E+00
RB 89	0.000E+00	3.871E+14	3.116E+13	2.020E+12	2.646E+00	1.456E-14
RB 90	0.000E+00	4.650E+15	9.307E+09	5.377E+05	0.000E+00	0.000E+00
RB 90M	0.000E+00	1.595E+15	1.070E+11	6.746E+06	0.000E+00	0.000E+00
RB 92	0.000E+00	4.132E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 92	0.000E+00	2.496E+12	2.440E+12	2.306E+12	6.344E+11	7.890E+10
RB 94	0.000E+00	2.585E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC104	0.000E+00	2.200E+15	2.441E+14	2.484E+13	2.958E+03	3.649E-09
RH106	0.000E+00	9.608E+11	8.577E+11	8.576E+11	8.569E+11	8.561E+11
I136	0.000E+00	7.158E+14	7.278E+01	6.387E-12	0.000E+00	0.000E+00
CS138	0.000E+00	3.657E+14	1.577E+14	4.635E+13	1.157E+08	2.150E+01
XE139	0.000E+00	3.058E+14	1.131E-13	0.000E+00	0.000E+00	0.000E+00
CS139	0.000E+00	4.428E+14	5.595E+12	6.704E+10	4.089E-09	0.000E+00
LA140	0.000E+00	1.933E+13	1.931E+13	1.929E+13	1.908E+13	1.878E+13
LA142	0.000E+00	4.645E+15	3.331E+15	2.135E+15	2.404E+13	1.104E+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	1.592E+13	4.785E+12	1.294E+12	2.704E+06	4.133E-01
BR 88	0.000E+00	1.910E+15	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 88	0.000E+00	3.396E+13	2.874E+13	2.272E+13	1.979E+12	1.057E+11
KR 89	0.000E+00	1.773E+14	3.589E+08	7.199E+02	0.000E+00	0.000E+00
RB 89	0.000E+00	1.694E+13	1.364E+12	8.839E+10	1.158E-01	6.373E-16
RB 90	0.000E+00	5.382E+15	1.077E+10	6.222E+05	0.000E+00	0.000E+00
RB 90M	0.000E+00	2.535E+14	1.701E+10	1.072E+06	0.000E+00	0.000E+00
RB 92	0.000E+00	9.904E+14	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	0.000E+00	1.006E+13	4.336E+12	1.275E+12	3.183E+06	5.912E-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	7.808E+13	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 94	0.000E+00	5.032E+12	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	0.000E+00	1.449E+08	1.473E-05	1.293E-18	0.000E+00	0.000E+00
CE142	0.000E+00	5.894E-06	5.894E-06	5.894E-06	5.894E-06	5.894E-06
SM147	0.000E+00	2.717E-07	2.717E-07	2.717E-07	2.718E-07	2.720E-07

OUTPUT UNIT =
6 PAGE 136
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

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	1.816E+10	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE142	0.000E+00	3.727E-07	3.727E-07	3.727E-07	3.727E-07	3.727E-07
SM147	0.000E+00	1.718E-08	1.718E-08	1.718E-08	1.719E-08	1.720E-08

OUTPUT UNIT =
6 PAGE 137
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 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
K INFINITY	0.00000	0.80245	0.80055	0.79733	0.80462
NEUT PRODN	0.00E+00	3.80E+03	3.80E+03	3.80E+03	3.81E+03
NEUT DESTN	0.00E+00	4.73E+03	4.74E+03	4.77E+03	4.73E+03

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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  138
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  1      1.498E+00 1.498E+00 1.498E+00 1.498E+00 1.498E+00
 H  2      3.376E-03 3.376E-03 3.376E-03 3.376E-03 3.376E-03
 H  3      1.371E-02 1.371E-02 1.371E-02 1.371E-02 1.371E-02
HE  3      1.173E-04 1.174E-04 1.174E-04 1.183E-04 1.194E-04
HE  4      2.124E+00 2.124E+00 2.124E+00 2.124E+00 2.124E+00
LI  6      1.705E-03 1.705E-03 1.705E-03 1.705E-03 1.705E-03
LI  7      5.033E-01 5.033E-01 5.033E-01 5.033E-01 5.033E-01
BE  9      7.654E-04 7.654E-04 7.654E-04 7.654E-04 7.654E-04
BE 10      8.512E-05 8.512E-05 8.512E-05 8.512E-05 8.512E-05
 B 10      2.021E-04 2.021E-04 2.021E-04 2.021E-04 2.021E-04
 B 11      4.874E-01 4.874E-01 4.874E-01 4.874E-01 4.874E-01
 C 12      7.246E+01 7.246E+01 7.246E+01 7.246E+01 7.246E+01
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C	13	7.289E+00	7.289E+00	7.289E+00	7.289E+00	7.289E+00
C	14	2.345E-01	2.345E-01	2.345E-01	2.345E-01	2.345E-01
N	14	5.226E+01	5.226E+01	5.226E+01	5.226E+01	5.226E+01
N	15	2.173E-01	2.173E-01	2.173E-01	2.173E-01	2.173E-01
O	16	6.196E+04	6.196E+04	6.196E+04	6.196E+04	6.196E+04
O	17	2.510E+01	2.510E+01	2.510E+01	2.510E+01	2.510E+01
O	18	1.426E+02	1.426E+02	1.426E+02	1.426E+02	1.426E+02
F	19	4.936E+00	4.936E+00	4.936E+00	4.936E+00	4.936E+00
NE	20	2.796E-04	2.796E-04	2.796E-04	2.796E-04	2.796E-04
NA	23	6.898E+00	6.898E+00	6.898E+00	6.898E+00	6.898E+00
MG	24	7.429E-01	7.429E-01	7.429E-01	7.429E-01	7.429E-01
MG	25	9.534E-02	9.534E-02	9.534E-02	9.534E-02	9.534E-02
MG	26	1.089E-01	1.089E-01	1.089E-01	1.089E-01	1.089E-01
AL	27	4.578E+01	4.578E+01	4.578E+01	4.578E+01	4.578E+01
SI	28	1.916E+02	1.916E+02	1.916E+02	1.916E+02	1.916E+02
SI	29	1.008E+01	1.008E+01	1.008E+01	1.008E+01	1.008E+01
SI	30	6.902E+00	6.902E+00	6.902E+00	6.902E+00	6.902E+00
P	31	1.485E+02	1.485E+02	1.485E+02	1.485E+02	1.485E+02
P	32	1.653E-03	1.649E-03	1.646E-03	1.613E-03	1.574E-03
S	32	9.591E+00	9.591E+00	9.591E+00	9.591E+00	9.591E+00
S	33	8.680E-02	8.680E-02	8.680E-02	8.680E-02	8.680E-02
S	34	4.482E-01	4.482E-01	4.482E-01	4.482E-01	4.482E-01
S	35	3.647E-04	3.646E-04	3.645E-04	3.633E-04	3.619E-04
S	36	1.915E-03	1.915E-03	1.915E-03	1.915E-03	1.915E-03
CL	35	1.595E+00	1.595E+00	1.595E+00	1.595E+00	1.595E+00
CL	36	2.346E-01	2.346E-01	2.346E-01	2.346E-01	2.346E-01
CL	37	6.209E-01	6.209E-01	6.209E-01	6.209E-01	6.209E-01
AR	38	9.535E-04	9.535E-04	9.535E-04	9.535E-04	9.535E-04
K	40	4.243E-04	4.243E-04	4.243E-04	4.243E-04	4.243E-04
K	41	2.135E-05	2.135E-05	2.135E-05	2.135E-05	2.135E-05
CA	40	8.903E-01	8.903E-01	8.903E-01	8.903E-01	8.903E-01
CA	41	1.174E-03	1.174E-03	1.174E-03	1.174E-03	1.174E-03
CA	42	6.232E-03	6.232E-03	6.232E-03	6.232E-03	6.232E-03
CA	43	1.296E-03	1.296E-03	1.296E-03	1.296E-03	1.296E-03
CA	44	2.131E-02	2.131E-02	2.131E-02	2.131E-02	2.131E-02
CA	46	6.303E-05	6.303E-05	6.303E-05	6.303E-05	6.303E-05
CA	48	2.091E-03	2.091E-03	2.091E-03	2.091E-03	2.091E-03
SC	45	5.947E-05	5.947E-05	5.947E-05	5.950E-05	5.953E-05
SC	46	5.781E-05	5.779E-05	5.777E-05	5.757E-05	5.733E-05

OUTPUT UNIT =
6 PAGE 139
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
TI 46	3.947E+00	3.947E+00	3.947E+00	3.947E+00	3.947E+00
TI 47	3.634E+00	3.634E+00	3.634E+00	3.634E+00	3.634E+00
TI 48	3.597E+01	3.597E+01	3.597E+01	3.597E+01	3.597E+01
TI 49	3.673E+00	3.673E+00	3.673E+00	3.673E+00	3.673E+00
TI 50	2.740E+00	2.740E+00	2.740E+00	2.740E+00	2.740E+00
V 50	2.953E-02	2.953E-02	2.953E-02	2.953E-02	2.953E-02
V 51	8.302E+00	8.302E+00	8.302E+00	8.304E+00	8.306E+00
CR 50	2.056E+02	2.056E+02	2.056E+02	2.056E+02	2.056E+02
CR 51	1.777E-01	1.775E-01	1.773E-01	1.755E-01	1.733E-01
CR 52	4.204E+03	4.204E+03	4.204E+03	4.204E+03	4.204E+03
CR 53	4.882E+02	4.882E+02	4.882E+02	4.882E+02	4.882E+02
CR 54	1.371E+02	1.371E+02	1.371E+02	1.371E+02	1.371E+02
MN 54	5.723E-02	5.722E-02	5.722E-02	5.716E-02	5.710E-02
MN 55	3.907E+02	3.907E+02	3.907E+02	3.907E+02	3.907E+02
MN 56	9.208E-04	7.038E-04	5.379E-04	3.658E-05	1.453E-06
FE 54	8.088E+02	8.088E+02	8.088E+02	8.088E+02	8.088E+02
FE 55	1.305E+00	1.305E+00	1.305E+00	1.305E+00	1.304E+00
FE 56	1.325E+04	1.325E+04	1.325E+04	1.325E+04	1.325E+04
FE 57	3.533E+02	3.533E+02	3.533E+02	3.533E+02	3.533E+02
FE 58	4.605E+01	4.605E+01	4.605E+01	4.605E+01	4.606E+01
FE 59	4.315E-03	4.312E-03	4.309E-03	4.282E-03	4.249E-03
CO 58	1.323E-01	1.323E-01	1.322E-01	1.317E-01	1.311E-01
CO 59	3.743E+01	3.743E+01	3.743E+01	3.743E+01	3.743E+01
CO 60	6.911E+00	6.911E+00	6.911E+00	6.910E+00	6.909E+00
CO 60M	2.484E-05	4.677E-07	8.808E-09	4.942E-26	0.000E+00
NI 58	3.781E+03	3.781E+03	3.781E+03	3.781E+03	3.781E+03
NI 59	3.344E+01	3.344E+01	3.344E+01	3.344E+01	3.344E+01
NI 60	1.511E+03	1.511E+03	1.511E+03	1.511E+03	1.511E+03
NI 61	7.715E+01	7.715E+01	7.715E+01	7.715E+01	7.715E+01
NI 62	2.080E+02	2.080E+02	2.080E+02	2.080E+02	2.080E+02
NI 63	7.253E+00	7.253E+00	7.253E+00	7.253E+00	7.253E+00
NI 64	5.637E+01	5.637E+01	5.637E+01	5.637E+01	5.637E+01
NI 65	3.208E-05	2.436E-05	1.850E-05	1.182E-06	4.357E-08
CU 63	5.862E+00	5.862E+00	5.862E+00	5.862E+00	5.862E+00
CU 64	7.158E-05	6.777E-05	6.417E-05	3.718E-05	1.931E-05
CU 65	2.918E+00	2.918E+00	2.918E+00	2.918E+00	2.918E+00
ZN 64	8.840E+00	8.840E+00	8.840E+00	8.840E+00	8.840E+00
ZN 65	8.594E-03	8.592E-03	8.591E-03	8.581E-03	8.569E-03
ZN 66	5.237E+00	5.237E+00	5.237E+00	5.237E+00	5.237E+00
ZN 67	7.659E-01	7.659E-01	7.659E-01	7.659E-01	7.659E-01

ZN 68	3.635E+00	3.635E+00	3.635E+00	3.635E+00	3.635E+00
ZN 70	1.232E-01	1.232E-01	1.232E-01	1.232E-01	1.232E-01
GA 69	2.365E-02	2.365E-02	2.366E-02	2.366E-02	2.366E-02
GA 71	3.699E-05	3.699E-05	3.699E-05	3.699E-05	3.699E-05
GE 70	2.570E-04	2.570E-04	2.570E-04	2.570E-04	2.570E-04
SR 87	1.752E-03	1.752E-03	1.752E-03	1.752E-03	1.752E-03
SR 88	1.747E-01	1.747E-01	1.747E-01	1.747E-01	1.747E-01
SR 89	8.759E-04	8.754E-04	8.749E-04	8.699E-04	8.640E-04
SR 90	2.289E-05	2.289E-05	2.289E-05	2.289E-05	2.289E-05
Y 89	1.245E-02	1.245E-02	1.245E-02	1.246E-02	1.246E-02
Y 90	1.724E-03	1.705E-03	1.687E-03	1.514E-03	1.329E-03

OUTPUT UNIT = 6 PAGE 140
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
Y 91	2.615E-03	2.614E-03	2.613E-03	2.600E-03	2.585E-03
ZR 90	5.383E+04	5.383E+04	5.383E+04	5.383E+04	5.383E+04
ZR 91	1.177E+04	1.177E+04	1.177E+04	1.177E+04	1.177E+04
ZR 92	1.834E+04	1.834E+04	1.834E+04	1.834E+04	1.834E+04
ZR 93	8.597E+01	8.597E+01	8.597E+01	8.597E+01	8.597E+01
ZR 94	1.900E+04	1.900E+04	1.900E+04	1.900E+04	1.900E+04
ZR 95	1.364E+00	1.363E+00	1.362E+00	1.356E+00	1.349E+00
ZR 96	3.099E+03	3.099E+03	3.099E+03	3.099E+03	3.099E+03
ZR 97	2.434E-02	2.337E-02	2.243E-02	1.488E-02	9.097E-03
NB 92	9.040E-05	9.014E-05	8.988E-05	8.736E-05	8.443E-05
NB 93	3.202E+02	3.202E+02	3.202E+02	3.202E+02	3.202E+02
NB 93M	7.258E-05	7.258E-05	7.259E-05	7.262E-05	7.267E-05
NB 94	5.702E+00	5.702E+00	5.702E+00	5.702E+00	5.702E+00
NB 95	7.827E-01	7.826E-01	7.826E-01	7.823E-01	7.819E-01
NB 95M	5.433E-04	5.433E-04	5.432E-04	5.427E-04	5.419E-04
NB 96	4.112E-05	3.992E-05	3.875E-05	2.880E-05	2.017E-05
NB 97	1.731E-03	1.711E-03	1.669E-03	1.137E-03	6.512E-04
NB 97M	2.272E-05	2.183E-05	2.095E-05	1.390E-05	8.498E-06
MO 92	2.572E+01	2.572E+01	2.572E+01	2.572E+01	2.572E+01
MO 93	1.830E-02	1.830E-02	1.830E-02	1.830E-02	1.830E-02

MO 94	1.650E+01	1.650E+01	1.650E+01	1.650E+01	1.650E+01
MO 95	3.734E+01	3.735E+01	3.735E+01	3.735E+01	3.736E+01
MO 96	3.554E+01	3.554E+01	3.554E+01	3.554E+01	3.554E+01
MO 97	4.421E+01	4.421E+01	4.421E+01	4.422E+01	4.422E+01
MO 98	4.301E+01	4.301E+01	4.301E+01	4.301E+01	4.301E+01
MO 99	9.475E-03	9.376E-03	9.278E-03	8.353E-03	7.364E-03
MO100	1.802E+01	1.802E+01	1.802E+01	1.802E+01	1.802E+01
TC 99	2.696E-01	2.697E-01	2.697E-01	2.698E-01	2.699E-01
RU100	6.245E-02	6.245E-02	6.245E-02	6.245E-02	6.245E-02
RU101	1.236E-01	1.236E-01	1.236E-01	1.236E-01	1.236E-01
RU102	8.982E-03	8.982E-03	8.982E-03	8.982E-03	8.982E-03
PD108	1.129E-04	1.129E-04	1.129E-04	1.129E-04	1.129E-04
PD110	5.529E-05	5.529E-05	5.529E-05	5.529E-05	5.529E-05
AG107	1.834E-02	1.834E-02	1.834E-02	1.834E-02	1.834E-02
AG108M	3.410E-04	3.410E-04	3.410E-04	3.410E-04	3.410E-04
AG109	3.630E-03	3.630E-03	3.630E-03	3.630E-03	3.630E-03
AG110M	1.169E-04	1.169E-04	1.168E-04	1.167E-04	1.165E-04
CD106	1.412E-01	1.412E-01	1.412E-01	1.412E-01	1.412E-01
CD108	1.030E-01	1.030E-01	1.030E-01	1.030E-01	1.030E-01
CD109	2.973E-04	2.973E-04	2.973E-04	2.971E-04	2.969E-04
CD110	1.300E+00	1.300E+00	1.300E+00	1.300E+00	1.300E+00
CD111	1.388E+00	1.388E+00	1.388E+00	1.388E+00	1.388E+00
CD112	2.862E+00	2.862E+00	2.862E+00	2.862E+00	2.862E+00
CD113	5.818E-04	5.818E-04	5.818E-04	5.818E-04	5.818E-04
CD114	4.717E+00	4.717E+00	4.717E+00	4.717E+00	4.717E+00
CD115	4.436E-04	4.379E-04	4.323E-04	3.797E-04	3.250E-04
CD115M	6.524E-04	6.519E-04	6.515E-04	6.473E-04	6.423E-04
CD116	8.895E-01	8.895E-01	8.895E-01	8.895E-01	8.895E-01
IN113	3.723E-01	3.723E-01	3.724E-01	3.725E-01	3.726E-01
IN113M	2.908E-05	2.908E-05	2.908E-05	2.901E-05	2.892E-05
IN114M	5.077E-03	5.074E-03	5.071E-03	5.042E-03	5.007E-03

OUTPUT UNIT =
6 PAGE 141
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR

IN115	1.888E-03	1.889E-03	1.889E-03	1.893E-03	1.898E-03
SN112	1.588E+01	1.588E+01	1.588E+01	1.588E+01	1.588E+01
SN113	4.845E-02	4.844E-02	4.842E-02	4.830E-02	4.816E-02
SN114	1.126E+01	1.126E+01	1.126E+01	1.126E+01	1.126E+01
SN115	5.490E+00	5.490E+00	5.490E+00	5.490E+00	5.490E+00
SN116	2.443E+02	2.443E+02	2.443E+02	2.443E+02	2.443E+02
SN117	1.350E+02	1.350E+02	1.350E+02	1.350E+02	1.350E+02
SN117M	5.111E-02	5.100E-02	5.090E-02	4.986E-02	4.864E-02
SN118	4.162E+02	4.162E+02	4.162E+02	4.162E+02	4.162E+02
SN119	1.546E+02	1.546E+02	1.546E+02	1.546E+02	1.546E+02
SN119M	8.024E-01	8.023E-01	8.022E-01	8.012E-01	8.001E-01
SN120	5.687E+02	5.687E+02	5.687E+02	5.687E+02	5.687E+02
SN121	2.211E-03	2.155E-03	2.100E-03	1.621E-03	1.189E-03
SN121M	7.541E-03	7.541E-03	7.541E-03	7.541E-03	7.540E-03
SN122	8.191E+01	8.191E+01	8.191E+01	8.191E+01	8.191E+01
SN123	2.305E-02	2.305E-02	2.304E-02	2.299E-02	2.293E-02
SN124	9.975E+01	9.975E+01	9.975E+01	9.975E+01	9.975E+01
SN125	1.319E-02	1.315E-02	1.312E-02	1.273E-02	1.228E-02
SB121	1.329E+00	1.329E+00	1.329E+00	1.329E+00	1.330E+00
SB122	1.241E-03	1.228E-03	1.215E-03	1.091E-03	9.599E-04
SB123	1.164E-01	1.164E-01	1.164E-01	1.165E-01	1.165E-01
SB124	1.314E-03	1.314E-03	1.313E-03	1.307E-03	1.299E-03
SB125	1.096E+00	1.096E+00	1.096E+00	1.097E+00	1.097E+00
SB126	6.091E-04	6.077E-04	6.063E-04	5.923E-04	5.760E-04
TE122	1.690E-01	1.690E-01	1.690E-01	1.691E-01	1.692E-01
TE123	2.501E-03	2.501E-03	2.502E-03	2.503E-03	2.505E-03
TE123M	7.195E-04	7.194E-04	7.192E-04	7.175E-04	7.154E-04
TE124	1.346E-02	1.346E-02	1.346E-02	1.347E-02	1.347E-02
TE125	6.313E-01	6.313E-01	6.313E-01	6.316E-01	6.320E-01
TE125M	1.358E-02	1.358E-02	1.358E-02	1.359E-02	1.359E-02
TE126	3.286E-02	3.286E-02	3.287E-02	3.288E-02	3.290E-02
I127	2.220E-04	2.220E-04	2.221E-04	2.222E-04	2.223E-04
EU153	2.762E-04	2.762E-04	2.763E-04	2.765E-04	2.768E-04
EU154	1.220E-04	1.220E-04	1.220E-04	1.220E-04	1.220E-04
EU155	4.605E-05	4.604E-05	4.604E-05	4.604E-05	4.603E-05
GD152	1.269E-03	1.269E-03	1.269E-03	1.269E-03	1.269E-03
GD153	2.134E-04	2.134E-04	2.134E-04	2.131E-04	2.128E-04
GD154	1.356E-02	1.356E-02	1.356E-02	1.356E-02	1.356E-02
GD155	9.059E-05	9.059E-05	9.059E-05	9.059E-05	9.060E-05
GD156	3.472E-01	3.472E-01	3.472E-01	3.472E-01	3.472E-01
GD157	1.770E-04	1.770E-04	1.770E-04	1.770E-04	1.770E-04
GD158	4.975E-01	4.975E-01	4.975E-01	4.975E-01	4.975E-01
GD159	4.486E-05	4.322E-05	4.164E-05	2.868E-05	1.834E-05
GD160	2.513E-01	2.513E-01	2.513E-01	2.513E-01	2.513E-01
TB159	2.984E-02	2.984E-02	2.984E-02	2.985E-02	2.986E-02
TB160	1.457E-03	1.456E-03	1.455E-03	1.450E-03	1.443E-03
TB161	7.676E-05	7.645E-05	7.613E-05	7.302E-05	6.946E-05
DY160	4.280E-03	4.280E-03	4.281E-03	4.287E-03	4.294E-03

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DY161      4.251E-03 4.252E-03 4.252E-03 4.255E-03 4.259E-03
DY162      2.572E-03 2.572E-03 2.572E-03 2.572E-03 2.572E-03
DY163      2.053E-03 2.053E-03 2.053E-03 2.053E-03 2.053E-03
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         OUTPUT UNIT =
6                          PAGE  142
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
          ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

DY164      4.369E-04 4.369E-04 4.369E-04 4.369E-04 4.369E-04
HO165      7.772E-04 7.773E-04 7.774E-04 7.776E-04 7.776E-04
ER166      1.492E-04 1.492E-04 1.492E-04 1.495E-04 1.497E-04
LU175      5.421E-03 5.421E-03 5.421E-03 5.423E-03 5.425E-03
LU176      2.375E-04 2.375E-04 2.375E-04 2.375E-04 2.375E-04
HF174      3.244E-03 3.244E-03 3.244E-03 3.244E-03 3.244E-03
HF175      4.291E-04 4.289E-04 4.287E-04 4.270E-04 4.248E-04
HF176      1.976E-01 1.976E-01 1.976E-01 1.976E-01 1.976E-01
HF177      7.505E-02 7.505E-02 7.505E-02 7.505E-02 7.505E-02
HF178      6.152E-01 6.152E-01 6.152E-01 6.152E-01 6.152E-01
HF179      2.719E+00 2.719E+00 2.719E+00 2.719E+00 2.719E+00
HF180      4.594E+00 4.594E+00 4.594E+00 4.594E+00 4.594E+00
HF181      1.938E-02 1.937E-02 1.936E-02 1.923E-02 1.907E-02
HF182      1.436E-03 1.436E-03 1.436E-03 1.436E-03 1.436E-03
TA181      1.910E-01 1.910E-01 1.910E-01 1.911E-01 1.913E-01
TA182      5.072E-03 5.070E-03 5.069E-03 5.056E-03 5.041E-03
TA183      7.999E-04 7.954E-04 7.909E-04 7.473E-04 6.982E-04
 W180      3.288E-03 3.288E-03 3.288E-03 3.288E-03 3.288E-03
 W181      1.089E-04 1.088E-04 1.088E-04 1.085E-04 1.082E-04
 W182      4.465E-01 4.465E-01 4.465E-01 4.465E-01 4.466E-01
 W183      6.932E-01 6.932E-01 6.932E-01 6.932E-01 6.933E-01
 W184      1.198E+00 1.198E+00 1.198E+00 1.198E+00 1.198E+00
 W185      2.204E-03 2.203E-03 2.203E-03 2.194E-03 2.184E-03
 W186      5.032E-01 5.032E-01 5.032E-01 5.032E-01 5.032E-01
 W187      3.976E-04 3.863E-04 3.752E-04 2.808E-04 1.982E-04
 W188      1.157E-04 1.156E-04 1.156E-04 1.151E-04 1.145E-04
RE185      8.152E-03 8.152E-03 8.153E-03 8.162E-03 8.172E-03
RE186      8.845E-05 8.778E-05 8.711E-05 8.069E-05 7.362E-05
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RE187	3.230E-01	3.230E-01	3.230E-01	3.231E-01	3.232E-01
RE188	1.590E-04	1.551E-04	1.492E-04	9.963E-05	6.150E-05
OS186	1.016E-02	1.016E-02	1.016E-02	1.016E-02	1.017E-02
OS188	9.976E-02	9.977E-02	9.977E-02	9.982E-02	9.986E-02
OS189	4.752E-03	4.752E-03	4.752E-03	4.752E-03	4.752E-03
OS190	1.151E-03	1.151E-03	1.151E-03	1.151E-03	1.151E-03
PB204	6.335E-03	6.335E-03	6.335E-03	6.335E-03	6.335E-03
PB205	2.321E-05	2.321E-05	2.321E-05	2.321E-05	2.321E-05
PB206	1.017E-01	1.017E-01	1.017E-01	1.017E-01	1.017E-01
PB207	1.105E-01	1.105E-01	1.105E-01	1.105E-01	1.105E-01
PB208	2.429E-01	2.429E-01	2.429E-01	2.429E-01	2.429E-01
BI209	1.845E-01	1.845E-01	1.845E-01	1.845E-01	1.845E-01
BI210M	2.322E-05	2.322E-05	2.322E-05	2.322E-05	2.322E-05
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

OUTPUT UNIT =
6 PAGE 143
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	1.516E+00	1.516E+00	1.516E+00	1.516E+00	1.516E+00
HE	2.124E+00	2.124E+00	2.124E+00	2.124E+00	2.124E+00
LI	5.050E-01	5.050E-01	5.050E-01	5.050E-01	5.050E-01
BE	8.505E-04	8.505E-04	8.505E-04	8.505E-04	8.505E-04
B	4.876E-01	4.876E-01	4.876E-01	4.876E-01	4.876E-01
C	7.998E+01	7.998E+01	7.998E+01	7.998E+01	7.998E+01
N	5.248E+01	5.248E+01	5.248E+01	5.248E+01	5.248E+01
O	6.213E+04	6.213E+04	6.213E+04	6.213E+04	6.213E+04
F	4.936E+00	4.936E+00	4.936E+00	4.936E+00	4.936E+00
NE	3.051E-04	3.051E-04	3.051E-04	3.051E-04	3.051E-04
NA	6.899E+00	6.899E+00	6.899E+00	6.898E+00	6.898E+00
MG	9.471E-01	9.471E-01	9.471E-01	9.471E-01	9.471E-01
AL	4.578E+01	4.578E+01	4.578E+01	4.578E+01	4.578E+01
SI	2.086E+02	2.086E+02	2.086E+02	2.086E+02	2.086E+02
P	1.485E+02	1.485E+02	1.485E+02	1.485E+02	1.485E+02

S	1.013E+01	1.013E+01	1.013E+01	1.013E+01	1.013E+01
CL	2.451E+00	2.451E+00	2.451E+00	2.451E+00	2.451E+00
AR	9.636E-04	9.636E-04	9.636E-04	9.636E-04	9.636E-04
K	4.457E-04	4.457E-04	4.457E-04	4.457E-04	4.457E-04
CA	9.225E-01	9.225E-01	9.225E-01	9.225E-01	9.225E-01
SC	1.212E-04	1.212E-04	1.211E-04	1.206E-04	1.200E-04
TI	4.997E+01	4.997E+01	4.997E+01	4.997E+01	4.997E+01
V	8.331E+00	8.331E+00	8.332E+00	8.333E+00	8.336E+00
CR	5.035E+03	5.035E+03	5.035E+03	5.035E+03	5.035E+03
MN	3.907E+02	3.907E+02	3.907E+02	3.907E+02	3.907E+02
FE	1.446E+04	1.446E+04	1.446E+04	1.446E+04	1.446E+04
CO	4.447E+01	4.447E+01	4.447E+01	4.447E+01	4.447E+01
NI	5.674E+03	5.674E+03	5.674E+03	5.674E+03	5.674E+03
CU	8.779E+00	8.779E+00	8.779E+00	8.779E+00	8.780E+00
ZN	1.861E+01	1.861E+01	1.861E+01	1.861E+01	1.861E+01
GA	2.369E-02	2.369E-02	2.369E-02	2.369E-02	2.369E-02
GE	2.579E-04	2.579E-04	2.579E-04	2.579E-04	2.579E-04
SR	1.774E-01	1.774E-01	1.774E-01	1.774E-01	1.774E-01
Y	1.681E-02	1.679E-02	1.676E-02	1.657E-02	1.638E-02
ZR	1.061E+05	1.061E+05	1.061E+05	1.061E+05	1.061E+05
NB	3.267E+02	3.267E+02	3.267E+02	3.267E+02	3.267E+02
MO	2.204E+02	2.204E+02	2.204E+02	2.204E+02	2.204E+02
TC	2.697E-01	2.697E-01	2.697E-01	2.698E-01	2.699E-01
RU	1.950E-01	1.950E-01	1.950E-01	1.950E-01	1.950E-01
PD	1.696E-04	1.696E-04	1.696E-04	1.696E-04	1.696E-04
AG	2.243E-02	2.243E-02	2.243E-02	2.243E-02	2.243E-02
CD	1.140E+01	1.140E+01	1.140E+01	1.140E+01	1.140E+01
IN	3.793E-01	3.793E-01	3.794E-01	3.794E-01	3.796E-01
SN	1.734E+03	1.734E+03	1.734E+03	1.734E+03	1.734E+03
SB	2.545E+00	2.545E+00	2.545E+00	2.545E+00	2.546E+00
TE	8.634E-01	8.634E-01	8.635E-01	8.639E-01	8.644E-01
I	2.220E-04	2.220E-04	2.221E-04	2.222E-04	2.223E-04
EU	4.561E-04	4.561E-04	4.561E-04	4.562E-04	4.562E-04
GD	1.111E+00	1.111E+00	1.111E+00	1.111E+00	1.111E+00
TB	3.137E-02	3.137E-02	3.137E-02	3.138E-02	3.138E-02
DY	1.359E-02	1.359E-02	1.360E-02	1.360E-02	1.361E-02
HO	7.866E-04	7.867E-04	7.868E-04	7.868E-04	7.866E-04
ER	1.546E-04	1.546E-04	1.546E-04	1.549E-04	1.551E-04
LU	5.675E-03	5.675E-03	5.675E-03	5.676E-03	5.677E-03
HF	8.225E+00	8.225E+00	8.225E+00	8.225E+00	8.225E+00
TA	1.968E-01	1.968E-01	1.968E-01	1.969E-01	1.970E-01
W	2.847E+00	2.847E+00	2.847E+00	2.847E+00	2.847E+00
RE	3.314E-01	3.314E-01	3.314E-01	3.315E-01	3.315E-01
OS	1.158E-01	1.158E-01	1.158E-01	1.159E-01	1.159E-01
PB	4.615E-01	4.615E-01	4.615E-01	4.615E-01	4.615E-01
BI	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

