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Calculated Concentrations of any
Radionuclide Deposited on the Ground
by Release from Underground Nuclear
Detonations, Tests of Nuclear Rockets,
and Tests of Nuclear Ramjet Engines

Harry G. Hicks

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November 1981

Lawrence
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Calculated Concentrations of any Radionuclide Deposited on the Ground by Release from Underground Nuclear Detonations, Tests of Nuclear Rockets, and Tests of Nuclear Ramjet Engines

Harry G. Hicks

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LAWRENCE LIVERMORE LABORATORY
University of California • Livermore, California • 94550

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Calculated Concentrations of any Radionuclide Deposited on the Ground by Release from Underground Nuclear Detonations, Tests of Nuclear Rockets, and Tests of Nuclear Ramjet Engines

ABSTRACT

This report presents calculated gamma radiation exposure rates and ground deposition of related radionuclides resulting from three types of event that deposited detectable radioactivity outside the Nevada Test Site complex, namely, underground nuclear detonations, tests of nuclear rocket engines and tests of nuclear ramjet engines.

INTRODUCTION

Most population exposure to radionuclides originating from the Nevada Test Site complex is believed to be due to the testing of nuclear devices in the atmosphere.¹ Small releases of radionuclides came from experiments using nuclear explosives for excavation.¹ There are three other classes of Events which have released radionuclides beyond

the Nevada Test Site complex: unintentional release from underground nuclear Events, tests of nuclear rocket engines, and tests of nuclear ramjet engines. Basic data for the last three classes of Events are presented here so that one may determine the ground deposition of released radionuclides.

CALCULATIONS

These calculations relate ground surface concentration ($\mu\text{Ci}/\text{m}^2$) of every radionuclide to the external gamma-ray exposure rate levels (mR/hr) as a function of time and release mode. Our computer code developed for previous work² has been modified to reflect the fission product distributions and nuclide release fractions pertinent to these three classes of events. I have used two fission product distributions: a generalized distribution due to bomb-spectrum neutrons, and the distribution due to thermal neutron fission of ^{235}U . The former distribution is used for all unintentional ventings of underground Events; the latter, for both types of engine tests. The fractions of nuclides released by venting of underground Events were taken from Ref. 3. The fractions of nuclides released from nuclear rocket engine tests have not been published; however, the data for the Phoebus 1B effluent have been made available by E. A. Bryant of Los Alamos.⁴ All other nuclear rocket

engine tests are assumed to have the same release fractions as the Phoebus 1B effluent. Recoiling fission products are stopped in the coolant gas stream of nuclear ramjet engines⁵; thus, all nuclide release fractions are essentially the same and have been taken as unity for the purpose of this calculation. The details of the calculations are described in Appendix A.

According to H. L. Beck,⁶ the concentration of fallout, C , varies exponentially with soil depth, z ($C = C_0 e^{-\alpha z}$). He defines relaxation length as $1/\alpha$. In order to simulate the effect of ground surface roughness on the radiation field, I used a relaxation length of $0.16 \text{ g}/\text{cm}^2$ in these calculations. The types of releases (see Appendix B) and the relaxation lengths are the only input to these calculations. The contributions of the neutron-induced nuclides to the radiation field are less than one percent of the total in nuclear rocket engine debris, and are essentially zero for underground ventings and nuclear

ramjet debris. Therefore, the neutron-induced radionuclides have been omitted from these calculations.

The results of the calculations are the contributions of each of 152 fission products to the surface deposition and to the external gamma-ray exposure rates. These values and the sums of all values at each decay interval are computed from zero time to 50 years after the Event. In order to

relate ground deposition ($\mu\text{Ci}/\text{m}^2$) to external gamma-ray exposure rate (mR/hr) more easily, all values have been normalized to an exposure rate of 1 mR/hr at 12 hours after the Event. The data for releases from underground Events are in Appendix B, those for nuclear rocket tests are in Appendix C, and those for nuclear ramjet tests are in Appendix D.

ACKNOWLEDGMENTS

The author wishes to extend his sincere thanks to Dr. Norman A. Bonner, who verified the algorithms and helped check the calculations, and to Mr. Walter H. Martin, who wrote the computer program.

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APPENDIX A

Details of the Calculation

The purpose of these calculations is to relate the surface concentration ($\mu\text{Ci}/\text{m}^2$) of every fission product to the external gamma-ray exposure levels (mR/hr) as a function of time and release mode.

1. Distribution of released fission product.

$$\text{FY}(\text{A}) = \text{FY}_i(\text{A}) \cdot b_k(\text{A}),$$

where $\text{FY}(\text{A})$ = relative number of atoms of mass chain A in the release for the Event in question,

$\text{FY}_i(\text{A})$ = unfractionated fission yield of mass chain A for a generalized bomb fission product distribution, $i = 1$, or for fission of ^{235}U with thermal neutrons, $i = 2$ (tables in computer program).

$b_k(\text{A})$ = release fraction of mass chain A for the k th type of release (table in computer program).

2. Relative released fission product distribution.

The decay matrix (see 3 below) was calculated by the ORIGEN⁷ computer program, which was written at ORNL to calculate the formation and destruction of radionuclides in reactor fuel elements. Results of that calculation were the number of curies of each fission product formed in a 1-s run, at a power level of 4.185 MW, in a fuel element arbitrarily composed of 1 kg each of ^{235}U , ^{238}U , and Pu. The fission yield distribution was neither that of a nuclear device nor that of thermal neutron fission of ^{235}U , so the values in this decay matrix were corrected by the factor $R(\text{A})$.

$$R(\text{A}) = \text{FY}(\text{A})/\text{FYO}(\text{A}),$$

where $R(\text{A})$ = relative released fission yield,

$\text{FYO}(\text{A})$ = fission yield used by the ORIGEN computer program (table in computer program).

3. Relative curies of released fission products.

The ORIGEN computer program followed the decay of each of the 152 fission products from zero time to 50 years postshot. There were 30 decay intervals: 10 from one to 21 hours, 10 from one to 300 days, and 10 from one to 50 years. This matrix was incorporated into the computer program for this work (see $D(\text{A}_j)_t$, below). The relative number of curies of each released fission product as a function of time is given by

$$\text{CI}(\text{A}_j)_t = D(\text{A}_j)_t \cdot R(\text{A}),$$

where $\text{CI}(\text{A}_j)_t$ = relative curies of A_j as a function of time after release, t , for a given event,

$D(\text{A}_j)_t$ = relative curies of nuclide A_j as a function of time calculated by the ORIGEN computer program (table in computer program).

4. External gamma-ray exposure rates.

Assume that the fallout is distributed uniformly over one square kilometer. The external gamma-ray exposure rate for each individual nuclide measured one meter above ground level is given by

$$\text{MR}(\text{A}_j)_t = \text{CI}(\text{A}_j)_t \cdot C(\text{A}_j),$$

where $MR(A_j)_t$ = mR/hr measured one meter above ground level due to nuclide A_j as a function of time,

$C(A_j)$ = conversion factor,⁶ (mR/hr)/(Ci/km²). Conversion factors are in a computer program table; the values selected from the table depend on relaxation length.*

5. Normalization to external gamma-ray exposure of 1 mR/hr at 12 hours postshot. All values are normalized to an exposure rate of 1 mR/hr at 12 hours postshot. Normalized values are calculated as follows, where N denotes a normalized value:

$$NMR(A_j)_t = MR(A_j)_t / \Sigma MR(A_j)_{12},$$

$$NCI(A_j)_t = CI(A_j)_t / \Sigma MR(A_j)_{12}.$$

*According to H. L. Beck,⁶ the concentration of fallout, C, varies exponentially with soil depth, z: $C = C_0 e^{-\alpha z}$. He defines relaxation length as $1/\alpha$.

APPENDIX B

Calculated Concentrations for Releases from Underground Events

Underground Events which unintentionally released detectable radioactivity	
outside the test range	B(iii)
Calculated results for Category A Events	B-1
Calculated results for Category B Events	B-10
Calculated results for Category C Events	B-19
Calculated results for Category C1 Events	B-28
Calculated results for Category D Events	B-37
Calculated results for Category E Events	B-46
Calculated results for Category F Events	B-55
Calculated results for Category G Events	B-64

UNDERGROUND EVENTS WHICH UNINTENTIONALLY RELEASED
DETECTABLE RADIOACTIVITY OUTSIDE THE TEST RANGE COMPLEX

OPERATION	EVENT	PLACEMENT	CATEGORY	DATE	TIME	CURIES
HARDTACK	BLANCA	TUNNEL	A	581030	1500	1.7E+05
NOUGAT	ANTLER	TUNNEL	D	610915	1800	2.1E+05
NOUGAT	FEATHER	TUNNEL	A	611222	1730	3.8E+02
NOUGAT	PAMPAS	SHAFT	B	620301	2010	2.0E+03
NOUGAT	PLATTE	TUNNEL	B	620414	1900	1.9E+06
NOUGAT	EEL	SHAFT	B	620519	1700	1.9E+06
NOUGAT	DES MOINES	TUNNEL	A	620613	2200	1.1E+07
STORAX	BANDICOOT	SHAFT	A	621019	1900	3.0E+06
STORAX	YUBA	TUNNEL	F	630605	1800	1.1E+02
NIBLICK	EAGLE	SHAFT	A	631212	1702	7.6E+02
NIBLICK	PIKE	SHAFT	A	640313	1702	1.2E+05
WHETSTONE	ALVA	SHAFT	B	640819	1700	6.1E+03
WHETSTONE	DRILL	SHAFT	E	641205	2215	6.1E+04
WHETSTONE	PARROT	SHAFT	D	641216	2100	2.3E+05
WHETSTONE	ALPACA	SHAFT	B	650212	1610	4.0E+04
WHETSTONE	TEE	SHAFT	C	650507	1647	1.6E+03
WHETSTONE	DILUTED WATERS	SHAFT	A	650616	1730	5.9E+03
FLINTLOCK	RED HOT	TUNNEL	F	660305	1915	1.0E+06
FLINTLOCK	PIN STRIPE	SHAFT	C	660425	1938	2.2E+05
FLINTLOCK	DOUBLE PLAY	TUNNEL	G	660615	1800	6.0E+05
LATCHKEY	DERRINGER	SHAFT	D	660912	1630	1.2E+04
LATCHKEY	NASH	SHAFT	F	670119	1745	6.9E+04
LATCHKEY	MIDI MIST	TUNNEL	G	670626	1700	1.3E+03
LATCHKEY	UMBER	SHAFT	D	670629	1225	2.6E+04
CROSSTIE	DOOR MIST	TUNNEL	G	670831	1730	4.0E+05
CROSSTIE	HUPMOBILE	SHAFT	C	680118	1730	1.2E+05
MANDREL	POD	SHAFT	D	690129	2100	3.9E+03
MANDREL	SCUTTLE	SHAFT	D	691113	1515	2.1E+02
MANDREL	SNUBBER	SHAFT	C	700421	1530	5.5E+04
MANDREL	MINT LEAF	TUNNEL	G	700505	1630	4.0E+05
EMERY	BANEBERRY	SHAFT	C1	701218	1630	6.7E+06
GROMMET	DIAGONAL LINE	SHAFT	G	711124	2015	6.8E+03
TINDERBOX	RICLA	SHAFT	F	800925	0826	2.9E+03

TIME IS GREENWICH CIVIL TIME

CURIES RELEASED AS MEASURED AT H+12 HOURS

CATEGORY A STARTED BEFORE H+30 SECONDS, CONTINUED LESS THAN 15 MINUTES
 CATEGORY B STARTED BEFORE H+30 SECONDS, CONTINUED MORE THAN 15 MINUTES
 CATEGORY C STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES, CONTINUED LESS
 THAN 2 HOURS, BANEBERRY IS A SPECIAL CASE
 CATEGORY D STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES, CONTINUED MORE
 THAN 2 HOURS
 CATEGORY E STARTED AFTER H+20 MINUTES, CONTINUED LESS THAN 12 HOURS
 CATEGORY F STARTED AFTER H+20 MINUTES, CONTINUED MORE THAN 12 HOURS
 CATEGORY G EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH
 THE SOIL

CURIES RELEASED FROM ALL EVENTS PRIOR TO EAGLE ARE PRECISE TO AN ORDER
 OF MAGNITUDE OF THE LISTED VALUE, FROM THEN ON, TO A FACTOR OF TWO

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 1

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.74E+02	2.05E+04
1.00E+00	8.45E+01	4.64E+03
2.00E+00	2.84E+01	1.72E+03
3.00E+00	1.13E+01	9.80E+02
4.00E+00	5.62E+00	7.13E+02
6.00E+00	2.49E+00	5.13E+02
9.00E+00	1.43E+00	3.91E+02
1.20E+01	1.00E+00	3.20E+02
1.50E+01	7.55E-01	2.71E+02
1.80E+01	5.98E-01	2.32E+02
2.10E+01	4.91E-01	2.01E+02
1.00E+00 DAYS	4.10E-01	1.74E+02
2.00E+00	1.97E-01	7.12E+01
5.00E+00	8.50E-02	2.89E+01
1.00E+01	3.62E-02	1.43E+01
2.00E+01	1.21E-02	4.70E+00
3.00E+01	6.79E-03	2.21E+00
5.00E+01	3.48E-03	1.05E+00
1.00E+02	1.33E-03	4.87E-01
2.00E+02	4.68E-04	1.85E-01
3.00E+02	2.74E-04	1.11E-01
1.00E+00 YEARS	2.30E-04	9.29E-02
1.50E+00	1.80E-04	6.96E-02
2.00E+00	1.59E-04	5.76E-02
3.50E+00	1.27E-04	3.92E-02
5.00E+00	1.13E-04	3.21E-02
7.00E+00	1.04E-04	2.82E-02
1.00E+01	9.57E-05	2.55E-02
2.00E+01	7.53E-05	1.99E-02
3.50E+01	5.34E-05	1.40E-02
5.00E+01	3.78E-05	9.81E-03