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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  144
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3      1.324E+02 1.324E+02 1.324E+02 1.324E+02 1.324E+02
 H  4      3.396E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
HE  6      2.151E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
LI  8      1.435E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BE  8      1.468E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 B 12      1.261E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 C 14      1.046E+00 1.046E+00 1.046E+00 1.046E+00 1.046E+00
 C 15      2.175E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 N 16      1.362E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 O 19      2.523E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 F 20      2.390E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NE 23      1.128E+00 8.944E-30 0.000E+00 0.000E+00 0.000E+00
NA 24      1.688E+02 1.612E+02 1.539E+02 9.696E+01 5.569E+01
NA 24M     6.899E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NA 25      1.393E-02 9.141E-21 0.000E+00 0.000E+00 0.000E+00
MG 27      9.709E+00 1.197E-01 1.477E-03 1.202E-22 0.000E+00
AL 28      2.611E+02 2.268E-06 1.006E-08 7.224E-09 4.853E-09
AL 29      5.469E-01 9.283E-04 1.577E-06 0.000E+00 0.000E+00
AL 30      5.261E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SI 31      2.653E+02 2.037E+02 1.564E+02 1.112E+01 4.656E-01
 P 32      4.718E+02 4.708E+02 4.699E+02 4.605E+02 4.495E+02
 P 33      1.729E-03 1.727E-03 1.725E-03 1.705E-03 1.682E-03
 P 34      4.531E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 S 35      1.547E+01 1.546E+01 1.546E+01 1.541E+01 1.535E+01
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 S 37      9.866E-03 2.658E-06 7.163E-10 0.000E+00 0.000E+00
CL 36      7.742E-03 7.742E-03 7.742E-03 7.742E-03 7.742E-03
CL 38      4.312E+00 1.410E+00 4.613E-01 6.469E-06 9.707E-12
CL 38M     5.154E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
AR 37      3.033E-01 3.031E-01 3.028E-01 3.004E-01 2.974E-01
AR 39      4.751E-05 4.751E-05 4.751E-05 4.751E-05 4.751E-05
AR 41      7.474E-05 5.114E-05 3.499E-05 7.875E-07 8.299E-09
 K 42      6.200E-03 5.862E-03 5.542E-03 3.163E-03 1.614E-03
 K 43      1.875E-04 1.819E-04 1.764E-04 1.298E-04 8.982E-05
 K 44      7.088E-05 1.070E-05 1.616E-06 9.969E-15 1.402E-24
CA 41      1.265E-04 1.265E-04 1.265E-04 1.265E-04 1.265E-04
CA 45      2.591E-01 2.591E-01 2.590E-01 2.586E-01 2.580E-01
CA 47      5.688E-04 5.652E-04 5.616E-04 5.269E-04 4.882E-04
CA 49      2.633E-02 2.333E-04 2.068E-06 6.176E-27 0.000E+00
SC 46      1.959E+00 1.958E+00 1.958E+00 1.951E+00 1.943E+00
SC 46M     6.918E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SC 47      3.114E+00 3.088E+00 3.061E+00 2.808E+00 2.533E+00
SC 48      2.885E-01 2.839E-01 2.795E-01 2.386E-01 1.973E-01
SC 49      3.417E-01 1.680E-01 8.154E-02 5.891E-05 1.002E-08
SC 50      5.004E-03 1.338E-13 3.579E-24 0.000E+00 0.000E+00
TI 51      5.897E+00 4.315E-03 3.157E-06 0.000E+00 0.000E+00
 V 52      5.882E+02 8.979E-03 1.370E-07 0.000E+00 0.000E+00
 V 53      7.783E-01 4.706E-12 2.845E-23 0.000E+00 0.000E+00
 V 54      9.600E-03 1.899E-22 0.000E+00 0.000E+00 0.000E+00
CR 51      1.642E+04 1.641E+04 1.639E+04 1.622E+04 1.602E+04
CR 55      2.692E+02 2.196E-03 1.794E-08 0.000E+00 0.000E+00
MN 54      4.430E+02 4.430E+02 4.429E+02 4.425E+02 4.420E+02
□
         OUTPUT UNIT =
6                          PAGE  145
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

MN 56      1.999E+04 1.528E+04 1.168E+04 7.943E+02 3.156E+01
MN 57      1.757E+00 1.062E-11 6.423E-23 0.000E+00 0.000E+00
MN 58      5.171E-03 1.311E-19 0.000E+00 0.000E+00 0.000E+00
FE 55      3.265E+03 3.264E+03 3.264E+03 3.263E+03 3.262E+03
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FE 59	2.123E+02	2.122E+02	2.120E+02	2.107E+02	2.091E+02
CO 58	4.212E+03	4.210E+03	4.208E+03	4.191E+03	4.171E+03
CO 60	7.818E+03	7.818E+03	7.818E+03	7.816E+03	7.815E+03
CO 60M	7.437E+03	1.401E+02	2.637E+00	1.480E-17	0.000E+00
CO 61	2.009E+02	1.320E+02	8.673E+01	1.299E+00	8.402E-03
CO 62	4.841E-01	4.403E-13	4.004E-25	0.000E+00	0.000E+00
NI 59	2.534E+00	2.534E+00	2.534E+00	2.534E+00	2.534E+00
NI 63	4.475E+02	4.475E+02	4.475E+02	4.475E+02	4.475E+02
NI 65	6.139E+02	4.663E+02	3.542E+02	2.263E+01	8.340E-01
NI 66	6.569E-03	6.486E-03	6.404E-03	5.641E-03	4.844E-03
CU 64	2.761E+02	2.614E+02	2.475E+02	1.434E+02	7.450E+01
CU 66	6.456E+01	2.505E-02	6.421E-03	5.649E-03	4.851E-03
CU 67	1.298E-04	1.283E-04	1.269E-04	1.135E-04	9.919E-05
ZN 65	7.082E+01	7.081E+01	7.080E+01	7.072E+01	7.062E+01
ZN 69	5.932E+01	3.060E+01	1.666E+01	2.350E+00	1.278E+00
ZN 69M	3.986E+00	3.791E+00	3.604E+00	2.178E+00	1.190E+00
ZN 71	8.030E-02	3.567E-06	2.986E-06	5.095E-07	6.104E-08
ZN 71M	8.419E-03	7.054E-03	5.911E-03	1.009E-03	1.208E-04
GA 70	1.256E+00	1.750E-01	2.438E-02	6.714E-11	3.588E-21
GA 72	4.184E-03	3.983E-03	3.792E-03	2.319E-03	1.286E-03
GA 72M	1.293E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 71	7.500E-03	7.482E-03	7.463E-03	7.283E-03	7.072E-03
GE 71M	6.120E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 89	2.546E+01	2.545E+01	2.543E+01	2.529E+01	2.511E+01
SR 90	3.124E-03	3.124E-03	3.124E-03	3.124E-03	3.124E-03
SR 91	4.925E+00	4.579E+00	4.257E+00	2.052E+00	8.550E-01
SR 93	1.688E-02	6.592E-05	2.574E-07	0.000E+00	0.000E+00
Y 89M	1.592E-02	1.578E-02	1.565E-02	1.432E-02	1.288E-02
Y 90	9.382E+02	9.281E+02	9.181E+02	8.239E+02	7.234E+02
Y 90M	8.523E-05	6.816E-05	5.450E-05	5.825E-06	3.982E-07
Y 91	6.417E+01	6.414E+01	6.411E+01	6.380E+01	6.342E+01
Y 92	1.654E+02	1.360E+02	1.118E+02	1.577E+01	1.503E+00
Y 93	1.688E-02	1.595E-02	1.490E-02	7.499E-03	3.291E-03
Y 94	3.523E+00	3.993E-01	4.526E-02	1.582E-11	7.104E-23
Y 96	2.246E-02	3.151E-10	4.421E-18	0.000E+00	0.000E+00
ZR 89	1.595E-02	1.581E-02	1.567E-02	1.434E-02	1.290E-02
ZR 93	2.161E-01	2.161E-01	2.161E-01	2.161E-01	2.161E-01
ZR 95	2.931E+04	2.929E+04	2.928E+04	2.915E+04	2.899E+04
ZR 97	4.656E+04	4.469E+04	4.289E+04	2.846E+04	1.740E+04
NB 92	1.263E+01	1.260E+01	1.256E+01	1.221E+01	1.180E+01
NB 93M	2.052E-02	2.052E-02	2.052E-02	2.054E-02	2.055E-02
NB 94	1.069E+00	1.069E+00	1.069E+00	1.069E+00	1.069E+00
NB 95	3.062E+04	3.062E+04	3.062E+04	3.060E+04	3.059E+04
NB 95M	2.070E+02	2.070E+02	2.070E+02	2.068E+02	2.065E+02
NB 96	5.751E+01	5.583E+01	5.420E+01	4.028E+01	2.821E+01
NB 97	4.656E+04	4.601E+04	4.490E+04	3.058E+04	1.752E+04
NB 97M	4.406E+04	4.233E+04	4.063E+04	2.696E+04	1.648E+04

OUTPUT UNIT = 6 PAGE 146
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
NB 98	6.422E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	3.294E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO 93M	9.221E-01	8.334E-01	7.532E-01	2.738E-01	8.130E-02
MO 93	2.012E-02	2.012E-02	2.012E-02	2.012E-02	2.012E-02
MO 99	4.546E+03	4.499E+03	4.452E+03	4.008E+03	3.533E+03
MO101	2.224E+02	1.293E+01	7.522E-01	3.328E-13	4.979E-28
TC 99	4.573E-03	4.573E-03	4.574E-03	4.576E-03	4.578E-03
TC100	1.999E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC101	2.224E+02	4.822E+01	4.691E+00	7.484E-12	1.510E-26
RU103	1.552E-01	1.551E-01	1.550E-01	1.539E-01	1.525E-01
RH104	6.069E-03	3.248E-08	2.238E-12	0.000E+00	0.000E+00
RH104M	3.952E-04	2.723E-08	1.877E-12	0.000E+00	0.000E+00
PD109	5.988E-02	5.688E-02	5.403E-02	3.228E-02	1.740E-02
PD109M	8.894E-04	1.253E-07	1.765E-11	0.000E+00	0.000E+00
PD111	1.202E-03	2.611E-04	1.096E-04	2.400E-05	5.290E-06
PD111M	1.495E-04	1.318E-04	1.162E-04	3.294E-05	7.261E-06
AG106	4.722E-04	4.706E-04	4.690E-04	4.533E-04	4.352E-04
AG108	7.682E+00	7.916E-04	7.913E-04	7.913E-04	7.913E-04
AG108M	8.891E-03	8.891E-03	8.891E-03	8.891E-03	8.891E-03
AG109M	8.278E-01	8.248E-01	8.219E-01	7.997E-01	7.842E-01
AG110	1.027E+01	7.386E-03	7.385E-03	7.377E-03	7.366E-03
AG110M	5.554E-01	5.553E-01	5.553E-01	5.546E-01	5.539E-01
AG111	9.796E-02	9.759E-02	9.721E-02	9.351E-02	8.926E-02
AG111M	4.912E-02	3.118E-04	1.480E-04	3.439E-05	7.579E-06
AG112	1.613E-04	1.293E-04	1.036E-04	1.132E-05	7.941E-07
CD107	7.318E-01	6.577E-01	5.911E-01	2.031E-01	5.637E-02
CD109	7.680E-01	7.679E-01	7.679E-01	7.674E-01	7.668E-01
CD111M	1.346E+00	5.731E-01	2.440E-01	4.771E-05	1.691E-09
CD115	2.262E+02	2.233E+02	2.204E+02	1.936E+02	1.657E+02
CD115M	1.662E+01	1.661E+01	1.660E+01	1.649E+01	1.636E+01
CD117	6.784E+00	5.196E+00	3.980E+00	2.768E-01	1.129E-02
CD117M	2.008E-01	1.638E-01	1.336E-01	1.739E-02	1.506E-03

CD119	4.677E-04	5.604E-06	6.715E-08	4.096E-27	0.000E+00
CD121	1.400E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN113M	4.867E+02	4.866E+02	4.865E+02	4.854E+02	4.840E+02
IN114	2.950E+02	1.124E+02	1.123E+02	1.117E+02	1.109E+02
IN114M	1.175E+02	1.174E+02	1.174E+02	1.167E+02	1.159E+02
IN116	1.251E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	8.982E+00	4.167E+00	1.933E+00	8.928E-04	8.874E-08
IN117	3.775E+00	3.585E+00	3.313E+00	4.489E-01	2.374E-02
IN117M	6.397E+00	6.150E+00	5.586E+00	7.754E-01	3.939E-02
IN118	6.140E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	4.536E-02	5.197E-06	5.509E-07	5.170E-17	4.702E-29
IN119M	4.677E-04	9.099E-05	9.562E-06	8.903E-16	8.097E-28
IN121	1.148E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN113	4.866E+02	4.865E+02	4.863E+02	4.851E+02	4.837E+02
SN113M	2.263E+02	2.828E+01	3.535E+00	3.292E-09	4.791E-20
SN117M	4.074E+03	4.066E+03	4.058E+03	3.975E+03	3.878E+03
SN119M	3.595E+03	3.594E+03	3.594E+03	3.590E+03	3.585E+03
SN121	2.138E+03	2.083E+03	2.030E+03	1.567E+03	1.149E+03
SN121M	4.460E-01	4.460E-01	4.460E-01	4.460E-01	4.460E-01

OUTPUT UNIT =
6 PAGE 147
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SN123	1.896E+02	1.895E+02	1.895E+02	1.890E+02	1.885E+02
SN123M	6.854E-01	2.429E-01	8.605E-02	2.683E-06	1.051E-11
SN125	1.430E+03	1.426E+03	1.422E+03	1.380E+03	1.331E+03
SN125M	9.915E+02	1.256E+01	1.591E-01	1.695E-20	0.000E+00
SB122	4.920E+02	4.868E+02	4.816E+02	4.328E+02	3.806E+02
SB122M	3.841E+00	1.923E-04	9.629E-09	0.000E+00	0.000E+00
SB124	2.300E+01	2.299E+01	2.298E+01	2.287E+01	2.274E+01
SB124M	6.578E-02	1.463E-13	3.255E-25	0.000E+00	0.000E+00
SB125	1.133E+03	1.133E+03	1.133E+03	1.133E+03	1.133E+03
SB126	5.094E+01	5.083E+01	5.071E+01	4.954E+01	4.817E+01
SB126M	3.686E+00	4.130E-01	4.627E-02	1.442E-11	5.645E-23
TE123M	6.385E+00	6.384E+00	6.382E+00	6.367E+00	6.349E+00

TE125M	2.447E+02	2.447E+02	2.448E+02	2.448E+02	2.449E+02
TE127	9.494E-01	8.857E-01	8.264E-01	4.236E-01	2.074E-01
TE127M	5.840E-02	5.838E-02	5.837E-02	5.821E-02	5.803E-02
I128	6.912E-02	1.308E-02	2.476E-03	1.459E-10	3.081E-19
XE129M	3.012E-05	3.001E-05	2.990E-05	2.884E-05	2.762E-05
EU154	3.296E-02	3.296E-02	3.296E-02	3.295E-02	3.295E-02
EU155	2.142E-02	2.142E-02	2.142E-02	2.142E-02	2.142E-02
EU156	6.524E-01	6.512E-01	6.500E-01	6.377E-01	6.233E-01
GD153	7.530E-01	7.529E-01	7.528E-01	7.519E-01	7.508E-01
GD155M	4.054E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	4.755E+01	4.582E+01	4.414E+01	3.041E+01	1.944E+01
GD161	4.728E+00	6.207E-05	8.153E-10	0.000E+00	0.000E+00
GD162	1.585E-03	2.476E-05	3.869E-07	3.355E-25	0.000E+00
TB160	1.645E+01	1.644E+01	1.643E+01	1.637E+01	1.629E+01
TB161	9.000E+00	8.964E+00	8.927E+00	8.562E+00	8.144E+00
TB162	1.553E-03	7.839E-05	1.432E-06	1.300E-24	0.000E+00
DY165	3.515E+00	2.631E+00	1.959E+00	1.026E-01	2.978E-03
DY165M	2.229E+00	9.284E-15	3.867E-29	0.000E+00	0.000E+00
DY166	1.549E-02	1.536E-02	1.523E-02	1.399E-02	1.263E-02
HO166	7.314E-01	7.131E-01	6.953E-01	5.402E-01	3.996E-01
ER167M	1.340E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	1.078E-04	1.075E-04	1.071E-04	1.039E-04	1.001E-04
LU176M	3.780E+00	3.133E+00	2.596E+00	3.968E-01	4.164E-02
LU177	1.642E+00	1.634E+00	1.627E+00	1.559E+00	1.480E+00
LU177M	4.566E-03	4.565E-03	4.564E-03	4.556E-03	4.546E-03
HF175	4.576E+00	4.574E+00	4.572E+00	4.553E+00	4.530E+00
HF178M	5.578E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HF179M	6.806E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HF180M	1.484E+01	1.309E+01	1.154E+01	3.271E+00	7.210E-01
HF181	3.300E+02	3.298E+02	3.295E+02	3.273E+02	3.246E+02
TA182	3.165E+01	3.165E+01	3.164E+01	3.156E+01	3.146E+01
TA182M	7.267E-02	5.844E-03	4.700E-04	5.315E-15	3.888E-28
TA183	1.120E+02	1.113E+02	1.107E+02	1.046E+02	9.773E+01
W181	6.483E-01	6.481E-01	6.480E-01	6.464E-01	6.446E-01
W183M	6.296E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W185	2.072E+01	2.072E+01	2.071E+01	2.063E+01	2.053E+01
W185M	2.385E-02	3.649E-13	5.581E-24	0.000E+00	0.000E+00
W187	2.789E+02	2.710E+02	2.632E+02	1.969E+02	1.391E+02
W188	1.158E+00	1.158E+00	1.157E+00	1.153E+00	1.147E+00

OUTPUT UNIT =
6 PAGE 148
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
RE186	1.645E+01	1.632E+01	1.620E+01	1.501E+01	1.369E+01
RE188	1.561E+02	1.523E+02	1.466E+02	9.785E+01	6.040E+01
RE188M	1.517E+02	1.640E+01	1.775E+00	3.894E-10	9.998E-22
RE189	9.297E-04	9.035E-04	8.781E-04	6.602E-04	4.688E-04
OS190M	4.126E-05	6.181E-07	9.261E-09	5.277E-27	0.000E+00
OS191	6.924E-02	6.920E-02	6.915E-02	6.849E-02	6.739E-02
OS191M	4.844E-02	4.592E-02	4.354E-02	2.555E-02	1.347E-02
IR192	2.363E-02	2.362E-02	2.361E-02	2.352E-02	2.341E-02
IR194	1.962E-03	1.892E-03	1.825E-03	1.271E-03	8.230E-04
IR194M	1.034E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PT193M	8.656E-05	8.598E-05	8.540E-05	7.985E-05	7.367E-05
PB209	3.218E-04	2.608E-04	2.114E-04	2.587E-05	2.081E-06
BI210	2.566E-02	2.551E-02	2.536E-02	2.394E-02	2.234E-02
PO210	2.302E-02	2.302E-02	2.302E-02	2.303E-02	2.303E-02
SUMTOT	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05
TOTAL	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05

OUTPUT UNIT = 6 PAGE 149
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	1.358E+02	1.324E+02	1.324E+02	1.324E+02	1.324E+02
HE	2.151E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI	1.435E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE	1.468E+00	1.903E-06	1.903E-06	1.903E-06	1.903E-06
B	1.261E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C	2.280E+01	1.046E+00	1.046E+00	1.046E+00	1.046E+00

N	1.362E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O	2.523E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F	2.390E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	1.128E+00	8.944E-30	0.000E+00	0.000E+00	0.000E+00
NA	2.378E+02	1.612E+02	1.539E+02	9.696E+01	5.569E+01
MG	9.709E+00	1.197E-01	1.477E-03	7.211E-09	4.844E-09
AL	2.617E+02	9.306E-04	1.587E-06	7.224E-09	4.853E-09
SI	2.653E+02	2.037E+02	1.564E+02	1.112E+01	4.656E-01
P	4.718E+02	4.708E+02	4.699E+02	4.605E+02	4.495E+02
S	1.548E+01	1.546E+01	1.546E+01	1.541E+01	1.535E+01
CL	4.371E+00	1.418E+00	4.691E-01	7.749E-03	7.742E-03
AR	3.035E-01	3.032E-01	3.029E-01	3.004E-01	2.974E-01
K	6.458E-03	6.054E-03	5.720E-03	3.293E-03	1.704E-03
CA	2.862E-01	2.600E-01	2.597E-01	2.592E-01	2.586E-01
SC	5.715E+00	5.498E+00	5.380E+00	4.998E+00	4.673E+00
TI	5.897E+00	4.315E-03	3.157E-06	0.000E+00	0.000E+00
V	5.890E+02	8.979E-03	1.370E-07	5.281E-15	5.281E-15
CR	1.669E+04	1.641E+04	1.639E+04	1.622E+04	1.602E+04
MN	2.044E+04	1.572E+04	1.212E+04	1.237E+03	4.736E+02
FE	3.477E+03	3.477E+03	3.476E+03	3.474E+03	3.471E+03
CO	1.967E+04	1.230E+04	1.212E+04	1.201E+04	1.199E+04
NI	1.064E+03	9.164E+02	8.042E+02	4.727E+02	4.509E+02
CU	3.406E+02	2.614E+02	2.475E+02	1.434E+02	7.451E+01
ZN	1.342E+02	1.052E+02	9.107E+01	7.525E+01	7.309E+01
GA	1.261E+00	1.790E-01	2.818E-02	2.319E-03	1.286E-03
GE	8.112E-03	7.482E-03	7.463E-03	7.283E-03	7.072E-03
SR	3.041E+01	3.003E+01	2.969E+01	2.734E+01	2.597E+01
Y	1.171E+03	1.129E+03	1.094E+03	9.034E+02	7.884E+02
ZR	7.586E+04	7.398E+04	7.217E+04	5.761E+04	4.639E+04
NB	1.215E+05	1.192E+05	1.164E+05	8.840E+04	6.483E+04
MO	4.770E+03	4.513E+03	4.453E+03	4.008E+03	3.534E+03
TC	4.223E+02	4.823E+01	4.695E+00	4.576E-03	4.578E-03
RU	1.552E-01	1.551E-01	1.550E-01	1.539E-01	1.525E-01
RH	6.474E-03	4.189E-06	3.977E-06	3.007E-06	2.328E-06
PD	6.212E-02	5.728E-02	5.425E-02	3.234E-02	1.742E-02
AG	1.949E+01	1.496E+00	1.492E+00	1.465E+00	1.445E+00
CD	2.526E+02	2.472E+02	2.427E+02	2.114E+02	1.829E+02
IN	9.310E+02	7.303E+02	7.271E+02	7.150E+02	7.108E+02
SN	1.313E+04	1.189E+04	1.178E+04	1.119E+04	1.062E+04
SB	1.706E+03	1.694E+03	1.688E+03	1.638E+03	1.584E+03
TE	2.521E+02	2.521E+02	2.520E+02	2.517E+02	2.515E+02
I	6.912E-02	1.308E-02	2.476E-03	1.318E-07	6.719E-08
XE	3.036E-05	3.025E-05	3.014E-05	2.908E-05	2.786E-05
EU	7.068E-01	7.056E-01	7.043E-01	6.921E-01	6.777E-01
GD	5.304E+01	4.657E+01	4.489E+01	3.116E+01	2.019E+01
TB	2.545E+01	2.541E+01	2.536E+01	2.493E+01	2.443E+01
DY	5.759E+00	2.647E+00	1.974E+00	1.166E-01	1.561E-02
HO	7.314E-01	7.131E-01	6.953E-01	5.402E-01	3.996E-01

ER	1.351E-02	1.075E-04	1.071E-04	1.039E-04	1.001E-04
LU	5.426E+00	4.772E+00	4.228E+00	1.960E+00	1.527E+00
HF	1.031E+03	3.474E+02	3.456E+02	3.351E+02	3.299E+02
TA	1.437E+02	1.430E+02	1.423E+02	1.362E+02	1.292E+02
W	3.021E+02	2.935E+02	2.857E+02	2.194E+02	1.614E+02
RE	3.242E+02	1.851E+02	1.645E+02	1.129E+02	7.409E+01
OS	1.177E-01	1.151E-01	1.127E-01	9.404E-02	8.086E-02
IR	2.570E-02	2.552E-02	2.544E-02	2.479E-02	2.424E-02
PT	8.710E-05	8.652E-05	8.594E-05	8.038E-05	7.418E-05
PB	3.218E-04	2.608E-04	2.114E-04	2.588E-05	2.082E-06
BI	2.566E-02	2.551E-02	2.536E-02	2.394E-02	2.234E-02
PO	2.302E-02	2.302E-02	2.302E-02	2.303E-02	2.303E-02
SUMTOT	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05
TOTAL	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05

CUMULATIVE TABLE TOTALS

AP+FP	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05
ACT+FP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AP+ACT+FP	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05

OUTPUT UNIT =
6 PAGE 150
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	4.458E-03	4.458E-03	4.458E-03	4.457E-03	4.457E-03
HE 6	1.999E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI 8	5.349E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 8	8.267E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE 11	3.189E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B 12	9.990E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C 14	3.066E-04	3.066E-04	3.066E-04	3.066E-04	3.066E-04
C 15	3.702E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
N 16	5.903E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O 19	7.208E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

F	20	9.960E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	23	1.382E-02	1.096E-31	0.000E+00	0.000E+00	0.000E+00
NA	24	4.678E+00	4.467E+00	4.265E+00	2.687E+00	1.543E+00
NA	24M	1.930E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA	25	1.599E-04	1.049E-22	0.000E+00	0.000E+00	0.000E+00
MG	27	9.168E-02	1.131E-03	1.394E-05	1.135E-24	0.000E+00
AL	28	4.684E+00	4.067E-08	1.805E-10	1.296E-10	8.705E-11
AL	29	7.622E-03	1.294E-05	2.198E-08	0.000E+00	0.000E+00
AL	30	1.785E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SI	31	9.382E-01	7.203E-01	5.529E-01	3.930E-02	1.646E-03
P	32	4.782E+00	4.772E+00	4.763E+00	4.668E+00	4.556E+00
P	33	2.542E-06	2.539E-06	2.536E-06	2.507E-06	2.472E-06
P	34	1.370E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
S	35	1.535E-02	1.534E-02	1.534E-02	1.529E-02	1.523E-02
S	37	2.807E-04	7.564E-08	2.038E-11	0.000E+00	0.000E+00
CL	36	1.142E-05	1.142E-05	1.142E-05	1.142E-05	1.142E-05
CL	38	7.708E-02	2.521E-02	8.247E-03	1.157E-07	1.735E-13
CL	38M	2.051E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AR	37	3.776E-06	3.773E-06	3.770E-06	3.739E-06	3.702E-06
AR	39	1.591E-07	1.591E-07	1.591E-07	1.591E-07	1.591E-07
AR	41	7.744E-07	5.299E-07	3.626E-07	8.160E-09	8.599E-11
K	42	6.270E-05	5.928E-05	5.604E-05	3.199E-05	1.632E-05
K	43	1.422E-06	1.379E-06	1.337E-06	9.839E-07	6.809E-07
K	44	2.185E-06	3.299E-07	4.983E-08	3.073E-16	4.322E-26
CA	45	1.186E-04	1.186E-04	1.185E-04	1.183E-04	1.181E-04
CA	47	4.747E-06	4.717E-06	4.687E-06	4.398E-06	4.074E-06
CA	49	8.210E-04	7.275E-06	6.447E-08	1.926E-28	0.000E+00
SC	46	2.464E-02	2.463E-02	2.462E-02	2.454E-02	2.444E-02
SC	46M	5.626E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SC	47	4.999E-03	4.956E-03	4.914E-03	4.508E-03	4.065E-03
SC	48	6.101E-03	6.005E-03	5.911E-03	5.046E-03	4.173E-03
SC	49	4.067E-03	2.000E-03	9.706E-04	7.012E-07	1.192E-10
SC	50	1.432E-04	3.829E-15	1.024E-25	0.000E+00	0.000E+00
TI	51	4.317E-02	3.159E-05	2.311E-08	0.000E+00	0.000E+00
V	52	8.765E+00	1.338E-04	2.042E-09	0.000E+00	0.000E+00
V	53	9.397E-03	5.682E-14	3.435E-25	0.000E+00	0.000E+00
V	54	4.154E-04	8.216E-24	0.000E+00	0.000E+00	0.000E+00
CR	51	3.524E+00	3.520E+00	3.517E+00	3.480E+00	3.437E+00
CR	55	1.757E+00	1.433E-05	1.171E-10	0.000E+00	0.000E+00
MN	54	2.205E+00	2.205E+00	2.205E+00	2.203E+00	2.200E+00
MN	56	2.988E+02	2.283E+02	1.745E+02	1.187E+01	4.716E-01

OUTPUT UNIT =
6

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
MN 57	1.219E-02	7.373E-14	4.458E-25	0.000E+00	0.000E+00
MN 58	1.224E-04	3.105E-21	0.000E+00	0.000E+00	0.000E+00
FE 55	1.103E-01	1.103E-01	1.103E-01	1.103E-01	1.102E-01
FE 59	1.644E+00	1.642E+00	1.641E+00	1.631E+00	1.618E+00
CO 58	2.519E+01	2.518E+01	2.517E+01	2.507E+01	2.494E+01
CO 60	1.205E+02	1.205E+02	1.205E+02	1.205E+02	1.205E+02
CO 60M	2.779E+00	5.233E-02	9.854E-04	5.529E-21	0.000E+00
CO 61	6.503E-01	4.272E-01	2.807E-01	4.206E-03	2.719E-05
CO 62	9.182E-03	8.351E-15	7.595E-27	0.000E+00	0.000E+00
NI 59	1.006E-04	1.006E-04	1.006E-04	1.006E-04	1.006E-04
NI 63	4.510E-02	4.510E-02	4.510E-02	4.510E-02	4.510E-02
NI 65	4.298E+00	3.264E+00	2.479E+00	1.584E-01	5.838E-03
NI 66	2.609E-06	2.576E-06	2.543E-06	2.240E-06	1.924E-06
CU 64	5.122E-01	4.850E-01	4.593E-01	2.661E-01	1.382E-01
CU 66	4.420E-01	1.715E-04	4.396E-05	3.868E-05	3.321E-05
CU 67	2.084E-07	2.061E-07	2.038E-07	1.822E-07	1.593E-07
ZN 65	2.478E-01	2.478E-01	2.478E-01	2.475E-01	2.471E-01
ZN 69	1.128E-01	5.821E-02	3.169E-02	4.470E-03	2.432E-03
ZN 69M	1.037E-02	9.859E-03	9.375E-03	5.665E-03	3.095E-03
ZN 71	1.336E-03	5.932E-08	4.967E-08	8.475E-09	1.015E-09
ZN 71M	1.479E-04	1.239E-04	1.038E-04	1.771E-05	2.122E-06
GA 70	4.864E-03	6.776E-04	9.440E-05	2.599E-13	1.389E-23
GA 72	7.953E-05	7.572E-05	7.208E-05	4.409E-05	2.444E-05
GE 71	4.001E-07	3.991E-07	3.982E-07	3.885E-07	3.773E-07
GE 71M	7.110E-07	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 89	8.801E-02	8.796E-02	8.791E-02	8.741E-02	8.681E-02
SR 90	3.626E-06	3.626E-06	3.626E-06	3.625E-06	3.625E-06
SR 91	3.947E-02	3.670E-02	3.411E-02	1.645E-02	6.852E-03
SR 93	2.557E-04	9.988E-07	3.900E-09	0.000E+00	0.000E+00
Y 89M	8.654E-05	8.578E-05	8.503E-05	7.784E-05	7.001E-05
Y 90	5.200E+00	5.144E+00	5.088E+00	4.566E+00	4.010E+00
Y 90M	3.451E-07	2.759E-07	2.206E-07	2.359E-08	1.612E-09
Y 91	2.305E-01	2.304E-01	2.302E-01	2.291E-01	2.278E-01
Y 92	1.665E+00	1.369E+00	1.125E+00	1.587E-01	1.513E-02
Y 93	1.262E-04	1.193E-04	1.114E-04	5.610E-05	2.462E-05
Y 94	5.871E-02	6.654E-03	7.541E-04	2.636E-13	1.184E-24
Y 96	5.151E-04	7.227E-12	1.014E-19	0.000E+00	0.000E+00
ZR 89	1.193E-04	1.183E-04	1.172E-04	1.073E-04	9.651E-05

ZR 93	2.511E-05	2.511E-05	2.511E-05	2.511E-05	2.511E-05
ZR 95	1.484E+02	1.484E+02	1.483E+02	1.476E+02	1.468E+02
ZR 97	2.426E+02	2.329E+02	2.235E+02	1.483E+02	9.066E+01
NB 92	1.131E-01	1.128E-01	1.124E-01	1.093E-01	1.056E-01
NB 93M	3.636E-06	3.636E-06	3.636E-06	3.638E-06	3.641E-06
NB 94	1.089E-02	1.089E-02	1.089E-02	1.089E-02	1.089E-02
NB 95	1.469E+02	1.469E+02	1.469E+02	1.468E+02	1.467E+02
NB 95M	2.876E-01	2.876E-01	2.876E-01	2.873E-01	2.869E-01
NB 96	9.562E-01	9.283E-01	9.011E-01	6.697E-01	4.690E-01
NB 97	3.099E+02	3.063E+02	2.989E+02	2.036E+02	1.166E+02
NB 97M	1.940E+02	1.863E+02	1.789E+02	1.187E+02	7.255E+01
NB 98	7.925E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	7.772E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 152
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
MO 93M	1.290E-02	1.166E-02	1.054E-02	3.830E-03	1.137E-03
MO 93	1.884E-06	1.884E-06	1.884E-06	1.884E-06	1.884E-06
MO 99	1.460E+01	1.445E+01	1.430E+01	1.287E+01	1.135E+01
MO101	2.540E+00	1.477E-01	8.592E-03	3.801E-15	5.687E-30
TC 99	2.293E-06	2.294E-06	2.294E-06	2.295E-06	2.296E-06
TC100	1.760E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC101	1.067E+00	2.314E-01	2.251E-02	3.592E-14	7.246E-29
RU103	5.193E-04	5.189E-04	5.185E-04	5.147E-04	5.102E-04
RH104	3.588E-05	1.920E-10	1.323E-14	0.000E+00	0.000E+00
RH104M	3.280E-07	2.260E-11	1.557E-15	0.000E+00	0.000E+00
PD109	1.592E-04	1.513E-04	1.437E-04	8.585E-05	4.628E-05
PD109M	9.912E-07	1.396E-10	1.967E-14	0.000E+00	0.000E+00
PD111	6.391E-06	1.388E-06	5.826E-07	1.276E-07	2.813E-08
PD111M	5.210E-07	4.593E-07	4.049E-07	1.148E-07	2.531E-08
AG106	3.412E-06	3.401E-06	3.389E-06	3.276E-06	3.145E-06
AG108	2.860E-02	2.947E-06	2.946E-06	2.946E-06	2.946E-06
AG108M	8.611E-05	8.611E-05	8.611E-05	8.611E-05	8.611E-05
AG109M	4.267E-04	4.252E-04	4.237E-04	4.122E-04	4.043E-04

AG110	7.378E-02	5.306E-05	5.306E-05	5.300E-05	5.292E-05
AG110M	9.274E-03	9.273E-03	9.272E-03	9.261E-03	9.248E-03
AG111	2.194E-04	2.186E-04	2.178E-04	2.095E-04	2.000E-04
AG111M	1.893E-05	1.201E-07	5.703E-08	1.325E-08	2.920E-09
AG112	2.001E-06	1.604E-06	1.285E-06	1.404E-07	9.852E-09
CD107	5.236E-04	4.706E-04	4.229E-04	1.453E-04	4.033E-05
CD109	8.923E-05	8.922E-05	8.921E-05	8.916E-05	8.909E-05
CD111M	3.160E-03	1.345E-03	5.727E-04	1.120E-07	3.968E-12
CD115	7.180E-01	7.087E-01	6.996E-01	6.145E-01	5.260E-01
CD115M	6.197E-02	6.193E-02	6.189E-02	6.150E-02	6.102E-02
CD117	4.886E-02	3.742E-02	2.867E-02	1.993E-03	8.132E-05
CD117M	1.632E-03	1.331E-03	1.086E-03	1.413E-04	1.224E-05
CD119	5.129E-06	6.145E-08	7.364E-10	4.492E-29	0.000E+00
CD121	2.319E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN113M	1.134E+00	1.134E+00	1.133E+00	1.131E+00	1.127E+00
IN114	1.405E+00	5.353E-01	5.350E-01	5.319E-01	5.281E-01
IN114M	1.667E-01	1.666E-01	1.665E-01	1.656E-01	1.644E-01
IN116	1.025E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	1.478E-01	6.859E-02	3.182E-02	1.470E-05	1.461E-09
IN117	1.701E-02	1.615E-02	1.492E-02	2.022E-03	1.069E-04
IN117M	2.416E-02	2.322E-02	2.109E-02	2.928E-03	1.487E-04
IN118	7.413E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN119	3.627E-04	4.156E-08	4.405E-09	4.134E-19	3.760E-31
IN119M	3.951E-06	7.686E-07	8.077E-08	7.520E-18	6.840E-30
IN121	1.383E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN113	8.105E-02	8.103E-02	8.101E-02	8.081E-02	8.056E-02
SN113M	1.064E-01	1.329E-02	1.662E-03	1.548E-12	2.252E-23
SN117M	7.557E+00	7.541E+00	7.526E+00	7.372E+00	7.192E+00
SN119M	1.858E+00	1.858E+00	1.858E+00	1.855E+00	1.853E+00
SN121	2.585E+00	2.519E+00	2.455E+00	1.895E+00	1.390E+00
SN121M	8.936E-04	8.936E-04	8.936E-04	8.936E-04	8.936E-04
SN123	5.920E-01	5.919E-01	5.918E-01	5.904E-01	5.889E-01
SN123M	2.498E-03	8.850E-04	3.136E-04	9.779E-09	3.828E-14

OUTPUT UNIT = 6 PAGE 153
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SN125	9.479E+00	9.451E+00	9.422E+00	9.144E+00	8.821E+00
SN125M	6.671E+00	8.451E-02	1.071E-03	1.141E-22	0.000E+00
SB122	2.934E+00	2.903E+00	2.872E+00	2.581E+00	2.270E+00
SB122M	3.689E-03	1.847E-07	9.246E-12	0.000E+00	0.000E+00
SB124	3.054E-01	3.053E-01	3.051E-01	3.037E-01	3.019E-01
SB124M	1.691E-04	3.762E-16	8.368E-28	0.000E+00	0.000E+00
SB125	3.541E+00	3.541E+00	3.541E+00	3.541E+00	3.541E+00
SB126	9.413E-01	9.391E-01	9.369E-01	9.153E-01	8.901E-01
SB126M	4.693E-02	5.258E-03	5.891E-04	1.837E-13	7.187E-25
TE123M	9.300E-03	9.298E-03	9.295E-03	9.273E-03	9.246E-03
TE125M	2.057E-01	2.057E-01	2.057E-01	2.058E-01	2.059E-01
TE127	1.282E-03	1.196E-03	1.116E-03	5.719E-04	2.801E-04
TE127M	3.141E-05	3.140E-05	3.139E-05	3.131E-05	3.121E-05
I128	3.428E-04	6.488E-05	1.228E-05	7.238E-13	1.528E-21
EU154	2.948E-04	2.948E-04	2.948E-04	2.948E-04	2.947E-04
EU155	1.558E-05	1.558E-05	1.558E-05	1.558E-05	1.558E-05
EU156	6.733E-03	6.720E-03	6.708E-03	6.581E-03	6.433E-03
GD153	6.802E-04	6.801E-04	6.801E-04	6.792E-04	6.783E-04
GD155M	2.920E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD159	1.550E-01	1.494E-01	1.439E-01	9.914E-02	6.339E-02
GD161	3.430E-02	4.504E-07	5.915E-12	0.000E+00	0.000E+00
GD162	5.758E-06	8.996E-08	1.406E-09	1.219E-27	0.000E+00
TB160	1.340E-01	1.339E-01	1.339E-01	1.333E-01	1.327E-01
TB161	1.803E-02	1.796E-02	1.789E-02	1.715E-02	1.632E-02
TB162	1.548E-05	7.816E-07	1.427E-08	1.296E-26	0.000E+00
DY165	1.627E-02	1.218E-02	9.070E-03	4.749E-04	1.379E-05
DY165M	1.665E-03	6.934E-18	2.888E-32	0.000E+00	0.000E+00
DY166	1.809E-05	1.794E-05	1.779E-05	1.634E-05	1.475E-05
HO166	3.135E-03	3.057E-03	2.980E-03	2.315E-03	1.713E-03
HO166M	1.667E-07	1.667E-07	1.667E-07	1.667E-07	1.667E-07
ER167M	1.652E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	2.173E-07	2.166E-07	2.159E-07	2.094E-07	2.018E-07
LU176M	2.935E-02	2.433E-02	2.016E-02	3.081E-03	3.234E-04
LU177	1.771E-03	1.763E-03	1.756E-03	1.682E-03	1.597E-03
LU177M	3.676E-05	3.675E-05	3.674E-05	3.667E-05	3.659E-05
HF175	1.125E-02	1.125E-02	1.124E-02	1.120E-02	1.114E-02
HF178M	3.792E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HF179M	1.525E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
HF180M	1.005E-01	8.858E-02	7.809E-02	2.215E-02	4.881E-03
HF181	1.475E+00	1.474E+00	1.473E+00	1.463E+00	1.451E+00
TA182	2.818E-01	2.818E-01	2.817E-01	2.810E-01	2.801E-01
TA182M	2.167E-04	1.743E-05	1.401E-06	1.585E-17	1.159E-30
TA183	7.101E-01	7.061E-01	7.021E-01	6.635E-01	6.199E-01
W181	1.856E-04	1.856E-04	1.855E-04	1.851E-04	1.846E-04
W183M	9.703E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W185	1.560E-02	1.560E-02	1.559E-02	1.553E-02	1.546E-02

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 W185M     2.786E-05 4.261E-16 6.517E-27 0.000E+00 0.000E+00
 W187      1.265E+00 1.229E+00 1.194E+00 8.932E-01 6.307E-01
 W188      6.928E-04 6.925E-04 6.922E-04 6.893E-04 6.859E-04
RE186      3.517E-02 3.490E-02 3.463E-02 3.208E-02 2.927E-02
RE188      7.747E-01 7.559E-01 7.272E-01 4.855E-01 2.997E-01
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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

9 SUMMARY TABLE: THERMAL POWER, WATTS
17X17 PWR ASSEMBLY, 4.236% UO2, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
RE188M	1.546E-01	1.673E-02	1.809E-03	3.970E-13	1.019E-24
RE189	5.566E-06	5.409E-06	5.257E-06	3.953E-06	2.807E-06
OS190M	4.172E-07	6.251E-09	9.365E-11	5.337E-29	0.000E+00
OS191	1.006E-04	1.005E-04	1.004E-04	9.947E-05	9.786E-05
OS191M	2.125E-05	2.014E-05	1.910E-05	1.121E-05	5.910E-06
IR192	1.447E-04	1.447E-04	1.446E-04	1.440E-04	1.434E-04
IR194	1.047E-05	1.010E-05	9.737E-06	6.780E-06	4.391E-06
PB209	3.700E-07	2.999E-07	2.431E-07	2.976E-08	2.393E-09
BI210	5.916E-05	5.882E-05	5.848E-05	5.521E-05	5.152E-05
PO210	7.381E-04	7.381E-04	7.381E-04	7.382E-04	7.382E-04
SUMTOT	1.612E+03	1.478E+03	1.397E+03	9.922E+02	7.829E+02
TOTAL	1.612E+03	1.478E+03	1.397E+03	9.922E+02	7.829E+02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	4.458E-03	4.458E-03	4.458E-03	4.457E-03	4.457E-03
HE	1.999E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LI	5.349E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BE	8.270E-04	2.284E-09	2.284E-09	2.284E-09	2.284E-09
B	9.990E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C	3.705E-01	3.066E-04	3.066E-04	3.066E-04	3.066E-04
N	5.903E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
O	7.208E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
F	9.960E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NE	1.382E-02	1.096E-31	0.000E+00	0.000E+00	0.000E+00
NA	4.871E+00	4.467E+00	4.265E+00	2.687E+00	1.543E+00
MG	9.168E-02	1.131E-03	1.394E-05	6.553E-11	4.402E-11
AL	4.692E+00	1.298E-05	2.216E-08	1.296E-10	8.705E-11
SI	9.382E-01	7.203E-01	5.529E-01	3.930E-02	1.646E-03
P	4.783E+00	4.772E+00	4.763E+00	4.668E+00	4.556E+00
S	1.563E-02	1.534E-02	1.534E-02	1.529E-02	1.523E-02
CL	7.730E-02	2.522E-02	8.259E-03	1.153E-05	1.142E-05
AR	4.710E-06	4.462E-06	4.291E-06	3.906E-06	3.861E-06
K	6.630E-05	6.099E-05	5.743E-05	3.297E-05	1.700E-05
CA	9.443E-04	1.306E-04	1.233E-04	1.227E-04	1.222E-04
SC	3.996E-02	3.759E-02	3.642E-02	3.409E-02	3.268E-02
TI	4.317E-02	3.159E-05	2.311E-08	0.000E+00	0.000E+00
V	8.775E+00	1.338E-04	2.042E-09	5.822E-17	5.822E-17
CR	5.281E+00	3.521E+00	3.517E+00	3.480E+00	3.437E+00
MN	3.010E+02	2.305E+02	1.767E+02	1.407E+01	2.672E+00
FE	1.754E+00	1.753E+00	1.752E+00	1.741E+00	1.729E+00
CO	1.492E+02	1.462E+02	1.460E+02	1.456E+02	1.454E+02
NI	4.343E+00	3.310E+00	2.525E+00	2.036E-01	5.104E-02
CU	9.542E-01	4.852E-01	4.593E-01	2.661E-01	1.383E-01
ZN	3.725E-01	3.160E-01	2.890E-01	2.576E-01	2.527E-01
GA	4.943E-03	7.533E-04	1.665E-04	4.409E-05	2.444E-05
GE	1.111E-06	3.991E-07	3.982E-07	3.885E-07	3.773E-07
SR	1.277E-01	1.247E-01	1.220E-01	1.039E-01	9.367E-02
Y	7.155E+00	6.750E+00	6.445E+00	4.954E+00	4.253E+00
ZR	3.911E+02	3.812E+02	3.718E+02	2.959E+02	2.375E+02
NB	6.521E+02	6.408E+02	6.259E+02	4.701E+02	3.367E+02
MO	1.715E+01	1.461E+01	1.432E+01	1.288E+01	1.135E+01
TC	2.827E+00	2.314E-01	2.252E-02	2.295E-06	2.296E-06
RU	5.193E-04	5.189E-04	5.185E-04	5.147E-04	5.102E-04
RH	3.627E-05	6.819E-09	6.087E-09	4.117E-09	3.222E-09
PD	1.671E-04	1.531E-04	1.447E-04	8.609E-05	4.633E-05
AG	1.124E-01	1.006E-02	1.006E-02	1.003E-02	9.998E-03
CD	8.342E-01	8.113E-01	7.923E-01	6.784E-01	5.873E-01
IN	2.998E+00	1.944E+00	1.903E+00	1.833E+00	1.820E+00

SN	2.893E+01	2.214E+01	2.194E+01	2.094E+01	1.993E+01
SB	7.772E+00	7.693E+00	7.655E+00	7.341E+00	7.003E+00
TE	2.163E-01	2.162E-01	2.162E-01	2.157E-01	2.154E-01
I	3.428E-04	6.489E-05	1.228E-05	1.896E-09	9.669E-10
EU	7.044E-03	7.031E-03	7.018E-03	6.892E-03	6.743E-03
GD	1.900E-01	1.500E-01	1.446E-01	9.981E-02	6.407E-02
TB	1.520E-01	1.519E-01	1.517E-01	1.505E-01	1.490E-01
DY	1.795E-02	1.220E-02	9.088E-03	4.913E-04	2.854E-05
HO	3.135E-03	3.057E-03	2.980E-03	2.315E-03	1.713E-03
ER	1.674E-05	2.166E-07	2.159E-07	2.094E-07	2.018E-07
LU	3.116E-02	2.613E-02	2.195E-02	4.799E-03	1.957E-03
HF	3.115E+00	1.574E+00	1.562E+00	1.496E+00	1.467E+00
TA	9.921E-01	9.879E-01	9.838E-01	9.444E-01	9.000E-01
W	1.282E+00	1.245E+00	1.210E+00	9.096E-01	6.470E-01
RE	9.645E-01	8.076E-01	7.637E-01	5.176E-01	3.290E-01
OS	1.222E-04	1.207E-04	1.195E-04	1.107E-04	1.038E-04
IR	1.552E-04	1.548E-04	1.543E-04	1.508E-04	1.478E-04
PB	3.700E-07	2.999E-07	2.431E-07	2.976E-08	2.393E-09
BI	5.916E-05	5.882E-05	5.848E-05	5.521E-05	5.152E-05
PO	7.381E-04	7.381E-04	7.381E-04	7.382E-04	7.382E-04
SUMTOT	1.612E+03	1.478E+03	1.397E+03	9.922E+02	7.829E+02
TOTAL	1.612E+03	1.478E+03	1.397E+03	9.922E+02	7.829E+02

CUMULATIVE TABLE TOTALS

AP+FP	1.612E+03	1.478E+03	1.397E+03	9.922E+02	7.829E+02
ACT+FP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AP+ACT+FP	1.612E+03	1.478E+03	1.397E+03	9.922E+02	7.829E+02

OUTPUT UNIT = 6 PAGE 156
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
N 14	3.792E-01	3.792E-01	3.792E-01	3.792E-01

O 16	6.261E+00	6.261E+00	6.261E+00	6.261E+00	6.261E+00
TI 48	2.392E-01	2.392E-01	2.392E-01	2.392E-01	2.392E-01
CR 50	2.692E+00	2.692E+00	2.692E+00	2.692E+00	2.692E+00
CR 52	7.305E+00	7.305E+00	7.305E+00	7.305E+00	7.305E+00
CR 53	6.888E+00	6.888E+00	6.888E+00	6.888E+00	6.888E+00
MN 55	5.187E+00	5.187E+00	5.187E+00	5.187E+00	5.187E+00
FE 54	1.544E+00	1.544E+00	1.544E+00	1.544E+00	1.544E+00
FE 56	2.638E+01	2.638E+01	2.638E+01	2.638E+01	2.638E+01
FE 57	6.427E-01	6.427E-01	6.427E-01	6.427E-01	6.427E-01
CO 58	3.621E-01	3.620E-01	3.619E-01	3.604E-01	3.586E-01
CO 59	2.429E+00	2.429E+00	2.429E+00	2.429E+00	2.429E+00
NI 58	1.226E+01	1.226E+01	1.226E+01	1.226E+01	1.226E+01
NI 59	3.138E+00	3.138E+00	3.138E+00	3.138E+00	3.138E+00
NI 60	2.954E+00	2.954E+00	2.954E+00	2.954E+00	2.954E+00
NI 61	1.398E-01	1.398E-01	1.398E-01	1.398E-01	1.398E-01
NI 62	1.952E+00	1.952E+00	1.952E+00	1.952E+00	1.952E+00
ZR 90	8.596E+00	8.596E+00	8.596E+00	8.596E+00	8.596E+00
ZR 91	2.047E+01	2.047E+01	2.047E+01	2.047E+01	2.047E+01
ZR 92	1.262E+01	1.262E+01	1.262E+01	1.262E+01	1.262E+01
ZR 93	5.623E-01	5.623E-01	5.623E-01	5.623E-01	5.623E-01
ZR 94	2.317E+00	2.317E+00	2.317E+00	2.317E+00	2.317E+00
ZR 96	3.616E+00	3.616E+00	3.616E+00	3.616E+00	3.616E+00
NB 93	9.865E-01	9.865E-01	9.865E-01	9.865E-01	9.865E-01
NB 94	1.454E-01	1.454E-01	1.454E-01	1.454E-01	1.454E-01
MO 95	9.451E-01	9.451E-01	9.452E-01	9.453E-01	9.455E-01
MO 96	1.539E-01	1.539E-01	1.539E-01	1.539E-01	1.539E-01
MO 97	1.846E-01	1.846E-01	1.846E-01	1.846E-01	1.847E-01
MO 98	3.358E-01	3.358E-01	3.358E-01	3.358E-01	3.358E-01
SN116	7.719E-01	7.719E-01	7.719E-01	7.719E-01	7.719E-01
SN117	5.053E-01	5.053E-01	5.053E-01	5.053E-01	5.053E-01
SN118	8.400E-01	8.400E-01	8.400E-01	8.400E-01	8.400E-01
SN119	1.996E-01	1.996E-01	1.996E-01	1.996E-01	1.996E-01
SN120	1.668E-01	1.668E-01	1.668E-01	1.668E-01	1.668E-01
SN124	1.882E-01	1.882E-01	1.882E-01	1.882E-01	1.882E-01
HF179	1.478E-01	1.478E-01	1.478E-01	1.478E-01	1.478E-01
SUMTOT	1.345E+02	1.345E+02	1.345E+02	1.345E+02	1.345E+02
TOTAL	1.359E+02	1.359E+02	1.359E+02	1.359E+02	1.359E+02

OUTPUT UNIT =
6 PAGE 157
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
N	3.792E-01	3.792E-01	3.792E-01	3.792E-01	3.792E-01
O	6.277E+00	6.277E+00	6.277E+00	6.277E+00	6.277E+00
TI	2.560E-01	2.560E-01	2.560E-01	2.560E-01	2.560E-01
CR	1.692E+01	1.692E+01	1.692E+01	1.692E+01	1.692E+01
MN	5.187E+00	5.187E+00	5.187E+00	5.187E+00	5.187E+00
FE	2.861E+01	2.861E+01	2.861E+01	2.861E+01	2.861E+01
CO	2.806E+00	2.806E+00	2.806E+00	2.804E+00	2.802E+00
NI	2.061E+01	2.061E+01	2.061E+01	2.061E+01	2.061E+01
ZR	4.819E+01	4.819E+01	4.819E+01	4.819E+01	4.819E+01
NB	1.136E+00	1.136E+00	1.136E+00	1.136E+00	1.136E+00
MO	1.643E+00	1.643E+00	1.643E+00	1.643E+00	1.644E+00
SN	2.846E+00	2.846E+00	2.846E+00	2.846E+00	2.846E+00
HF	3.360E-01	3.360E-01	3.360E-01	3.360E-01	3.360E-01
SUMTOT	1.352E+02	1.352E+02	1.352E+02	1.352E+02	1.352E+02
TOTAL	1.359E+02	1.359E+02	1.359E+02	1.359E+02	1.359E+02

CUMULATIVE TABLE TOTALS

AP+FP	1.359E+02	1.359E+02	1.359E+02	1.359E+02	1.359E+02
ACT+FP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AP+ACT+FP	1.359E+02	1.359E+02	1.359E+02	1.359E+02	1.359E+02

OUTPUT UNIT = 6 PAGE 158

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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,FRACTIONAL NEUTRONS PER SECOND