B-1

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 2

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
GE 75	2.29E-06	1.11E-02	6.69E-03	4.04E-03	2.43E-03	8.82E-04	1.92E-04	4.22E-05	9.19E-06	2.00E-06	4.38E-07
GE 77	4.02E-03	1.03E-02	9.71E-03	9.14E-03	8.63E-03	7.62E-03	6.34E-03	5.27E-03	4.39E-03	3.64E-03	3.03E-03
AS 77	4.15E-05	6.54E-03	6.67E-03	6.67E-03	6.73E-03	6.79E-03	6.79E-03	6.73E-03	6.60E-03	6.48E-03	6.32E-03
SE 77M	1.64E-09	1.96E-05	1.99E-05	2.01E-05	2.01E-05	2.03E-05	2.04E-05	2.03E-05	1.99E-05	1.95E-05	1.89E-05
GE 78	1.04E+00	6.51E-01	4.05E-01	2.53E-01	1.58E-01	6.15E-02	1.49E-02	3.61E-03	8.83E-04	2.15E-04	5.21E-05
AS 78	1.87E-02	3.11E-01	3.83E-01	3.59E-01	3.00E-01	1.77E-01	6.58E-02	2.19E-02	6.76E-03	2.02E-03	5.86E-04
AS 79	1.94E+01	1.90E-01	1.88E-03	1.85E-05	1.82E-07	1.77E-11	1.68E-17	1.61E-23	1.54E-29	1.46E-35	1.40E-41
SE 79M	2.87E-02	3.37E-01	3.32E-03	3.27E-05	3.22E-07	3.11E-11	2.97E-17	2.83E-23	2.70E-29	2.58E-35	2.46E-41
BR 80	1.08E-01	1.02E-02	9.60E-04	9.02E-05	8.50E-06	7.54E-08	6.31E-11	5.26E-14	4.38E-17	3.66E-20	3.05E-23
SE 81M	7.79E-02	3.63E+00	1.75E+00	8.42E-01	4.06E-01	9.47E-02	1.06E-02	1.19E-03	1.33E-04	1.49E-05	1.67E-06
SE 81	9.51E-01	4.29E+00	2.48E+00	1.24E+00	6.01E-01	1.41E-01	1.57E-02	1.76E-03	1.97E-04	2.21E-05	2.48E-06
BR 82	3.86E-04	3.78E-04	3.71E-04	3.64E-04	3.57E-04	3.43E-04	3.24E-04	3.05E-04	2.88E-04	2.71E-04	2.56E-04
SE 83	1.90E+01	3.60E+00	6.79E-01	1.29E-01	2.45E-02	8.77E-04	5.97E-06	4.06E-08	2.78E-10	1.88E-12	1.20E-14
BR 83	1.57E-01	2.36E+00	2.18E+00	1.71E+00	1.30E+00	7.33E-01	3.11E-01	1.31E-01	5.53E-02	2.33E-02	9.85E-03
KR 83M	8.17E-06	5.33E-01	1.09E+00	1.35E+00	1.39E+00	1.17E+00	6.85E-01	3.53E-01	1.70E-01	7.87E-02	3.53E-02
BR 84	3.05E-02	5.26E+00	1.43E+00	3.86E-01	1.04E-01	7.62E-03	1.51E-04	2.97E-06	5.88E-08	1.17E-09	2.30E-11
KR 85M	1.60E-02	3.43E+01	2.92E+01	2.49E+01	2.13E+01	1.56E+01	9.73E+00	6.06E+00	3.77E+00	2.35E+00	1.47E+00
KR 87	2.80E+02	1.61E+02	9.38E+01	5.40E+01	3.11E+01	1.04E+01	2.03E+00	3.93E-01	7.61E-02	1.48E-02	2.85E-03
KR 88	1.23E+02	9.65E+01	7.52E+01	5.88E+01	4.59E+01	2.79E+01	1.33E+01	6.34E+00	3.01E+00	1.43E+00	6.82E-01
RB 88	3.14E+01	9.79E+01	8.30E+01	6.56E+01	5.13E+01	3.12E+01	1.49E+01	7.10E+00	3.38E+00	1.61E+00	7.66E-01
RB 89	1.76E+02	1.65E+02	1.11E+01	7.44E-01	4.99E-02	2.26E-04	6.84E-08	2.06E-11	6.29E-15	1.90E-18	5.78E-22
SR 89	1.34E-05	4.71E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.03E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01
SR 90	3.19E-05	3.28E-03	3.28E-03	3.28E-03	3.28E-03	3.28E-03	3.28E-03	3.28E-03	3.28E-03	3.28E-03	3.28E-03
SR 91	4.88E-01	9.08E+00	8.47E+00	7.89E+00	7.34E+00	6.36E+00	5.12E+00	4.14E+00	3.35E+00	2.69E+00	2.17E+00
Y 91M	3.28E-05	3.13E+00	4.27E+00	4.58E+00	4.51E+00	4.05E+00	3.32E+00	2.67E+00	2.15E+00	1.73E+00	1.40E+00
Y 91	1.34E-08	2.78E-03	6.42E-03	1.02E-02	1.40E-02	2.10E-02	2.98E-02	3.68E-02	4.27E-02	4.72E-02	5.10E-02
SR 92	1.39E+00	6.21E+00	4.81E+00	3.72E+00	2.88E+00	1.73E+00	8.01E-01	3.72E-01	1.73E-01	8.01E-02	3.72E-02
Y 92	6.40E-02	1.31E+00	2.06E+00	2.43E+00	2.58E+00	2.47E+00	1.89E+00	1.29E+00	8.27E-01	5.09E-01	3.07E-01
SR 93	7.44E+01	1.28E+00	7.07E-03	3.90E-05	2.14E-07	6.58E-12	1.11E-18	1.87E-25	3.17E-32	5.34E-39	8.98E-46
Y 93	9.06E-02	2.94E+00	2.76E+00	2.57E+00	2.40E+00	2.10E+00	1.71E+00	1.40E+00	1.14E+00	9.32E-01	7.59E-01
Y 94	1.22E+01	1.67E+01	2.15E+00	2.77E-01	3.57E-02	5.95E-04	1.27E-06	2.73E-09	5.85E-12	1.27E-14	7.07E-16
Y 95	5.19E+01	4.88E+00	1.08E-01	2.37E-03	5.23E-05	2.54E-08	2.71E-13	2.90E-18	3.10E-23	3.31E-28	3.55E-33
ZR 95	1.95E-04	2.54E-02	2.60E-02	2.60E-02	2.60E-02	2.60E-02	2.60E-02	2.58E-02	2.58E-02	2.58E-02	2.58E-02
NB 95	2.17E-11	1.57E-05	3.66E-05	5.77E-05	7.85E-05	1.20E-04	1.83E-04	2.45E-04	3.08E-04	3.70E-04	4.32E-04
ZR 97	5.59E-01	2.44E+00	2.33E+00	2.24E+00	2.15E+00	1.98E+00	1.75E+00	1.55E+00	1.38E+00	1.21E+00	1.08E+00
NB 97M	2.88E-03	2.33E+00	2.24E+00	2.16E+00	2.07E+00	1.90E+00	1.68E+00	1.49E+00	1.32E+00	1.16E+00	1.03E+00
NB 97	2.81E-01	1.22E+00	1.72E+00	1.96E+00	2.06E+00	2.05E+00	1.87E+00	1.66E+00	1.47E+00	1.30E+00	1.16E+00
NB 98	3.84E+00	1.70E+00	7.53E-01	3.32E-01	1.48E-01	2.88E-02	2.50E-03	2.16E-04	1.88E-05	1.63E-06	1.40E-07
MO 99	1.21E-02	5.01E+00	4.96E+00	4.91E+00	4.86E+00	4.76E+00	4.62E+00	4.47E+00	4.34E+00	4.21E+00	4.08E+00
TC 99M	1.13E-07	4.78E-01	8.97E-01	1.27E+00	1.59E+00	2.13E+00	2.69E+00	3.07E+00	3.29E+00	3.42E+00	3.46E+00

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
M0101	2	38E+02	1	08E+02	6	26E+00	3	62E-01	2	10E-02	7	05E-05	1	37E-08	2	68E-12	5	19E-16	1	01E-19	1	97E-23
TC101	1	01E+01	3	02E+02	3	30E+01	2	71E+00	1	97E-01	8	90E-04	2	23E-07	4	99E-11	1	06E-14	2	18E-18	4	39E-22
M0102	2	46E+03	5	61E+01	1	27E+00	2	92E-02	6	64E-04	3	45E-07	4	11E-12	4	86E-17	5	77E-22	6	86E-27	8	14E-32
TC102M	1	58E+00	4	74E+01	1	09E+00	2	48E-02	5	64E-04	2	92E-07	3	47E-12	4	11E-17	4	88E-22	5	79E-27	6	87E-32
TC102	7	39E+03	2	81E+01	6	45E-01	1	46E-02	3	35E-04	1	74E-07	2	07E-12	2	46E-17	2	92E-22	3	45E-27	4	10E-32
RU103	2	38E-04	5	50E-01	5	50E-01	5	50E-01	5	50E-01	5	48E-01	5	46E-01	5	46E-01	5	44E-01	5	44E-01	5	42E-01
RH103M	1	58E-08	2	84E-01	4	22E-01	4	89E-01	5	20E-01	5	42E-01	5	46E-01	5	46E-01	5	44E-01	5	44E-01	5	44E-01
TC104	2	52E+02	1	80E+02	1	80E+01	1	79E+00	1	77E-01	1	74E-03	1	70E-06	1	66E-09	1	62E-12	1	59E-15	1	55E-18
RU105	2	52E+00	8	70E+01	7	43E+01	6	38E+01	5	46E+01	3	99E+01	2	50E+01	1	56E+01	9	77E+00	6	11E+00	3	84E+00
RH105M	1	66E-02	8	72E+01	7	45E+01	6	40E+01	5	46E+01	3	99E+01	2	50E+01	1	57E+01	9	81E+00	6	13E+00	3	84E+00
RH105	2	72E-08	1	77E+00	3	28E+00	4	53E+00	5	58E+00	7	14E+00	8	54E+00	9	19E+00	9	37E+00	9	28E+00	9	03E+00
RU106	2	54E-03	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02
RH106	2	76E-05	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02	4	83E-02
RH107	6	30E-01	8	56E+01	1	30E+01	1	96E+00	2	94E-01	6	72E-03	2	31E-05	7	97E-08	2	74E-10	9	39E-14	9	34E-17
PD107M	1	31E-03	1	74E+01	2	63E+00	3	97E-01	5	99E-02	1	37E-03	4	71E-06	1	62E-08	5	59E-11	1	92E-13	6	58E-16
PD109	2	07E-02	1	71E+00	1	63E+00	1	54E+00	1	46E+00	1	32E+00	1	14E+00	9	73E-01	8	34E-01	7	14E-01	6	14E-01
AG109M	1	19E-04	1	71E+00	1	63E+00	1	54E+00	1	46E+00	1	32E+00	1	14E+00	9	73E-01	8	34E-01	7	14E-01	6	14E-01
PD111M	5	67E+00	4	98E+00	4	40E+00	3	87E+00	3	42E+00	2	66E+00	1	82E+00	1	25E+00	8	56E-01	5	86E-01	4	02E-01
PD111	2	01E+00	3	64E+00	3	49E+00	3	11E+00	2	75E+00	2	13E+00	1	46E+00	1	00E+00	6	86E-01	4	71E-01	3	23E-01
AG111M	1	60E-02	4	90E+00	4	59E+00	4	11E+00	3	64E+00	2	80E+00	1	92E+00	1	32E+00	9	02E-01	6	20E-01	4	23E-01
AG111	5	69E-09	1	69E-02	3	54E-02	5	21E-02	6	70E-02	9	11E-02	1	17E-01	1	34E-01	1	45E-01	1	53E-01	1	57E-01
PD112	1	48E+00	1	43E+00	1	38E+00	1	34E+00	1	30E+00	1	21E+00	1	10E+00	9	96E-01	9	02E-01	8	18E-01	7	41E-01
AG112	4	44E-05	2	84E-01	5	00E-01	6	71E-01	7	97E-01	9	58E-01	1	05E+00	1	04E+00	9	96E-01	9	30E-01	8	56E-01
AG113	8	49E-03	1	82E+00	1	60E+00	1	40E+00	1	23E+00	9	44E-01	6	41E-01	4	33E-01	2	92E-01	1	97E-01	1	33E-01
AG115	1	69E+00	1	81E+00	2	25E-01	2	82E-02	3	53E-03	5	51E-05	1	08E-07	2	10E-10	4	08E-13	4	04E-16	3	75E-16
CD115M	1	38E-08	3	68E-04	4	14E-04	4	17E-04	4	17E-04	4	17E-04	4	17E-04	4	17E-04	4	15E-04	4	14E-04	4	14E-04
CD115	5	34E-06	1	01E-01	1	08E-01	1	08E-01	1	07E-01	1	04E-01	1	00E-01	9	60E-02	9	24E-02	8	90E-02	8	56E-02
IN115M	6	65E-11	1	11E-02	2	46E-02	3	66E-02	4	67E-02	6	21E-02	7	68E-02	8	46E-02	8	82E-02	8	90E-02	8	84E-02
CD117	1	19E-01	1	99E+00	1	50E+00	1	12E+00	8	37E-01	4	69E-01	1	97E-01	8	31E-02	3	50E-02	1	47E-02	6	19E-03
IN117M	5	74E-06	6	91E-01	1	00E+00	1	09E+00	1	05E+00	8	27E-01	4	73E-01	2	41E-01	1	16E-01	5	39E-02	2	43E-02
IN117	2	32E-10	1	26E-01	3	06E-01	4	24E-01	4	73E-01	4	34E-01	2	76E-01	1	48E-01	7	38E-02	3	46E-02	1	59E-02
CD118	7	67E+00	3	30E+00	1	41E+00	6	01E-01	2	58E-01	4	72E-02	3	70E-03	2	89E-04	2	27E-05	1	78E-06	1	40E-07
IN118	5	09E-01	3	30E+00	1	41E+00	6	03E-01	2	58E-01	4	72E-02	3	70E-03	2	91E-04	2	27E-05	1	78E-06	1	40E-07
CD119	2	02E+01	3	15E-01	4	91E-03	7	68E-05	1	20E-06	2	93E-10	1	12E-15	4	28E-21	1	63E-26	6	22E-32	2	38E-37
IN119M	3	05E-02	3	41E+00	3	70E-01	3	74E-02	3	72E-03	3	66E-05	3	57E-08	3	49E-11	3	41E-14	3	33E-17	3	25E-20
IN119	1	50E+00	1	79E-01	2	08E-02	2	10E-03	2	10E-04	2	06E-06	2	02E-09	1	97E-12	1	93E-15	1	88E-18	1	84E-21
SN121	2	53E-03	2	62E-01	2	53E-01	2	47E-01	2	41E-01	2	29E-01	2	11E-01	1	97E-01	1	82E-01	1	69E-01	1	57E-01
SN123M	1	34E+00	2	51E+00	8	90E-01	3	15E-01	1	11E-01	1	39E-02	6	14E-04	2	73E-05	1	20E-06	5	31E-08	2	35E-09
SN123	1	26E-05	1	32E-03	1	32E-03	1	32E-03	1	32E-03	1	32E-03	1	32E-03	1	32E-03	1	32E-03	1	32E-03	1	32E-03
SN125	3	02E-02	3	01E-02	2	99E-02	2	99E-02	2	98E-02	2	97E-02	2	94E-02	2	91E-02	2	88E-02	2	85E-02	2	83E-02