17X17 PWR ASSEMBLY, 4.236% UO2, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR

```
 N 14      2.791E-03 2.791E-03 2.791E-03 2.791E-03 2.791E-03
 O 16      4.608E-02 4.608E-02 4.608E-02 4.608E-02 4.609E-02
TI 48      1.760E-03 1.760E-03 1.760E-03 1.760E-03 1.761E-03
CR 50      1.981E-02 1.981E-02 1.981E-02 1.981E-02 1.981E-02
CR 52      5.377E-02 5.377E-02 5.377E-02 5.377E-02 5.377E-02
CR 53      5.070E-02 5.070E-02 5.070E-02 5.070E-02 5.070E-02
MN 55      3.818E-02 3.818E-02 3.818E-02 3.818E-02 3.818E-02
FE 54      1.137E-02 1.137E-02 1.137E-02 1.137E-02 1.137E-02
FE 56      1.942E-01 1.942E-01 1.942E-01 1.942E-01 1.942E-01
FE 57      4.731E-03 4.731E-03 4.731E-03 4.731E-03 4.731E-03
CO 58      2.666E-03 2.665E-03 2.664E-03 2.653E-03 2.640E-03
CO 59      1.788E-02 1.788E-02 1.788E-02 1.788E-02 1.788E-02
NI 58      9.027E-02 9.027E-02 9.027E-02 9.027E-02 9.028E-02
NI 59      2.310E-02 2.310E-02 2.310E-02 2.310E-02 2.310E-02
NI 60      2.174E-02 2.174E-02 2.174E-02 2.174E-02 2.174E-02
NI 61      1.029E-03 1.029E-03 1.029E-03 1.029E-03 1.029E-03
NI 62      1.437E-02 1.437E-02 1.437E-02 1.437E-02 1.437E-02
ZR 90      6.327E-02 6.327E-02 6.327E-02 6.327E-02 6.328E-02
ZR 91      1.507E-01 1.507E-01 1.507E-01 1.507E-01 1.507E-01
ZR 92      9.293E-02 9.293E-02 9.293E-02 9.293E-02 9.293E-02
ZR 93      4.139E-03 4.139E-03 4.139E-03 4.139E-03 4.139E-03
ZR 94      1.706E-02 1.706E-02 1.706E-02 1.706E-02 1.706E-02
ZR 96      2.662E-02 2.662E-02 2.662E-02 2.662E-02 2.662E-02
NB 93      7.261E-03 7.261E-03 7.261E-03 7.261E-03 7.262E-03
NB 94      1.071E-03 1.071E-03 1.071E-03 1.071E-03 1.071E-03
MO 95      6.957E-03 6.957E-03 6.957E-03 6.958E-03 6.960E-03
MO 96      1.133E-03 1.133E-03 1.133E-03 1.133E-03 1.133E-03
MO 97      1.359E-03 1.359E-03 1.359E-03 1.359E-03 1.359E-03
MO 98      2.472E-03 2.472E-03 2.472E-03 2.472E-03 2.472E-03
SN116      5.682E-03 5.682E-03 5.682E-03 5.682E-03 5.682E-03
SN117      3.719E-03 3.719E-03 3.719E-03 3.719E-03 3.720E-03
SN118      6.183E-03 6.183E-03 6.183E-03 6.183E-03 6.183E-03
SN119      1.469E-03 1.469E-03 1.469E-03 1.469E-03 1.469E-03
SN120      1.228E-03 1.228E-03 1.228E-03 1.228E-03 1.228E-03
SN124      1.385E-03 1.385E-03 1.385E-03 1.385E-03 1.385E-03
HF179      1.088E-03 1.088E-03 1.088E-03 1.088E-03 1.088E-03
SUMTOT     9.901E-01 9.901E-01 9.901E-01 9.901E-01 9.901E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE  159
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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

20 SUMMARY TABLE: NEUTRON ABSORPTION RATE,FRACTIONAL NEUTRONS PER SECOND

17X17 PWR ASSEMBLY, 4.236% UO2, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
N	2.791E-03	2.791E-03	2.791E-03	2.791E-03	2.791E-03
O	4.620E-02	4.620E-02	4.620E-02	4.620E-02	4.620E-02
TI	1.884E-03	1.884E-03	1.884E-03	1.884E-03	1.884E-03
CR	1.246E-01	1.246E-01	1.246E-01	1.246E-01	1.246E-01
MN	3.818E-02	3.818E-02	3.818E-02	3.818E-02	3.818E-02
FE	2.106E-01	2.106E-01	2.106E-01	2.106E-01	2.106E-01
CO	2.065E-02	2.065E-02	2.065E-02	2.064E-02	2.063E-02
NI	1.517E-01	1.517E-01	1.517E-01	1.517E-01	1.517E-01
ZR	3.547E-01	3.547E-01	3.547E-01	3.547E-01	3.547E-01
NB	8.363E-03	8.363E-03	8.363E-03	8.363E-03	8.363E-03
MO	1.209E-02	1.209E-02	1.209E-02	1.210E-02	1.210E-02
SN	2.095E-02	2.095E-02	2.095E-02	2.095E-02	2.095E-02
HF	2.473E-03	2.473E-03	2.473E-03	2.473E-03	2.473E-03
SUMTOT	9.952E-01	9.952E-01	9.952E-01	9.952E-01	9.952E-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 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
HE 4	5.834E-01	5.835E-01	5.835E-01	5.840E-01	5.845E-01
TH230	8.608E-04	8.608E-04	8.609E-04	8.611E-04	8.614E-04
TH232	2.386E-04	2.386E-04	2.386E-04	2.387E-04	2.388E-04
PA231	3.045E-04	3.045E-04	3.045E-04	3.048E-04	3.051E-04

U232	7.765E-04	7.766E-04	7.767E-04	7.774E-04	7.782E-04
U233	8.846E-04	8.846E-04	8.846E-04	8.848E-04	8.850E-04
U234	7.209E+01	7.209E+01	7.209E+01	7.209E+01	7.210E+01
U235	2.147E+03	2.147E+03	2.147E+03	2.147E+03	2.147E+03
U236	2.573E+03	2.573E+03	2.573E+03	2.573E+03	2.573E+03
U237	9.802E+00	9.760E+00	9.719E+00	9.311E+00	8.845E+00
U238	4.220E+05	4.220E+05	4.220E+05	4.220E+05	4.220E+05
U239	3.696E-01	6.312E-02	1.078E-02	2.279E-10	1.405E-19
NP236	5.295E-04	5.295E-04	5.295E-04	5.295E-04	5.295E-04
NP237	4.967E+02	4.967E+02	4.968E+02	4.972E+02	4.976E+02
NP238	1.969E+00	1.942E+00	1.916E+00	1.671E+00	1.419E+00
NP239	5.317E+01	5.282E+01	5.223E+01	4.621E+01	3.989E+01
NP240	1.535E-03	8.095E-04	4.269E-04	7.124E-07	3.298E-10
PU236	1.707E-03	1.707E-03	1.707E-03	1.709E-03	1.710E-03
PU237	4.222E-04	4.219E-04	4.216E-04	4.190E-04	4.158E-04
PU238	2.535E+02	2.535E+02	2.536E+02	2.538E+02	2.541E+02
PU239	3.325E+03	3.326E+03	3.327E+03	3.333E+03	3.339E+03
PU240	1.790E+03	1.790E+03	1.790E+03	1.790E+03	1.790E+03
PU241	7.700E+02	7.700E+02	7.700E+02	7.699E+02	7.699E+02
PU242	4.020E+02	4.020E+02	4.020E+02	4.020E+02	4.020E+02
PU243	1.479E-01	1.286E-01	1.118E-01	2.760E-02	5.153E-03
PU244	6.917E-02	6.917E-02	6.917E-02	6.917E-02	6.917E-02
AM241	2.853E+01	2.854E+01	2.854E+01	2.859E+01	2.864E+01
AM242M	1.362E+00	1.362E+00	1.362E+00	1.362E+00	1.362E+00
AM242	6.951E-02	6.656E-02	6.375E-02	4.136E-02	2.462E-02
AM243	1.353E+02	1.353E+02	1.353E+02	1.354E+02	1.354E+02
AM244M	7.081E-03	1.430E-03	2.889E-04	3.265E-11	1.506E-19
AM244	8.658E-03	8.083E-03	7.547E-03	3.800E-03	1.668E-03
CM242	1.203E+01	1.203E+01	1.203E+01	1.203E+01	1.201E+01
CM243	6.233E-01	6.233E-01	6.233E-01	6.233E-01	6.232E-01
CM244	8.447E+01	8.447E+01	8.447E+01	8.448E+01	8.447E+01
CM245	4.905E+00	4.905E+00	4.905E+00	4.905E+00	4.905E+00
CM246	9.835E-01	9.835E-01	9.835E-01	9.835E-01	9.835E-01
CM247	1.733E-02	1.733E-02	1.733E-02	1.733E-02	1.733E-02
CM248	1.796E-03	1.796E-03	1.796E-03	1.796E-03	1.796E-03
SUMTOT	4.342E+05	4.342E+05	4.342E+05	4.342E+05	4.342E+05
TOTAL	4.342E+05	4.342E+05	4.342E+05	4.342E+05	4.342E+05

OUTPUT UNIT =
6 PAGE 161
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
HE	5.834E-01	5.835E-01	5.835E-01	5.840E-01	5.845E-01
TH	1.114E-03	1.114E-03	1.114E-03	1.114E-03	1.114E-03
PA	3.230E-04	3.230E-04	3.230E-04	3.230E-04	3.230E-04
U	4.268E+05	4.268E+05	4.268E+05	4.268E+05	4.268E+05
NP	5.518E+02	5.515E+02	5.509E+02	5.451E+02	5.390E+02
PU	6.541E+03	6.541E+03	6.542E+03	6.548E+03	6.555E+03
AM	1.652E+02	1.653E+02	1.653E+02	1.654E+02	1.654E+02
CM	1.030E+02	1.030E+02	1.030E+02	1.030E+02	1.030E+02
SUMTOT	4.342E+05	4.342E+05	4.342E+05	4.342E+05	4.342E+05
TOTAL	4.342E+05	4.342E+05	4.342E+05	4.342E+05	4.342E+05

CUMULATIVE TABLE TOTALS

AP+FP	1.968E+05	1.968E+05	1.968E+05	1.968E+05	1.968E+05
ACT+FP	4.342E+05	4.342E+05	4.342E+05	4.342E+05	4.342E+05
AP+ACT+FP	6.310E+05	6.310E+05	6.310E+05	6.310E+05	6.310E+05

OUTPUT UNIT = 6

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
TL208	1.535E-03	1.536E-03	1.577E-03	1.535E-03	1.608E-03
PB212	4.273E-03	4.273E-03	4.272E-03	4.271E-03	4.269E-03
BI212	4.273E-03	4.274E-03	4.275E-03	4.272E-03	4.475E-03
PO212	2.738E-03	2.738E-03	2.739E-03	2.737E-03	2.867E-03
PO216	4.273E-03	4.273E-03	4.273E-03	4.271E-03	4.270E-03
RN220	4.273E-03	4.273E-03	4.273E-03	4.271E-03	4.270E-03
RA224	4.273E-03	4.273E-03	4.272E-03	4.271E-03	4.269E-03

TH228	4.246E-03	4.247E-03	4.247E-03	4.252E-03	4.259E-03
TH231	6.992E-01	6.806E-01	6.625E-01	5.060E-01	3.666E-01
TH233	2.360E-02	3.595E-03	5.475E-04	3.678E-12	5.732E-22
TH234	1.421E-01	1.421E-01	1.421E-01	1.421E-01	1.421E-01
PA232	6.505E-01	6.363E-01	6.224E-01	4.993E-01	3.832E-01
PA233	3.537E-01	3.537E-01	3.537E-01	3.537E-01	3.536E-01
PA234M	1.491E-01	1.421E-01	1.421E-01	1.421E-01	1.421E-01
PA234	7.196E-03	6.507E-03	5.885E-03	2.210E-03	7.699E-04
U232	1.663E-02	1.663E-02	1.663E-02	1.665E-02	1.666E-02
U234	4.506E-01	4.506E-01	4.506E-01	4.507E-01	4.507E-01
U235	4.643E-03	4.643E-03	4.643E-03	4.643E-03	4.643E-03
U236	1.665E-01	1.665E-01	1.665E-01	1.665E-01	1.665E-01
U237	8.004E+05	7.970E+05	7.936E+05	7.603E+05	7.223E+05
U238	1.419E-01	1.419E-01	1.419E-01	1.419E-01	1.419E-01
U239	1.236E+07	2.111E+06	3.606E+05	7.621E-03	4.699E-12
U240	1.869E+01	1.779E+01	1.694E+01	1.036E+01	5.744E+00
NP235	8.104E-03	8.103E-03	8.103E-03	8.097E-03	8.090E-03
NP236M	9.898E+00	9.598E+00	9.306E+00	6.839E+00	4.725E+00
NP237	3.503E-01	3.503E-01	3.503E-01	3.506E-01	3.509E-01
NP238	5.105E+05	5.035E+05	4.967E+05	4.334E+05	3.679E+05
NP239	1.234E+07	1.226E+07	1.212E+07	1.072E+07	9.257E+06
NP240M	3.809E+03	3.169E+01	1.714E+01	1.045E+01	5.795E+00
NP240	1.851E+04	9.761E+03	5.148E+03	8.590E+00	3.977E-03
PU236	9.072E-01	9.073E-01	9.074E-01	9.082E-01	9.088E-01
PU237	5.103E+00	5.100E+00	5.096E+00	5.064E+00	5.026E+00
PU238	4.342E+03	4.342E+03	4.343E+03	4.347E+03	4.352E+03
PU239	2.068E+02	2.068E+02	2.069E+02	2.072E+02	2.076E+02
PU240	4.080E+02	4.080E+02	4.080E+02	4.080E+02	4.080E+02
PU241	7.936E+04	7.936E+04	7.936E+04	7.935E+04	7.935E+04
PU242	1.536E+00	1.536E+00	1.536E+00	1.536E+00	1.536E+00
PU243	3.850E+05	3.348E+05	2.911E+05	7.187E+04	1.341E+04
PU245	2.476E+00	2.319E+00	2.172E+00	1.129E+00	5.153E-01
AM240	3.137E-01	3.094E-01	3.052E-01	2.663E-01	2.261E-01
AM241	9.797E+01	9.799E+01	9.800E+01	9.815E+01	9.832E+01
AM242M	1.324E+01	1.324E+01	1.324E+01	1.324E+01	1.324E+01
AM242	5.621E+04	5.383E+04	5.155E+04	3.345E+04	1.991E+04
AM243	2.698E+01	2.698E+01	2.698E+01	2.700E+01	2.700E+01
AM244M	2.100E+05	4.241E+04	8.566E+03	9.682E-04	4.464E-12
AM244	1.101E+04	1.028E+04	9.601E+03	4.834E+03	2.121E+03
AM245	2.476E+00	2.452E+00	2.392E+00	1.393E+00	6.402E-01
CM241	2.103E-02	2.101E-02	2.100E-02	2.083E-02	2.063E-02
CM242	3.979E+04	3.979E+04	3.979E+04	3.978E+04	3.974E+04
CM243	3.219E+01	3.219E+01	3.219E+01	3.219E+01	3.219E+01
CM244	6.837E+03	6.837E+03	6.837E+03	6.837E+03	6.837E+03

OUTPUT UNIT =
6

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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, 57469.5 MW
D/MTIHM, 3 CYCLE
          ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

CM245     8.425E-01 8.425E-01 8.425E-01 8.425E-01 8.425E-01
CM246     3.022E-01 3.022E-01 3.022E-01 3.022E-01 3.022E-01
CM249     3.578E-01 1.871E-01 9.784E-02 1.498E-04 6.526E-07
BK249     4.145E-02 4.147E-02 4.148E-02 4.146E-02 4.141E-02
BK250     1.609E-01 1.298E-01 1.047E-01 1.218E-02 9.236E-04
CF252     1.516E-03 1.516E-03 1.516E-03 1.515E-03 1.515E-03
SUMTOT    2.682E+07 1.625E+07 1.427E+07 1.216E+07 1.051E+07

TOTAL     2.682E+07 1.625E+07 1.427E+07 1.216E+07 1.051E+07
       

        OUTPUT UNIT =
6                         PAGE  164
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
          ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

TL        1.536E-03 1.536E-03 1.578E-03 1.536E-03 1.609E-03
PB        4.275E-03 4.274E-03 4.274E-03 4.272E-03 4.271E-03
BI        4.275E-03 4.276E-03 4.276E-03 4.273E-03 4.477E-03
PO        7.012E-03 7.014E-03 7.014E-03 7.010E-03 7.139E-03
RN        4.274E-03 4.274E-03 4.274E-03 4.272E-03 4.271E-03
RA        4.275E-03 4.274E-03 4.274E-03 4.273E-03 4.271E-03
TH        8.692E-01 8.306E-01 8.094E-01 6.524E-01 5.129E-01
PA        1.161E+00 1.139E+00 1.124E+00 9.973E-01 8.798E-01
 U        1.316E+07 2.908E+06 1.154E+06 7.604E+05 7.223E+05
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NP	1.287E+07	1.277E+07	1.262E+07	1.116E+07	9.625E+06
PU	4.693E+05	4.191E+05	3.754E+05	1.562E+05	9.774E+04
AM	2.773E+05	1.067E+05	6.986E+04	3.842E+04	2.217E+04
CM	4.666E+04	4.666E+04	4.666E+04	4.665E+04	4.661E+04
BK	2.025E-01	1.713E-01	1.462E-01	5.364E-02	4.234E-02
CF	2.396E-03	2.396E-03	2.396E-03	2.395E-03	2.391E-03
SUMTOT	2.682E+07	1.625E+07	1.427E+07	1.216E+07	1.051E+07
TOTAL	2.682E+07	1.625E+07	1.427E+07	1.216E+07	1.051E+07

CUMULATIVE TABLE TOTALS

AP+FP	2.859E+05	2.650E+05	2.561E+05	2.002E+05	1.629E+05
ACT+FP	2.682E+07	1.625E+07	1.427E+07	1.216E+07	1.051E+07
AP+ACT+FP	2.711E+07	1.652E+07	1.452E+07	1.236E+07	1.068E+07

OUTPUT UNIT = 6 PAGE 165
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
TL208	3.613E-05	3.614E-05	3.711E-05	3.612E-05	3.784E-05
PB212	8.135E-06	8.135E-06	8.134E-06	8.131E-06	8.128E-06
BI212	7.266E-05	7.269E-05	7.270E-05	7.265E-05	7.611E-05
PO212	1.451E-04	1.451E-04	1.451E-04	1.450E-04	1.519E-04
PO216	1.749E-04	1.749E-04	1.749E-04	1.749E-04	1.748E-04
RN220	1.622E-04	1.622E-04	1.622E-04	1.622E-04	1.621E-04
RA224	1.466E-04	1.466E-04	1.466E-04	1.466E-04	1.465E-04
TH228	1.389E-04	1.389E-04	1.389E-04	1.391E-04	1.393E-04
TH231	3.923E-04	3.819E-04	3.717E-04	2.839E-04	2.057E-04
TH233	5.974E-05	9.099E-06	1.386E-06	9.310E-15	1.451E-24
TH234	5.762E-05	5.762E-05	5.762E-05	5.762E-05	5.762E-05
PA232	4.253E-03	4.160E-03	4.069E-03	3.264E-03	2.506E-03
PA233	8.028E-04	8.028E-04	8.028E-04	8.027E-04	8.027E-04
PA234M	7.371E-04	7.023E-04	7.023E-04	7.023E-04	7.023E-04
PA234	1.033E-04	9.345E-05	8.453E-05	3.175E-05	1.106E-05
U232	5.338E-04	5.339E-04	5.339E-04	5.344E-04	5.350E-04

U234	1.298E-02	1.298E-02	1.298E-02	1.298E-02	1.298E-02
U235	1.216E-04	1.216E-04	1.216E-04	1.216E-04	1.216E-04
U236	4.512E-03	4.512E-03	4.512E-03	4.512E-03	4.512E-03
U237	1.514E+03	1.508E+03	1.502E+03	1.439E+03	1.367E+03
U238	3.600E-03	3.600E-03	3.600E-03	3.600E-03	3.600E-03
U239	3.327E+04	5.682E+03	9.706E+02	2.051E-05	1.265E-14
U240	1.533E-02	1.460E-02	1.390E-02	8.501E-03	4.713E-03
NP236M	7.821E-03	7.584E-03	7.354E-03	5.404E-03	3.734E-03
NP237	1.071E-02	1.071E-02	1.071E-02	1.072E-02	1.073E-02
NP238	2.445E+03	2.412E+03	2.379E+03	2.076E+03	1.762E+03
NP239	2.982E+04	2.963E+04	2.930E+04	2.592E+04	2.238E+04
NP240M	2.207E+01	1.836E-01	9.933E-02	6.058E-02	3.358E-02
NP240	1.962E+02	1.034E+02	5.456E+01	9.105E-02	4.215E-05
PU236	3.157E-02	3.157E-02	3.158E-02	3.161E-02	3.163E-02
PU237	1.881E-03	1.880E-03	1.879E-03	1.867E-03	1.853E-03
PU238	1.439E+02	1.439E+02	1.439E+02	1.441E+02	1.442E+02
PU239	6.373E+00	6.374E+00	6.375E+00	6.387E+00	6.399E+00
PU240	1.270E+01	1.270E+01	1.270E+01	1.270E+01	1.270E+01
PU241	2.460E+00	2.460E+00	2.460E+00	2.460E+00	2.460E+00
PU242	4.535E-02	4.535E-02	4.535E-02	4.535E-02	4.535E-02
PU243	4.444E+02	3.864E+02	3.359E+02	8.294E+01	1.548E+01
PU245	5.870E-03	5.498E-03	5.150E-03	2.678E-03	1.222E-03
AM240	2.053E-03	2.025E-03	1.997E-03	1.743E-03	1.479E-03
AM241	3.254E+00	3.255E+00	3.255E+00	3.260E+00	3.266E+00
AM242M	5.229E-03	5.229E-03	5.229E-03	5.229E-03	5.229E-03
AM242	6.381E+01	6.111E+01	5.852E+01	3.797E+01	2.260E+01
AM243	8.671E-01	8.673E-01	8.674E-01	8.679E-01	8.681E-01
AM244M	6.351E+02	1.283E+02	2.591E+01	2.929E-06	1.350E-14
AM244	5.771E+01	5.389E+01	5.031E+01	2.533E+01	1.112E+01
AM245	4.593E-03	4.549E-03	4.437E-03	2.584E-03	1.188E-03
AM246	7.474E-06	7.464E-06	7.446E-06	7.251E-06	7.023E-06
CM241	8.645E-05	8.638E-05	8.631E-05	8.562E-05	8.480E-05
CM242	1.466E+03	1.466E+03	1.466E+03	1.466E+03	1.464E+03
CM243	1.181E+00	1.181E+00	1.181E+00	1.181E+00	1.181E+00
CM244	2.391E+02	2.392E+02	2.392E+02	2.392E+02	2.392E+02

OUTPUT UNIT =
6 PAGE 166
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
CM245	2.796E-02	2.796E-02	2.796E-02	2.796E-02
CM246	9.895E-03	9.895E-03	9.895E-03	9.895E-03
CM249	6.227E-04	3.256E-04	1.703E-04	2.607E-07	1.136E-09
BK249	3.072E-05	3.073E-05	3.074E-05	3.072E-05	3.069E-05
BK250	1.118E-03	9.017E-04	7.271E-04	8.462E-05	6.416E-06
CF250	2.446E-05	2.449E-05	2.452E-05	2.461E-05	2.462E-05
CF252	1.082E-04	1.082E-04	1.082E-04	1.081E-04	1.081E-04
CF254	3.709E-06	3.707E-06	3.705E-06	3.688E-06	3.667E-06
SUMTOT	7.035E+04	4.184E+04	3.655E+04	3.146E+04	2.743E+04
TOTAL	7.035E+04	4.184E+04	3.655E+04	3.146E+04	2.743E+04

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
TL	3.613E-05	3.614E-05	3.712E-05	3.612E-05	3.784E-05
PB	8.138E-06	8.138E-06	8.138E-06	8.134E-06	8.131E-06
BI	7.269E-05	7.272E-05	7.273E-05	7.267E-05	7.614E-05
PO	3.201E-04	3.201E-04	3.202E-04	3.200E-04	3.268E-04
RN	1.623E-04	1.623E-04	1.623E-04	1.622E-04	1.621E-04
RA	1.467E-04	1.467E-04	1.467E-04	1.466E-04	1.466E-04
TH	6.491E-04	5.880E-04	5.702E-04	4.812E-04	4.031E-04
PA	5.897E-03	5.759E-03	5.660E-03	4.802E-03	4.022E-03
U	3.478E+04	7.191E+03	2.472E+03	1.439E+03	1.367E+03
NP	3.249E+04	3.215E+04	3.173E+04	2.800E+04	2.414E+04
PU	6.099E+02	5.519E+02	5.015E+02	2.486E+02	1.814E+02
AM	7.608E+02	2.474E+02	1.389E+02	6.744E+01	3.786E+01
CM	1.706E+03	1.706E+03	1.706E+03	1.706E+03	1.705E+03
BK	1.149E-03	9.327E-04	7.580E-04	1.153E-04	3.710E-05
CF	1.374E-04	1.374E-04	1.374E-04	1.375E-04	1.374E-04
SUMTOT	7.035E+04	4.184E+04	3.655E+04	3.146E+04	2.743E+04

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TOTAL      7.035E+04 4.184E+04 3.655E+04 3.146E+04 2.743E+04

                                          CUMULATIVE TABLE TOTALS

AP+FP      1.612E+03 1.478E+03 1.397E+03 9.922E+02 7.829E+02
ACT+FP     7.035E+04 4.184E+04 3.655E+04 3.146E+04 2.743E+04
AP+ACT+FP  7.196E+04 4.332E+04 3.795E+04 3.245E+04 2.821E+04
□
         OUTPUT UNIT =
6                          PAGE  168
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U235      2.568E+02 2.568E+02 2.568E+02 2.568E+02 2.568E+02
 U236      5.580E+01 5.580E+01 5.580E+01 5.580E+01 5.580E+01
 U238      1.021E+03 1.021E+03 1.021E+03 1.021E+03 1.021E+03
NP237      3.891E+01 3.892E+01 3.892E+01 3.895E+01 3.899E+01
PU238      1.862E+01 1.862E+01 1.862E+01 1.864E+01 1.866E+01
PU239      1.314E+03 1.314E+03 1.314E+03 1.316E+03 1.319E+03
PU240      9.616E+02 9.616E+02 9.616E+02 9.616E+02 9.616E+02
PU241      2.597E+02 2.597E+02 2.597E+02 2.596E+02 2.596E+02
PU242      3.335E+01 3.335E+01 3.335E+01 3.335E+01 3.335E+01
AM241      7.477E+00 7.478E+00 7.479E+00 7.490E+00 7.503E+00
AM243      1.646E+01 1.646E+01 1.647E+01 1.648E+01 1.648E+01
SUMTOT     3.984E+03 3.984E+03 3.984E+03 3.987E+03 3.989E+03

TOTAL      3.997E+03 3.997E+03 3.997E+03 3.999E+03 4.002E+03
□
         OUTPUT UNIT =
6                          PAGE  169
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	1.338E+03	1.338E+03	1.338E+03	1.338E+03	1.338E+03
NP	4.128E+01	4.126E+01	4.124E+01	4.099E+01	4.074E+01
PU	2.587E+03	2.587E+03	2.587E+03	2.590E+03	2.592E+03
AM	2.545E+01	2.545E+01	2.545E+01	2.546E+01	2.547E+01
CM	4.896E+00	4.896E+00	4.896E+00	4.896E+00	4.896E+00
SUMTOT	3.997E+03	3.997E+03	3.997E+03	3.999E+03	4.002E+03
TOTAL	3.997E+03	3.997E+03	3.997E+03	3.999E+03	4.002E+03

CUMULATIVE TABLE TOTALS

AP+FP	1.359E+02	1.359E+02	1.359E+02	1.359E+02	1.359E+02
ACT+FP	3.997E+03	3.997E+03	3.997E+03	3.999E+03	4.002E+03
AP+ACT+FP	4.133E+03	4.133E+03	4.133E+03	4.135E+03	4.137E+03

OUTPUT UNIT =
6 PAGE 170
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW
D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	6.424E-02	6.424E-02	6.424E-02	6.420E-02	6.417E-02
U236	1.396E-02	1.396E-02	1.396E-02	1.395E-02	1.394E-02
U238	2.555E-01	2.555E-01	2.555E-01	2.554E-01	2.552E-01
NP237	9.736E-03	9.736E-03	9.736E-03	9.739E-03	9.743E-03
PU238	4.658E-03	4.658E-03	4.659E-03	4.661E-03	4.664E-03

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PU239      3.287E-01 3.287E-01 3.287E-01 3.292E-01 3.296E-01
PU240      2.406E-01 2.406E-01 2.406E-01 2.404E-01 2.403E-01
PU241      6.497E-02 6.496E-02 6.496E-02 6.492E-02 6.488E-02
PU242      8.343E-03 8.342E-03 8.342E-03 8.338E-03 8.333E-03
AM241      1.871E-03 1.871E-03 1.871E-03 1.873E-03 1.875E-03
AM243      4.118E-03 4.119E-03 4.119E-03 4.119E-03 4.118E-03
SUMTOT     9.967E-01 9.967E-01 9.967E-01 9.968E-01 9.969E-01

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE  171
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 U         3.349E-01 3.348E-01 3.348E-01 3.346E-01 3.344E-01
NP         1.033E-02 1.032E-02 1.032E-02 1.025E-02 1.018E-02
PU         6.472E-01 6.472E-01 6.473E-01 6.475E-01 6.478E-01
AM         6.367E-03 6.366E-03 6.366E-03 6.366E-03 6.365E-03
CM         1.225E-03 1.225E-03 1.225E-03 1.224E-03 1.224E-03
SUMTOT     1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00

TOTAL      1.000E+00 1.000E+00 1.000E+00 1.000E+00 1.000E+00
□
         OUTPUT UNIT =
6                          PAGE  172
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	2.077E+02	2.077E+02	2.077E+02	2.077E+02	2.077E+02
U238	1.034E+02	1.034E+02	1.034E+02	1.034E+02	1.034E+02
PU238	1.359E+00	1.359E+00	1.360E+00	1.361E+00	1.362E+00
PU239	8.314E+02	8.315E+02	8.317E+02	8.332E+02	8.348E+02
PU240	2.691E+00	2.691E+00	2.691E+00	2.691E+00	2.691E+00
PU241	1.949E+02	1.949E+02	1.949E+02	1.949E+02	1.949E+02
CM245	1.509E+00	1.509E+00	1.509E+00	1.509E+00	1.509E+00
SUMTOT	1.343E+03	1.343E+03	1.343E+03	1.345E+03	1.346E+03
TOTAL	1.348E+03	1.348E+03	1.348E+03	1.350E+03	1.351E+03

OUTPUT UNIT =
6 PAGE 173
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW
D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	3.125E+02	3.125E+02	3.125E+02	3.125E+02	3.125E+02
PU	1.031E+03	1.031E+03	1.031E+03	1.033E+03	1.034E+03
AM	1.465E+00	1.462E+00	1.461E+00	1.452E+00	1.446E+00
CM	1.809E+00	1.809E+00	1.809E+00	1.809E+00	1.809E+00
SUMTOT	1.347E+03	1.347E+03	1.347E+03	1.348E+03	1.350E+03
TOTAL	1.348E+03	1.348E+03	1.348E+03	1.350E+03	1.351E+03

CUMULATIVE TABLE TOTALS

AP+FP	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ACT+FP	1.348E+03	1.348E+03	1.348E+03	1.350E+03	1.351E+03
AP+ACT+FP	1.348E+03	1.348E+03	1.348E+03	1.350E+03	1.351E+03

OUTPUT UNIT =
6 PAGE 174
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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 FISSIONS PER SECOND
17X17 PWR ASSEMBLY, 4.236% UO2, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
U235	1.541E-01	1.541E-01	1.541E-01	1.539E-01	1.537E-01
U238	7.672E-02	7.672E-02	7.671E-02	7.663E-02	7.654E-02
PU238	1.008E-03	1.008E-03	1.008E-03	1.008E-03	1.008E-03
PU239	6.168E-01	6.169E-01	6.169E-01	6.174E-01	6.179E-01
PU240	1.996E-03	1.996E-03	1.996E-03	1.994E-03	1.992E-03
PU241	1.446E-01	1.446E-01	1.446E-01	1.444E-01	1.442E-01
CM245	1.120E-03	1.120E-03	1.120E-03	1.118E-03	1.117E-03
SUMTOT	9.964E-01	9.964E-01	9.964E-01	9.964E-01	9.965E-01
TOTAL	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT =
6 PAGE 175
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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 FISSIONS PER SECOND
17X17 PWR ASSEMBLY, 4.236% UO2, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
U	2.319E-01	2.318E-01	2.318E-01	2.316E-01	2.313E-01
PU	7.647E-01	7.648E-01	7.648E-01	7.651E-01	7.654E-01
AM	1.087E-03	1.085E-03	1.083E-03	1.076E-03	1.070E-03

CM	1.342E-03	1.342E-03	1.342E-03	1.341E-03	1.339E-03
SUMTOT	9.990E-01	9.990E-01	9.990E-01	9.991E-01	9.992E-01
TOTAL	1.000E+00	1.000E+00	1.000E+00	1.000E+00	1.000E+00

OUTPUT UNIT = 6 PAGE 176
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
PU238	4.342E+03	4.342E+03	4.343E+03	4.347E+03	4.352E+03
PU239	2.068E+02	2.068E+02	2.069E+02	2.072E+02	2.076E+02
PU240	4.080E+02	4.080E+02	4.080E+02	4.080E+02	4.080E+02
AM241	9.797E+01	9.799E+01	9.800E+01	9.815E+01	9.832E+01
CM242	3.979E+04	3.979E+04	3.979E+04	3.978E+04	3.974E+04
CM244	6.837E+03	6.837E+03	6.837E+03	6.837E+03	6.837E+03
SUMTOT	5.168E+04	5.168E+04	5.168E+04	5.168E+04	5.164E+04
TOTAL	5.174E+04	5.174E+04	5.175E+04	5.174E+04	5.171E+04

OUTPUT UNIT = 6 PAGE 177
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR

```
PU          4.961E+03 4.961E+03 4.962E+03 4.967E+03 4.972E+03
AM          1.250E+02 1.250E+02 1.250E+02 1.252E+02 1.254E+02
CM          4.666E+04 4.666E+04 4.666E+04 4.665E+04 4.661E+04
SUMTOT      5.174E+04 5.174E+04 5.174E+04 5.174E+04 5.171E+04

TOTAL       5.174E+04 5.174E+04 5.175E+04 5.174E+04 5.171E+04

                                          CUMULATIVE TABLE TOTALS

AP+FP       0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ACT+FP      5.174E+04 5.174E+04 5.175E+04 5.174E+04 5.171E+04
AP+ACT+FP   5.174E+04 5.174E+04 5.175E+04 5.174E+04 5.171E+04
□
         OUTPUT UNIT =
6                          PAGE  178
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3      4.527E-02 4.527E-02 4.527E-02 4.526E-02 4.526E-02
LI  6      9.963E-05 9.963E-05 9.963E-05 9.963E-05 9.963E-05
LI  7      8.202E-06 8.202E-06 8.202E-06 8.202E-06 8.202E-06
BE  9      1.577E-05 1.577E-05 1.577E-05 1.577E-05 1.577E-05
BE 10      1.054E-04 1.054E-04 1.054E-04 1.054E-04 1.054E-04
 C 14      2.130E-05 2.130E-05 2.130E-05 2.130E-05 2.130E-05
ZN 68      1.172E-03 1.172E-03 1.172E-03 1.172E-03 1.172E-03
GA 69      3.991E-06 3.991E-06 3.991E-06 3.991E-06 3.991E-06
ZN 70      4.193E-03 4.193E-03 4.193E-03 4.193E-03 4.193E-03
ZN 72      4.349E-05 4.285E-05 4.221E-05 3.637E-05 3.041E-05
GA 72      1.323E-05 1.323E-05 1.321E-05 1.267E-05 1.148E-05
GE 72      1.813E-02 1.813E-02 1.813E-02 1.814E-02 1.815E-02
GA 73      8.686E-06 7.547E-06 6.548E-06 1.582E-06 2.878E-07
GE 73      3.558E-02 3.558E-02 3.558E-02 3.559E-02 3.559E-02
GE 74      7.989E-02 7.989E-02 7.989E-02 7.989E-02 7.989E-02
GE 75      9.503E-06 5.895E-06 3.567E-06 2.349E-08 5.675E-11
AS 75      1.574E-01 1.574E-01 1.575E-01 1.575E-01 1.575E-01
GE 76      3.946E-01 3.946E-01 3.946E-01 3.946E-01 3.946E-01
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AS 76	2.341E-05	2.280E-05	2.221E-05	1.706E-05	1.244E-05
SE 76	8.162E-03	8.162E-03	8.163E-03	8.168E-03	8.173E-03
GE 77	1.304E-04	1.227E-04	1.154E-04	6.249E-05	2.993E-05
AS 77	1.205E-03	1.191E-03	1.177E-03	1.033E-03	8.625E-04
SE 77	7.794E-01	7.794E-01	7.794E-01	7.796E-01	7.798E-01
GE 78	1.047E-04	6.494E-05	4.026E-05	3.379E-07	1.091E-09
AS 78	1.130E-04	1.028E-04	8.440E-05	2.645E-06	1.783E-08
SE 78	1.967E+00	1.967E+00	1.967E+00	1.967E+00	1.967E+00
AS 79	2.637E-05	2.793E-07	2.749E-09	2.347E-29	0.000E+00
SE 79	4.678E+00	4.678E+00	4.678E+00	4.678E+00	4.678E+00
SE 79M	1.146E-05	2.124E-07	2.098E-09	1.787E-29	0.000E+00
BR 79	1.185E-04	1.185E-04	1.185E-04	1.185E-04	1.186E-04
SE 80	1.061E+01	1.061E+01	1.061E+01	1.061E+01	1.061E+01
KR 80	2.015E-04	2.015E-04	2.015E-04	2.015E-04	2.015E-04
AS 81	5.175E-06	8.802E-40	0.000E+00	0.000E+00	0.000E+00
SE 81	1.956E-04	2.413E-05	3.912E-06	1.229E-09	2.028E-13
SE 81M	1.562E-05	7.561E-06	3.659E-06	2.578E-09	4.252E-13
BR 81	1.646E+01	1.646E+01	1.646E+01	1.646E+01	1.646E+01
KR 81	2.801E-05	2.801E-05	2.801E-05	2.801E-05	2.801E-05
SE 82	2.633E+01	2.633E+01	2.633E+01	2.633E+01	2.633E+01
BR 82	4.801E-03	4.713E-03	4.621E-03	3.798E-03	3.000E-03
BR 82M	5.398E-06	6.106E-09	6.928E-12	0.000E+00	0.000E+00
KR 82	1.298E+00	1.299E+00	1.299E+00	1.299E+00	1.300E+00
AS 83	2.961E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	2.091E-04	3.310E-05	5.213E-06	4.894E-14	1.139E-23
SE 83M	1.534E-05	5.862E-21	1.934E-36	0.000E+00	0.000E+00
BR 83	3.314E-03	2.640E-03	1.998E-03	1.103E-04	3.396E-06
KR 83	2.730E+01	2.730E+01	2.730E+01	2.731E+01	2.731E+01
KR 83M	2.557E-03	2.468E-03	2.242E-03	2.627E-04	1.006E-05
SE 84	1.208E-04	4.103E-10	1.380E-15	0.000E+00	0.000E+00
BR 84	1.221E-03	3.669E-04	9.922E-05	2.074E-10	3.170E-17
BR 84M	1.094E-05	1.068E-08	1.043E-11	0.000E+00	0.000E+00
KR 84	9.255E+01	9.255E+01	9.255E+01	9.255E+01	9.255E+01

OUTPUT UNIT =
6 PAGE 179
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SE 85	1.316E-05	2.177E-33	0.000E+00	0.000E+00	0.000E+00
SE 85M	4.822E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	1.313E-04	7.708E-11	3.858E-17	0.000E+00	0.000E+00
KR 85	1.728E+01	1.728E+01	1.728E+01	1.728E+01	1.728E+01
KR 85M	1.252E-02	1.086E-02	9.301E-03	1.980E-03	3.093E-04
RB 85	7.617E+01	7.617E+01	7.617E+01	7.618E+01	7.618E+01
SE 86	1.053E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	2.925E-05	7.285E-25	0.000E+00	0.000E+00	0.000E+00
KR 86	1.457E+02	1.457E+02	1.457E+02	1.457E+02	1.457E+02
RB 86	2.501E-02	2.497E-02	2.493E-02	2.455E-02	2.410E-02
SR 86	6.006E-01	6.006E-01	6.007E-01	6.010E-01	6.015E-01
SE 87	3.063E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 87	6.842E-05	2.723E-24	1.219E-43	0.000E+00	0.000E+00
KR 87	6.679E-03	3.914E-03	2.269E-03	9.742E-06	1.405E-08
RB 87	1.865E+02	1.865E+02	1.865E+02	1.865E+02	1.865E+02
SR 87	5.924E-03	5.924E-03	5.925E-03	5.925E-03	5.925E-03
BR 88	2.019E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	2.113E-02	1.657E-02	1.298E-02	1.129E-03	6.031E-05
RB 88	2.261E-03	1.913E-03	1.513E-03	1.318E-04	7.038E-06
SR 88	2.676E+02	2.676E+02	2.676E+02	2.676E+02	2.676E+02
BR 89	3.634E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	4.677E-04	9.435E-10	1.892E-15	0.000E+00	0.000E+00
RB 89	2.463E-03	1.982E-04	1.285E-05	1.683E-17	9.265E-32
SR 89	1.238E+01	1.238E+01	1.237E+01	1.230E+01	1.221E+01
Y 89	3.353E+02	3.353E+02	3.353E+02	3.354E+02	3.355E+02
KR 90	7.892E-05	2.348E-38	0.000E+00	0.000E+00	0.000E+00
RB 90	3.976E-04	7.955E-10	4.596E-14	0.000E+00	0.000E+00
RB 90M	1.735E-04	1.163E-08	7.334E-13	0.000E+00	0.000E+00
SR 90	3.963E+02	3.963E+02	3.963E+02	3.963E+02	3.963E+02
Y 90	1.054E-01	1.053E-01	1.052E-01	1.046E-01	1.040E-01
ZR 90	2.715E+01	2.715E+01	2.715E+01	2.716E+01	2.718E+01
KR 91	1.596E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	1.988E-04	5.218E-23	1.250E-41	0.000E+00	0.000E+00
SR 91	1.285E-01	1.196E-01	1.112E-01	5.362E-02	2.234E-02
Y 91	1.983E+01	1.983E+01	1.983E+01	1.979E+01	1.971E+01
Y 91M	6.507E-03	6.360E-03	6.047E-03	2.973E-03	1.238E-03
ZR 91	4.326E+02	4.326E+02	4.326E+02	4.327E+02	4.329E+02
RB 92	1.384E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 92	4.184E-02	3.241E-02	2.510E-02	1.944E-03	9.033E-05
Y 92	5.498E-02	5.375E-02	5.080E-02	1.398E-02	1.738E-03
ZR 92	4.967E+02	4.967E+02	4.967E+02	4.968E+02	4.968E+02
RB 93	1.395E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 93	2.308E-03	9.072E-06	3.545E-08	0.000E+00	0.000E+00
Y 93	1.923E-01	1.818E-01	1.697E-01	8.545E-02	3.750E-02
ZR 93	5.559E+02	5.559E+02	5.559E+02	5.560E+02	5.561E+02
NB 93	9.232E-05	9.233E-05	9.233E-05	9.238E-05	9.244E-05