MICROCURI/SG METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 4

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
SB125	1.81E-04	1.83E-04	1.83E-04	1.84E-04	1.84E-04	1.84E-04	1.86E-04	1.88E-04	1.91E-04	1.94E-04	1.96E-04	1.99E-04
SB126	5.86E-03	5.83E-03	5.83E-03	5.81E-03	5.80E-03	5.77E-03	5.73E-03	5.70E-03	5.66E-03	5.61E-03	5.58E-03	5.53E-03
SN127	6.08E+00	4.37E+00	3.14E+00	2.26E+00	1.63E+00	8.40E-01	3.12E-01	1.16E-01	4.31E-02	1.60E-02	5.93E-03	2.99E-01
SB127	7.10E-02	2.45E-01	2.71E-01	2.89E-01	3.01E-01	3.14E-01	3.19E-01	3.15E-01	3.10E-01	3.04E-01	2.99E-01	2.99E-01
TE127	4.01E-02	4.99E-02	6.06E-02	7.20E-02	8.32E-02	1.04E-01	1.34E-01	1.56E-01	1.74E-01	1.87E-01	1.97E-01	1.97E-01
SN128	4.67E+01	2.31E+01	1.14E+01	5.64E+00	2.78E+00	6.79E-01	8.20E-02	9.91E-03	1.19E-03	1.45E-04	1.75E-05	1.75E-05
SB128M	2.38E-02	2.62E+01	1.36E+01	6.72E+00	3.31E+00	8.11E-01	9.78E-02	1.18E-02	1.42E-03	1.72E-04	2.09E-05	2.09E-05
SB128	1.96E+00	1.89E+00	1.78E+00	1.67E+00	1.56E+00	1.34E+00	1.07E+00	8.46E-01	6.72E-01	5.33E-01	4.23E-01	4.23E-01
SN129M	2.61E+01	1.30E+01	6.54E+00	3.27E+00	1.64E+00	4.08E-01	5.12E-02	6.40E-03	7.99E-04	9.98E-05	1.25E-05	1.25E-05
SN129	1.75E+02	1.71E+00	1.69E-02	1.67E-04	1.64E-06	1.59E-10	1.51E-16	1.45E-22	1.38E-28	1.32E-34	1.26E-40	1.26E-40
SB129	9.83E+00	1.65E+01	1.55E+01	1.38E+01	1.22E+01	9.03E+00	5.62E+00	3.48E+00	2.15E+00	1.33E+00	8.15E-01	8.15E-01
TE129M	1.85E-07	2.06E-03	4.24E-03	6.23E-03	7.99E-03	1.08E-02	1.37E-02	1.55E-02	1.66E-02	1.72E-02	1.76E-02	1.76E-02
TE129	7.08E+00	9.72E+00	1.14E+01	1.18E+01	1.14E+01	9.43E+00	6.28E+00	3.96E+00	2.46E+00	1.53E+00	9.47E-01	9.47E-01
SB130M	1.02E+00	1.92E+00	5.05E-03	1.33E-05	3.50E-08	2.41E-13	4.40E-21	7.98E-29	1.45E-36	2.63E-44	4.79E-52	4.79E-52
SB130	1.75E+02	5.28E+01	1.50E+01	4.26E+00	1.20E+00	9.69E-02	2.22E-03	5.04E-05	1.15E-06	2.61E-08	5.99E-10	5.99E-10
I130	4.86E-02	4.60E-02	4.36E-02	4.12E-02	3.89E-02	3.48E-02	2.94E-02	2.49E-02	2.09E-02	1.78E-02	1.50E-02	1.50E-02
SB131	2.49E+02	6.51E+01	1.06E+01	1.75E+00	2.86E-01	7.71E-03	3.40E-05	1.50E-07	6.60E-10	2.91E-12	1.45E-14	1.45E-14
TE131M	1.19E-04	6.27E-01	7.14E-01	7.15E-01	7.02E-01	6.71E-01	6.26E-01	5.84E-01	5.45E-01	5.09E-01	4.75E-01	4.75E-01
TE131	1.10E+02	1.19E+02	3.91E+01	1.02E+01	2.46E+00	2.32E-01	1.15E-01	1.06E-01	9.91E-02	9.28E-02	8.65E-02	8.65E-02
I131	1.60E-02	5.55E-01	8.18E-01	8.96E-01	9.12E-01	9.20E-01	9.20E-01	9.12E-01	9.12E-01	9.04E-01	9.04E-01	9.04E-01
TE132	1.52E+00	3.69E+00	3.65E+00	3.63E+00	3.58E+00	3.52E+00	3.43E+00	3.35E+00	3.25E+00	3.16E+00	3.08E+00	3.08E+00
I132	3.73E+00	3.71E+00	3.71E+00	3.69E+00	3.66E+00	3.61E+00	3.54E+00	3.44E+00	3.35E+00	3.27E+00	3.19E+00	3.19E+00
TE133M	9.86E-02	3.41E+01	1.48E+01	6.45E+00	2.81E+00	5.34E-01	4.39E-02	3.62E-03	2.98E-04	2.46E-05	2.03E-06	2.03E-06
TE133	5.52E+02	3.13E+01	3.48E+00	1.15E+00	4.87E-01	9.24E-02	7.63E-03	6.27E-04	5.20E-05	4.27E-06	3.52E-07	3.52E-07
I133	8.56E-01	9.24E+00	9.94E+00	9.94E+00	9.77E+00	9.24E+00	8.42E+00	7.63E+00	6.88E+00	6.27E+00	5.66E+00	5.66E+00
XE133M	6.08E-07	3.46E-02	8.34E-02	1.33E-01	1.82E-01	2.73E-01	3.95E-01	5.01E-01	5.92E-01	6.69E-01	7.33E-01	7.33E-01
XE133	1.06E-05	6.03E-01	1.47E+00	2.34E+00	3.21E+00	4.87E+00	7.14E+00	9.13E+00	1.09E+01	1.25E+01	1.39E+01	1.39E+01
TE134	1.83E+02	8.48E+01	3.16E+01	1.17E+01	4.36E+00	6.04E-01	3.09E-02	1.58E-03	8.10E-05	4.16E-06	2.14E-07	2.14E-07
I134	8.38E+01	1.12E+02	7.85E+01	4.61E+01	2.47E+01	6.27E+00	6.90E-01	7.04E-02	6.90E-03	6.61E-04	6.27E-05	6.27E-05
I135	1.28E+01	2.26E+01	2.04E+01	1.83E+01	1.66E+01	1.35E+01	9.91E+00	7.22E+00	5.31E+00	3.91E+00	2.86E+00	2.86E+00
XE135M	2.36E-02	1.09E+02	1.06E+02	9.58E+01	8.60E+01	7.00E+01	5.15E+01	3.77E+01	2.76E+01	2.03E+01	1.48E+01	1.48E+01
XE135	2.46E+01	4.88E+01	7.12E+01	8.97E+01	1.04E+02	1.25E+02	1.39E+02	1.39E+02	1.33E+02	1.21E+02	1.08E+02	1.08E+02
CS136	6.04E-03	6.01E-03	6.01E-03	6.01E-03	5.98E-03	5.95E-03	5.91E-03	5.88E-03	5.85E-03	5.82E-03	5.75E-03	5.75E-03
CS137	1.20E-03	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02
BA137M	2.52E-06	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02
XE138	5.72E+03	4.92E+02	4.27E+01	3.70E+00	3.21E-01	2.41E-03	1.57E-06	1.02E-09	6.61E-13	4.30E-16	2.78E-19	2.78E-19
CS138	8.52E+02	1.44E+03	4.96E+02	1.46E+02	4.09E+01	3.11E+00	6.48E-02	1.35E-03	2.78E-05	5.81E-07	1.21E-08	1.21E-08
CS139	4.52E+02	1.44E+01	1.81E-01	2.27E-03	2.86E-05	4.48E-09	8.93E-15	1.76E-20	3.49E-26	6.93E-32	1.37E-37	1.37E-37
BA139	8.38E+00	9.34E+01	5.74E+01	3.49E+01	2.11E+01	7.76E+00	1.72E+00	3.82E-01	8.51E-02	1.88E-02	4.17E-03	4.17E-03
BA140	5.29E-02	3.31E-01	3.31E-01	3.29E-01	3.29E-01	3.26E-01	3.26E-01	3.23E-01	3.21E-01	3.19E-01	3.16E-01	3.16E-01

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 5

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
LA140	1	26E-07	5	65E-03	1	12E-02	1	66E-02	2	20E-02	3	23E-02	4	73E-02	6	12E-02	7	43E-02	8	69E-02	9	84E-02
BA141	1	01E+02	3	05E+01	3	03E+00	3	01E-01	2	98E-02	2	95E-04	2	88E-07	2	81E-10	2	74E-13	2	69E-16	2	62E-19
LA141	9	34E-01	1	97E+01	1	84E+01	1	56E+01	1	31E+01	9	19E+00	5	36E+00	3	15E+00	1	85E+00	1	09E+00	6	38E-01
CE141	1	15E-07	1	28E-02	3	01E-02	4	52E-02	5	77E-02	7	76E-02	9	64E-02	1	07E-01	1	13E-01	1	17E-01	1	19E-01
BA142	1	35E+02	5	39E+00	1	23E-01	2	79E-03	6	38E-05	3	32E-08	3	94E-13	4	66E-18	5	53E-23	6	58E-28	7	80E-33
LA142	3	12E+00	2	16E+01	1	42E+01	9	05E+00	5	76E+00	2	33E+00	6	01E-01	1	55E-01	3	99E-02	1	03E-02	2	64E-03
LA143	4	15E+01	8	13E+00	4	15E-01	2	14E-02	1	10E-03	2	87E-06	3	88E-10	5	23E-14	7	05E-18	9	50E-22	1	28E-25
CE143	1	66E-02	1	06E+00	1	10E+00	1	07E+00	1	05E+00	1	01E+00	9	48E-01	8	91E-01	8	36E-01	7	83E-01	7	37E-01
PR143	4	87E-09	1	63E-03	3	93E-03	6	20E-03	8	42E-03	1	27E-02	1	88E-02	2	46E-02	2	98E-02	3	47E-02	3	93E-02
CE144	5	92E-04	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03
PR144	1	62E-07	3	86E-03	4	21E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03	4	23E-03
PR145	3	05E-02	4	47E+00	3	97E+00	3	52E+00	3	15E+00	2	50E+00	1	76E+00	1	24E+00	8	81E-01	6	22E-01	4	39E-01
CE146	1	01E+02	5	19E+00	2	66E-01	1	36E-02	6	98E-04	1	84E-06	2	48E-10	3	34E-14	4	50E-18	6	07E-22	8	20E-26
PR146	2	09E+00	1	82E+01	4	12E+00	7	74E-01	1	39E-01	4	38E-03	2	42E-05	1	34E-07	7	39E-10	4	10E-12	2	23E-14
PR147	1	19E+01	3	44E+00	1	08E-01	3	37E-03	1	05E-04	1	03E-07	3	13E-12	9	55E-17	2	92E-21	8	90E-26	2	71E-30
ND147	4	25E-06	7	98E-02	8	22E-02	8	19E-02	8	19E-02	8	14E-02	8	09E-02	8	01E-02	7	96E-02	7	88E-02	7	83E-02
ND149	8	62E+00	5	89E+00	3	98E+00	2	72E+00	1	84E+00	8	56E-01	2	69E-01	8	50E-02	2	68E-02	8	41E-03	2	66E-03
PM149	1	20E-03	9	39E-02	1	56E-01	1	97E-01	2	24E-01	2	51E-01	2	61E-01	2	56E-01	2	49E-01	2	40E-01	2	32E-01
PM150	1	15E-01	8	85E-02	6	84E-02	5	30E-02	4	08E-02	2	45E-02	1	14E-02	5	24E-03	2	44E-03	1	13E-03	5	21E-04
ND151	5	31E+01	1	66E+00	5	20E-02	1	62E-03	5	09E-05	4	95E-08	1	51E-12	4	63E-17	1	41E-21	4	30E-26	1	32E-30
PM151	3	37E-02	3	95E-01	3	98E-01	3	87E-01	3	77E-01	3	59E-01	3	33E-01	3	09E-01	2	87E-01	2	66E-01	2	47E-01
PM152	9	28E+01	9	06E-02	8	84E-05	8	62E-08	8	43E-11	8	06E-17	7	51E-26	6	99E-35	6	51E-44	6	10E-53	5	66E-62
SM153	1	27E-01	1	25E-01	1	24E-01	1	22E-01	1	20E-01	1	17E-01	1	12E-01	1	07E-01	1	02E-01	9	77E-02	9	34E-02
SM155	1	19E+01	1	95E+00	3	19E-01	5	21E-02	8	58E-03	2	31E-04	1	02E-06	4	48E-09	1	97E-11	8	81E-14	2	16E-16
EU155	8	72E-06	2	49E-04	2	88E-04	2	94E-04	2	95E-04	2	95E-04	2	95E-04	2	95E-04	2	95E-04	2	95E-04	2	95E-04
SM156	2	23E-01	2	07E-01	1	92E-01	1	78E-01	1	65E-01	1	43E-01	1	15E-01	9	19E-02	7	36E-02	5	90E-02	4	74E-02
EU156	6	53E-04	1	06E-03	1	44E-03	1	80E-03	2	12E-03	2	71E-03	3	45E-03	3	99E-03	4	45E-03	4	82E-03	5	07E-03
EU157	4	27E-02	1	41E-01	1	35E-01	1	29E-01	1	23E-01	1	12E-01	9	79E-02	8	54E-02	7	44E-02	6	49E-02	5	64E-02
EU158	2	31E+00	9	35E-01	3	77E-01	1	53E-01	6	17E-02	1	01E-02	6	77E-04	4	48E-05	2	98E-06	1	98E-07	1	31E-08
EU159	2	53E+00	2	51E-01	2	49E-02	2	47E-03	2	45E-04	2	41E-06	2	36E-09	2	30E-12	2	25E-15	2	20E-18	2	15E-21
GD159	1	08E-02	4	74E-02	4	93E-02	4	78E-02	4	60E-02	4	26E-02	3	80E-02	3	39E-02	3	01E-02	2	68E-02	2	39E-02
TB161	9	60E-05	6	90E-04	6	86E-04	6	83E-04	6	83E-04	6	76E-04	6	69E-04	6	58E-04	6	51E-04	6	44E-04	6	34E-04
TOTAL	2	05E+04	4	64E+03	1	72E+03	9	80E+02	7	13E+02	5	13E+02	3	91E+02	3	20E+02	2	71E+02	2	32E+02	2	01E+02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
GE 77	4	02E-03	2	53E-03	5	79E-04	6	98E-06	4	45E-09	1	80E-15	7	24E-22	1	19E-34	0		0		0	
AS 77	4	15E-05	6	13E-03	4	43E-03	1	28E-03	1	50E-04	2	04E-06	2	77E-08	5	10E-12	2	37E-21	5	07E-40	1	09E-58
SE 77M	1	64E-09	1	85E-05	1	33E-05	3	85E-06	4	49E-07	6	11E-09	8	32E-11	1	53E-14	7	11E-24	1	52E-42	3	28E-61
AS 78	1	87E-02	1	65E-04	4	88E-09	4	13E-23	0		0		0		0		0		0		0	
BR 82	3	86E-04	2	40E-04	1	50E-04	3	66E-05	3	46E-06	3	11E-08	2	80E-10	2	26E-14	1	32E-24	4	52E-45	1	54E-65
BR 83	1	57E-01	4	15E-03	4	18E-06	4	24E-15	4	33E-30	0		0		0		0		0		0	
KR 83M	8	17E-06	1	81E-02	2	06E-05	1	86E-14	1	90E-29	0		0		0		0		0		0	
KR 85M	1	60E-02	9	12E-01	2	08E-02	2	47E-07	1	53E-15	5	80E-32	2	20E-48	0		0		0		0	
KR 85	1	66E-05	4	35E-04	4	43E-04	4	43E-04	4	43E-04	4	43E-04	4	43E-04	4	41E-04	4	37E-04	4	29E-04	4	22E-04
KR 87	2	80E+02	5	52E-04	1	09E-09	8	48E-27	0		0		0		0		0		0		0	
KR 88	1	23E+02	3	25E-01	8	52E-04	1	55E-11	1	95E-24	0		0		0		0		0		0	
RB 88	3	14E+01	3	63E-01	9	58E-04	1	73E-11	2	17E-24	0		0		0		0		0		0	
SR 89	1	34E-05	4	03E-01	3	97E-01	3	82E-01	3	58E-01	3	12E-01	2	73E-01	2	10E-01	1	07E-01	2	83E-02	7	44E-03
SR 90	3	19E-05	3	28E-03	3	28E-03	3	28E-03	3	28E-03	3	28E-03	3	28E-03	3	28E-03	3	24E-03	3	24E-03	3	22E-03
Y 90	4	72E-11	7	50E-04	1	33E-03	2	38E-03	3	04E-03	3	24E-03	3	28E-03	3	28E-03	3	24E-03	3	24E-03	3	22E-03
SR 91	4	88E-01	1	75E+00	3	13E-01	1	80E-03	3	28E-07	1	11E-14	3	78E-22	4	29E-37	0		0		0	
Y 91M	3	28E-05	1	13E+00	2	02E-01	1	16E-03	2	13E-07	7	19E-15	2	43E-22	2	77E-37	0		0		0	
Y 91	1	34E-08	5	37E-02	6	36E-02	6	36E-02	5	98E-02	5	31E-02	4	72E-02	3	75E-02	2	07E-02	6	38E-03	1	96E-03
SR 92	1	39E+00	1	73E-02	3	74E-05	3	76E-13	1	76E-26	0		0		0		0		0		0	
Y 92	6	40E-02	1	82E-01	2	02E-03	1	55E-09	9	06E-20	3	09E-40	1	06E-60	0		0		0		0	
Y 93	9	06E-02	6	13E-01	1	20E-01	8	98E-04	2	59E-07	2	14E-14	1	76E-21	1	20E-35	0		0		0	
ZR 95	1	95E-04	2	43E-02	2	41E-02	2	32E-02	2	22E-02	1	98E-02	1	79E-02	1	44E-02	8	46E-03	2	90E-03	1	00E-03
NB 95M	4	15E-12	8	24E-05	1	50E-04	2	86E-04	3	87E-04	4	09E-04	3	77E-04	3	06E-04	1	79E-04	6	18E-05	2	13E-05
NB 95	2	17E-11	4	71E-04	9	32E-04	2	24E-03	4	15E-03	7	14E-03	9	23E-03	1	14E-02	1	10E-02	5	29E-03	2	03E-03
ZR 97	5	59E-01	9	52E-01	3	58E-01	1	89E-02	1	42E-04	8	01E-09	4	50E-13	1	42E-21	8	04E-43	0		0	
NB 97M	2	88E-03	9	13E-01	3	42E-01	1	83E-02	1	37E-04	7	69E-09	4	34E-13	1	37E-21	7	72E-43	0		0	
NB 97	2	81E-01	9	54E-01	3	58E-01	1	90E-02	1	43E-04	8	63E-09	4	84E-13	1	54E-21	8	65E-43	0		0	
MO 99	1	21E-02	3	95E+00	3	08E+00	1	46E+00	4	23E-01	3	53E-02	2	95E-03	2	06E-05	8	35E-11	1	38E-21	2	27E-32
TC 99M	1	13E-07	3	47E+00	2	92E+00	1	40E+00	4	04E-01	3	37E-02	2	82E-03	1	97E-05	7	96E-11	1	31E-21	2	17E-32
RU103	2	38E-04	5	42E-01	5	32E-01	5	04E-01	4	63E-01	3	88E-01	3	25E-01	2	29E-01	9	56E-02	1	66E-02	2	88E-03
RH103M	1	58E-08	5	42E-01	5	32E-01	5	06E-01	4	63E-01	3	88E-01	3	25E-01	2	29E-01	9	56E-02	1	66E-02	2	88E-03
RU105	2	52E+00	2	41E+00	5	67E-02	7	43E-07	5	44E-15	2	90E-31	1	55E-47	0		0		0		0	
RH105M	1	66E-02	2	41E+00	5	67E-02	7	45E-07	5	46E-15	2	92E-31	1	56E-47	0		0		0		0	
RH105	2	72E-08	8	68E+00	5	67E+00	1	41E+00	1	39E-01	1	36E-03	1	32E-05	1	24E-09	1	08E-19	8	10E-40	6	09E-60
RU106	2	54E-03	4	83E-02	4	80E-02	4	78E-02	4	73E-02	4	66E-02	4	54E-02	4	37E-02	3	99E-02	3	30E-02	2	73E-02
RH106	2	76E-05	4	83E-02	4	80E-02	4	78E-02	4	73E-02	4	66E-02	4	54E-02	4	37E-02	3	99E-02	3	30E-02	2	73E-02
PD109	2	07E-02	5	25E-01	1	53E-01	3	79E-03	8	00E-06	3	56E-11	1	59E-16	3	14E-27	0		0		0	
AG109M	1	19E-04	5	25E-01	1	53E-01	3	79E-03	8	03E-06	3	57E-11	1	59E-16	3	14E-27	0		0		0	
PD111M	5	67E+00	2	75E-01	1	33E-02	1	53E-06	4	14E-13	3	01E-26	2	22E-39	0		0		0		0	
PD111	2	01E+00	2	22E-01	1	07E-02	1	23E-06	3	35E-13	2	44E-26	1	78E-39	0		0		0		0	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 7