NB 93M	5.749E-04	5.749E-04	5.749E-04	5.752E-04	5.755E-04
RB 94	3.524E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 94	3.753E-04	1.752E-18	8.104E-33	0.000E+00	0.000E+00
Y 94	6.354E-03	7.661E-04	8.682E-05	3.035E-14	1.363E-25
ZR 94	5.922E+02	5.922E+02	5.922E+02	5.922E+02	5.922E+02

OUTPUT UNIT =
6 PAGE 180
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
NB 94	6.540E-04	6.540E-04	6.540E-04	6.540E-04	6.540E-04
SR 95	1.211E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	3.898E-03	7.665E-05	1.460E-06	9.176E-24	0.000E+00
ZR 95	3.561E+01	3.560E+01	3.558E+01	3.542E+01	3.523E+01
NB 95	1.964E+01	1.964E+01	1.964E+01	1.963E+01	1.963E+01
NB 95M	1.436E-02	1.436E-02	1.436E-02	1.433E-02	1.430E-02
MO 95	5.163E+02	5.163E+02	5.163E+02	5.165E+02	5.167E+02
SR 96	1.302E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	8.228E-04	1.173E-11	1.646E-19	0.000E+00	0.000E+00
ZR 96	6.359E+02	6.359E+02	6.359E+02	6.359E+02	6.359E+02
NB 96	1.482E-03	1.438E-03	1.396E-03	1.038E-03	7.266E-04
MO 96	5.643E+01	5.643E+01	5.643E+01	5.643E+01	5.643E+01
Y 97	5.814E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	4.198E-01	4.030E-01	3.868E-01	2.567E-01	1.569E-01
NB 97	3.018E-02	2.969E-02	2.890E-02	1.961E-02	1.123E-02
NB 97M	3.928E-04	3.764E-04	3.613E-04	2.398E-04	1.466E-04
MO 97	6.326E+02	6.326E+02	6.326E+02	6.328E+02	6.329E+02
ZR 98	2.194E-04	2.435E-39	0.000E+00	0.000E+00	0.000E+00
NB 98	2.024E-05	2.418E-40	0.000E+00	0.000E+00	0.000E+00
NB 98M	2.666E-04	1.189E-04	5.302E-05	1.649E-08	1.020E-12
MO 98	6.528E+02	6.528E+02	6.528E+02	6.528E+02	6.528E+02
TC 98	7.269E-03	7.269E-03	7.269E-03	7.269E-03	7.269E-03
ZR 99	1.699E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	1.061E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	5.364E-05	6.062E-12	6.852E-19	0.000E+00	0.000E+00
MO 99	1.992E+00	1.972E+00	1.951E+00	1.757E+00	1.549E+00

TC 99	5.729E+02	5.729E+02	5.730E+02	5.732E+02	5.734E+02
TC 99M	1.591E-01	1.590E-01	1.587E-01	1.503E-01	1.351E-01
RU 99	4.453E-03	4.454E-03	4.454E-03	4.456E-03	4.458E-03
ZR100	4.653E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	1.016E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	1.020E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO100	7.546E+02	7.546E+02	7.546E+02	7.546E+02	7.546E+02
TC100	5.946E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU100	1.469E+02	1.469E+02	1.469E+02	1.469E+02	1.469E+02
ZR101	1.381E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB101	4.988E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	6.810E-03	3.998E-04	2.325E-05	1.029E-17	1.539E-32
TC101	6.617E-03	1.445E-03	1.407E-04	2.247E-16	4.532E-31
RU101	6.109E+02	6.109E+02	6.109E+02	6.109E+02	6.109E+02
ZR102	6.990E-05	1.001E-42	0.000E+00	0.000E+00	0.000E+00
NB102	1.874E-05	1.429E-43	0.000E+00	0.000E+00	0.000E+00
MO102	5.118E-03	1.229E-04	2.900E-06	1.551E-22	4.574E-42
TC102	4.063E-05	9.824E-07	2.318E-08	1.239E-24	0.000E+00
TC102M	2.811E-06	1.980E-10	1.395E-14	0.000E+00	0.000E+00
RU102	6.621E+02	6.621E+02	6.621E+02	6.621E+02	6.621E+02
RH102	9.508E-04	9.508E-04	9.507E-04	9.505E-04	9.502E-04
NB103	7.122E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	4.727E-04	4.956E-22	4.298E-40	0.000E+00	0.000E+00
TC103	4.009E-04	2.478E-21	2.150E-39	0.000E+00	0.000E+00
RU103	2.741E+01	2.739E+01	2.737E+01	2.717E+01	2.694E+01

OUTPUT UNIT =
6 PAGE 181
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
RH103	2.565E+02	2.565E+02	2.565E+02	2.567E+02	2.570E+02
RH103M	2.449E-02	2.449E-02	2.448E-02	2.432E-02	2.409E-02
MO104	6.360E-04	3.289E-15	1.692E-26	0.000E+00	0.000E+00
TC104	7.779E-03	8.629E-04	8.781E-05	1.046E-14	1.290E-26
RU104	4.730E+02	4.730E+02	4.730E+02	4.730E+02	4.730E+02
RH104	2.969E-04	1.597E-09	1.100E-13	0.000E+00	0.000E+00

RH104M	1.196E-04	8.243E-09	5.680E-13	0.000E+00	0.000E+00
PD104	2.982E+02	2.982E+02	2.982E+02	2.982E+02	2.982E+02
MO105	2.640E-04	2.267E-24	0.000E+00	0.000E+00	0.000E+00
TC105	2.928E-03	1.783E-05	9.849E-08	0.000E+00	0.000E+00
RU105	9.998E-02	8.836E-02	7.560E-02	1.586E-02	2.435E-03
RH105	7.179E-01	7.187E-01	7.174E-01	6.426E-01	5.195E-01
RH105M	7.884E-05	6.986E-05	5.978E-05	1.254E-05	1.926E-06
PD105	3.282E+02	3.282E+02	3.282E+02	3.284E+02	3.285E+02
MO106	2.431E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	1.649E-04	1.012E-33	0.000E+00	0.000E+00	0.000E+00
RU106	1.138E+02	1.137E+02	1.137E+02	1.136E+02	1.135E+02
RH106	1.198E-04	1.069E-04	1.069E-04	1.068E-04	1.067E-04
RH106M	1.555E-03	1.135E-03	8.279E-04	3.545E-05	8.085E-07
PD106	2.290E+02	2.290E+02	2.291E+02	2.291E+02	2.293E+02
MO107	6.349E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	7.240E-05	3.449E-42	0.000E+00	0.000E+00	0.000E+00
RU107	9.758E-04	5.333E-08	2.670E-12	0.000E+00	0.000E+00
RH107	5.068E-03	9.398E-04	1.383E-04	6.566E-13	6.749E-23
PD107	2.011E+02	2.011E+02	2.011E+02	2.011E+02	2.011E+02
AG107	3.537E-05	3.537E-05	3.537E-05	3.540E-05	3.543E-05
TC108	7.672E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU108	7.327E-04	7.179E-08	6.956E-12	0.000E+00	0.000E+00
RH108	4.603E-05	4.763E-09	4.615E-13	0.000E+00	0.000E+00
RH108M	9.312E-06	8.085E-09	7.021E-12	0.000E+00	0.000E+00
PD108	1.382E+02	1.382E+02	1.382E+02	1.382E+02	1.382E+02
CD108	4.870E-04	4.870E-04	4.870E-04	4.870E-04	4.870E-04
TC109	3.519E-05	1.988E-26	0.000E+00	0.000E+00	0.000E+00
RU109	5.920E-05	4.350E-26	0.000E+00	0.000E+00	0.000E+00
RH109	1.586E-04	5.746E-16	5.226E-28	0.000E+00	0.000E+00
RH109M	4.407E-05	9.919E-25	0.000E+00	0.000E+00	0.000E+00
PD109	1.197E-01	1.144E-01	1.086E-01	6.490E-02	3.499E-02
PD109M	2.511E-04	7.076E-08	9.970E-12	0.000E+00	0.000E+00
AG109	5.926E+01	5.926E+01	5.927E+01	5.931E+01	5.934E+01
AG109M	9.780E-05	9.348E-05	8.878E-05	5.305E-05	2.860E-05
RU110	1.181E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	2.309E-05	2.158E-42	0.000E+00	0.000E+00	0.000E+00
PD110	4.632E+01	4.632E+01	4.632E+01	4.632E+01	4.632E+01
AG110	4.018E-05	1.542E-08	1.542E-08	1.540E-08	1.538E-08
AG110M	1.018E+00	1.018E+00	1.018E+00	1.016E+00	1.015E+00
CD110	5.271E+01	5.271E+01	5.271E+01	5.272E+01	5.272E+01
RU111	4.932E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	2.763E-05	2.153E-22	1.353E-39	0.000E+00	0.000E+00
PD111	6.012E-04	1.012E-04	1.993E-05	1.590E-06	3.504E-07
PD111M	1.484E-04	1.309E-04	1.154E-04	3.273E-05	7.214E-06
AG111	2.996E-01	2.990E-01	2.979E-01	2.867E-01	2.737E-01

OUTPUT UNIT = 6 PAGE 182

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
AG111M	2.979E-05	5.329E-06	1.134E-06	1.122E-07	2.472E-08
CD111	2.582E+01	2.582E+01	2.583E+01	2.584E+01	2.585E+01
PD112	1.686E-02	1.629E-02	1.574E-02	1.115E-02	7.369E-03
AG112	2.636E-03	2.625E-03	2.599E-03	2.023E-03	1.357E-03
CD112	1.539E+01	1.539E+01	1.539E+01	1.540E+01	1.540E+01
PD113	1.644E-05	1.527E-17	1.389E-29	0.000E+00	0.000E+00
AG113	3.142E-03	2.770E-03	2.431E-03	6.573E-04	1.368E-04
CD113	8.585E-02	8.623E-02	8.657E-02	8.832E-02	8.883E-02
CD113M	2.666E-01	2.666E-01	2.666E-01	2.666E-01	2.666E-01
IN113	1.832E-02	1.832E-02	1.832E-02	1.834E-02	1.836E-02
PD114	1.785E-05	5.414E-13	1.613E-20	0.000E+00	0.000E+00
CD114	1.946E+01	1.946E+01	1.946E+01	1.946E+01	1.946E+01
IN114M	2.389E-04	2.387E-04	2.386E-04	2.372E-04	2.355E-04
SN114	3.451E-03	3.451E-03	3.452E-03	3.453E-03	3.454E-03
PD115	4.495E-06	1.506E-34	0.000E+00	0.000E+00	0.000E+00
AG115	1.064E-04	1.377E-05	1.721E-06	1.603E-15	2.332E-26
CD115	2.339E-02	2.318E-02	2.289E-02	2.011E-02	1.721E-02
CD115M	4.421E-02	4.418E-02	4.415E-02	4.387E-02	4.353E-02
IN115	1.104E+00	1.104E+00	1.104E+00	1.108E+00	1.111E+00
IN115M	1.884E-03	1.883E-03	1.878E-03	1.734E-03	1.502E-03
SN115	2.682E-01	2.682E-01	2.682E-01	2.683E-01	2.685E-01
AG116	7.984E-06	1.581E-12	2.881E-19	0.000E+00	0.000E+00
CD116	6.918E+00	6.918E+00	6.918E+00	6.918E+00	6.918E+00
IN116M	1.753E-04	8.133E-05	3.773E-05	1.743E-08	1.732E-12
SN116	7.161E+00	7.161E+00	7.161E+00	7.161E+00	7.161E+00
AG117	3.588E-06	5.965E-21	9.351E-36	0.000E+00	0.000E+00
CD117	6.119E-04	4.712E-04	3.609E-04	2.510E-05	1.024E-06
CD117M	4.335E-04	3.544E-04	2.890E-04	3.763E-05	3.259E-06
IN117	1.592E-04	1.539E-04	1.412E-04	2.059E-05	1.425E-06
IN117M	5.335E-04	5.143E-04	4.694E-04	7.134E-05	4.440E-06
SN117	6.972E+00	6.972E+00	6.972E+00	6.973E+00	6.973E+00
SN117M	1.576E-03	1.573E-03	1.570E-03	1.538E-03	1.500E-03
CD118	2.996E-04	1.313E-04	5.745E-05	1.474E-08	7.235E-13
SN118	7.061E+00	7.061E+00	7.061E+00	7.061E+00	7.061E+00

CD119	2.825E-05	3.423E-07	4.102E-09	2.502E-28	0.000E+00
CD119M	9.616E-06	2.260E-11	5.126E-17	0.000E+00	0.000E+00
IN119	4.324E-06	1.105E-07	1.153E-08	1.078E-18	9.807E-31
IN119M	8.116E-05	1.387E-05	1.438E-06	1.337E-16	1.216E-28
SN119	6.997E+00	6.997E+00	6.997E+00	6.997E+00	6.997E+00
SN119M	3.703E-02	3.703E-02	3.702E-02	3.698E-02	3.693E-02
CD120	5.033E-06	2.415E-27	0.000E+00	0.000E+00	0.000E+00
SN120	7.158E+00	7.158E+00	7.158E+00	7.158E+00	7.158E+00
IN121M	4.141E-06	1.486E-11	4.996E-17	0.000E+00	0.000E+00
SN121	1.017E-02	9.915E-03	9.662E-03	7.460E-03	5.470E-03
SN121M	3.033E-03	3.033E-03	3.033E-03	3.033E-03	3.033E-03
SB121	6.516E+00	6.516E+00	6.516E+00	6.519E+00	6.521E+00
SN122	7.848E+00	7.848E+00	7.848E+00	7.848E+00	7.848E+00
SB122	6.100E-03	6.035E-03	5.971E-03	5.365E-03	4.719E-03
TE122	8.499E-01	8.500E-01	8.500E-01	8.506E-01	8.512E-01
SN123	2.574E-01	2.574E-01	2.573E-01	2.567E-01	2.560E-01
SN123M	2.413E-04	8.622E-05	3.055E-05	9.527E-10	3.730E-15

OUTPUT UNIT =
6 PAGE 183
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SB123	7.983E+00	7.983E+00	7.984E+00	7.984E+00
TE123	1.265E-02	1.265E-02	1.266E-02	1.267E-02
TE123M	3.636E-03	3.635E-03	3.626E-03	3.615E-03
SN124	1.053E+01	1.053E+01	1.053E+01	1.053E+01
SB124	9.158E-02	9.154E-02	9.105E-02	9.053E-02
TE124	5.945E-01	5.946E-01	5.950E-01	5.955E-01
SN125	7.609E-02	7.563E-02	7.340E-02	7.081E-02
SN125M	8.439E-05	1.081E-06	1.370E-08	1.460E-27
SB125	1.004E+01	1.004E+01	1.004E+01	1.004E+01
TE125	5.782E+00	5.783E+00	5.786E+00	5.789E+00
TE125M	1.245E-01	1.245E-01	1.245E-01	1.246E-01
SN126	2.330E+01	2.330E+01	2.330E+01	2.330E+01
SB126	1.055E-02	1.052E-02	1.050E-02	1.026E-02	9.974E-03
SB126M	4.065E-06	4.629E-07	5.934E-08	8.416E-09	8.416E-09

TE126	7.903E-01	7.903E-01	7.903E-01	7.906E-01	7.908E-01
SN127	3.450E-03	2.481E-03	1.783E-03	6.573E-05	1.252E-06
SN127M	5.432E-05	2.318E-09	9.893E-14	0.000E+00	0.000E+00
SB127	2.407E-01	2.399E-01	2.388E-01	2.231E-01	2.040E-01
TE127	2.409E-02	2.409E-02	2.408E-02	2.360E-02	2.240E-02
TE127M	8.870E-01	8.870E-01	8.870E-01	8.871E-01	8.870E-01
I127	4.382E+01	4.382E+01	4.382E+01	4.384E+01	4.386E+01
XE127	3.654E-06	3.651E-06	3.648E-06	3.619E-06	3.585E-06
SN128	3.608E-03	1.783E-03	8.813E-04	7.653E-07	1.623E-10
SB128	3.360E-03	3.111E-03	2.881E-03	1.335E-03	5.303E-04
SB128M	6.997E-04	3.803E-04	1.886E-04	1.638E-07	3.472E-11
TE128	9.260E+01	9.261E+01	9.261E+01	9.261E+01	9.261E+01
I128	2.320E-04	4.391E-05	8.311E-06	4.899E-13	1.034E-21
XE128	4.951E+00	4.951E+00	4.951E+00	4.951E+00	4.951E+00
SN129	3.165E-04	1.237E-06	4.832E-09	0.000E+00	0.000E+00
SN129M	1.119E-04	6.675E-12	3.978E-19	0.000E+00	0.000E+00
SB129	3.202E-02	2.764E-02	2.354E-02	4.731E-03	6.897E-04
TE129	8.475E-03	8.151E-03	7.515E-03	2.327E-03	1.033E-03
TE129M	8.799E-01	8.798E-01	8.796E-01	8.745E-01	8.661E-01
I129	1.437E+02	1.437E+02	1.437E+02	1.437E+02	1.437E+02
XE129	4.634E-02	4.634E-02	4.634E-02	4.634E-02	4.634E-02
XE129M	9.691E-05	9.656E-05	9.621E-05	9.280E-05	8.886E-05
SN130	4.769E-04	6.655E-09	9.286E-14	0.000E+00	0.000E+00
SB130	1.643E-03	5.809E-04	2.054E-04	6.268E-09	2.391E-14
SB130M	1.077E-03	3.028E-06	4.151E-09	0.000E+00	0.000E+00
TE130	2.941E+02	2.941E+02	2.941E+02	2.941E+02	2.941E+02
I130	1.867E-02	1.772E-02	1.675E-02	9.563E-03	4.879E-03
I130M	8.956E-05	8.816E-07	8.677E-09	7.408E-29	0.000E+00
XE130	1.595E+01	1.595E+01	1.595E+01	1.596E+01	1.596E+01
SN131	1.125E-04	7.070E-22	4.443E-39	0.000E+00	0.000E+00
SB131	6.719E-03	1.121E-03	1.838E-04	2.578E-12	9.722E-22
TE131	7.911E-03	3.773E-03	1.284E-03	2.325E-04	1.762E-04
TE131M	9.765E-02	9.581E-02	9.368E-02	7.436E-02	5.636E-02
I131	4.162E+00	4.158E+00	4.149E+00	4.023E+00	3.871E+00
XE131	2.579E+02	2.579E+02	2.580E+02	2.581E+02	2.583E+02
XE131M	6.892E-02	6.892E-02	6.891E-02	6.887E-02	6.875E-02
SN132	3.654E-05	2.952E-32	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW
D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SB132	4.690E-04	1.831E-10	6.489E-17	0.000E+00	0.000E+00
SB132M	4.724E-04	2.365E-08	1.184E-12	0.000E+00	0.000E+00
TE132	2.372E+00	2.352E+00	2.331E+00	2.133E+00	1.918E+00
I132	7.115E-02	7.071E-02	7.023E-02	6.463E-02	5.812E-02
XE132	9.732E+02	9.732E+02	9.732E+02	9.734E+02	9.737E+02
CS132	1.440E-03	1.433E-03	1.427E-03	1.365E-03	1.293E-03
BA132	2.073E-03	2.073E-03	2.073E-03	2.074E-03	2.076E-03
SB133	4.418E-04	1.318E-11	3.928E-19	0.000E+00	0.000E+00
TE133	5.163E-03	4.195E-04	1.176E-04	6.100E-08	7.465E-12
TE133M	1.322E-02	6.244E-03	2.947E-03	1.619E-06	1.981E-10
I133	8.807E-01	8.638E-01	8.390E-01	6.035E-01	4.046E-01
I133M	3.721E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	5.349E+00	5.349E+00	5.348E+00	5.295E+00	5.154E+00
XE133M	7.156E-02	7.146E-02	7.134E-02	6.894E-02	6.413E-02
CS133	7.960E+02	7.960E+02	7.960E+02	7.963E+02	7.967E+02
SB134	6.251E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	5.613E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	2.239E-02	8.284E-03	3.063E-03	1.463E-07	9.548E-13
I134	4.054E-02	2.769E-02	1.594E-02	1.065E-05	8.563E-10
I134M	3.251E-04	4.269E-09	5.607E-14	0.000E+00	0.000E+00
XE134	1.189E+03	1.189E+03	1.189E+03	1.189E+03	1.189E+03
CS134	1.447E+02	1.447E+02	1.447E+02	1.447E+02	1.446E+02
CS134M	5.769E-03	4.543E-03	3.577E-03	3.277E-04	1.861E-05
BA134	7.772E+01	7.772E+01	7.773E+01	7.778E+01	7.785E+01
TE135	9.323E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	2.662E-01	2.397E-01	2.159E-01	7.566E-02	2.150E-02
XE135	8.394E-02	1.040E-01	1.195E-01	1.479E-01	9.161E-02
XE135M	2.281E-03	1.522E-03	1.336E-03	4.671E-04	1.328E-04
CS135	3.047E+02	3.047E+02	3.048E+02	3.049E+02	3.050E+02
CS135M	1.547E-03	7.057E-04	3.220E-04	1.259E-07	1.024E-11
BA135	1.076E+00	1.076E+00	1.077E+00	1.077E+00	1.077E+00
BA135M	2.936E-04	2.866E-04	2.798E-04	2.197E-04	1.644E-04
TE136	5.186E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	4.356E-04	4.429E-17	3.887E-30	0.000E+00	0.000E+00
I136M	1.401E-04	3.868E-28	0.000E+00	0.000E+00	0.000E+00
XE136	1.853E+03	1.853E+03	1.853E+03	1.853E+03	1.853E+03
CS136	7.255E-01	7.239E-01	7.223E-01	7.066E-01	6.881E-01
BA136	2.607E+01	2.607E+01	2.607E+01	2.609E+01	2.611E+01
I137	1.222E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	2.413E-03	4.897E-08	9.420E-13	0.000E+00	0.000E+00
CS137	9.495E+02	9.495E+02	9.495E+02	9.495E+02	9.494E+02
BA137	5.276E+01	5.276E+01	5.276E+01	5.279E+01	5.282E+01

BA137M	1.455E-04	1.453E-04	1.453E-04	1.453E-04	1.452E-04
I138	1.556E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	8.107E-03	4.316E-04	2.293E-05	4.111E-18	2.080E-33
CS138	2.072E-02	8.934E-03	2.626E-03	6.559E-09	1.218E-15
CS138M	9.783E-05	5.785E-11	3.420E-17	0.000E+00	0.000E+00
BA138	1.025E+03	1.025E+03	1.025E+03	1.025E+03	1.025E+03
LA138	3.437E-03	3.437E-03	3.437E-03	3.437E-03	3.437E-03
XE139	2.904E-04	1.074E-31	0.000E+00	0.000E+00	0.000E+00
CS139	5.760E-03	7.279E-05	8.722E-07	5.321E-26	0.000E+00

OUTPUT UNIT =
6 PAGE 185
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA139	5.282E-02	3.601E-02	2.182E-02	1.428E-04	3.422E-07
LA139	9.700E+02	9.701E+02	9.701E+02	9.701E+02	9.701E+02
XE140	6.318E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	5.893E-04	6.917E-21	7.144E-38	0.000E+00	0.000E+00
BA140	1.141E+01	1.139E+01	1.136E+01	1.111E+01	1.081E+01
LA140	1.587E+00	1.585E+00	1.583E+00	1.566E+00	1.541E+00
CE140	9.839E+02	9.839E+02	9.839E+02	9.842E+02	9.845E+02
XE141	2.850E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	1.701E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	1.071E-02	1.118E-03	1.147E-04	1.485E-14	2.024E-26
LA141	1.391E-01	1.253E-01	1.059E-01	1.818E-02	2.191E-03
CE141	2.791E+01	2.791E+01	2.790E+01	2.774E+01	2.746E+01
PR141	8.543E+02	8.543E+02	8.544E+02	8.546E+02	8.549E+02
CS142	6.828E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	5.895E-03	1.211E-04	2.483E-06	3.272E-23	1.990E-43
LA142	5.246E-02	3.762E-02	2.410E-02	2.715E-04	1.246E-06
CE142	9.007E+02	9.008E+02	9.008E+02	9.008E+02	9.008E+02
PR142	6.751E-02	6.527E-02	6.295E-02	4.382E-02	2.837E-02
PR142M	1.683E-04	9.747E-06	5.646E-07	2.402E-19	3.430E-34
ND142	3.559E+01	3.560E+01	3.560E+01	3.562E+01	3.563E+01
CS143	3.210E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	1.078E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

LA143	7.437E-03	3.871E-04	1.985E-05	2.491E-18	8.219E-34
CE143	1.061E+00	1.046E+00	1.025E+00	8.308E-01	6.457E-01
PR143	1.038E+01	1.038E+01	1.038E+01	1.036E+01	1.028E+01
ND143	5.083E+02	5.083E+02	5.084E+02	5.086E+02	5.088E+02
BA144	6.405E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	3.098E-04	3.223E-31	0.000E+00	0.000E+00	0.000E+00
CE144	1.812E+02	1.812E+02	1.812E+02	1.810E+02	1.808E+02
PR144	7.731E-03	7.657E-03	7.650E-03	7.642E-03	7.632E-03
PR144M	3.829E-05	3.824E-05	3.824E-05	3.820E-05	3.815E-05
ND144	9.718E+02	9.718E+02	9.718E+02	9.720E+02	9.722E+02
BA145	1.931E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	1.671E-04	8.128E-42	0.000E+00	0.000E+00	0.000E+00
CE145	1.123E-03	1.283E-09	1.224E-15	0.000E+00	0.000E+00
PR145	1.343E-01	1.208E-01	1.076E-01	3.376E-02	8.402E-03
ND145	4.898E+02	4.898E+02	4.898E+02	4.899E+02	4.899E+02
LA146	3.189E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	4.360E-03	2.350E-04	1.256E-05	2.396E-18	1.306E-33
PR146	7.464E-03	2.677E-03	5.516E-04	2.002E-11	2.214E-20
ND146	6.010E+02	6.010E+02	6.010E+02	6.010E+02	6.010E+02
PM146	5.052E-03	5.052E-03	5.052E-03	5.051E-03	5.051E-03
SM146	7.702E-03	7.702E-03	7.702E-03	7.703E-03	7.703E-03
LA147	1.912E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	2.821E-04	1.007E-19	3.323E-35	0.000E+00	0.000E+00
PR147	2.988E-03	1.038E-04	3.244E-06	2.882E-21	2.499E-39
ND147	4.003E+00	3.995E+00	3.985E+00	3.882E+00	3.763E+00
PM147	5.841E+01	5.842E+01	5.843E+01	5.851E+01	5.861E+01
SM147	4.384E+01	4.385E+01	4.385E+01	4.387E+01	4.389E+01
CE148	1.303E-04	8.259E-30	0.000E+00	0.000E+00	0.000E+00
PR148	4.678E-04	9.245E-12	1.297E-19	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 186
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
ND148	2.976E+02	2.976E+02	2.976E+02	2.976E+02	2.976E+02
PM148	8.524E-01	8.479E-01	8.434E-01	7.994E-01	7.497E-01

PM148M	6.528E-01	6.523E-01	6.519E-01	6.473E-01	6.419E-01
SM148	1.736E+02	1.736E+02	1.736E+02	1.736E+02	1.737E+02
PR149	3.391E-04	4.790E-12	6.720E-20	0.000E+00	0.000E+00
ND149	1.673E-02	1.144E-02	7.666E-03	1.395E-04	1.139E-06
PM149	8.437E-01	8.383E-01	8.312E-01	7.363E-01	6.296E-01
SM149	1.260E+00	1.271E+00	1.282E+00	1.385E+00	1.492E+00
PR150	2.142E-05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND150	1.466E+02	1.466E+02	1.466E+02	1.466E+02	1.466E+02
PM150	6.178E-04	4.770E-04	3.683E-04	2.773E-05	1.245E-06
SM150	2.465E+02	2.465E+02	2.465E+02	2.465E+02	2.465E+02
PR151	3.945E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	1.124E-03	3.944E-05	1.378E-06	3.744E-21	1.242E-38
PM151	1.544E-01	1.518E-01	1.482E-01	1.161E-01	8.659E-02
SM151	1.048E+01	1.048E+01	1.049E+01	1.052E+01	1.055E+01
EU151	6.263E-03	6.272E-03	6.282E-03	6.374E-03	6.485E-03
PR152	3.707E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	7.267E-04	1.966E-05	5.283E-07	1.040E-22	1.470E-41
PM152	2.667E-04	1.088E-05	2.931E-07	5.761E-23	8.094E-42
PM152M	9.552E-06	3.731E-08	1.458E-10	0.000E+00	0.000E+00
SM152	8.558E+01	8.559E+01	8.559E+01	8.559E+01	8.559E+01
EU152	2.393E-02	2.393E-02	2.393E-02	2.393E-02	2.392E-02
EU152M	3.299E-05	3.063E-05	2.843E-05	1.351E-05	5.536E-06
GD152	4.165E-02	4.166E-02	4.166E-02	4.167E-02	4.167E-02
ND153	4.255E-05	3.948E-21	3.556E-37	0.000E+00	0.000E+00
PM153	2.331E-04	1.303E-07	5.893E-11	0.000E+00	0.000E+00
SM153	8.573E-01	8.450E-01	8.325E-01	7.177E-01	6.006E-01
EU153	1.040E+02	1.040E+02	1.040E+02	1.041E+02	1.043E+02
GD153	5.171E-03	5.171E-03	5.170E-03	5.164E-03	5.157E-03
ND154	1.377E-05	1.117E-32	0.000E+00	0.000E+00	0.000E+00
PM154	7.163E-05	3.261E-11	1.155E-17	0.000E+00	0.000E+00
PM154M	8.053E-06	7.441E-16	6.875E-26	0.000E+00	0.000E+00
SM154	3.319E+01	3.319E+01	3.319E+01	3.319E+01	3.319E+01
EU154	3.926E+01	3.926E+01	3.926E+01	3.926E+01	3.926E+01
GD154	4.265E+00	4.265E+00	4.266E+00	4.269E+00	4.274E+00
ND155	3.555E-06	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	1.017E-05	5.154E-35	0.000E+00	0.000E+00	0.000E+00
SM155	4.619E-04	7.314E-05	1.123E-05	8.215E-14	1.417E-23
EU155	1.549E+01	1.549E+01	1.549E+01	1.548E+01	1.548E+01
GD155	1.066E-01	1.069E-01	1.071E-01	1.096E-01	1.126E-01
ND156	2.984E-06	8.848E-25	2.186E-43	0.000E+00	0.000E+00
SM156	7.293E-03	6.779E-03	6.297E-03	3.012E-03	1.243E-03
EU156	4.229E+00	4.221E+00	4.213E+00	4.137E+00	4.046E+00
GD156	9.536E+01	9.536E+01	9.537E+01	9.545E+01	9.555E+01
PM157	5.400E-06	6.387E-22	7.467E-38	0.000E+00	0.000E+00
SM157	6.954E-05	4.193E-07	2.316E-09	0.000E+00	0.000E+00
EU157	1.861E-02	1.786E-02	1.706E-02	1.081E-02	6.256E-03
GD157	1.109E-01	1.118E-01	1.126E-01	1.188E-01	1.234E-01
SM158	2.108E-04	8.194E-05	3.183E-05	2.491E-09	2.941E-14