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
AG111M	1.60E-02	2.89E-01	1.41E-02	1.62E-06	4.38E-13	3.21E-26	2.34E-39	0.	0.	0.	0.	0.
AG111	5.69E-09	1.57E-01	1.51E-01	1.15E-01	7.25E-02	2.87E-02	1.14E-02	1.80E-03	1.77E-05	1.71E-09	1.66E-13	0.
PD112	1.48E+00	6.71E-01	3.04E-01	2.82E-02	5.38E-04	1.95E-07	7.09E-11	9.30E-18	5.87E-35	0.	0.	0.
AG112	4.44E-05	7.79E-01	3.60E-01	3.33E-02	6.36E-04	2.30E-07	8.35E-11	1.10E-17	6.89E-35	0.	0.	0.
AG113	8.49E-03	8.98E-02	3.89E-03	3.16E-07	4.84E-14	1.13E-27	2.64E-41	0.	0.	0.	0.	0.
CD115M	1.38E-08	4.00E-04	3.93E-04	3.74E-04	3.47E-04	2.93E-04	2.52E-04	1.81E-04	8.10E-05	1.61E-05	3.22E-06	0.
CD115	5.34E-06	8.02E-02	5.89E-02	2.33E-02	4.90E-03	2.19E-04	9.74E-06	1.94E-08	3.43E-15	1.07E-28	3.37E-42	0.
IN115M	6.65E-11	8.48E-02	6.42E-02	2.53E-02	5.34E-03	2.38E-04	1.06E-05	2.12E-08	3.75E-15	1.17E-28	3.68E-42	0.
CD117	1.19E-01	2.61E-03	2.53E-06	2.36E-15	2.10E-30	0.	0.	0.	0.	0.	0.	0.
IN117M	5.74E-06	1.08E-02	1.25E-05	1.20E-14	1.07E-29	0.	0.	0.	0.	0.	0.	0.
IN117	2.32E-10	7.12E-03	8.43E-06	8.17E-15	7.24E-30	0.	0.	0.	0.	0.	0.	0.
SN121	2.53E-03	1.45E-01	7.80E-02	1.23E-02	5.65E-04	1.19E-06	2.51E-09	1.12E-14	4.67E-28	0.	0.	0.
SN123	1.26E-05	1.32E-03	1.31E-03	1.28E-03	1.25E-03	1.18E-03	1.12E-03	1.00E-03	7.59E-04	4.36E-04	2.51E-04	0.
SN125	3.02E-02	2.80E-02	2.61E-02	2.09E-02	1.44E-02	6.91E-03	3.30E-03	7.55E-04	1.88E-05	1.19E-08	7.45E-12	0.
SB125	1.81E-04	2.02E-04	2.19E-04	2.69E-04	3.29E-04	3.99E-04	4.30E-04	4.47E-04	4.38E-04	4.09E-04	3.83E-04	0.
SB126	5.86E-03	5.54E-03	5.24E-03	4.44E-03	3.36E-03	1.93E-03	1.11E-03	3.66E-04	2.28E-05	1.11E-07	2.23E-08	0.
SN127	6.08E+00	2.21E-03	8.01E-07	3.82E-17	2.41E-34	0.	0.	0.	0.	0.	0.	0.
SB127	7.10E-02	2.91E-01	2.44E-01	1.42E-01	5.83E-02	9.73E-03	1.63E-03	4.55E-05	5.93E-09	1.01E-16	1.72E-24	0.
TE127M	5.74E-10	4.45E-04	8.14E-04	1.58E-03	2.18E-03	2.41E-03	2.32E-03	2.06E-03	1.50E-03	7.93E-04	4.19E-04	0.
TE127	4.01E-02	2.08E-01	2.05E-01	1.25E-01	5.28E-02	1.08E-02	3.71E-03	2.08E-03	1.48E-03	7.83E-04	4.14E-04	0.
SB128	1.96E+00	3.35E-01	5.29E-02	2.07E-04	2.01E-08	1.89E-16	1.77E-24	1.56E-40	0.	0.	0.	0.
SB129	9.83E+00	5.04E-01	1.05E-02	9.57E-08	3.81E-16	6.00E-33	9.47E-50	0.	0.	0.	0.	0.
TE129M	1.85E-07	1.96E-02	1.96E-02	1.85E-02	1.67E-02	1.36E-02	1.11E-02	7.35E-03	2.65E-03	3.46E-04	4.50E-05	0.
TE129	7.08E+00	5.88E-01	2.46E-02	1.18E-02	1.07E-02	8.70E-03	7.09E-03	4.72E-03	1.70E-03	2.21E-04	2.89E-05	0.
I130	4.86E-02	1.27E-02	3.32E-03	5.95E-05	7.27E-08	1.08E-13	1.61E-19	3.60E-31	0.	0.	0.	0.
TE131M	1.19E-04	4.19E-01	2.41E-01	4.55E-02	2.85E-03	1.11E-05	4.35E-08	6.63E-13	6.03E-25	0.	0.	0.
TE131	1.10E+02	7.64E-02	4.38E-02	8.34E-03	5.20E-04	2.03E-06	7.93E-09	1.22E-13	1.10E-25	0.	0.	0.
I131	1.60E-02	8.65E-01	8.18E-01	6.56E-01	4.33E-01	1.83E-01	7.72E-02	1.39E-02	1.86E-04	3.40E-08	6.19E-12	0.
XE131M	4.35E-11	4.01E-04	7.61E-04	1.59E-03	2.27E-03	2.25E-03	1.67E-03	6.88E-04	4.59E-05	1.37E-07	3.87E-10	0.
TE132	1.52E+00	3.01E+00	2.43E+00	1.28E+00	4.40E-01	5.22E-02	6.19E-03	8.70E-05	2.04E-09	1.11E-18	6.08E-28	0.
I132	3.73E+00	3.09E+00	2.49E+00	1.31E+00	4.55E-01	5.38E-02	6.38E-03	8.97E-05	2.10E-09	1.14E-18	6.25E-28	0.
I133	8.56E-01	4.77E+00	2.15E+00	2.00E-01	3.81E-03	1.38E-06	5.01E-10	6.60E-17	4.14E-34	0.	0.	0.
XE133M	6.08E-07	7.51E-01	8.90E-01	5.22E-01	1.22E-01	5.74E-03	2.67E-04	5.80E-07	1.27E-13	6.08E-27	2.91E-40	0.
XE133	1.06E-05	1.44E+01	1.93E+01	1.73E+01	9.43E+00	2.54E+00	6.86E-01	4.94E-02	6.88E-05	1.33E-10	2.59E-16	0.
I135	1.28E+01	2.09E+00	1.75E-01	1.01E-04	4.13E-10	6.82E-21	1.12E-31	3.04E-53	0.	0.	0.	0.
XE135M	2.36E-02	1.09E+01	9.09E-01	5.29E-04	2.15E-09	3.53E-20	5.83E-31	1.59E-52	0.	0.	0.	0.
XE135	2.46E+01	9.40E+01	2.30E+01	1.32E-01	1.61E-05	2.26E-13	3.17E-21	6.27E-37	0.	0.	0.	0.
CS136	6.04E-03	5.72E-03	5.43E-03	4.62E-03	3.56E-03	2.08E-03	1.22E-03	4.20E-04	2.92E-05	1.41E-07	6.82E-10	0.
CS137	1.20E-03	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.29E-02	1.28E-02	1.28E-02	1.27E-02	0.
BA137M	2.52E-06	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.21E-02	1.20E-02	1.19E-02	1.18E-02	0.

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BA139	8.38E+00	8.93E-04	5.27E-09	1.08E-24	0.	0.	0.	0.	0.	0.	0.
BA140	5.29E-02	3.14E-01	2.98E-01	2.53E-01	1.93E-01	1.12E-01	6.54E-02	2.21E-02	1.48E-03	6.60E-06	2.91E-08
LA140	1.26E-07	1.09E-01	1.76E-01	2.43E-01	2.16E-01	1.29E-01	7.49E-02	2.55E-02	1.70E-03	7.54E-06	3.36E-08
LA141	9.34E-01	3.70E-01	5.21E-03	1.44E-08	7.86E-18	2.35E-36	6.99E-55	0.	0.	0.	0.
CE141	1.15E-07	1.28E-01	1.27E-01	1.19E-01	1.07E-01	8.68E-02	6.99E-02	4.54E-02	1.56E-02	1.84E-03	2.16E-04
LA142	3.12E+00	6.81E-04	1.32E-08	9.70E-23	0.	0.	0.	0.	0.	0.	0.
CE143	1.66E-02	6.84E-01	4.13E-01	9.11E-02	7.32E-03	4.73E-05	3.05E-07	1.28E-11	1.45E-22	0.	0.
PR143	4.87E-09	4.38E-02	6.82E-02	8.79E-02	7.53E-02	4.59E-02	2.78E-02	1.00E-02	8.01E-04	5.10E-06	3.24E-08
CE144	5.92E-04	4.23E-03	4.21E-03	4.19E-03	4.14E-03	4.03E-03	3.94E-03	3.75E-03	3.31E-03	2.61E-03	2.04E-03
PR144	1.62E-07	4.23E-03	4.21E-03	4.19E-03	4.14E-03	4.03E-03	3.94E-03	3.75E-03	3.31E-03	2.61E-03	2.04E-03
PR145	3.05E-02	3.10E-01	1.92E-02	4.57E-06	4.15E-12	3.45E-24	2.85E-36	0.	0.	0.	0.
ND147	4.25E-06	7.15E-02	6.71E-02	5.56E-02	4.07E-02	2.19E-02	1.17E-02	3.37E-03	1.47E-04	2.87E-07	5.56E-10
PM147	1.18E-14	5.35E-05	1.03E-04	2.36E-04	4.10E-04	6.24E-04	7.36E-04	8.19E-04	8.27E-04	7.72E-04	7.18E-04
ND149	8.62E+00	8.35E-04	8.09E-08	7.37E-20	6.30E-40	0.	0.	0.	0.	0.	0.
PM149	1.20E-03	2.22E-01	1.62E-01	6.33E-02	1.33E-02	5.77E-04	2.51E-05	4.79E-08	7.52E-15	1.86E-28	4.64E-42
PM150	1.15E-01	2.42E-04	5.08E-07	4.77E-15	2.00E-28	0.	0.	0.	0.	0.	0.
PM151	3.37E-02	2.30E-01	1.27E-01	2.13E-02	1.09E-03	2.87E-06	7.57E-09	5.24E-14	6.56E-27	0.	0.
SM153	1.27E-01	8.94E-02	6.28E-02	2.17E-02	3.70E-03	1.07E-04	3.12E-06	2.62E-09	5.39E-17	2.30E-32	9.77E-48
SM156	2.23E-01	3.80E-02	6.49E-03	3.19E-05	4.62E-09	9.44E-17	1.95E-24	8.32E-40	0.	0.	0.
EU155	8.72E-06	2.95E-04	2.95E-04	2.95E-04	2.94E-04	2.93E-04	2.92E-04	2.90E-04	2.84E-04	2.73E-04	2.62E-04
EU156	6.53E-04	5.28E-03	5.86E-03	5.28E-03	4.20E-03	2.63E-03	1.65E-03	6.57E-04	6.53E-05	6.40E-07	6.32E-09
EU157	4.27E-02	4.92E-02	1.68E-02	6.19E-04	2.61E-06	4.60E-11	8.14E-16	2.54E-25	0.	0.	0.
GD159	1.08E-02	2.13E-02	8.47E-03	5.29E-04	5.21E-06	5.04E-10	4.89E-14	4.58E-22	3.91E-42	0.	0.
TB161	9.60E-05	6.27E-04	5.67E-04	4.20E-04	2.54E-04	9.28E-05	3.40E-05	4.55E-06	3.01E-08	1.30E-12	5.67E-17
TOTAL		1.74E+02	7.12E+01	2.89E+01	1.43E+01	4.70E+00	2.21E+00	1.05E+00	4.87E-01	1.85E-01	1.11E-01

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MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY A
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED LESS THAN 15 MINUTES

PAGE 9

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1	00E+00	1	50E+00	2	00E+00	3	50E+00	5	00E+00	7	00E+00	1	00E+01	2	00E+01	3	50E+01	5	00E+01
KR 85	1	66E-05	4	11E-04	3	99E-04	3	86E-04	3	52E-04	3	18E-04	2	79E-04	2	30E-04	1	22E-04	4	64E-05	1	78E-05
SR 89	1	34E-05	3	14E-03	2	75E-04	2	42E-05	1	63E-08	1	10E-11	6	49E-16	2	95E-22	2	15E-43	0		0	
SR 90	3	19E-05	3	19E-03	3	15E-03	3	13E-03	3	01E-03	2	90E-03	2	76E-03	2	56E-03	2	00E-03	1	38E-03	9	57E-04
Y 90	4	72E-11	3	19E-03	3	15E-03	3	13E-03	3	01E-03	2	90E-03	2	76E-03	2	56E-03	2	00E-03	1	38E-03	9	57E-04
Y 91	1	34E-08	9	08E-04	1	06E-04	1	23E-05	1	92E-08	3	02E-11	5	53E-15	1	36E-20	2	74E-39	0		0	
ZR 95	1	95E-04	5	01E-04	7	14E-05	1	02E-05	2	97E-08	8	63E-11	3	57E-14	3	01E-19	3	70E-36	0		0	
NB 95M	4	15E-12	1	06E-05	1	51E-06	2	15E-07	6	28E-10	1	83E-12	7	57E-16	6	39E-21	7	83E-38	0		0	
NB 95	2	17E-11	1	08E-03	1	55E-04	2	19E-05	6	39E-08	1	85E-10	7	75E-14	6	54E-19	8	00E-36	0		0	
RU103	2	38E-04	9	22E-04	3	78E-05	1	55E-06	1	06E-10	7	27E-15	2	03E-20	9	58E-29	0		0		0	
RH103M	1	58E-08	9	24E-04	3	78E-05	1	55E-06	1	06E-10	7	27E-15	2	03E-20	9	60E-29	0		0		0	
RU106	2	54E-03	2	42E-02	1	71E-02	1	21E-02	4	33E-03	1	53E-03	3	85E-04	4	87E-05	4	92E-08	1	58E-12	5	09E-17
RH106	2	76E-05	2	42E-02	1	71E-02	1	21E-02	4	33E-03	1	53E-03	3	85E-04	4	87E-05	4	92E-08	1	58E-12	5	09E-17
SN123	1	26E-05	1	75E-04	6	34E-05	2	30E-05	1	10E-06	5	29E-08	9	24E-10	2	12E-12	3	42E-21	2	20E-34	1	41E-47
SB125	1	81E-04	3	65E-04	3	20E-04	2	82E-04	1	93E-04	1	31E-04	7	82E-05	3	62E-05	2	78E-06	5	92E-08	1	26E-09
TE125M	4	88E-12	1	49E-04	1	32E-04	1	17E-04	7	96E-05	5	41E-05	3	24E-05	1	49E-05	1	15E-06	2	45E-08	5	22E-10
TE127M	5	74E-10	2	75E-04	8	60E-05	2	70E-05	8	27E-07	2	55E-08	2	45E-10	2	31E-13	1	89E-23	1	41E-38	1	05E-53
TE127	4	01E-02	2	71E-04	8	50E-05	2	67E-05	8	17E-07	2	52E-08	2	42E-10	2	28E-13	1	87E-23	1	39E-38	1	04E-53
CS137	1	20E-03	1	26E-02	1	25E-02	1	23E-02	1	19E-02	1	15E-02	1	10E-02	1	03E-02	8	12E-03	5	76E-03	4	07E-03
BA137M	2	52E-06	1	18E-02	1	17E-02	1	16E-02	1	11E-02	1	08E-02	1	03E-02	9	62E-03	7	61E-03	5	38E-03	3	81E-03
CE141	1	15E-07	4	98E-05	1	00E-06	2	01E-08	1	64E-13	1	33E-18	2	18E-25	1	45E-35	0		0		0	
CE144	5	92E-04	1	74E-03	1	12E-03	7	12E-04	1	87E-04	4	93E-05	8	26E-06	5	72E-07	7	69E-11	1	21E-16	1	88E-22
PR144	1	62E-07	1	74E-03	1	12E-03	7	12E-04	1	87E-04	4	93E-05	8	26E-06	5	72E-07	7	69E-11	1	21E-16	1	88E-22
PM147	1	18E-14	6	84E-04	6	00E-04	5	24E-04	3	52E-04	2	37E-04	1	40E-04	6	34E-05	4	49E-06	8	51E-08	1	61E-09
EU155	8	72E-06	2	55E-04	2	37E-04	2	21E-04	1	78E-04	1	43E-04	1	07E-04	6	87E-05	1	61E-05	1	81E-06	2	03E-07
TOTAL			9	29E-02	6	96E-02	5	76E-02	3	92E-02	3	21E-02	2	82E-02	2	55E-02	1	99E-02	1	40E-02	9	81E-03