EU158 2.365E-04 1.746E-04 1.013E-04 4.064E-08 1.198E-12

OUTPUT UNIT =
6 PAGE 187
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
GD158	2.303E+01	2.303E+01	2.303E+01	2.303E+01	2.303E+01
SM159	6.216E-06	1.300E-12	2.709E-19	0.000E+00	0.000E+00
EU159	5.049E-05	5.811E-06	5.839E-07	6.130E-17	6.498E-29
GD159	5.284E-03	5.142E-03	4.959E-03	3.416E-03	2.185E-03
TB159	2.492E+00	2.493E+00	2.493E+00	2.494E+00	2.496E+00
SM160	4.874E-06	3.835E-09	3.016E-12	0.000E+00	0.000E+00
GD160	1.183E+00	1.183E+00	1.183E+00	1.183E+00	1.183E+00
TB160	1.168E-01	1.167E-01	1.167E-01	1.162E-01	1.157E-01
DY160	2.931E-01	2.931E-01	2.932E-01	2.937E-01	2.942E-01
TB161	9.555E-03	9.518E-03	9.478E-03	9.091E-03	8.647E-03
DY161	3.971E-01	3.971E-01	3.972E-01	3.975E-01	3.980E-01
GD162	3.007E-06	6.799E-08	1.064E-09	9.232E-28	0.000E+00
DY162	3.279E-01	3.279E-01	3.279E-01	3.279E-01	3.279E-01
DY163	3.394E-01	3.394E-01	3.394E-01	3.394E-01	3.394E-01
DY164	8.533E-02	8.533E-02	8.533E-02	8.533E-02	8.533E-02
DY165	8.916E-05	6.678E-05	4.972E-05	2.603E-06	7.557E-08
HO165	2.140E-01	2.140E-01	2.140E-01	2.141E-01	2.141E-01
DY166	9.793E-05	9.710E-05	9.628E-05	8.843E-05	7.985E-05
HO166	3.120E-04	3.048E-04	2.979E-04	2.369E-04	1.810E-04
HO166M	3.291E-03	3.291E-03	3.291E-03	3.291E-03	3.291E-03
ER166	7.182E-02	7.183E-02	7.184E-02	7.191E-02	7.197E-02
ER167	3.395E-03	3.395E-03	3.395E-03	3.395E-03	3.395E-03
ER168	7.911E-03	7.911E-03	7.911E-03	7.911E-03	7.911E-03
ER169	4.330E-06	4.317E-06	4.303E-06	4.173E-06	4.022E-06
TM169	7.240E-05	7.242E-05	7.243E-05	7.256E-05	7.271E-05
TM170	1.629E-05	1.629E-05	1.629E-05	1.625E-05	1.621E-05
YB170	2.356E-05	2.356E-05	2.357E-05	2.360E-05	2.365E-05
SUMTOT	2.766E+04	2.766E+04	2.766E+04	2.766E+04	2.766E+04
TOTAL	2.766E+04	2.766E+04	2.766E+04	2.766E+04	2.766E+04

OUTPUT UNIT =
6 PAGE 188
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	4.527E-02	4.527E-02	4.527E-02	4.526E-02	4.526E-02
LI	1.078E-04	1.078E-04	1.078E-04	1.078E-04	1.078E-04
BE	1.211E-04	1.211E-04	1.211E-04	1.211E-04	1.211E-04
C	2.130E-05	2.130E-05	2.130E-05	2.130E-05	2.130E-05
ZN	5.409E-03	5.408E-03	5.408E-03	5.402E-03	5.396E-03
GA	2.825E-05	2.614E-05	2.512E-05	1.961E-05	1.713E-05
GE	5.285E-01	5.284E-01	5.284E-01	5.283E-01	5.283E-01
AS	1.588E-01	1.588E-01	1.587E-01	1.585E-01	1.583E-01
SE	4.437E+01	4.437E+01	4.437E+01	4.437E+01	4.437E+01
BR	1.647E+01	1.647E+01	1.647E+01	1.647E+01	1.647E+01
KR	2.842E+02	2.842E+02	2.842E+02	2.841E+02	2.841E+02
RB	2.627E+02	2.627E+02	2.627E+02	2.627E+02	2.627E+02
SR	6.771E+02	6.771E+02	6.771E+02	6.769E+02	6.768E+02
Y	3.555E+02	3.555E+02	3.555E+02	3.554E+02	3.553E+02
ZR	2.777E+03	2.777E+03	2.777E+03	2.777E+03	2.776E+03
NB	1.968E+01	1.968E+01	1.968E+01	1.967E+01	1.966E+01
MO	2.615E+03	2.615E+03	2.615E+03	2.615E+03	2.615E+03
TC	5.731E+02	5.731E+02	5.731E+02	5.733E+02	5.735E+02
RU	2.034E+03	2.034E+03	2.034E+03	2.034E+03	2.033E+03
RH	2.572E+02	2.572E+02	2.573E+02	2.574E+02	2.575E+02
PD	1.241E+03	1.241E+03	1.241E+03	1.241E+03	1.242E+03
AG	6.058E+01	6.059E+01	6.059E+01	6.062E+01	6.063E+01
CD	1.207E+02	1.207E+02	1.207E+02	1.207E+02	1.208E+02
IN	1.125E+00	1.125E+00	1.126E+00	1.128E+00	1.131E+00
SN	7.769E+01	7.769E+01	7.769E+01	7.768E+01	7.768E+01
SB	2.493E+01	2.492E+01	2.491E+01	2.487E+01	2.485E+01
TE	3.992E+02	3.992E+02	3.991E+02	3.989E+02	3.987E+02
I	1.929E+02	1.929E+02	1.928E+02	1.923E+02	1.919E+02
XE	4.300E+03	4.300E+03	4.300E+03	4.300E+03	4.300E+03
CS	2.196E+03	2.196E+03	2.196E+03	2.196E+03	2.196E+03
BA	1.194E+03	1.194E+03	1.194E+03	1.193E+03	1.193E+03

LA	9.718E+02	9.718E+02	9.718E+02	9.717E+02	9.716E+02
CE	2.095E+03	2.095E+03	2.095E+03	2.095E+03	2.094E+03
PR	8.649E+02	8.649E+02	8.649E+02	8.651E+02	8.652E+02
ND	3.055E+03	3.055E+03	3.055E+03	3.055E+03	3.056E+03
PM	6.092E+01	6.091E+01	6.091E+01	6.081E+01	6.072E+01
SM	5.953E+02	5.953E+02	5.953E+02	5.954E+02	5.955E+02
EU	1.630E+02	1.630E+02	1.630E+02	1.631E+02	1.631E+02
GD	1.241E+02	1.241E+02	1.241E+02	1.242E+02	1.243E+02
TB	2.619E+00	2.619E+00	2.619E+00	2.620E+00	2.620E+00
DY	1.443E+00	1.443E+00	1.443E+00	1.444E+00	1.445E+00
HO	2.176E-01	2.176E-01	2.176E-01	2.176E-01	2.176E-01
ER	8.314E-02	8.314E-02	8.315E-02	8.322E-02	8.328E-02
TM	9.094E-05	9.095E-05	9.096E-05	9.106E-05	9.116E-05
YB	2.592E-05	2.592E-05	2.592E-05	2.596E-05	2.601E-05
SUMTOT	2.766E+04	2.766E+04	2.766E+04	2.766E+04	2.766E+04
TOTAL	2.766E+04	2.766E+04	2.766E+04	2.766E+04	2.766E+04

CUMULATIVE TABLE TOTALS

AP+FP	2.245E+05	2.245E+05	2.245E+05	2.245E+05	2.245E+05
ACT+FP	4.618E+05	4.618E+05	4.618E+05	4.618E+05	4.618E+05
AP+ACT+FP	6.586E+05	6.586E+05	6.586E+05	6.586E+05	6.586E+05

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H 3	4.370E+02	4.370E+02	4.370E+02	4.370E+02	4.369E+02
ZN 69	1.913E-02	9.868E-03	5.372E-03	7.578E-04	4.122E-04
CO 72	9.208E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 72	1.737E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 72	3.429E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 72	4.072E+01	4.012E+01	3.953E+01	3.405E+01	2.848E+01
GA 72	4.087E+01	4.085E+01	4.080E+01	3.913E+01	3.547E+01
CO 73	3.023E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

NI 73	1.461E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 73	4.359E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 73	7.223E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 73	7.644E+01	6.641E+01	5.762E+01	1.392E+01	2.533E+00
GE 73M	7.650E+01	6.641E+01	5.762E+01	1.392E+01	2.533E+00
CO 74	5.708E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI 74	8.383E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 74	5.497E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 74	1.309E+02	5.139E-10	2.011E-21	0.000E+00	0.000E+00
GA 74	1.411E+02	1.019E+00	6.003E-03	0.000E+00	0.000E+00
NI 75	3.374E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 75	5.301E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 75	2.313E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 75	2.834E+02	9.465E-08	2.951E-17	0.000E+00	0.000E+00
GE 75	2.879E+02	1.786E+02	1.081E+02	7.117E-01	1.719E-03
GE 75M	1.341E+01	6.630E-09	2.067E-18	0.000E+00	0.000E+00
NI 76	8.460E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 76	3.760E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 76	3.598E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 76	5.649E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 76	3.669E+01	3.573E+01	3.480E+01	2.675E+01	1.950E+01
NI 77	1.470E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 77	1.752E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 77	3.872E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 77	9.794E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 77	4.697E+02	4.421E+02	4.158E+02	2.252E+02	1.079E+02
GE 77M	9.976E+02	1.412E-17	0.000E+00	0.000E+00	0.000E+00
AS 77	1.264E+03	1.250E+03	1.235E+03	1.084E+03	9.049E+02
SE 77M	4.411E+00	3.100E+00	3.064E+00	2.688E+00	2.245E+00
NI 78	1.712E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 78	6.171E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 78	3.531E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 78	1.600E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 78	2.902E+03	1.800E+03	1.116E+03	9.367E+00	3.024E-02
AS 78	3.004E+03	2.732E+03	2.244E+03	7.032E+01	4.741E-01
CU 79	2.050E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 79	2.660E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 79	1.921E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 79	5.995E+03	3.848E-22	0.000E+00	0.000E+00	0.000E+00
AS 79	6.977E+03	7.389E+01	7.273E-01	6.210E-21	0.000E+00
SE 79	3.260E-01	3.260E-01	3.260E-01	3.260E-01	3.260E-01
SE 79M	7.013E+03	1.300E+02	1.284E+00	1.094E-20	0.000E+00
BR 79M	1.210E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
CU 80	2.108E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 80	9.017E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 80	1.710E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 80	1.072E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 80	1.469E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 80	5.797E-01	3.499E-01	2.858E-01	5.922E-02	9.018E-03
BR 80M	3.634E-01	3.107E-01	2.656E-01	5.534E-02	8.426E-03
CU 81	1.603E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 81	2.199E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 81	1.032E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 81	1.209E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 81	2.253E+04	3.833E-30	0.000E+00	0.000E+00	0.000E+00
SE 81	2.455E+04	3.029E+03	4.911E+02	1.543E-01	2.545E-05
SE 81M	6.332E+02	3.064E+02	1.483E+02	1.045E-01	1.723E-05
KR 81M	2.834E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 82	2.995E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 82	3.981E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 82	9.925E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82	1.774E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82M	7.805E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 82	5.199E+03	5.104E+03	5.005E+03	4.112E+03	3.249E+03
BR 82M	2.020E+03	2.285E+00	2.593E-03	0.000E+00	0.000E+00
ZN 83	2.866E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 83	1.134E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 83	6.997E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 83	2.982E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	2.106E+04	3.334E+03	5.251E+02	4.929E-06	1.148E-15
SE 83M	2.980E+04	1.139E-11	3.758E-27	0.000E+00	0.000E+00
BR 83	5.237E+04	4.172E+04	3.158E+04	1.743E+03	5.368E+01
KR 83M	5.277E+04	5.094E+04	4.627E+04	5.423E+03	2.077E+02
GA 84	1.682E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 84	2.650E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 84	2.483E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	8.200E+04	2.784E-01	9.363E-07	0.000E+00	0.000E+00
BR 84	8.597E+04	2.584E+04	6.987E+03	1.460E-02	2.232E-09
BR 84M	4.083E+03	3.987E+00	3.894E-03	0.000E+00	0.000E+00

GE 85	5.997E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 85	1.357E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 85	4.482E+04	7.412E-24	0.000E+00	0.000E+00	0.000E+00
SE 85M	3.370E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	1.014E+05	5.950E-02	2.978E-08	0.000E+00	0.000E+00
KR 85	6.784E+03	6.784E+03	6.784E+03	6.784E+03	6.783E+03
KR 85M	1.031E+05	8.937E+04	7.656E+04	1.630E+04	2.546E+03
GE 86	1.159E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 86	7.024E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 86	8.322E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	6.979E+04	1.738E-15	0.000E+00	0.000E+00	0.000E+00
BR 86M	6.995E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 86	2.036E+03	2.033E+03	2.030E+03	1.999E+03	1.962E+03
RB 86M	1.971E+02	3.567E-16	5.179E-34	0.000E+00	0.000E+00
GE 87	1.517E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 191
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
AS 87	3.148E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 87	7.095E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 87	1.591E+05	6.330E-15	2.834E-34	0.000E+00	0.000E+00
KR 87	1.893E+05	1.109E+05	6.430E+04	2.761E+02	3.980E-01
SR 87M	9.208E+00	7.192E+00	5.618E+00	4.749E-01	2.449E-02
GE 88	7.673E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 88	3.489E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 88	2.675E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 88	1.589E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	2.652E+05	2.079E+05	1.629E+05	1.417E+04	7.569E+02
RB 88	2.716E+05	2.298E+05	1.816E+05	1.583E+04	8.452E+02
AS 89	3.919E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 89	8.018E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 89	1.024E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	3.119E+05	6.291E-01	1.262E-06	0.000E+00	0.000E+00
RB 89	3.425E+05	2.757E+04	1.787E+03	2.341E-09	1.288E-23

SR 89	3.598E+05	3.597E+05	3.595E+05	3.575E+05	3.550E+05
Y 89M	3.314E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 90	2.271E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 90	6.155E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 90	3.062E+05	9.110E-29	0.000E+00	0.000E+00	0.000E+00
RB 90	3.259E+05	6.521E-01	3.767E-05	0.000E+00	0.000E+00
RB 90M	8.432E+04	5.655E+00	3.565E-04	0.000E+00	0.000E+00
SR 90	5.409E+04	5.409E+04	5.409E+04	5.408E+04	5.408E+04
Y 90	5.735E+04	5.732E+04	5.728E+04	5.695E+04	5.660E+04
Y 90M	1.141E+01	9.122E+00	7.295E+00	7.797E-01	5.329E-02
SE 91	3.902E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 91	2.305E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 91	2.276E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	4.237E+05	1.112E-13	2.663E-32	0.000E+00	0.000E+00
SR 91	4.659E+05	4.339E+05	4.033E+05	1.944E+05	8.101E+04
Y 91	4.866E+05	4.865E+05	4.865E+05	4.856E+05	4.835E+05
Y 91M	2.706E+05	2.644E+05	2.514E+05	1.236E+05	5.148E+04
SE 92	2.567E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 92	3.482E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 92	1.200E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 92	3.789E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 92	5.261E+05	4.075E+05	3.156E+05	2.445E+04	1.136E+03
Y 92	5.295E+05	5.176E+05	4.892E+05	1.346E+05	1.674E+04
BR 93	5.679E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 93	4.572E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 93	2.919E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 93	6.224E+05	2.447E+03	9.561E+00	0.000E+00	0.000E+00
Y 93	6.420E+05	6.067E+05	5.665E+05	2.852E+05	1.252E+05
ZR 93	1.397E+00	1.397E+00	1.397E+00	1.398E+00	1.398E+00
NB 93M	1.626E-01	1.626E-01	1.626E-01	1.626E-01	1.627E-01
BR 94	5.017E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 94	1.416E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 94	1.573E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 94	5.961E+05	2.782E-09	1.287E-23	0.000E+00	0.000E+00
Y 94	6.657E+05	8.026E+04	9.096E+03	3.180E-06	1.428E-17

OUTPUT UNIT =
6 PAGE 192
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
NB 94M	7.470E-01	9.728E-04	1.270E-06	0.000E+00	0.000E+00
BR 95	4.744E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 95	2.647E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 95	7.628E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 95	5.532E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 95	7.351E+05	1.446E+04	2.753E+02	1.730E-15	0.000E+00
ZR 95	7.653E+05	7.651E+05	7.647E+05	7.613E+05	7.572E+05
NB 95	7.681E+05	7.681E+05	7.681E+05	7.681E+05	7.680E+05
NB 95M	5.472E+03	5.471E+03	5.470E+03	5.460E+03	5.447E+03
BR 96	2.517E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 96	4.034E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 96	2.441E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 96	3.825E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	7.010E+05	9.995E-03	1.402E-10	0.000E+00	0.000E+00
NB 96	2.072E+03	2.011E+03	1.953E+03	1.451E+03	1.016E+03
KR 97	2.618E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 97	4.774E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 97	2.037E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 97	6.094E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	8.029E+05	7.707E+05	7.397E+05	4.908E+05	3.001E+05
NB 97	8.118E+05	7.985E+05	7.772E+05	5.274E+05	3.021E+05
NB 97M	7.618E+05	7.300E+05	7.007E+05	4.649E+05	2.842E+05
KR 98	3.021E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 98	1.148E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 98	8.198E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 98	4.302E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 98	8.151E+05	9.047E-30	0.000E+00	0.000E+00	0.000E+00
NB 98	8.323E+05	9.947E-30	0.000E+00	0.000E+00	0.000E+00
NB 98M	9.936E+03	4.431E+03	1.976E+03	6.147E-01	3.803E-05
RB 99	1.183E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 99	2.381E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 99	2.465E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 99	8.073E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	8.461E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	3.920E+04	4.430E-03	5.007E-10	0.000E+00	0.000E+00
MO 99	9.560E+05	9.460E+05	9.362E+05	8.428E+05	7.430E+05
TC 99	9.717E+00	9.717E+00	9.717E+00	9.721E+00	9.725E+00
TC 99M	8.369E+05	8.365E+05	8.351E+05	7.908E+05	7.105E+05
RB100	1.091E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR100	4.883E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y100	1.109E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR100	7.397E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	4.777E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	4.777E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TC100	4.247E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR101	7.007E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y101	3.623E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	4.677E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB101	7.963E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	8.676E+05	5.093E+04	2.962E+03	1.310E-09	1.961E-24
TC101	8.679E+05	1.895E+05	1.845E+04	2.947E-08	5.945E-23

OUTPUT UNIT =
6 PAGE 193
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR	
SR102	6.698E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y102	9.391E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR102	2.702E+05	3.868E-33	0.000E+00	0.000E+00	0.000E+00
NB102	6.913E+05	5.272E-33	0.000E+00	0.000E+00	0.000E+00
MO102	8.503E+05	2.042E+04	4.819E+02	2.577E-14	7.599E-34
TC102	8.515E+05	2.059E+04	4.857E+02	2.597E-14	0.000E+00
TC102M	1.192E+03	8.395E-02	5.914E-06	0.000E+00	0.000E+00
RH102	1.150E+00	1.150E+00	1.150E+00	1.149E+00	1.149E+00
SR103	2.308E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y103	1.446E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR103	1.044E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB103	4.980E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	8.632E+05	9.052E-13	7.850E-31	0.000E+00	0.000E+00
TC103	8.785E+05	5.430E-12	4.711E-30	0.000E+00	0.000E+00
RU103	8.851E+05	8.845E+05	8.838E+05	8.773E+05	8.696E+05
RH103M	7.971E+05	7.970E+05	7.966E+05	7.914E+05	7.841E+05
SR104	9.921E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y104	1.383E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR104	2.615E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB104	2.479E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	7.190E+05	3.718E-06	1.913E-17	0.000E+00	0.000E+00
TC104	7.731E+05	8.576E+04	8.727E+03	1.039E-06	1.282E-18
RH104	7.617E+05	4.096E+00	2.823E-04	0.000E+00	0.000E+00
RH104M	4.984E+04	3.435E+00	2.367E-04	0.000E+00	0.000E+00

Y105	6.718E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR105	3.558E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB105	8.608E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO105	5.255E+05	4.512E-15	0.000E+00	0.000E+00	0.000E+00
TC105	6.557E+05	3.992E+03	2.206E+01	0.000E+00	0.000E+00
RU105	6.726E+05	5.943E+05	5.085E+05	1.067E+05	1.638E+04
RH105	6.062E+05	6.068E+05	6.058E+05	5.426E+05	4.387E+05
RH105M	1.883E+05	1.669E+05	1.428E+05	2.996E+04	4.600E+03
ZR106	3.624E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB106	2.212E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO106	2.876E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	4.744E+05	2.914E-24	0.000E+00	0.000E+00	0.000E+00
RU106	3.808E+05	3.807E+05	3.807E+05	3.804E+05	3.800E+05
RH106	4.265E+05	3.807E+05	3.807E+05	3.804E+05	3.800E+05
RH106M	2.090E+04	1.525E+04	1.113E+04	4.766E+02	1.087E+01
ZR107	1.621E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB107	3.373E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO107	1.048E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	2.633E+05	1.254E-32	0.000E+00	0.000E+00	0.000E+00
RU107	4.084E+05	2.232E+01	1.118E-03	0.000E+00	0.000E+00
RH107	4.106E+05	7.614E+04	1.120E+04	5.319E-05	5.467E-15
PD107	1.035E-01	1.035E-01	1.035E-01	1.035E-01	1.035E-01
PD107M	1.120E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR108	5.590E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB108	7.319E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO108	2.967E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC108	1.542E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 194
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
RU108	2.836E+05	2.779E+01	2.692E-03	0.000E+00	0.000E+00
RH108	2.863E+05	2.963E+01	2.871E-03	0.000E+00	0.000E+00
RH108M	2.749E+03	2.387E+00	2.073E-03	0.000E+00	0.000E+00
AG108	1.610E+00	2.777E-06	2.738E-06	2.738E-06	2.738E-06

ZR109	4.162E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB109	1.463E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO109	9.511E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC109	7.146E+04	4.037E-17	0.000E+00	0.000E+00	0.000E+00
RU109	1.751E+05	1.287E-16	0.000E+00	0.000E+00	0.000E+00
RH109	1.825E+05	6.611E-07	6.012E-19	0.000E+00	0.000E+00
RH109M	9.126E+04	2.054E-15	0.000E+00	0.000E+00	0.000E+00
PD109	2.559E+05	2.443E+05	2.321E+05	1.387E+05	7.476E+04
PD109M	9.238E+04	2.604E+01	3.669E-03	0.000E+00	0.000E+00
AG109M	2.557E+05	2.444E+05	2.322E+05	1.387E+05	7.478E+04
CD109	2.354E-03	2.354E-03	2.353E-03	2.352E-03	2.350E-03
NB110	1.648E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO110	1.836E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC110	1.727E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU110	7.571E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	8.169E+04	7.635E-33	0.000E+00	0.000E+00	0.000E+00
RH110M	5.986E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110	1.676E+05	6.432E+01	6.432E+01	6.424E+01	6.415E+01
AG110M	4.837E+03	4.836E+03	4.836E+03	4.830E+03	4.824E+03
NB111	1.401E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO111	3.746E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC111	5.434E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU111	3.252E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	4.459E+04	3.475E-13	2.184E-30	0.000E+00	0.000E+00
PD111	4.631E+04	7.798E+03	1.535E+03	1.225E+02	2.699E+01
PD111M	7.620E+02	6.723E+02	5.927E+02	1.681E+02	3.705E+01
AG111	4.732E+04	4.723E+04	4.706E+04	4.529E+04	4.324E+04
AG111M	4.661E+04	8.337E+03	1.774E+03	1.754E+02	3.867E+01
CD111M	5.461E+01	2.325E+01	9.897E+00	1.935E-03	6.857E-08
MO112	6.834E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	1.796E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	1.359E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	2.188E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD112	2.348E+04	2.269E+04	2.192E+04	1.552E+04	1.026E+04
AG112	2.357E+04	2.347E+04	2.324E+04	1.809E+04	1.214E+04
MO113	4.857E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC113	4.731E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU113	7.122E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH113	1.507E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD113	1.825E+04	1.694E-08	1.541E-20	0.000E+00	0.000E+00
AG113	1.645E+04	1.450E+04	1.272E+04	3.441E+03	7.163E+02
AG113M	1.851E+03	6.353E-09	5.779E-21	0.000E+00	0.000E+00
CD113M	5.784E+01	5.784E+01	5.784E+01	5.784E+01	5.784E+01
MO114	4.963E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC114	1.060E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU114	3.159E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH114	8.448E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT = 6 PAGE 195
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
PD114	1.227E+04	3.722E-04	1.109E-11	0.000E+00	0.000E+00
AG114	1.245E+04	3.843E-04	1.145E-11	0.000E+00	0.000E+00
IN114	1.430E+01	5.287E+00	5.284E+00	5.253E+00	5.217E+00
IN114M	5.528E+00	5.525E+00	5.521E+00	5.489E+00	5.451E+00
MO115	3.324E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC115	2.236E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU115	1.483E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH115	6.348E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD115	1.161E+04	3.890E-25	0.000E+00	0.000E+00	0.000E+00
AG115	8.706E+03	1.126E+03	1.408E+02	1.311E-07	1.908E-18
AG115M	3.360E+03	1.900E-25	0.000E+00	0.000E+00	0.000E+00
CD115	1.192E+04	1.182E+04	1.167E+04	1.025E+04	8.776E+03
CD115M	1.126E+03	1.125E+03	1.125E+03	1.117E+03	1.109E+03
IN115M	1.195E+04	1.194E+04	1.191E+04	1.099E+04	9.521E+03
TC116	1.386E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU116	3.311E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH116	3.002E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD116	8.630E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG116	4.831E+03	9.569E-04	1.743E-10	0.000E+00	0.000E+00
AG116M	4.831E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116	7.208E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	5.250E+03	2.436E+03	1.130E+03	5.218E-01	5.187E-05
TC117	5.865E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU117	4.803E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH117	1.493E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD117	7.474E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG117	4.728E+03	7.861E-12	1.232E-26	0.000E+00	0.000E+00
AG117M	4.727E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD117	6.306E+03	4.856E+03	3.720E+03	2.587E+02	1.055E+01
CD117M	3.416E+03	2.793E+03	2.278E+03	2.966E+02	2.568E+01
IN117	5.818E+03	5.623E+03	5.159E+03	7.525E+02	5.206E+01
IN117M	7.368E+03	7.104E+03	6.484E+03	9.854E+02	6.132E+01

SN117M	1.257E+02	1.254E+02	1.252E+02	1.226E+02	1.196E+02
RU118	3.265E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH118	2.545E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD118	6.340E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118	6.205E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118M	4.341E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD118	9.496E+03	4.162E+03	1.821E+03	4.671E-01	2.293E-05
IN118	9.500E+03	4.169E+03	1.824E+03	4.679E-01	2.297E-05
IN118M	4.333E+00	3.784E-04	3.305E-08	0.000E+00	0.000E+00
RH119	2.106E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD119	4.769E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG119	8.791E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD119	4.750E+03	5.757E+01	6.898E-01	4.208E-20	0.000E+00
CD119M	4.750E+03	1.116E-02	2.532E-08	0.000E+00	0.000E+00
IN119	2.734E+03	6.984E+01	7.291E+00	6.818E-10	6.201E-22
IN119M	7.128E+03	1.218E+03	1.263E+02	1.174E-08	1.068E-20
SN119M	1.659E+02	1.659E+02	1.659E+02	1.657E+02	1.654E+02
RU120	6.829E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH120	3.100E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 196
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
PD120	1.747E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG120	5.956E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD120	9.319E+03	4.472E-18	0.000E+00	0.000E+00	0.000E+00
IN120	4.761E+03	1.774E-17	0.000E+00	0.000E+00	0.000E+00
IN120M	4.761E+03	2.380E-18	0.000E+00	0.000E+00	0.000E+00
RH121	4.904E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD121	6.857E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG121	4.146E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD121	9.202E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121	7.843E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121M	1.951E+03	6.999E-03	2.354E-08	0.000E+00	0.000E+00
SN121	9.830E+03	9.586E+03	9.342E+03	7.213E+03	5.288E+03

SN121M	1.794E-01	1.794E-01	1.794E-01	1.794E-01	1.794E-01
RH122	5.938E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD122	2.106E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG122	2.576E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD122	8.764E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122	9.456E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122M	6.947E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB122	2.419E+03	2.393E+03	2.368E+03	2.127E+03	1.871E+03
SB122M	1.897E+01	9.497E-04	4.755E-08	0.000E+00	0.000E+00
RH123	5.062E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD123	4.758E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG123	1.344E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD123	8.324E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123	7.790E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123M	3.293E+03	9.812E-20	0.000E+00	0.000E+00	0.000E+00
SN123	2.117E+03	2.116E+03	2.116E+03	2.111E+03	2.105E+03
SN123M	9.207E+03	3.290E+03	1.166E+03	3.635E-02	1.423E-07
TE123M	3.227E+01	3.226E+01	3.225E+01	3.218E+01	3.208E+01
PD124	8.902E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG124	6.134E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD124	7.543E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN124	1.242E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	1.603E+03	1.602E+03	1.601E+03	1.593E+03	1.584E+03
SB124M	8.890E+00	1.977E-11	4.399E-23	0.000E+00	0.000E+00
AG125	1.928E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD125	5.538E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125	8.182E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125M	6.004E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN125	8.248E+03	8.224E+03	8.199E+03	7.957E+03	7.676E+03
SN125M	1.334E+04	1.710E+02	2.166E+00	2.308E-19	0.000E+00
SB125	1.037E+04	1.037E+04	1.037E+04	1.037E+04	1.037E+04
TE125M	2.243E+03	2.243E+03	2.243E+03	2.244E+03	2.245E+03
PD126	1.336E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG126	5.958E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD126	4.017E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN126	1.759E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN126	6.613E-01	6.613E-01	6.613E-01	6.613E-01	6.613E-01
SB126	8.821E+02	8.801E+02	8.781E+02	8.578E+02	8.342E+02
SB126M	3.194E+02	3.637E+01	4.663E+00	6.613E-01	6.613E-01

OUTPUT UNIT =
6 PAGE 197
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
CD127	2.299E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127	1.049E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127M	1.049E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN127	4.056E+04	2.916E+04	2.096E+04	7.727E+02	1.472E+01
SN127M	1.947E+04	8.307E-01	3.545E-05	0.000E+00	0.000E+00
SB127	6.430E+04	6.410E+04	6.380E+04	5.963E+04	5.451E+04
TE127	6.360E+04	6.359E+04	6.357E+04	6.230E+04	5.915E+04
TE127M	8.370E+03	8.370E+03	8.370E+03	8.371E+03	8.369E+03
XE127	1.032E-01	1.031E-01	1.030E-01	1.022E-01	1.013E-01
AG128	2.534E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD128	8.633E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN128	1.627E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN128	8.988E+04	4.442E+04	2.195E+04	1.906E+01	4.042E-03
SB128	9.132E+03	8.456E+03	7.830E+03	3.628E+03	1.441E+03
SB128M	9.888E+04	5.374E+04	2.665E+04	2.314E+01	4.907E-03
I128	1.365E+04	2.583E+03	4.889E+02	2.882E-05	6.084E-14
CD129	3.649E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN129	1.401E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN129	6.154E+04	2.404E+02	9.395E-01	0.000E+00	0.000E+00
SN129M	6.528E+04	3.893E-03	2.321E-10	0.000E+00	0.000E+00
SB129	1.801E+05	1.555E+05	1.325E+05	2.662E+04	3.881E+03
TE129	1.776E+05	1.708E+05	1.575E+05	4.875E+04	2.164E+04
TE129M	2.652E+04	2.652E+04	2.651E+04	2.636E+04	2.610E+04
I129	2.537E-02	2.537E-02	2.537E-02	2.538E-02	2.538E-02
XE129M	1.227E+01	1.222E+01	1.218E+01	1.175E+01	1.125E+01
CD130	2.978E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN130	1.373E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN130	1.855E+05	2.589E+00	3.612E-05	0.000E+00	0.000E+00
SB130	5.944E+04	2.102E+04	7.430E+03	2.267E-01	8.650E-07
SB130M	2.473E+05	6.956E+02	9.534E-01	0.000E+00	0.000E+00
I130	3.642E+04	3.457E+04	3.269E+04	1.866E+04	9.519E+03
I130M	1.440E+04	1.417E+02	1.395E+00	1.191E-20	0.000E+00
CD131	4.917E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN131	5.014E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN131	1.538E+05	9.669E-13	6.077E-30	0.000E+00	0.000E+00
SB131	4.195E+05	6.998E+04	1.147E+04	1.610E-04	6.070E-14
TE131	4.544E+05	2.167E+05	7.375E+04	1.336E+04	1.012E+04
TE131M	7.790E+04	7.643E+04	7.473E+04	5.932E+04	4.496E+04
I131	5.161E+05	5.157E+05	5.146E+05	4.989E+05	4.801E+05
XE131M	5.776E+03	5.776E+03	5.776E+03	5.772E+03	5.762E+03

CD132	4.480E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN132	1.234E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN132	7.810E+04	6.309E-23	0.000E+00	0.000E+00	0.000E+00
SB132	2.387E+05	9.321E-02	3.302E-08	0.000E+00	0.000E+00
SB132M	1.603E+05	8.026E+00	4.019E-04	0.000E+00	0.000E+00
TE132	7.204E+05	7.143E+05	7.080E+05	6.480E+05	5.826E+05
I132	7.347E+05	7.302E+05	7.252E+05	6.674E+05	6.002E+05
CS132	2.200E+02	2.191E+02	2.181E+02	2.086E+02	1.977E+02
IN133	1.515E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN133	2.341E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB133	2.604E+05	7.767E-03	2.315E-10	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 198
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
TE133	5.865E+05	4.765E+04	1.336E+04	6.930E+00	8.481E-04
TE133M	3.375E+05	1.594E+05	7.525E+04	4.133E+01	5.058E-03
I133	9.980E+05	9.789E+05	9.509E+05	6.840E+05	4.585E+05
I133M	3.509E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	1.002E+06	1.002E+06	1.001E+06	9.915E+05	9.650E+05
XE133M	3.210E+04	3.205E+04	3.200E+04	3.092E+04	2.876E+04
IN134	9.165E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN134	3.676E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134	4.786E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	4.419E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	7.520E+05	2.782E+05	1.029E+05	4.912E+00	3.207E-05
I134	1.082E+06	7.389E+05	4.254E+05	2.843E+02	2.285E-02
I134M	1.233E+05	1.620E+00	2.127E-05	0.000E+00	0.000E+00
XE134M	9.007E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	1.873E+05	1.873E+05	1.873E+05	1.872E+05	1.872E+05
CS134M	4.655E+04	3.665E+04	2.886E+04	2.644E+03	1.502E+02
SN135	4.116E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB135	2.413E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE135	4.059E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	9.349E+05	8.422E+05	7.583E+05	2.658E+05	7.553E+04