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 1

TIME		MR/HR	MICROCURIES/SQ METER
ZERO TIME	HOURS	2.87E+02	2.60E+04
1.00E+00		1.22E+02	1.20E+04
2.00E+00		2.41E+01	5.08E+03
3.00E+00		7.33E+00	3.61E+03
4.00E+00		3.47E+00	2.93E+03
6.00E+00		1.81E+00	2.08E+03
9.00E+00		1.23E+00	1.30E+03
1.20E+01		1.00E+00	8.58E+02
1.50E+01		9.01E-01	5.93E+02
1.80E+01		8.75E-01	4.32E+02
2.10E+01		8.87E-01	3.33E+02
1.00E+00	DAYS	9.22E-01	2.70E+02
2.00E+00		1.29E+00	1.50E+02
5.00E+00		1.69E+00	1.32E+02
1.00E+01		1.49E+00	1.07E+02
2.00E+01		8.95E-01	6.51E+01
3.00E+01		5.22E-01	4.10E+01
5.00E+01		1.83E-01	1.81E+01
1.00E+02		1.49E-02	3.71E+00
2.00E+02		5.26E-04	4.01E-01
3.00E+02		1.36E-04	7.13E-02
1.00E+00	YEARS	1.00E-04	3.60E-02
1.50E+00		8.91E-05	2.41E-02
2.00E+00		8.78E-05	2.34E-02
3.50E+00		8.47E-05	2.25E-02
5.00E+00		8.17E-05	2.17E-02
7.00E+00		7.81E-05	2.07E-02
1.00E+01		7.30E-05	1.93E-02
2.00E+01		5.77E-05	1.52E-02
3.50E+01		4.09E-05	1.07E-02
5.00E+01		2.89E-05	7.52E-03

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 2

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
GE 75	1	76E-09	8	53E-06	5	13E-06	3	09E-06	1	86E-06	6	75E-07	1	47E-07	3	24E-08	7	04E-09	1	54E-09	3	35E-10
GE 77	3	08E-06	7	93E-06	7	44E-06	7	00E-06	6	61E-06	5	84E-06	4	85E-06	4	04E-06	3	36E-06	2	79E-06	2	32E-06
AS 77	3	18E-08	5	01E-06	5	11E-06	5	11E-06	5	16E-06	5	20E-06	5	20E-06	5	16E-06	5	06E-06	4	96E-06	4	84E-06
SE 77M	1	25E-12	1	50E-08	1	53E-08	1	54E-08	1	54E-08	1	55E-08	1	56E-08	1	55E-08	1	53E-08	1	49E-08	1	45E-08
GE 78	7	96E-04	4	99E-04	3	10E-04	1	94E-04	1	21E-04	4	71E-05	1	15E-05	2	77E-06	6	76E-07	1	65E-07	3	99E-08
AS 78	1	43E-05	2	38E-04	2	94E-04	2	75E-04	2	30E-04	1	36E-04	5	04E-05	1	68E-05	5	18E-06	1	55E-06	4	49E-07
AS 79	1	48E-02	1	46E-04	1	44E-06	1	42E-08	1	39E-10	1	35E-14	1	29E-20	1	23E-26	1	18E-32	1	12E-38	1	07E-44
SE 79M	2	20E-05	2	58E-04	2	55E-06	2	51E-08	2	47E-10	2	39E-14	2	27E-20	2	17E-26	2	07E-32	1	97E-38	1	89E-44
BR 80	8	29E-05	7	82E-06	7	35E-07	6	91E-08	6	51E-09	5	78E-11	4	83E-14	4	03E-17	3	36E-20	2	80E-23	2	34E-26
SE 81M	5	97E-05	2	78E-03	1	34E-03	6	45E-04	3	11E-04	7	25E-05	8	15E-06	9	10E-07	1	02E-07	1	14E-08	1	28E-09
SE 81	7	28E-04	3	29E-03	1	90E-03	9	50E-04	4	61E-04	1	08E-04	1	21E-05	1	35E-06	1	51E-07	1	69E-08	1	90E-09
BR 82	2	96E-07	2	90E-07	2	84E-07	2	79E-07	2	73E-07	2	63E-07	2	48E-07	2	34E-07	2	20E-07	2	08E-07	1	96E-07
SE 83	9	70E-01	1	84E-01	3	47E-02	6	60E-03	1	25E-03	4	48E-05	3	05E-07	2	07E-09	1	42E-11	9	60E-14	6	11E-16
BR 83	8	04E-03	1	20E-01	1	11E-01	8	75E-02	6	66E-02	3	74E-02	1	59E-02	6	69E-03	2	82E-03	1	19E-03	5	03E-04
KR 83M	4	17E-07	2	72E-02	5	55E-02	6	90E-02	7	12E-02	5	95E-02	3	50E-02	1	80E-02	8	68E-03	4	02E-03	1	80E-03
BR 84	1	56E-03	2	69E-01	7	28E-02	1	97E-02	5	33E-03	3	89E-04	7	70E-06	1	52E-07	3	00E-09	5	95E-11	1	17E-12
KR 85M	1	23E-02	2	63E+01	2	24E+01	1	91E+01	1	63E+01	1	19E+01	7	45E+00	4	64E+00	2	89E+00	1	80E+00	1	12E+00
KR 87	2	14E+02	1	24E+02	7	18E+01	4	13E+01	2	39E+01	7	99E+00	1	56E+00	3	01E-01	5	83E-02	1	13E-02	2	18E-03
KR 88	9	46E+01	7	39E+01	5	76E+01	4	50E+01	3	52E+01	2	14E+01	1	02E+01	4	85E+00	2	31E+00	1	10E+00	5	22E-01
RB 88	2	41E+01	7	50E+01	6	36E+01	5	03E+01	3	93E+01	2	39E+01	1	14E+01	5	44E+00	2	59E+00	1	23E+00	5	87E-01
RB 89	1	35E+02	1	26E+02	8	50E+00	5	70E-01	3	82E-02	1	73E-04	5	24E-08	1	58E-11	4	82E-15	1	46E-18	4	43E-22
SR 89	1	03E-05	3	61E-01	3	86E-01	3	86E-01	3	86E-01	3	86E-01	3	86E-01	3	84E-01	3	84E-01	3	82E-01	3	82E-01
SR 90	2	44E-05	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03
SR 91	3	74E-04	6	96E-03	6	49E-03	6	04E-03	5	62E-03	4	87E-03	3	93E-03	3	17E-03	2	56E-03	2	06E-03	1	66E-03
Y 91M	2	51E-08	2	40E-03	3	27E-03	3	51E-03	3	46E-03	3	10E-03	2	54E-03	2	05E-03	1	65E-03	1	33E-03	1	07E-03
Y 91	1	03E-11	2	13E-06	4	92E-06	7	82E-06	1	07E-05	1	61E-05	2	28E-05	2	82E-05	3	27E-05	3	62E-05	3	91E-05
SR 92	5	33E-03	2	38E-02	1	84E-02	1	43E-02	1	10E-02	6	61E-03	3	07E-03	1	43E-03	6	61E-04	3	07E-04	1	43E-04
Y 92	2	45E-04	5	00E-03	7	89E-03	9	32E-03	9	89E-03	9	46E-03	7	24E-03	4	93E-03	3	17E-03	1	95E-03	1	18E-03
SR 93	2	85E-01	4	90E-03	2	71E-05	1	49E-07	8	21E-10	2	52E-14	4	25E-21	7	17E-28	1	21E-34	2	04E-41	3	44E-48
Y 93	3	47E-04	1	12E-02	1	06E-02	9	85E-03	9	19E-03	8	05E-03	6	56E-03	5	36E-03	4	35E-03	3	57E-03	2	91E-03
Y 94	4	68E-02	6	40E-02	8	24E-03	1	06E-03	1	37E-04	2	28E-06	4	88E-09	1	04E-11	2	24E-14	4	88E-17	2	71E-18
Y 95	1	99E-01	1	87E-02	4	12E-04	9	07E-06	2	00E-07	9	73E-11	1	04E-15	1	11E-20	1	19E-25	1	27E-30	1	36E-35
ZR 95	7	46E-07	9	73E-05	9	97E-05	9	97E-05	9	97E-05	9	97E-05	9	97E-05	9	89E-05	9	89E-05	9	89E-05	9	89E-05
NB 95	8	32E-14	6	02E-08	1	40E-07	2	21E-07	3	01E-07	4	62E-07	7	01E-07	9	40E-07	1	18E-06	1	42E-06	1	66E-06
ZR 97	2	14E-03	9	36E-03	8	92E-03	8	59E-03	8	22E-03	7	59E-03	6	71E-03	5	93E-03	5	27E-03	4	64E-03	4	13E-03
NB 97M	1	10E-05	8	92E-03	8	59E-03	8	26E-03	7	92E-03	7	29E-03	6	45E-03	5	71E-03	5	05E-03	4	46E-03	3	94E-03
NB 97	1	08E-03	4	68E-03	6	59E-03	7	52E-03	7	89E-03	7	85E-03	7	14E-03	6	38E-03	5	64E-03	4	98E-03	4	43E-03
NB 98	1	47E-02	6	52E-03	2	88E-03	1	27E-03	5	66E-04	1	10E-04	9	56E-06	8	26E-07	7	20E-08	6	23E-09	5	37E-10
MO 99	9	30E-06	3	84E-03	3	80E-03	3	76E-03	3	73E-03	3	65E-03	3	54E-03	3	43E-03	3	33E-03	3	23E-03	3	13E-03
TC 99M	8	65E-11	3	66E-04	6	88E-04	9	71E-04	1	22E-03	1	63E-03	2	06E-03	2	35E-03	2	52E-03	2	62E-03	2	65E-03

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
MO101	1.82E-01	8.25E-02	4.79E-03	2.77E-04	1.61E-05	5.40E-08	1.05E-11	2.05E-15	3.97E-19	7.72E-23	1.51E-26	
TC101	7.72E-03	2.32E-01	2.53E-02	2.07E-03	1.51E-04	6.82E-07	1.71E-10	3.82E-14	8.10E-18	1.67E-21	3.37E-25	
MO102	1.88E+00	4.30E-02	9.77E-04	2.24E-05	5.09E-07	2.65E-10	3.15E-15	3.72E-20	4.42E-25	5.25E-30	6.23E-35	
TC102M	1.21E-03	3.63E-02	8.32E-04	1.90E-05	4.32E-07	2.24E-10	2.66E-15	3.15E-20	3.74E-25	4.43E-30	5.27E-35	
TC102	5.66E+00	2.16E-02	4.94E-04	1.12E-05	2.56E-07	1.34E-10	1.58E-15	1.88E-20	2.24E-25	2.65E-30	3.14E-35	
RU103	1.82E-07	4.22E-04	4.22E-04	4.22E-04	4.22E-04	4.20E-04	4.18E-04	4.18E-04	4.17E-04	4.17E-04	4.15E-04	
RH103M	1.21E-11	2.18E-04	3.24E-04	3.75E-04	3.98E-04	4.15E-04	4.18E-04	4.18E-04	4.17E-04	4.17E-04	4.17E-04	
TC104	1.93E-01	1.38E-01	1.38E-02	1.37E-03	1.35E-04	1.33E-06	1.30E-09	1.27E-12	1.24E-15	1.21E-18	1.19E-21	
RU105	1.93E-03	6.66E-02	5.69E-02	4.89E-02	4.19E-02	3.06E-02	1.91E-02	1.20E-02	7.48E-03	4.68E-03	2.94E-03	
RH105M	1.27E-05	6.68E-02	5.71E-02	4.90E-02	4.19E-02	3.06E-02	1.91E-02	1.20E-02	7.52E-03	4.70E-03	2.94E-03	
RH105	2.08E-11	1.36E-03	2.51E-03	3.47E-03	4.27E-03	5.47E-03	6.54E-03	7.04E-03	7.18E-03	7.11E-03	6.92E-03	
RU106	1.95E-06	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	
RH106	2.11E-08	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	3.70E-05	
RH107	4.82E-04	6.55E-02	9.93E-03	1.50E-03	2.25E-04	5.15E-06	1.77E-08	6.11E-11	2.10E-13	7.20E-14	7.15E-15	
PD107M	1.00E-06	1.33E-02	2.02E-03	3.04E-04	4.59E-05	1.05E-06	3.61E-09	1.24E-11	4.28E-14	1.47E-16	5.04E-19	
PD109	1.58E-05	1.31E-03	1.25E-03	1.18E-03	1.12E-03	1.01E-03	8.70E-04	7.45E-04	6.39E-04	5.47E-04	4.70E-04	
AG109M	9.09E-08	1.31E-03	1.25E-03	1.18E-03	1.12E-03	1.01E-03	8.70E-04	7.45E-04	6.39E-04	5.47E-04	4.70E-04	
PD111M	4.34E-03	3.81E-03	3.37E-03	2.97E-03	2.62E-03	2.03E-03	1.39E-03	9.57E-04	6.56E-04	4.49E-04	3.08E-04	
PD111	1.54E-03	2.79E-03	2.68E-03	2.38E-03	2.11E-03	1.63E-03	1.12E-03	7.68E-04	5.26E-04	3.61E-04	2.47E-04	
AG111M	1.23E-05	3.76E-03	3.52E-03	3.15E-03	2.79E-03	2.14E-03	1.47E-03	1.01E-03	6.91E-04	4.75E-04	3.24E-04	
AG111	4.36E-12	1.29E-05	2.71E-05	3.99E-05	5.13E-05	6.98E-05	8.98E-05	1.03E-04	1.11E-04	1.17E-04	1.20E-04	
PD112	1.13E-03	1.10E-03	1.06E-03	1.03E-03	9.96E-04	9.29E-04	8.43E-04	7.63E-04	6.91E-04	6.27E-04	5.68E-04	
AG112	3.40E-08	2.17E-04	3.83E-04	5.14E-04	6.10E-04	7.34E-04	8.06E-04	8.01E-04	7.63E-04	7.12E-04	6.56E-04	
AG113	6.51E-06	1.39E-03	1.22E-03	1.07E-03	9.41E-04	7.23E-04	4.91E-04	3.31E-04	2.24E-04	1.51E-04	1.02E-04	
AG115	1.29E-03	1.39E-03	1.72E-04	2.16E-05	2.70E-06	4.22E-08	8.25E-11	1.61E-13	3.12E-16	3.10E-16	2.88E-19	
CD115M	1.06E-11	2.82E-07	3.17E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07	3.18E-07	3.17E-07	3.17E-07	
CD115	4.09E-09	7.71E-05	8.29E-05	8.26E-05	8.16E-05	7.96E-05	7.67E-05	7.36E-05	7.08E-05	6.82E-05	6.56E-05	
IN115M	5.10E-14	8.51E-06	1.88E-05	2.80E-05	3.58E-05	4.76E-05	5.88E-05	6.48E-05	6.76E-05	6.82E-05	6.77E-05	
CD117	9.14E-05	1.52E-03	1.15E-03	8.56E-04	6.41E-04	3.59E-04	1.51E-04	6.37E-05	2.68E-05	1.12E-05	4.74E-06	
IN117M	4.40E-09	5.29E-04	7.66E-04	8.32E-04	8.04E-04	6.34E-04	3.62E-04	1.85E-04	8.90E-05	4.13E-05	1.86E-05	
IN117	1.77E-13	9.65E-05	2.34E-04	3.25E-04	3.62E-04	3.33E-04	2.12E-04	1.14E-04	5.65E-05	2.65E-05	1.22E-05	
CD118	5.88E-03	2.53E-03	1.08E-03	4.61E-04	1.98E-04	3.62E-05	2.84E-06	2.22E-07	1.74E-08	1.37E-09	1.07E-10	
IN118	3.90E-04	2.53E-03	1.08E-03	4.62E-04	1.98E-04	3.62E-05	2.84E-06	2.23E-07	1.74E-08	1.37E-09	1.07E-10	
CD119	1.55E-02	2.41E-04	3.76E-06	5.88E-08	9.19E-10	2.24E-13	8.57E-19	3.28E-24	1.25E-29	4.77E-35	1.83E-40	
IN119M	2.34E-05	2.62E-03	2.83E-04	2.86E-05	2.85E-06	2.80E-08	2.74E-11	2.68E-14	2.62E-17	2.55E-20	2.49E-23	
IN119	1.15E-03	1.37E-04	1.59E-05	1.61E-06	1.61E-07	1.58E-09	1.55E-12	1.51E-15	1.48E-18	1.44E-21	1.41E-24	
SN121	1.94E-06	2.00E-04	1.94E-04	1.90E-04	1.85E-04	1.76E-04	1.62E-04	1.51E-04	1.40E-04	1.29E-04	1.20E-04	
SN123M	1.03E-03	1.93E-03	6.82E-04	2.41E-04	8.52E-05	1.06E-05	4.71E-07	2.09E-08	9.22E-10	4.07E-11	1.80E-12	
SN123	9.66E-09	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	1.01E-06	
SN125	2.32E-05	2.31E-05	2.29E-05	2.29E-05	2.28E-05	2.27E-05	2.25E-05	2.23E-05	2.20E-05	2.18E-05	2.17E-05	

B-12

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 4

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	5	00E+00	6	00E+00	7	00E+00	8	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
SB125	1	39E-07	1	40E-07	1	40E-07	1	41E-07	1	41E-07	1	42E-07	1	44E-07	1	47E-07	1	49E-07	1	50E-07	1	52E-07	1	50E-07	1	50E-07	1	52E-07
SB126	4	49E-06	4	47E-06	4	47E-06	4	45E-06	4	44E-06	4	42E-06	4	39E-06	4	37E-06	4	33E-06	4	30E-06	4	27E-06	4	30E-06	4	30E-06	4	27E-06
SN127	4	66E-03	3	35E-03	2	40E-03	1	73E-03	1	24E-03	6	44E-04	2	39E-04	8	89E-05	3	30E-05	1	23E-05	4	54E-06	4	23E-05	1	23E-05	4	54E-06
SB127	5	44E-05	1	88E-04	2	08E-04	2	22E-04	2	30E-04	2	40E-04	2	44E-04	2	42E-04	2	38E-04	2	33E-04	2	29E-04	2	33E-04	2	33E-04	2	29E-04
TE127	3	08E-05	3	82E-05	4	64E-05	5	52E-05	6	37E-05	7	99E-05	1	02E-04	1	20E-04	1	33E-04	1	43E-04	1	51E-04	1	43E-04	1	43E-04	1	51E-04
SN128	3	58E-02	1	77E-02	8	74E-03	4	32E-03	2	13E-03	5	21E-04	6	29E-05	7	59E-06	9	15E-07	1	11E-07	1	34E-08	1	11E-07	1	11E-07	1	34E-08
SB128M	1	82E-05	2	01E-02	1	04E-02	5	15E-03	2	54E-03	6	22E-04	7	49E-05	9	05E-06	1	09E-06	1	32E-07	1	60E-08	1	32E-07	1	32E-07	1	60E-08
SB128	1	50E-03	1	45E-03	1	37E-03	1	28E-03	1	20E-03	1	02E-03	8	18E-04	6	48E-04	5	15E-04	4	08E-04	3	24E-04	3	08E-04	3	08E-04	3	24E-04
SN129M	2	00E-02	1	00E-02	5	01E-03	2	51E-03	1	25E-03	3	13E-04	3	92E-05	4	90E-06	6	12E-07	7	65E-08	9	57E-09	9	65E-08	9	65E-08	9	57E-09
SN129	1	34E-01	1	31E-03	1	30E-05	1	28E-07	1	25E-09	1	22E-13	1	16E-19	1	11E-25	1	06E-31	1	01E-37	9	65E-44	9	01E-37	9	01E-37	9	65E-44
SB129	7	53E-03	1	26E-02	1	19E-02	1	06E-02	9	32E-03	6	92E-03	4	31E-03	2	66E-03	1	64E-03	1	02E-03	6	24E-04	6	02E-03	6	02E-03	6	24E-04
TE129M	1	42E-10	1	58E-06	3	25E-06	4	77E-06	6	12E-06	8	30E-06	1	05E-05	1	19E-05	1	27E-05	1	32E-05	1	35E-05	1	32E-05	1	32E-05	1	35E-05
TE129	5	42E-03	7	45E-03	8	72E-03	9	05E-03	8	72E-03	7	22E-03	4	81E-03	3	04E-03	1	88E-03	1	17E-03	7	25E-04	7	17E-03	7	17E-03	7	25E-04
SB130M	7	81E-04	1	47E-03	3	87E-06	1	02E-08	2	68E-11	1	84E-16	3	37E-24	6	11E-32	1	11E-39	2	02E-47	3	67E-55	3	02E-47	3	02E-47	3	67E-55
SB130	1	34E-01	4	04E-02	1	15E-02	3	26E-03	9	23E-04	7	43E-05	1	70E-06	3	86E-08	8	82E-10	2	00E-11	4	59E-13	4	00E-11	4	00E-11	4	59E-13
I130	3	73E-05	3	53E-05	3	34E-05	3	16E-05	2	98E-05	2	67E-05	2	25E-05	1	91E-05	1	60E-05	1	37E-05	1	15E-05	1	37E-05	1	37E-05	1	15E-05
SB131	1	27E+01	3	32E+00	5	43E-01	8	93E-02	1	46E-02	3	94E-04	1	73E-06	7	66E-09	3	37E-11	1	48E-13	7	42E-16	7	48E-13	7	48E-13	7	42E-16
TE131M	6	09E-06	3	20E-02	3	65E-02	3	65E-02	3	58E-02	3	43E-02	3	20E-02	2	98E-02	2	78E-02	2	60E-02	2	42E-02	2	60E-02	2	60E-02	2	42E-02
TE131	5	63E+00	6	09E+00	2	00E+00	5	19E-01	1	26E-01	1	18E-02	5	86E-03	5	43E-03	5	06E-03	4	74E-03	4	42E-03	4	06E-03	4	06E-03	4	42E-03
I131	8	18E-04	2	84E-02	4	18E-02	4	58E-02	4	66E-02	4	70E-02	4	70E-02	4	66E-02	4	66E-02	4	62E-02	4	62E-02	4	62E-02	4	62E-02	4	62E-02
TE132	1	16E-03	2	83E-03	2	79E-03	2	78E-03	2	75E-03	2	70E-03	2	62E-03	2	56E-03	2	49E-03	2	42E-03	2	36E-03	2	42E-03	2	42E-03	2	36E-03
I132	2	85E-03	2	84E-03	2	84E-03	2	83E-03	2	81E-03	2	77E-03	2	71E-03	2	64E-03	2	56E-03	2	50E-03	2	44E-03	2	50E-03	2	50E-03	2	44E-03
TE133M	5	03E-03	1	74E+00	7	57E-01	3	30E-01	1	43E-01	2	73E-02	2	24E-03	1	85E-04	1	52E-05	1	26E-06	1	04E-07	1	26E-06	1	26E-06	1	04E-07
TE133	2	82E+01	1	60E+00	1	78E-01	5	88E-02	2	49E-02	4	72E-03	3	90E-04	3	20E-05	2	65E-06	2	18E-07	1	80E-08	1	18E-07	1	18E-07	1	80E-08
I133	4	37E-02	4	72E-01	5	08E-01	5	08E-01	4	99E-01	4	72E-01	4	30E-01	3	90E-01	3	51E-01	3	20E-01	2	89E-01	2	20E-01	2	20E-01	2	89E-01
XE133M	4	65E-07	2	65E-02	6	39E-02	1	02E-01	1	39E-01	2	09E-01	3	03E-01	3	84E-01	4	53E-01	5	12E-01	5	61E-01	5	12E-01	5	12E-01	5	61E-01
XE133	8	13E-06	4	62E-01	1	12E+00	1	79E+00	2	46E+00	3	73E+00	5	47E+00	6	99E+00	8	36E+00	9	57E+00	1	06E+01	1	57E+00	1	57E+00	1	06E+01
TE134	9	33E+00	4	33E+00	1	61E+00	5	99E-01	2	23E-01	3	08E-02	1	58E-03	8	07E-05	4	14E-06	2	12E-07	1	09E-08	1	12E-07	1	12E-07	1	09E-08
I134	4	28E+00	5	72E+00	4	01E+00	2	35E+00	1	26E+00	3	20E-01	3	52E-02	3	60E-03	3	52E-04	3	38E-05	3	20E-06	3	38E-05	3	38E-05	3	20E-06
I135	6	56E-01	1	15E+00	1	04E+00	9	37E-01	8	46E-01	6	88E-01	5	06E-01	3	69E-01	2	71E-01	2	00E-01	1	46E-01	1	00E-01	1	00E-01	1	46E-01
XE135M	1	81E-02	8	33E+01	8	09E+01	7	34E+01	6	59E+01	5	37E+01	3	94E+01	2	89E+01	2	11E+01	1	55E+01	1	14E+01	1	55E+01	1	55E+01	1	14E+01
XE135	1	89E+01	3	74E+01	5	46E+01	6	87E+01	8	01E+01	9	60E+01	1	07E+02	1	07E+02	1	02E+02	9	27E+01	8	28E+01	8	02E+02	8	02E+02	8	28E+01
CS136	1	16E-02	1	15E-02	1	15E-02	1	15E-02	1	15E-02	1	14E-02	1	13E-02	1	13E-02	1	12E-02	1	11E-02	1	10E-02	1	11E-02	1	11E-02	1	10E-02
CS137	9	19E-04	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03	9	90E-03
BA137M	1	93E-06	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03	9	24E-03
XE138	4	38E+03	3	77E+02	3	27E+01	2	84E+00	2	46E-01	1	85E-03	1	20E-06	7	78E-10	5	06E-13	3	29E-16	2	13E-19	2	06E-13	2	06E-13	2	13E-19
CS138	6	52E+02	1	10E+03	3	80E+02	1	12E+02	3	13E+01	2	38E+00	4	96E-02	1	03E-03	2	13E-05	4	45E-07	9	24E-09	9	45E-07	9	45E-07	9	24E-09
CS139	8	67E+02	2	76E+01	3	47E-01	4	35E-03	5	47E-05	8	59E-09	1	71E-14	3	38E-20	6	68E-26	1	33E-31	2	62E-37	2	33E-31	2	33E-31	2	62E-37
BA139	1	60E+01	1	79E+02	1	10E+02	6	68E+01	4	04E+01	1	49E+01	3	29E+00	7	31E-01	1	63E-01	3	60E-02	8	00E-03	8	60E-02	8	60E-02	8	00E-03
BA140	1	01E+01	6	35E+01	6	35E+01	6	30E+01	6	30E+01	6	25E+01	6	25E+01	6	20E+01	6	15E+01	6	11E+01	6	06E+01	6	15E+01	6	15E+01	6	06E+01