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XE135      2.145E+05 2.657E+05 3.053E+05 3.779E+05 2.341E+05
XE135M     2.078E+05 1.387E+05 1.217E+05 4.257E+04 1.210E+04
CS135      3.510E-01 3.510E-01 3.510E-01 3.512E-01 3.513E-01
CS135M     4.066E+04 1.855E+04 8.465E+03 3.309E+00 2.693E-04
BA135M     2.376E+02 2.320E+02 2.264E+02 1.778E+02 1.331E+02
SN136      3.792E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SB136      5.022E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE136      2.049E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I136      4.355E+05 4.428E-08 3.886E-21 0.000E+00 0.000E+00
 I136M     2.527E+05 6.978E-19 0.000E+00 0.000E+00 0.000E+00
CS136      5.319E+04 5.307E+04 5.296E+04 5.180E+04 5.045E+04
BA136M     8.766E+03 8.746E+03 8.727E+03 8.537E+03 8.314E+03
SB137      8.240E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE137      6.114E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I137      4.094E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE137      8.652E+05 1.756E+01 3.377E-04 0.000E+00 0.000E+00
CS137      8.263E+04 8.263E+04 8.263E+04 8.262E+04 8.262E+04
BA137M     7.830E+04 7.819E+04 7.816E+04 7.816E+04 7.816E+04
SB138      1.067E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE138      1.555E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I138      1.989E+05 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE138      7.799E+05 4.152E+04 2.206E+03 3.954E-10 2.001E-25
CS138      8.773E+05 3.782E+05 1.112E+05 2.777E-01 5.157E-08
CS138M     4.598E+04 2.719E-02 1.608E-08 0.000E+00 0.000E+00
SB139      7.997E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TE139      3.141E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 I139      8.733E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
XE139      5.969E+05 2.208E-22 0.000E+00 0.000E+00 0.000E+00
CS139      8.293E+05 1.048E+04 1.256E+02 7.660E-18 0.000E+00
BA139      8.643E+05 5.892E+05 3.571E+05 2.337E+03 5.600E+00
TE140      3.966E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE  199
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
          ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR
```

I140	2.369E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE140	3.745E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	7.446E+05	8.741E-12	9.027E-29	0.000E+00	0.000E+00
BA140	8.327E+05	8.309E+05	8.290E+05	8.105E+05	7.888E+05
LA140	8.833E+05	8.824E+05	8.815E+05	8.717E+05	8.582E+05
PR140	2.108E+01	9.899E-05	4.652E-10	0.000E+00	0.000E+00
TE141	1.839E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I141	4.056E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE141	1.326E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	5.446E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	7.826E+05	8.163E+04	8.377E+03	1.084E-06	1.478E-18
LA141	7.868E+05	7.087E+05	5.992E+05	1.029E+05	1.239E+04
CE141	7.952E+05	7.952E+05	7.951E+05	7.905E+05	7.826E+05
TE142	2.092E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I142	6.638E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE142	4.579E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS142	3.192E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	7.298E+05	1.499E+04	3.074E+02	4.051E-15	2.464E-35
LA142	7.496E+05	5.376E+05	3.444E+05	3.879E+03	1.781E+01
PR142	7.792E+04	7.532E+04	7.265E+04	5.057E+04	3.274E+04
PR142M	1.527E+04	8.844E+02	5.123E+01	2.180E-11	3.113E-26
I143	4.575E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE143	8.156E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS143	1.490E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	6.255E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	6.988E+05	3.637E+04	1.865E+03	2.341E-10	7.723E-26
CE143	7.051E+05	6.951E+05	6.809E+05	5.519E+05	4.290E+05
PR143	6.992E+05	6.992E+05	6.992E+05	6.974E+05	6.921E+05
I144	3.846E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE144	1.505E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS144	4.770E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA144	4.564E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	6.070E+05	6.316E-22	0.000E+00	0.000E+00	0.000E+00
CE144	5.782E+05	5.782E+05	5.781E+05	5.775E+05	5.768E+05
PR144	5.843E+05	5.788E+05	5.782E+05	5.776E+05	5.769E+05
PR144M	6.947E+03	6.938E+03	6.938E+03	6.931E+03	6.922E+03
XE145	1.835E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS145	1.221E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA145	2.424E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	4.485E+05	2.181E-32	0.000E+00	0.000E+00	0.000E+00
CE145	4.854E+05	5.550E-01	5.292E-07	0.000E+00	0.000E+00
PR145	4.856E+05	4.367E+05	3.889E+05	1.220E+05	3.037E+04
XE146	1.159E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS146	1.855E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA146	9.152E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA146	2.970E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	3.956E+05	2.132E+04	1.140E+03	2.174E-10	1.185E-25
PR146	3.974E+05	1.425E+05	2.937E+04	1.066E-03	1.179E-12

PM146	2.250E+00	2.250E+00	2.250E+00	2.250E+00	2.249E+00
XE147	1.053E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS147	3.267E+02	0.000E+00	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 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA147	2.187E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA147	1.468E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	3.094E+05	1.104E-10	3.644E-26	0.000E+00	0.000E+00
PR147	3.186E+05	1.107E+04	3.460E+02	3.073E-13	2.665E-31
ND147	3.216E+05	3.210E+05	3.202E+05	3.119E+05	3.023E+05
PM147	5.417E+04	5.418E+04	5.418E+04	5.426E+04	5.435E+04
CS148	2.174E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA148	4.095E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA148	5.660E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	2.311E+05	1.465E-20	0.000E+00	0.000E+00	0.000E+00
PR148	2.585E+05	5.109E-03	7.168E-11	0.000E+00	0.000E+00
PM148	1.401E+05	1.394E+05	1.386E+05	1.314E+05	1.232E+05
PM148M	1.395E+04	1.394E+04	1.393E+04	1.384E+04	1.372E+04
BA149	4.893E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA149	1.468E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE149	1.310E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	1.861E+05	2.629E-03	3.689E-11	0.000E+00	0.000E+00
ND149	2.035E+05	1.392E+05	9.324E+04	1.696E+03	1.385E+01
PM149	3.344E+05	3.323E+05	3.295E+05	2.918E+05	2.496E+05
CS150	2.083E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA150	3.742E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA150	2.926E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE150	6.321E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR150	1.300E+05	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM150	4.818E+03	3.720E+03	2.872E+03	2.163E+02	9.707E+00
LA151	3.830E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE151	1.933E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR151	7.371E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00

ND151	1.130E+05	3.962E+03	1.385E+02	3.762E-13	1.248E-30
PM151	1.129E+05	1.110E+05	1.084E+05	8.488E+04	6.333E+04
SM151	2.758E+02	2.759E+02	2.760E+02	2.769E+02	2.777E+02
BA152	1.019E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA152	4.426E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE152	4.320E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR152	3.309E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	7.820E+04	2.115E+03	5.685E+01	1.119E-14	1.582E-33
PM152	8.050E+04	3.285E+03	8.848E+01	1.739E-14	2.443E-33
PM152M	1.576E+03	6.157E+00	2.406E-02	0.000E+00	0.000E+00
EU152	4.140E+00	4.139E+00	4.139E+00	4.139E+00	4.139E+00
EU152M	7.302E+01	6.779E+01	6.293E+01	2.991E+01	1.225E+01
LA153	4.672E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE153	7.833E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR153	1.069E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND153	4.647E+04	4.312E-12	3.884E-28	0.000E+00	0.000E+00
PM153	5.307E+04	2.968E+01	1.342E-02	0.000E+00	0.000E+00
SM153	3.762E+05	3.708E+05	3.653E+05	3.149E+05	2.635E+05
GD153	1.824E+01	1.824E+01	1.824E+01	1.822E+01	1.819E+01
LA154	2.170E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE154	9.243E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR154	2.649E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND154	2.524E+04	2.047E-23	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 201
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
PM154	3.125E+04	1.422E-02	5.039E-09	0.000E+00	0.000E+00
PM154M	5.465E+03	5.049E-07	4.666E-17	0.000E+00	0.000E+00
EU154	1.060E+04	1.060E+04	1.060E+04	1.060E+04	1.060E+04
CE155	1.072E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR155	5.384E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND155	9.934E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	2.025E+04	1.027E-25	0.000E+00	0.000E+00	0.000E+00
SM155	2.525E+04	3.998E+03	6.141E+02	4.491E-06	7.748E-16

EU155	7.206E+03	7.206E+03	7.206E+03	7.205E+03	7.203E+03
GD155M	1.275E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE156	1.016E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR156	1.029E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND156	3.691E+03	1.094E-15	2.704E-34	0.000E+00	0.000E+00
PM156	1.163E+04	1.410E-15	0.000E+00	0.000E+00	0.000E+00
SM156	1.559E+04	1.449E+04	1.346E+04	6.441E+03	2.658E+03
EU156	2.332E+05	2.328E+05	2.323E+05	2.282E+05	2.231E+05
CE157	7.867E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR157	1.558E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND157	1.045E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	5.707E+03	6.751E-13	7.891E-29	0.000E+00	0.000E+00
SM157	1.041E+04	6.280E+01	3.468E-01	0.000E+00	0.000E+00
EU157	2.445E+04	2.346E+04	2.242E+04	1.421E+04	8.219E+03
PR158	1.130E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	1.588E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM158	1.870E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	5.707E+03	2.218E+03	8.616E+02	6.742E-02	7.961E-07
EU158	6.135E+03	4.529E+03	2.627E+03	1.054E+00	3.107E-05
PR159	4.377E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	1.549E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	4.284E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	2.720E+03	5.691E-04	1.185E-10	0.000E+00	0.000E+00
EU159	3.300E+03	3.798E+02	3.816E+01	4.006E-09	4.247E-21
GD159	5.602E+03	5.451E+03	5.257E+03	3.622E+03	2.316E+03
ND160	1.118E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM160	6.905E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	9.849E+02	7.748E-01	6.094E-04	0.000E+00	0.000E+00
EU160	1.512E+03	9.074E-01	7.137E-04	0.000E+00	0.000E+00
TB160	1.319E+03	1.318E+03	1.318E+03	1.312E+03	1.306E+03
ND161	7.861E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	8.089E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	2.698E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU161	6.575E+02	1.332E-23	0.000E+00	0.000E+00	0.000E+00
GD161	7.774E+02	1.250E-02	1.642E-07	0.000E+00	0.000E+00
TB161	1.120E+03	1.116E+03	1.111E+03	1.066E+03	1.014E+03
PM162	3.381E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM162	3.355E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU162	1.896E+02	1.849E-02	1.780E-06	0.000E+00	0.000E+00
GD162	3.492E+02	7.895E+00	1.236E-01	1.072E-19	0.000E+00
TB162	3.459E+02	2.360E+01	4.519E-01	4.152E-19	0.000E+00
TB162M	1.065E+01	8.311E+00	6.100E+00	2.725E-01	6.540E-03
SM163	3.675E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT = 6

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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, 57469.5 MW
D/MTIHM, 3 CYCLE
          ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

EU163     4.352E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD163     1.389E+02 3.066E-10 6.381E-22 0.000E+00 0.000E+00
TB163     1.502E+02 1.929E+01 2.286E+00 1.249E-09 9.588E-21
SM164     3.126E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU164     8.555E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD164     5.435E+01 7.986E+00 1.173E+00 5.490E-09 5.544E-19
TB164     6.772E+01 9.292E+00 1.362E+00 6.371E-09 6.434E-19
SM165     1.912E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
EU165     1.313E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GD165     1.798E+01 2.755E-10 4.214E-21 0.000E+00 0.000E+00
TB165     2.959E+01 4.093E-10 6.261E-21 0.000E+00 0.000E+00
DY165     7.209E+02 5.399E+02 4.020E+02 2.105E+01 6.110E-01
DY165M    4.511E+02 8.273E-10 1.263E-20 0.000E+00 0.000E+00
DY166     2.269E+01 2.250E+01 2.231E+01 2.049E+01 1.850E+01
HO166     2.199E+02 2.148E+02 2.099E+02 1.669E+02 1.276E+02
HO166M    5.909E-03 5.909E-03 5.909E-03 5.909E-03 5.909E-03
ER167M    6.452E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ER169     3.561E-01 3.550E-01 3.539E-01 3.432E-01 3.307E-01
TM170     9.737E-02 9.735E-02 9.733E-02 9.711E-02 9.685E-02
TM170M    1.065E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
TM171     2.448E-03 2.448E-03 2.448E-03 2.447E-03 2.445E-03
SUMTOT    8.661E+07 3.263E+07 2.914E+07 2.157E+07 1.846E+07

TOTAL     8.661E+07 3.263E+07 2.914E+07 2.157E+07 1.846E+07
□
        OUTPUT UNIT =
6                        PAGE  203
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	4.370E+02	4.370E+02	4.370E+02	4.370E+02	4.369E+02
CO	1.288E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI	4.474E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU	2.494E+02	9.072E-09	6.425E-11	5.513E-11	4.819E-11
ZN	1.957E+03	4.013E+01	3.953E+01	3.406E+01	2.848E+01
GA	8.878E+03	1.083E+02	9.842E+01	5.305E+01	3.800E+01
GE	5.386E+04	2.487E+03	1.698E+03	2.492E+02	1.104E+02
AS	1.528E+05	4.092E+03	3.515E+03	1.181E+03	9.249E+02
SE	4.352E+05	6.804E+03	1.169E+03	3.273E+00	2.571E+00
BR	8.998E+05	7.267E+04	4.358E+04	5.855E+03	3.303E+03
KR	1.646E+06	4.659E+05	3.568E+05	4.296E+04	1.029E+04
RB	2.385E+06	2.594E+05	1.855E+05	1.783E+04	2.807E+03
SR	3.875E+06	1.258E+06	1.133E+06	6.304E+05	4.913E+05
Y	5.532E+06	2.027E+06	1.860E+06	1.086E+06	7.335E+05
ZR	4.803E+06	1.536E+06	1.504E+06	1.252E+06	1.057E+06
NB	7.378E+06	2.309E+06	2.255E+06	1.767E+06	1.361E+06
MO	5.215E+06	1.017E+06	9.396E+05	8.428E+05	7.430E+05
TC	6.278E+06	1.136E+06	8.628E+05	7.909E+05	7.105E+05
RU	2.940E+06	1.860E+06	1.773E+06	1.364E+06	1.266E+06
RH	4.015E+06	2.043E+06	1.948E+06	1.745E+06	1.607E+06
PD	4.909E+05	2.755E+05	2.561E+05	1.545E+05	8.508E+04
AG	6.418E+05	3.440E+05	3.220E+05	2.106E+05	1.358E+05
CD	9.847E+04	2.489E+04	2.068E+04	1.198E+04	9.979E+03
IN	2.131E+05	3.257E+04	2.665E+04	1.274E+04	9.645E+03
SN	7.647E+05	9.751E+04	6.403E+04	1.836E+04	1.537E+04
SB	1.876E+06	3.888E+05	2.649E+05	1.048E+05	7.449E+04
TE	3.898E+06	1.764E+06	1.306E+06	8.687E+05	7.552E+05
I	5.901E+06	3.843E+06	3.408E+06	2.135E+06	1.624E+06
XE	4.276E+06	1.485E+06	1.468E+06	1.449E+06	1.246E+06
CS	3.983E+06	7.671E+05	4.717E+05	3.245E+05	3.206E+05
BA	4.739E+06	1.604E+06	1.282E+06	8.997E+05	8.754E+05
LA	4.692E+06	2.165E+06	1.827E+06	9.784E+05	8.706E+05
CE	3.719E+06	2.090E+06	2.055E+06	1.920E+06	1.788E+06
PR	3.281E+06	1.951E+06	1.776E+06	1.455E+06	1.339E+06
ND	8.028E+05	4.663E+05	4.136E+05	3.136E+05	3.023E+05
PM	8.722E+05	6.578E+05	6.475E+05	5.764E+05	5.042E+05
SM	4.375E+05	3.918E+05	3.805E+05	3.217E+05	2.665E+05
EU	2.874E+05	2.790E+05	2.753E+05	2.602E+05	2.491E+05
GD	6.959E+03	5.485E+03	5.276E+03	3.640E+03	2.334E+03
TB	3.043E+03	2.495E+03	2.439E+03	2.378E+03	2.320E+03
DY	1.195E+03	5.624E+02	4.243E+02	4.154E+01	1.911E+01
HO	2.199E+02	2.148E+02	2.099E+02	1.669E+02	1.276E+02
ER	6.808E+00	3.550E-01	3.539E-01	3.432E-01	3.307E-01

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TM          1.108E-01 1.001E-01 1.001E-01 9.983E-02 9.953E-02
SUMTOT      8.661E+07 3.263E+07 2.914E+07 2.157E+07 1.846E+07

TOTAL       8.661E+07 3.263E+07 2.914E+07 2.157E+07 1.846E+07

                                          CUMULATIVE TABLE TOTALS

AP+FP       8.689E+07 3.290E+07 2.940E+07 2.177E+07 1.863E+07
ACT+FP      1.134E+08 4.889E+07 4.341E+07 3.373E+07 2.898E+07
AP+ACT+FP   1.137E+08 4.915E+07 4.367E+07 3.393E+07 2.914E+07
□
         OUTPUT UNIT =
6                          PAGE  204
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
           ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

 H  3      1.471E-02 1.471E-02 1.471E-02 1.471E-02 1.471E-02
CO 72      4.683E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 72      3.302E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 72      9.535E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 72      6.163E-02 6.072E-02 5.982E-02 5.153E-02 4.309E-02
GA 72      7.770E-01 7.765E-01 7.756E-01 7.439E-01 6.742E-01
CO 73      1.366E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 73      4.654E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 73      8.935E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 73      1.051E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
GA 73      3.457E-01 3.004E-01 2.606E-01 6.297E-02 1.146E-02
GE 73M     3.038E-02 2.638E-02 2.288E-02 5.530E-03 1.006E-03
CO 74      3.227E-03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 74      2.112E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 74      1.827E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 74      8.413E-01 3.302E-12 1.292E-23 0.000E+00 0.000E+00
GA 74      3.632E+00 2.623E-02 1.545E-04 0.000E+00 0.000E+00
CO 75      3.829E-04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
NI 75      1.284E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
CU 75      1.416E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
ZN 75      4.494E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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GA 75	2.320E+00	7.748E-10	2.415E-19	0.000E+00	0.000E+00
GE 75	7.951E-01	4.933E-01	2.985E-01	1.966E-03	4.748E-06
GE 75M	1.105E-02	5.463E-12	1.703E-21	0.000E+00	0.000E+00
NI 76	2.644E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 76	1.477E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 76	4.690E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 76	1.630E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 76	3.249E-01	3.164E-01	3.082E-01	2.369E-01	1.727E-01
NI 77	6.441E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 77	5.736E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 77	9.702E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 77	1.486E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 77	4.825E+00	4.542E+00	4.272E+00	2.313E+00	1.108E+00
GE 77M	6.114E+00	8.652E-20	0.000E+00	0.000E+00	0.000E+00
AS 77	1.780E+00	1.760E+00	1.740E+00	1.526E+00	1.275E+00
SE 77M	6.536E-03	4.594E-03	4.541E-03	3.983E-03	3.326E-03
NI 78	6.395E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU 78	2.777E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 78	6.476E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 78	4.347E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 78	8.858E+00	5.495E+00	3.407E+00	2.860E-02	9.233E-05
AS 78	4.695E+01	4.271E+01	3.508E+01	1.099E+00	7.411E-03
CU 79	7.943E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 79	8.297E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 79	3.988E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 79	7.619E+01	4.891E-24	0.000E+00	0.000E+00	0.000E+00
AS 79	3.635E+01	3.850E-01	3.790E-03	3.236E-23	0.000E+00
SE 79	8.116E-05	8.116E-05	8.116E-05	8.116E-05	8.116E-05
SE 79M	3.949E+00	7.321E-02	7.231E-04	6.159E-24	0.000E+00
CU 80	1.192E-02	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 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
ZN 80	2.173E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

GA 80	5.700E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 80	6.539E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 80	2.724E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 80	2.754E-03	1.663E-03	1.358E-03	2.814E-04	4.284E-05
BR 80M	1.821E-04	1.557E-04	1.331E-04	2.773E-05	4.222E-06
CU 81	8.658E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN 81	9.471E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 81	2.742E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 81	2.328E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 81	2.229E+02	3.792E-32	0.000E+00	0.000E+00	0.000E+00
SE 81	8.922E+01	1.101E+01	1.785E+00	5.606E-04	9.248E-08
SE 81M	3.866E-01	1.871E-01	9.054E-02	6.378E-05	1.052E-08
ZN 82	1.195E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 82	1.791E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 82	1.214E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82	3.669E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 82M	2.639E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 82	8.565E+01	8.408E+01	8.244E+01	6.774E+01	5.353E+01
BR 82M	9.354E-01	1.058E-03	1.201E-06	0.000E+00	0.000E+00
ZN 83	1.398E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GA 83	4.797E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 83	2.091E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 83	4.704E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 83	3.746E+02	5.931E+01	9.341E+00	8.769E-08	2.042E-17
SE 83M	3.905E+02	1.493E-13	4.925E-29	0.000E+00	0.000E+00
BR 83	1.020E+02	8.126E+01	6.152E+01	3.395E+00	1.046E-01
KR 83M	1.275E+01	1.231E+01	1.118E+01	1.310E+00	5.017E-02
GA 84	8.519E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GE 84	6.809E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 84	8.633E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 84	4.564E+02	1.550E-03	5.212E-09	0.000E+00	0.000E+00
BR 84	1.547E+03	4.650E+02	1.257E+02	2.628E-04	4.017E-11
BR 84M	8.867E+01	8.659E-02	8.456E-05	0.000E+00	0.000E+00
GE 85	2.157E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 85	4.053E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 85	8.911E+02	1.474E-25	0.000E+00	0.000E+00	0.000E+00
SE 85M	6.979E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 85	6.257E+02	3.672E-04	1.838E-10	0.000E+00	0.000E+00
KR 85	1.016E+01	1.016E+01	1.016E+01	1.016E+01	1.016E+01
KR 85M	2.524E+02	2.189E+02	1.875E+02	3.991E+01	6.236E+00
GE 86	3.817E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 86	2.834E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 86	1.203E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 86	2.107E+03	5.248E-17	0.000E+00	0.000E+00	0.000E+00
BR 86M	1.970E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 86	9.201E+00	9.186E+00	9.172E+00	9.031E+00	8.865E+00
RB 86M	6.543E-01	1.184E-18	1.719E-36	0.000E+00	0.000E+00
GE 87	6.405E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00

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AS 87      1.101E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SE 87      1.782E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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OUTPUT UNIT =
6 PAGE 206
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BR 87	3.641E+03	1.449E-16	6.489E-36	0.000E+00	0.000E+00
KR 87	2.378E+03	1.394E+03	8.081E+02	3.469E+00	5.002E-03
SR 87M	2.112E-02	1.650E-02	1.288E-02	1.089E-03	5.617E-05
GE 88	2.956E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AS 88	1.635E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 88	5.911E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 88	2.382E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 88	3.645E+03	2.858E+03	2.239E+03	1.948E+02	1.040E+01
RB 88	4.321E+03	3.656E+03	2.890E+03	2.518E+02	1.345E+01
AS 89	1.704E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 89	2.421E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 89	2.912E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 89	5.912E+03	1.192E-02	2.392E-08	0.000E+00	0.000E+00
RB 89	6.291E+03	5.064E+02	3.283E+01	4.300E-11	2.367E-25
SR 89	1.244E+03	1.244E+03	1.243E+03	1.236E+03	1.227E+03
Y 89M	1.801E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SE 90	6.180E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 90	2.070E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 90	4.703E+03	1.399E-30	0.000E+00	0.000E+00	0.000E+00
RB 90	7.768E+03	1.554E-02	8.978E-07	0.000E+00	0.000E+00
RB 90M	2.235E+03	1.499E-01	9.449E-06	0.000E+00	0.000E+00
SR 90	6.277E+01	6.277E+01	6.277E+01	6.277E+01	6.277E+01
Y 90	3.179E+02	3.177E+02	3.175E+02	3.157E+02	3.137E+02
Y 90M	4.619E-02	3.693E-02	2.953E-02	3.157E-03	2.158E-04
SE 91	1.514E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR 91	7.367E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR 91	4.453E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 91	1.022E+04	2.681E-15	6.420E-34	0.000E+00	0.000E+00
SR 91	3.734E+03	3.477E+03	3.232E+03	1.558E+03	6.492E+02

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 Y 91      1.747E+03 1.747E+03 1.747E+03 1.744E+03 1.737E+03
 Y 91M     8.943E+02 8.740E+02 8.310E+02 4.086E+02 1.702E+02
SE 92      8.475E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
BR 92      1.381E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 92      2.268E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 92      8.388E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 92      4.787E+03 3.708E+03 2.871E+03 2.225E+02 1.033E+01
 Y 92      5.329E+03 5.209E+03 4.924E+03 1.355E+03 1.685E+02
BR 93      2.209E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 93      1.300E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 93      5.956E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 93      9.430E+03 3.707E+01 1.449E-01 0.000E+00 0.000E+00
 Y 93      4.803E+03 4.539E+03 4.238E+03 2.134E+03 9.363E+02
ZR 93      1.624E-04 1.624E-04 1.624E-04 1.624E-04 1.624E-04
NB 93M     2.880E-05 2.880E-05 2.880E-05 2.882E-05 2.883E-05
BR 94      2.515E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 94      3.247E+02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 94      4.415E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 94      7.463E+03 3.483E-11 1.611E-25 0.000E+00 0.000E+00
 Y 94      1.109E+04 1.337E+03 1.516E+02 5.299E-08 2.379E-19
NB 94M     2.086E-04 2.716E-07 3.545E-10 0.000E+00 0.000E+00
BR 95      2.108E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
□
         OUTPUT UNIT =
6                          PAGE  207
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03    at 14:28:02

    *  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, 57469.5 MW
D/MTIHM, 3 CYCLE
          ASSY DIS      1.0HR     2.0HR    12.0HR    24.0HR

KR 95      9.240E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
RB 95      2.045E+03 0.000E+00 0.000E+00 0.000E+00 0.000E+00
SR 95      1.082E+04 0.000E+00 0.000E+00 0.000E+00 0.000E+00
 Y 95      9.734E+03 1.914E+02 3.646E+00 2.291E-17 0.000E+00
ZR 95      3.876E+03 3.875E+03 3.873E+03 3.856E+03 3.835E+03
NB 95      3.684E+03 3.684E+03 3.684E+03 3.684E+03 3.684E+03
NB 95M     7.603E+00 7.602E+00 7.601E+00 7.587E+00 7.568E+00
BR 96      1.398E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00
KR 96      1.160E+01 0.000E+00 0.000E+00 0.000E+00 0.000E+00
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RB 96	8.930E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 96	5.606E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 96	1.608E+04	2.292E-04	3.216E-12	0.000E+00	0.000E+00
NB 96	3.445E+01	3.345E+01	3.247E+01	2.413E+01	1.690E+01
KR 97	1.086E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 97	1.480E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 97	5.055E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 97	1.119E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 97	4.184E+03	4.016E+03	3.855E+03	2.558E+03	1.564E+03
NB 97	5.404E+03	5.315E+03	5.174E+03	3.511E+03	2.011E+03
NB 97M	3.354E+03	3.214E+03	3.085E+03	2.047E+03	1.251E+03
KR 98	1.022E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB 98	4.631E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 98	1.548E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 98	1.221E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 98	4.363E+03	4.842E-32	0.000E+00	0.000E+00	0.000E+00
NB 98	1.027E+04	1.228E-31	0.000E+00	0.000E+00	0.000E+00
NB 98M	1.911E+02	8.523E+01	3.801E+01	1.182E-02	7.314E-07
RB 99	4.224E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR 99	7.346E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y 99	5.463E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR 99	1.155E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99	7.809E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB 99M	5.040E+02	5.696E-05	6.438E-12	0.000E+00	0.000E+00
MO 99	3.070E+03	3.038E+03	3.007E+03	2.707E+03	2.386E+03
TC 99	4.873E-03	4.873E-03	4.873E-03	4.875E-03	4.877E-03
TC 99M	7.055E+02	7.051E+02	7.039E+02	6.666E+02	5.989E+02
RB100	5.472E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR100	1.147E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y100	3.831E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR100	6.003E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100	1.127E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB100M	9.866E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC100	3.739E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR101	2.531E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y101	9.906E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR101	8.659E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB101	1.053E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO101	9.910E+03	5.818E+02	3.383E+01	1.497E-11	2.240E-26
TC101	4.166E+03	9.094E+02	8.855E+01	1.414E-10	2.853E-25
SR102	1.938E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y102	3.749E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 208
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
ZR102	3.476E+03	4.976E-35	0.000E+00	0.000E+00	0.000E+00
NB102	1.711E+04	1.305E-34	0.000E+00	0.000E+00	0.000E+00
MO102	1.568E+03	3.765E+01	8.884E-01	4.750E-17	1.401E-36
TC102	8.783E+03	2.123E+02	5.010E+00	2.679E-16	0.000E+00
TC102M	2.262E+01	1.593E-03	1.122E-07	0.000E+00	0.000E+00
RH102	1.466E-02	1.466E-02	1.466E-02	1.466E-02	1.465E-02
SR103	9.607E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y103	4.749E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR103	2.560E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB103	9.208E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO103	1.174E+04	1.231E-14	1.067E-32	0.000E+00	0.000E+00
TC103	6.390E+03	3.949E-14	3.426E-32	0.000E+00	0.000E+00
RU103	2.961E+03	2.959E+03	2.957E+03	2.935E+03	2.909E+03
RH103M	1.835E+02	1.834E+02	1.833E+02	1.822E+02	1.805E+02
SR104	3.512E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y104	6.253E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR104	4.614E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB104	7.486E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO104	4.411E+03	2.281E-08	1.174E-19	0.000E+00	0.000E+00
TC104	1.681E+04	1.865E+03	1.897E+02	2.260E-08	2.788E-20
RH104	4.503E+03	2.422E-02	1.669E-06	0.000E+00	0.000E+00
RH104M	4.136E+01	2.851E-03	1.965E-07	0.000E+00	0.000E+00
Y105	2.647E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR105	1.057E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB105	2.019E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO105	9.703E+03	8.331E-17	0.000E+00	0.000E+00	0.000E+00
TC105	7.234E+03	4.404E+01	2.433E-01	0.000E+00	0.000E+00
RU105	4.720E+03	4.171E+03	3.569E+03	7.488E+02	1.150E+02
RH105	8.297E+02	8.306E+02	8.291E+02	7.427E+02	6.004E+02
RH105M	1.439E+02	1.275E+02	1.091E+02	2.289E+01	3.515E+00
ZR106	8.507E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB106	7.873E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO106	3.060E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC106	1.093E+04	6.715E-26	0.000E+00	0.000E+00	0.000E+00
RU106	2.264E+01	2.264E+01	2.263E+01	2.262E+01	2.260E+01
RH106	4.091E+03	3.652E+03	3.651E+03	3.648E+03	3.645E+03
RH106M	3.983E+02	2.907E+02	2.121E+02	9.083E+00	2.071E-01

Y107	1.410E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR107	5.764E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB107	9.934E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO107	2.294E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC107	4.372E+03	2.083E-34	0.000E+00	0.000E+00	0.000E+00
RU107	3.515E+03	1.921E-01	9.619E-06	0.000E+00	0.000E+00
RH107	1.964E+03	3.642E+02	5.358E+01	2.544E-07	2.615E-17
PD107M	1.394E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR108	1.609E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB108	3.043E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO108	4.732E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC108	4.224E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU108	8.674E+02	8.499E-02	8.235E-06	0.000E+00	0.000E+00
RH108	3.958E+03	4.096E-01	3.968E-05	0.000E+00	0.000E+00

OUTPUT UNIT = 6

ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
RH108M	5.180E+01	4.498E-02	3.906E-05	0.000E+00	0.000E+00
AG108	5.993E-03	1.034E-08	1.019E-08	1.019E-08	1.019E-08
ZR109	1.693E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB109	5.114E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO109	2.589E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC109	1.577E+03	8.909E-19	0.000E+00	0.000E+00	0.000E+00
RU109	2.473E+03	1.817E-18	0.000E+00	0.000E+00	0.000E+00
RH109	1.379E+03	4.996E-09	4.544E-21	0.000E+00	0.000E+00
RH109M	1.352E+02	3.044E-18	0.000E+00	0.000E+00	0.000E+00
PD109	6.804E+02	6.497E+02	6.171E+02	3.688E+02	1.988E+02
PD109M	1.030E+02	2.902E-02	4.088E-06	0.000E+00	0.000E+00
AG109M	1.318E+02	1.260E+02	1.197E+02	7.151E+01	3.855E+01
NB110	7.652E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO110	3.818E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC110	5.773E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU110	6.907E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH110	1.750E+03	1.635E-34	0.000E+00	0.000E+00	0.000E+00

RH110M	9.002E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110	1.204E+03	4.621E-01	4.621E-01	4.615E-01	4.609E-01
AG110M	8.077E+01	8.076E+01	8.075E+01	8.066E+01	8.055E+01
NB111	5.626E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MO111	1.216E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC111	1.471E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU111	6.250E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH111	6.013E+02	4.686E-15	2.945E-32	0.000E+00	0.000E+00
PD111	2.463E+02	4.146E+01	8.164E+00	6.511E-01	1.435E-01
PD111M	2.656E+00	2.343E+00	2.066E+00	5.859E-01	1.291E-01
AG111	1.060E+02	1.058E+02	1.054E+02	1.015E+02	9.685E+01
AG111M	1.796E+01	3.212E+00	6.835E-01	6.760E-02	1.490E-02
CD111M	1.282E-01	5.457E-02	2.323E-02	4.542E-06	1.610E-10
MO112	1.756E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC112	6.972E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU112	1.777E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH112	5.283E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD112	2.157E+01	2.084E+01	2.014E+01	1.426E+01	9.430E+00
AG112	2.925E+02	2.912E+02	2.883E+02	2.244E+02	1.506E+02
MO113	1.846E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC113	1.522E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU113	1.707E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH113	2.691E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD113	2.148E+02	1.995E-10	1.814E-22	0.000E+00	0.000E+00
AG113	1.027E+02	9.052E+01	7.942E+01	2.148E+01	4.471E+00
AG113M	1.296E+01	4.448E-11	4.045E-23	0.000E+00	0.000E+00
CD113M	9.737E-02	9.737E-02	9.737E-02	9.737E-02	9.737E-02
MO114	1.529E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC114	4.699E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU114	5.516E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH114	2.433E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD114	8.533E+01	2.588E-06	7.713E-14	0.000E+00	0.000E+00
AG114	1.513E+02	4.669E-06	1.392E-13	0.000E+00	0.000E+00
IN114	6.809E-02	2.518E-02	2.517E-02	2.502E-02	2.485E-02

OUTPUT UNIT =
6 PAGE 210
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW

D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
IN114M	7.845E-03	7.840E-03	7.835E-03	7.790E-03	7.736E-03
MO115	1.422E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC115	8.381E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU115	4.299E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH115	1.424E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD115	1.775E+02	5.946E-27	0.000E+00	0.000E+00	0.000E+00
AG115	8.902E+01	1.151E+01	1.439E+00	1.340E-09	1.950E-20
AG115M	3.800E+01	2.149E-27	0.000E+00	0.000E+00	0.000E+00
CD115	3.785E+01	3.751E+01	3.705E+01	3.255E+01	2.786E+01
CD115M	4.200E+00	4.197E+00	4.195E+00	4.168E+00	4.135E+00
IN115M	2.382E+01	2.380E+01	2.374E+01	2.192E+01	1.899E+01
TC116	6.787E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU116	7.319E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH116	1.021E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD116	8.026E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG116	9.805E+01	1.942E-05	3.538E-12	0.000E+00	0.000E+00
AG116M	1.148E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116	5.905E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN116M	8.642E+01	4.009E+01	1.860E+01	8.590E-03	8.539E-07
TC117	2.441E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU117	1.657E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH117	4.059E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD117	1.493E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG117	6.948E+01	1.155E-13	1.811E-28	0.000E+00	0.000E+00
AG117M	7.285E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD117	4.542E+01	3.498E+01	2.679E+01	1.863E+00	7.600E-02
CD117M	2.776E+01	2.270E+01	1.851E+01	2.410E+00	2.087E-01
IN117	2.621E+01	2.533E+01	2.324E+01	3.390E+00	2.345E-01
IN117M	2.782E+01	2.683E+01	2.448E+01	3.721E+00	2.315E-01
SN117M	2.331E-01	2.326E-01	2.321E-01	2.274E-01	2.218E-01
RU118	8.571E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH118	1.009E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD118	8.479E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118	1.171E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG118M	5.463E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD118	2.471E+01	1.083E+01	4.738E+00	1.215E-03	5.967E-08
IN118	1.147E+02	5.034E+01	2.202E+01	5.649E-03	2.773E-07
IN118M	8.486E-02	7.411E-06	6.472E-10	0.000E+00	0.000E+00
RH119	6.636E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD119	1.211E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG119	1.657E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD119	5.209E+01	6.313E-01	7.564E-03	4.614E-22	0.000E+00
CD119M	5.811E+01	1.366E-04	3.098E-10	0.000E+00	0.000E+00
IN119	2.186E+01	5.585E-01	5.830E-02	5.452E-12	4.959E-24
IN119M	6.021E+01	1.029E+01	1.067E+00	9.918E-11	9.021E-23

SN119M	8.575E-02	8.574E-02	8.573E-02	8.563E-02	8.551E-02
RU120	2.154E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RH120	1.357E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD120	3.056E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG120	9.069E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD120	5.237E+01	2.513E-20	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
IN120	1.102E+02	4.106E-19	0.000E+00	0.000E+00	0.000E+00
IN120M	7.629E+01	3.814E-20	0.000E+00	0.000E+00	0.000E+00
RH121	1.812E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD121	2.016E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG121	9.492E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD121	1.525E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121	9.447E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN121M	2.513E+01	9.015E-05	3.032E-10	0.000E+00	0.000E+00
SN121	1.189E+01	1.159E+01	1.130E+01	8.722E+00	6.395E+00
SN121M	3.594E-04	3.594E-04	3.594E-04	3.594E-04	3.594E-04
RH122	2.806E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD122	4.701E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG122	8.975E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD122	7.527E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122	2.606E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN122M	1.363E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB122	1.442E+01	1.427E+01	1.412E+01	1.269E+01	1.116E+01
SB122M	1.822E-02	9.120E-07	4.566E-11	0.000E+00	0.000E+00
RH123	2.076E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PD123	1.605E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG123	3.745E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD123	1.662E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123	1.081E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN123M	5.308E+01	1.581E-21	0.000E+00	0.000E+00	0.000E+00
SN123	6.611E+00	6.609E+00	6.608E+00	6.593E+00	6.575E+00

SN123M	3.355E+01	1.199E+01	4.248E+00	1.325E-04	5.186E-10
TE123M	4.700E-02	4.699E-02	4.697E-02	4.686E-02	4.673E-02
PD124	2.384E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG124	2.412E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD124	1.023E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN124	3.281E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	2.128E+01	2.127E+01	2.126E+01	2.116E+01	2.104E+01
SB124M	2.285E-02	5.084E-14	1.131E-25	0.000E+00	0.000E+00
AG125	6.262E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD125	1.326E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125	1.567E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN125M	1.193E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN125	5.466E+01	5.450E+01	5.434E+01	5.273E+01	5.087E+01
SN125M	8.975E+01	1.150E+00	1.457E-02	1.553E-21	0.000E+00
SB125	3.241E+01	3.241E+01	3.241E+01	3.241E+01	3.241E+01
TE125M	1.885E+00	1.885E+00	1.885E+00	1.886E+00	1.887E+00
PD126	4.222E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG126	2.566E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD126	7.049E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN126	5.351E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN126	8.248E-04	8.248E-04	8.248E-04	8.248E-04	8.248E-04
SB126	1.630E+01	1.626E+01	1.622E+01	1.585E+01	1.541E+01
SB126M	4.067E+00	4.631E-01	5.937E-02	8.420E-03	8.420E-03
CD127	6.350E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127	2.528E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN127M	2.642E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 212
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SN127	5.871E+02	4.221E+02	3.035E+02	1.118E+01	2.130E-01
SN127M	1.878E+02	8.016E-03	3.421E-07	0.000E+00	0.000E+00
SB127	3.816E+02	3.803E+02	3.786E+02	3.538E+02	3.234E+02
TE127	8.588E+01	8.587E+01	8.584E+01	8.413E+01	7.987E+01
TE127M	4.502E+00	4.502E+00	4.502E+00	4.502E+00	4.502E+00

XE127	1.891E-04	1.890E-04	1.888E-04	1.873E-04	1.855E-04
AG128	1.186E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CD128	1.891E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN128	5.660E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN128	4.337E+02	2.143E+02	1.059E+02	9.197E-02	1.950E-05
SB128	1.885E+02	1.745E+02	1.616E+02	7.489E+01	2.975E+01
SB128M	1.735E+03	9.429E+02	4.675E+02	4.060E-01	8.609E-05
I128	6.770E+01	1.281E+01	2.425E+00	1.429E-07	3.018E-16
CD129	1.174E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN129	3.835E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN129	9.229E+02	3.606E+00	1.409E-02	0.000E+00	0.000E+00
SN129M	1.040E+03	6.201E-05	3.696E-12	0.000E+00	0.000E+00
SB129	2.013E+03	1.738E+03	1.480E+03	2.974E+02	4.336E+01
TE129	6.343E+02	6.101E+02	5.625E+02	1.741E+02	7.731E+01
TE129M	4.650E+01	4.649E+01	4.648E+01	4.621E+01	4.577E+01
I129	1.174E-05	1.174E-05	1.174E-05	1.174E-05	1.174E-05
XE129M	1.716E-02	1.710E-02	1.704E-02	1.643E-02	1.574E-02
CD130	8.081E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN130	4.373E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN130	1.446E+03	2.018E-02	2.816E-07	0.000E+00	0.000E+00
SB130	1.391E+03	4.919E+02	1.739E+02	5.308E-03	2.025E-08
SB130M	5.447E+03	1.532E+01	2.100E-02	0.000E+00	0.000E+00
I130	5.244E+02	4.977E+02	4.706E+02	2.686E+02	1.371E+02
I130M	2.626E+01	2.584E-01	2.544E-03	2.172E-23	0.000E+00
CD131	2.158E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN131	1.610E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN131	2.746E+03	1.726E-14	1.085E-31	0.000E+00	0.000E+00
SB131	6.072E+03	1.013E+03	1.661E+02	2.330E-06	8.786E-16
TE131	3.068E+03	1.463E+03	4.980E+02	9.017E+01	6.834E+01
TE131M	7.490E+02	7.348E+02	7.185E+02	5.704E+02	4.323E+02
I131	1.753E+03	1.752E+03	1.748E+03	1.695E+03	1.631E+03
XE131M	5.557E+00	5.557E+00	5.557E+00	5.553E+00	5.544E+00
CD132	1.776E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
IN132	6.205E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN132	9.546E+02	7.712E-25	0.000E+00	0.000E+00	0.000E+00
SB132	5.569E+03	2.175E-03	7.705E-10	0.000E+00	0.000E+00
SB132M	3.735E+03	1.870E-01	9.364E-06	0.000E+00	0.000E+00
TE132	1.427E+03	1.415E+03	1.403E+03	1.284E+03	1.154E+03
I132	1.208E+04	1.200E+04	1.192E+04	1.097E+04	9.866E+03
CS132	9.499E-01	9.457E-01	9.415E-01	9.004E-01	8.535E-01
IN133	7.007E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN133	6.781E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB133	5.711E+03	1.703E-04	5.077E-12	0.000E+00	0.000E+00
TE133	6.070E+03	4.932E+02	1.383E+02	7.172E-02	8.777E-06
TE133M	5.965E+03	2.818E+03	1.330E+03	7.305E-01	8.940E-05
I133	5.993E+03	5.878E+03	5.710E+03	4.107E+03	2.753E+03

OUTPUT UNIT =

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
I133M	3.392E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	1.073E+03	1.073E+03	1.073E+03	1.062E+03	1.034E+03
XE133M	4.409E+01	4.402E+01	4.394E+01	4.247E+01	3.950E+01
IN134	4.970E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SN134	9.011E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134	1.399E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB134M	1.322E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE134	5.269E+03	1.949E+03	7.207E+02	3.442E-02	2.247E-07
I134	2.083E+04	1.423E+04	8.189E+03	5.473E+00	4.400E-04
I134M	2.536E+02	3.329E-03	4.373E-08	0.000E+00	0.000E+00
XE134M	1.017E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	1.907E+03	1.906E+03	1.906E+03	1.906E+03	1.905E+03
CS134M	3.730E+01	2.937E+01	2.313E+01	2.119E+00	1.204E-01
SN135	1.376E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB135	6.970E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE135	7.474E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	1.073E+04	9.665E+03	8.703E+03	3.050E+03	8.668E+02
XE135	7.177E+02	8.892E+02	1.022E+03	1.265E+03	7.833E+02
XE135M	6.489E+02	4.331E+02	3.800E+02	1.329E+02	3.777E+01
CS135	1.171E-04	1.171E-04	1.172E-04	1.172E-04	1.172E-04
CS135M	3.902E+02	1.780E+02	8.123E+01	3.176E-02	2.585E-06
BA135M	3.755E-01	3.666E-01	3.578E-01	2.810E-01	2.103E-01
SN136	1.101E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB136	1.958E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE136	3.451E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I136	1.099E+04	1.117E-09	9.804E-23	0.000E+00	0.000E+00
I136M	5.728E+03	1.582E-20	0.000E+00	0.000E+00	0.000E+00
CS136	7.252E+02	7.236E+02	7.220E+02	7.062E+02	6.878E+02
BA136M	1.060E+02	1.058E+02	1.055E+02	1.032E+02	1.005E+02
SB137	2.855E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE137	1.555E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I137	8.598E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	1.007E+04	2.043E-01	3.930E-06	0.000E+00	0.000E+00

CS137	9.139E+01	9.139E+01	9.139E+01	9.139E+01	9.139E+01
BA137M	3.074E+02	3.070E+02	3.069E+02	3.069E+02	3.069E+02
SB138	4.713E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE138	3.306E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I138	4.716E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	8.326E+03	4.432E+02	2.355E+01	4.222E-12	2.136E-27
CS138	1.850E+04	7.977E+03	2.345E+03	5.856E-03	1.088E-09
CS138M	2.546E+02	1.505E-04	8.900E-11	0.000E+00	0.000E+00
SB139	3.079E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE139	9.775E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I139	2.187E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE139	9.454E+03	3.498E-24	0.000E+00	0.000E+00	0.000E+00
CS139	9.817E+03	1.241E+02	1.486E+00	9.067E-20	0.000E+00
BA139	4.813E+03	3.281E+03	1.989E+03	1.302E+01	3.118E-02
TE140	9.973E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I140	7.049E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE140	4.979E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS140	1.793E+04	2.105E-13	2.173E-30	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 214
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
BA140	2.323E+03	2.318E+03	2.313E+03	2.261E+03	2.201E+03
LA140	1.481E+04	1.479E+04	1.478E+04	1.461E+04	1.439E+04
PR140	8.746E-02	4.107E-07	1.930E-12	0.000E+00	0.000E+00
TE141	6.552E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I141	1.162E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE141	3.020E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS141	1.034E+04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	8.020E+03	8.366E+02	8.585E+01	1.111E-08	1.515E-20
LA141	4.621E+03	4.162E+03	3.519E+03	6.040E+02	7.278E+01
CE141	1.164E+03	1.164E+03	1.164E+03	1.157E+03	1.146E+03
TE142	5.743E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I142	2.690E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE142	7.771E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00

CS142	8.683E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	6.355E+03	1.305E+02	2.677E+00	3.527E-17	2.145E-37
LA142	1.587E+04	1.138E+04	7.293E+03	8.214E+01	3.771E-01
PR142	4.005E+02	3.872E+02	3.734E+02	2.599E+02	1.683E+02
PR142M	2.262E+01	1.311E+00	7.592E-02	3.230E-14	4.612E-29
I143	1.494E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE143	2.170E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS143	3.297E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA143	9.859E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA143	8.168E+03	4.251E+02	2.180E+01	2.736E-12	9.028E-28
CE143	2.970E+03	2.928E+03	2.868E+03	2.324E+03	1.807E+03
PR143	1.303E+03	1.303E+03	1.303E+03	1.299E+03	1.289E+03
I144	1.645E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE144	2.858E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS144	1.524E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA144	4.583E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA144	1.240E+04	1.290E-23	0.000E+00	0.000E+00	0.000E+00
CE144	3.836E+02	3.835E+02	3.835E+02	3.831E+02	3.826E+02
PR144	4.295E+03	4.254E+03	4.250E+03	4.245E+03	4.240E+03
PR144M	2.377E+00	2.374E+00	2.374E+00	2.371E+00	2.368E+00
XE145	5.478E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS145	2.911E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA145	4.609E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA145	6.854E+03	3.334E-34	0.000E+00	0.000E+00	0.000E+00
CE145	4.273E+03	4.885E-03	4.659E-09	0.000E+00	0.000E+00
PR145	1.991E+03	1.790E+03	1.594E+03	5.003E+02	1.245E+02
XE146	2.715E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS146	6.380E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA146	1.052E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA146	7.262E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE146	1.030E+03	5.549E+01	2.967E+00	5.658E-13	3.085E-28
PR146	6.037E+03	2.165E+03	4.462E+02	1.619E-05	1.791E-14
PM146	1.135E-02	1.135E-02	1.135E-02	1.135E-02	1.134E-02
XE147	3.569E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS147	9.502E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA147	4.742E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA147	2.502E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE147	3.894E+03	1.390E-12	4.586E-28	0.000E+00	0.000E+00

OUTPUT UNIT =
6 PAGE 215
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MW D/MTIHM, 3 CYCLE

	ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
PR147	2.961E+03	1.029E+02	3.216E+00	2.856E-15	2.477E-33
ND147	7.759E+02	7.745E+02	7.725E+02	7.526E+02	7.293E+02
PM147	1.943E+01	1.943E+01	1.943E+01	1.946E+01	1.950E+01
CS148	8.462E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA148	6.360E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA148	1.544E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE148	1.350E+03	8.561E-23	0.000E+00	0.000E+00	0.000E+00
PR148	4.323E+03	8.543E-05	1.199E-12	0.000E+00	0.000E+00
PM148	1.079E+03	1.073E+03	1.067E+03	1.012E+03	9.488E+02
PM148M	1.769E+02	1.768E+02	1.767E+02	1.754E+02	1.740E+02
BA149	1.250E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA149	3.116E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE149	1.952E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR149	1.555E+03	2.196E-05	3.081E-13	0.000E+00	0.000E+00
ND149	1.074E+03	7.343E+02	4.919E+02	8.950E+00	7.307E-02
PM149	7.471E+02	7.424E+02	7.361E+02	6.520E+02	5.576E+02
CS150	8.966E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA150	7.567E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA150	9.140E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE150	5.696E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR150	2.475E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM150	6.520E+01	5.034E+01	3.887E+01	2.927E+00	1.314E-01
LA151	9.989E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE151	3.551E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR151	1.039E+03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND151	9.930E+02	3.483E+01	1.217E+00	3.307E-15	1.097E-32
PM151	4.158E+02	4.086E+02	3.989E+02	3.125E+02	2.331E+02
SM151	3.234E-02	3.235E-02	3.237E-02	3.246E-02	3.256E-02
BA152	2.533E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA152	1.593E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE152	5.726E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR152	7.819E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND152	2.605E+02	7.046E+00	1.894E-01	3.728E-17	5.269E-36
PM152	8.241E+02	3.363E+01	9.058E-01	1.780E-16	2.501E-35
PM152M	1.595E+01	6.230E-02	2.435E-04	0.000E+00	0.000E+00
EU152	3.131E-02	3.131E-02	3.131E-02	3.131E-02	3.131E-02
EU152M	3.508E-01	3.256E-01	3.023E-01	1.437E-01	5.886E-02
LA153	1.442E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE153	1.769E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR153	1.992E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND153	5.752E+02	5.337E-14	4.807E-30	0.000E+00	0.000E+00

PM153	2.359E+02	1.319E-01	5.964E-05	0.000E+00	0.000E+00
SM153	7.382E+02	7.275E+02	7.168E+02	6.179E+02	5.171E+02
GD153	1.648E-02	1.648E-02	1.648E-02	1.646E-02	1.643E-02
LA154	8.792E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE154	1.617E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR154	7.415E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND154	1.614E+02	1.309E-25	0.000E+00	0.000E+00	0.000E+00
PM154	4.899E+02	2.230E-04	7.901E-11	0.000E+00	0.000E+00
PM154M	8.280E+01	7.650E-09	7.069E-19	0.000E+00	0.000E+00
EU154	9.484E+01	9.484E+01	9.484E+01	9.483E+01	9.482E+01

OUTPUT UNIT =
6 PAGE 216
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
CE155	2.905E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR155	1.240E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND155	1.503E+02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM155	2.354E+02	1.193E-27	0.000E+00	0.000E+00	0.000E+00
SM155	1.473E+02	2.332E+01	3.582E+00	2.619E-08	4.519E-18
EU155	5.241E+00	5.241E+00	5.241E+00	5.240E+00	5.239E+00
GD155M	9.181E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE156	2.307E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR156	3.360E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND156	3.774E+01	1.119E-17	2.765E-36	0.000E+00	0.000E+00
PM156	2.217E+02	2.688E-17	0.000E+00	0.000E+00	0.000E+00
SM156	3.947E+01	3.669E+01	3.408E+01	1.630E+01	6.729E+00
EU156	2.406E+03	2.402E+03	2.398E+03	2.355E+03	2.302E+03
CE157	2.496E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR157	4.421E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND157	2.010E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM157	8.883E+01	1.051E-14	1.228E-30	0.000E+00	0.000E+00
SM157	9.389E+01	5.662E-01	3.127E-03	0.000E+00	0.000E+00
EU157	1.090E+02	1.046E+02	9.992E+01	6.333E+01	3.664E+01
PR158	4.232E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND158	2.387E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

PM158	4.596E+01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM158	2.392E+01	9.295E+00	3.611E+00	2.826E-04	3.337E-09
EU158	7.747E+01	5.719E+01	3.316E+01	1.331E-02	3.922E-07
PR159	1.486E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND159	3.635E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM159	8.773E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM159	3.188E+01	6.669E-06	1.389E-12	0.000E+00	0.000E+00
EU159	3.094E+01	3.562E+00	3.579E-01	3.757E-11	3.983E-23
GD159	1.826E+01	1.777E+01	1.714E+01	1.181E+01	7.550E+00
ND160	2.234E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM160	2.003E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM160	1.046E+01	8.226E-03	6.470E-06	0.000E+00	0.000E+00
EU160	2.033E+01	1.220E-02	9.599E-06	0.000E+00	0.000E+00
TB160	1.074E+01	1.074E+01	1.073E+01	1.069E+01	1.064E+01
ND161	2.268E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PM161	2.072E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM161	4.392E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU161	8.095E+00	1.640E-25	0.000E+00	0.000E+00	0.000E+00
GD161	5.641E+00	9.068E-05	1.191E-09	0.000E+00	0.000E+00
TB161	2.245E+00	2.236E+00	2.227E+00	2.136E+00	2.031E+00
PM162	1.166E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SM162	4.334E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU162	3.763E+00	3.671E-04	3.533E-08	0.000E+00	0.000E+00
GD162	1.269E+00	2.869E-02	4.491E-04	3.895E-22	0.000E+00
TB162	3.448E+00	2.353E-01	4.505E-03	4.140E-21	0.000E+00
TB162M	1.157E-01	9.026E-02	6.624E-02	2.960E-03	7.102E-05
SM163	7.796E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU163	7.760E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD163	1.372E+00	3.030E-12	6.305E-24	0.000E+00	0.000E+00
TB163	9.064E-01	1.164E-01	1.380E-02	7.539E-12	5.786E-23

OUTPUT UNIT = 6

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
SM164	5.442E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EU164	2.236E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD164	3.463E-01	5.089E-02	7.476E-03	3.498E-11	3.532E-21
TB164	9.485E-01	1.302E-01	1.907E-02	8.924E-11	9.012E-21
SM165	4.975E-04	0.000E+00	0.000E+00	0.000E+00	0.000E+00
EU165	2.941E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GD165	2.480E-01	3.801E-12	5.813E-23	0.000E+00	0.000E+00
TB165	2.987E-01	4.132E-12	6.320E-23	0.000E+00	0.000E+00
DY165	3.337E+00	2.500E+00	1.861E+00	9.745E-02	2.829E-03
DY165M	3.369E-01	6.179E-13	9.431E-24	0.000E+00	0.000E+00
DY166	2.650E-02	2.628E-02	2.605E-02	2.393E-02	2.161E-02
HO166	9.424E-01	9.208E-01	8.997E-01	7.156E-01	5.468E-01
HO166M	6.547E-05	6.547E-05	6.547E-05	6.547E-05	6.547E-05
ER167M	7.955E-03	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ER169	7.176E-04	7.154E-04	7.132E-04	6.916E-04	6.666E-04
TM170	1.932E-04	1.931E-04	1.931E-04	1.927E-04	1.921E-04
SUMTOT	1.008E+06	2.071E+05	1.663E+05	1.007E+05	8.296E+04
TOTAL	1.008E+06	2.071E+05	1.663E+05	1.007E+05	8.296E+04

OUTPUT UNIT =
6 PAGE 218
ORIGEN2 V2.2 (5-4-2002), Run on 04/29/03 at 14:28:02

* 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, 57469.5 MWD/MTIHM, 3 CYCLE

ASSY DIS	1.0HR	2.0HR	12.0HR	24.0HR
H	1.471E-02	1.471E-02	1.471E-02	1.471E-02	1.471E-02
CO	6.410E-02	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI	1.169E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU	7.510E+00	6.179E-11	1.167E-13	8.852E-14	7.739E-14
ZN	3.887E+01	6.074E-02	5.984E-02	5.154E-02	4.310E-02
GA	2.296E+02	1.103E+00	1.036E+00	8.068E-01	6.857E-01
GE	8.197E+02	1.056E+01	8.000E+00	2.349E+00	1.109E+00
AS	3.362E+03	4.517E+01	3.713E+01	2.862E+00	1.455E+00
SE	6.801E+03	7.059E+01	1.122E+01	4.689E-03	3.407E-03
BR	1.843E+04	6.304E+02	2.697E+02	7.114E+01	5.363E+01
KR	2.536E+04	4.493E+03	3.256E+03	2.497E+02	2.686E+01
RB	5.274E+04	4.172E+03	2.932E+03	2.608E+02	2.231E+01
SR	5.063E+04	8.529E+03	7.409E+03	3.079E+03	1.950E+03

Y	8.410E+04	1.422E+04	1.221E+04	5.956E+03	3.325E+03
ZR	4.525E+04	7.891E+03	7.728E+03	6.414E+03	5.399E+03
NB	9.967E+04	1.234E+04	1.202E+04	9.274E+03	6.970E+03
MO	4.654E+04	3.658E+03	3.041E+03	2.707E+03	2.386E+03
TC	6.977E+04	3.735E+03	9.875E+02	6.666E+02	5.989E+02
RU	1.634E+04	7.153E+03	6.548E+03	3.707E+03	3.047E+03
RH	2.155E+04	5.448E+03	5.038E+03	4.605E+03	4.430E+03
PD	2.024E+03	7.144E+02	6.475E+02	3.843E+02	2.085E+02
AG	3.266E+03	7.095E+02	6.761E+02	5.001E+02	3.714E+02
CD	1.107E+03	1.110E+02	9.141E+01	4.109E+01	3.238E+01
IN	4.423E+03	1.773E+02	1.132E+02	2.908E+01	1.948E+01
SN	9.298E+03	7.263E+02	4.862E+02	7.964E+01	6.436E+01
SB	3.598E+04	4.841E+03	2.912E+03	8.086E+02	4.766E+02
TE	3.624E+04	9.622E+03	5.509E+03	2.256E+03	1.864E+03
I	8.566E+04	4.403E+04	3.674E+04	2.010E+04	1.525E+04
XE	3.947E+04	2.888E+03	2.547E+03	2.508E+03	1.900E+03
CS	7.386E+04	1.103E+04	5.171E+03	2.706E+03	2.685E+03
BA	4.258E+04	6.980E+03	4.803E+03	2.685E+03	2.609E+03
LA	7.445E+04	3.076E+04	2.561E+04	1.530E+04	1.446E+04
CE	1.802E+04	4.531E+03	4.418E+03	3.865E+03	3.335E+03
PR	2.747E+04	1.001E+04	7.972E+03	6.307E+03	5.825E+03
ND	4.051E+03	1.551E+03	1.266E+03	7.615E+02	7.294E+02
PM	4.755E+03	2.504E+03	2.438E+03	2.174E+03	1.933E+03
SM	1.090E+03	7.974E+02	7.581E+02	6.343E+02	5.239E+02
EU	2.758E+03	2.668E+03	2.632E+03	2.518E+03	2.439E+03
GD	2.716E+01	1.787E+01	1.716E+01	1.182E+01	7.567E+00
TB	1.870E+01	1.354E+01	1.306E+01	1.283E+01	1.267E+01
DY	3.701E+00	2.526E+00	1.887E+00	1.214E-01	2.444E-02
HO	9.425E-01	9.209E-01	8.998E-01	7.156E-01	5.469E-01
ER	8.672E-03	7.154E-04	7.132E-04	6.916E-04	6.666E-04
TM	1.971E-04	1.970E-04	1.969E-04	1.961E-04	1.952E-04
SUMTOT	1.008E+06	2.071E+05	1.663E+05	1.007E+05	8.296E+04
TOTAL	1.008E+06	2.071E+05	1.663E+05	1.007E+05	8.296E+04

CUMULATIVE TABLE TOTALS

AP+FP	1.010E+06	2.086E+05	1.677E+05	1.017E+05	8.374E+04
ACT+FP	1.079E+06	2.489E+05	2.029E+05	1.321E+05	1.104E+05
AP+ACT+FP	1.080E+06	2.504E+05	2.043E+05	1.331E+05	1.112E+05