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 5

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
LA140	2.42E-05	1.08E+00	2.15E+00	3.19E+00	4.21E+00	6.20E+00	9.05E+00	1.17E+01	1.42E+01	1.66E+01	1.88E+01
BA141	1.94E+04	5.84E+03	5.80E+02	5.76E+01	5.71E+00	5.66E-02	5.52E-05	5.39E-08	5.25E-11	5.15E-14	5.01E-17
LA141	1.79E+02	3.78E+03	3.53E+03	2.99E+03	2.51E+03	1.76E+03	1.03E+03	6.03E+02	3.55E+02	2.08E+02	1.22E+02
CE141	2.21E-05	2.45E+00	5.76E+00	8.65E+00	1.10E+01	1.49E+01	1.85E+01	2.05E+01	2.17E+01	2.24E+01	2.28E+01
BA142	5.19E-01	2.06E-02	4.70E-04	1.07E-05	2.44E-07	1.27E-10	1.51E-15	1.79E-20	2.12E-25	2.52E-30	2.99E-35
LA142	1.19E-02	8.26E-02	5.45E-02	3.47E-02	2.21E-02	8.92E-03	2.30E-03	5.93E-04	1.53E-04	3.93E-05	1.01E-05
LA143	1.59E-01	3.11E-02	1.59E-03	8.19E-05	4.21E-06	1.10E-08	1.49E-12	2.00E-16	2.70E-20	3.64E-24	4.92E-28
CE143	6.37E-05	4.06E-03	4.21E-03	4.10E-03	4.03E-03	3.88E-03	3.63E-03	3.41E-03	3.20E-03	3.00E-03	2.82E-03
PR143	1.86E-11	6.23E-06	1.50E-05	2.37E-05	3.23E-05	4.88E-05	7.19E-05	9.41E-05	1.14E-04	1.33E-04	1.50E-04
CE144	2.27E-06	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05
PR144	6.21E-10	1.48E-05	1.61E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05	1.62E-05
PR145	1.17E-04	1.71E-02	1.52E-02	1.35E-02	1.21E-02	9.57E-03	6.74E-03	4.76E-03	3.38E-03	2.38E-03	1.68E-03
CE146	3.88E-01	1.99E-02	1.02E-03	5.21E-05	2.68E-06	7.07E-09	9.51E-13	1.28E-16	1.73E-20	2.33E-24	3.14E-28
PR146	8.02E-03	6.97E-02	1.58E-02	2.97E-03	5.34E-04	1.68E-05	9.28E-08	5.12E-10	2.83E-12	1.57E-14	8.56E-17
PR147	4.56E-02	1.32E-02	4.12E-04	1.29E-05	4.03E-07	3.93E-10	1.20E-14	3.66E-19	1.12E-23	3.41E-28	1.04E-32
ND147	1.63E-08	3.06E-04	3.15E-04	3.14E-04	3.14E-04	3.12E-04	3.10E-04	3.07E-04	3.05E-04	3.02E-04	3.00E-04
ND149	3.30E-02	2.25E-02	1.53E-02	1.04E-02	7.06E-03	3.28E-03	1.03E-03	3.26E-04	1.02E-04	3.22E-05	1.02E-05
PM149	4.60E-06	3.60E-04	5.98E-04	7.56E-04	8.56E-04	9.62E-04	1.00E-03	9.80E-04	9.55E-04	9.19E-04	8.87E-04
PM150	4.39E-04	3.39E-04	2.62E-04	2.03E-04	1.56E-04	9.40E-05	4.35E-05	2.01E-05	9.33E-06	4.32E-06	2.00E-06
ND151	2.03E-01	6.36E-03	1.99E-04	6.22E-06	1.95E-07	1.90E-10	5.80E-15	1.77E-19	5.40E-24	1.65E-28	5.04E-33
PM151	1.29E-04	1.51E-03	1.53E-03	1.48E-03	1.44E-03	1.37E-03	1.27E-03	1.18E-03	1.10E-03	1.02E-03	9.47E-04
PM152	3.56E-01	3.47E-04	3.39E-07	3.30E-10	3.23E-13	3.09E-19	2.88E-28	2.68E-37	2.49E-46	2.34E-55	2.17E-64
SM153	4.88E-04	4.80E-04	4.75E-04	4.66E-04	4.61E-04	4.47E-04	4.28E-04	4.09E-04	3.91E-04	3.74E-04	3.58E-04
SM155	4.54E-02	7.46E-03	1.22E-03	2.00E-04	3.29E-05	8.84E-07	3.91E-09	1.72E-11	7.56E-14	3.38E-16	8.27E-19
EU155	3.34E-08	9.52E-07	1.10E-06	1.13E-06	1.13E-06	1.13E-06	1.13E-06	1.13E-06	1.13E-06	1.13E-06	1.13E-06
SM156	8.54E-04	7.92E-04	7.36E-04	6.83E-04	6.34E-04	5.48E-04	4.40E-04	3.52E-04	2.82E-04	2.26E-04	1.82E-04
EU156	2.50E-06	4.08E-06	5.53E-06	6.88E-06	8.14E-06	1.04E-05	1.32E-05	1.53E-05	1.70E-05	1.85E-05	1.94E-05
EU157	1.63E-04	5.41E-04	5.17E-04	4.94E-04	4.71E-04	4.30E-04	3.75E-04	3.27E-04	2.85E-04	2.49E-04	2.16E-04
EU158	8.84E-03	3.58E-03	1.45E-03	5.85E-04	2.36E-04	3.88E-05	2.59E-06	1.72E-07	1.14E-08	7.57E-10	5.03E-11
EU159	9.69E-03	9.62E-04	9.54E-05	9.45E-06	9.37E-07	9.24E-09	9.03E-12	8.82E-15	8.61E-18	8.42E-21	8.23E-24
GD159	4.15E-05	1.82E-04	1.89E-04	1.83E-04	1.76E-04	1.63E-04	1.45E-04	1.30E-04	1.15E-04	1.03E-04	9.16E-05
TB161	3.68E-07	2.64E-06	2.63E-06	2.62E-06	2.62E-06	2.59E-06	2.56E-06	2.52E-06	2.50E-06	2.47E-06	2.43E-06
TOTAL	2.60E+04	1.20E+04	5.08E+03	3.61E+03	2.93E+03	2.08E+03	1.30E+03	8.58E+02	5.93E+02	4.32E+02	3.33E+02

B-14

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 6

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
GE 77	3	08E-06	1	94E-06	4	44E-07	5	35E-09	3	41E-12	1	38E-18	5	54E-25	9	09E-38	0		0		0	
AS 77	3	18E-08	4	69E-06	3	39E-06	9	82E-07	1	15E-07	1	56E-09	2	12E-11	3	91E-15	1	81E-24	3	89E-43	8	37E-62
SE 77M	1	25E-12	1	42E-08	1	02E-08	2	95E-09	3	44E-10	4	68E-12	6	37E-14	1	17E-17	5	45E-27	1	16E-45	2	51E-64
AS 78	1	43E-05	1	27E-07	3	74E-12	3	16E-26	0		0		0		0		0		0		0	
BR 82	2	96E-07	1	84E-07	1	15E-07	2	80E-08	2	65E-09	2	39E-11	2	14E-13	1	73E-17	1	01E-27	3	46E-48	1	18E-68
BR 83	8	04E-03	2	12E-04	2	13E-07	2	17E-16	2	21E-31	0		0		0		0		0		0	
KR 83M	4	17E-07	9	27E-04	1	05E-06	9	48E-16	9	73E-31	0		0		0		0		0		0	
KR 85M	1	23E-02	6	99E-01	1	60E-02	1	89E-07	1	17E-15	4	44E-32	1	68E-48	0		0		0		0	
KR 85	1	27E-05	3	33E-04	3	39E-04	3	39E-04	3	39E-04	3	39E-04	3	39E-04	3	38E-04	3	35E-04	3	28E-04	3	23E-04
KR 87	2	14E+02	4	23E-04	8	37E-10	6	50E-27	0		0		0		0		0		0		0	
KR 88	9	46E+01	2	49E-01	6	52E-04	1	19E-11	1	50E-24	0		0		0		0		0		0	
RB 88	2	41E+01	2	78E-01	7	34E-04	1	33E-11	1	66E-24	0		0		0		0		0		0	
SR 89	1	03E-05	3	09E-01	3	04E-01	2	92E-01	2	74E-01	2	39E-01	2	09E-01	1	61E-01	8	22E-02	2	17E-02	5	70E-03
SR 90	2	44E-05	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	51E-03	2	48E-03	2	48E-03	2	46E-03
Y 90	3	62E-11	5	75E-04	1	02E-03	2	83E-03	2	33E-03	2	48E-03	2	51E-03	2	51E-03	2	48E-03	2	48E-03	2	46E-03
SR 91	3	74E-04	1	34E-03	2	40E-04	1	38E-06	2	51E-10	8	52E-18	2	89E-25	3	29E-40	0		0		0	
Y 91M	2	51E-08	8	66E-04	1	54E-04	8	87E-07	1	63E-10	5	50E-18	1	87E-25	2	12E-40	0		0		0	
Y 91	1	03E-11	4	11E-05	4	87E-05	4	87E-05	4	58E-05	4	07E-05	3	62E-05	2	87E-05	1	59E-05	4	89E-06	1	50E-06
SR 92	5	33E-03	6	64E-05	1	43E-07	1	44E-15	6	74E-29	0		0		0		0		0		0	
Y 92	2	45E-04	6	96E-04	7	74E-06	5	94E-12	3	47E-22	1	18E-42	4	06E-63	0		0		0		0	
Y 93	3	47E-04	2	35E-03	4	58E-04	3	44E-06	9	93E-10	8	18E-17	6	76E-24	4	61E-38	0		0		0	
ZR 95	7	46E-07	9	31E-05	9	23E-05	8	90E-05	8	49E-05	7	59E-05	6	84E-05	5	53E-05	3	24E-05	1	11E-05	3	83E-06
NB 95M	1	59E-14	3	16E-07	5	76E-07	1	10E-06	1	48E-06	1	57E-06	1	44E-06	1	17E-06	6	87E-07	2	37E-07	8	15E-08
NB 95	8	32E-14	1	80E-06	3	57E-06	8	57E-06	1	59E-05	2	74E-05	3	54E-05	4	38E-05	4	22E-05	2	03E-05	7	79E-06
ZR 97	2	14E-03	3	65E-03	1	37E-03	7	26E-05	5	46E-07	3	07E-11	1	72E-15	5	46E-24	3	08E-45	0		0	
NB 97M	1	10E-05	3	50E-03	1	31E-03	7	01E-05	5	23E-07	2	95E-11	1	66E-15	5	23E-24	2	96E-45	0		0	
NB 97	1	08E-03	3	66E-03	1	37E-03	7	29E-05	5	49E-07	3	31E-11	1	85E-15	5	89E-24	3	31E-45	0		0	
MO 99	9	30E-06	3	03E-03	2	36E-03	1	12E-03	3	24E-04	2	71E-05	2	26E-06	1	57E-08	6	40E-14	1	05E-24	1	74E-35
TC 99M	8	65E-11	2	66E-03	2	24E-03	1	07E-03	3	09E-04	2	58E-05	2	16E-06	1	51E-08	6	10E-14	1	01E-24	1	66E-35
RU103	1	82E-07	4	15E-04	4	08E-04	3	86E-04	3	55E-04	2	97E-04	2	49E-04	1	76E-04	7	33E-05	1	27E-05	2	21E-06
RH103M	1	21E-11	4	15E-04	4	08E-04	3	87E-04	3	55E-04	2	97E-04	2	49E-04	1	76E-04	7	33E-05	1	27E-05	2	21E-06
RU105	1	93E-03	1	85E-03	4	34E-05	5	69E-10	4	17E-18	2	22E-34	1	19E-50	0		0		0		0	
RH105M	1	27E-05	1	85E-03	4	34E-05	5	71E-10	4	19E-18	2	24E-34	1	19E-50	0		0		0		0	
RH105	2	08E-11	6	65E-03	4	34E-03	1	08E-03	1	07E-04	1	04E-06	1	01E-08	9	52E-13	8	25E-23	6	20E-43	4	66E-63
RU106	1	95E-06	3	70E-05	3	68E-05	3	66E-05	3	62E-05	3	57E-05	3	48E-05	3	35E-05	3	06E-05	2	53E-05	2	09E-05
RH106	2	11E-08	3	70E-05	3	68E-05	3	66E-05	3	62E-05	3	57E-05	3	48E-05	3	35E-05	3	06E-05	2	53E-05	2	09E-05
PD109	1	58E-05	4	02E-04	1	18E-04	2	91E-06	6	13E-09	2	73E-14	1	21E-19	2	41E-30	0		0		0	
AG109M	9	09E-08	4	02E-04	1	18E-04	2	91E-06	6	15E-09	2	73E-14	1	21E-19	2	41E-30	0		0		0	
PD111M	4	34E-03	2	11E-04	1	02E-05	1	17E-09	3	17E-16	2	31E-29	1	70E-42	0		0		0		0	
PD111	1	54E-03	1	70E-04	8	23E-06	9	44E-10	2	57E-16	1	87E-29	1	36E-42	0		0		0		0	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 7

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
AG111M	1.23E-05	2.22E-04	1.08E-05	1.24E-09	3.35E-16	2.46E-29	1.80E-42	0.	0.	0.	0.	0.
AG111	4.36E-12	1.21E-04	1.16E-04	8.81E-05	5.55E-05	2.20E-05	8.74E-06	1.38E-06	1.35E-08	1.31E-12	1.27E-16	0.
PD112	1.13E-03	5.14E-04	2.33E-04	2.16E-05	4.12E-07	1.49E-10	5.44E-14	7.12E-21	4.50E-38	0.	0.	0.
AG112	3.40E-08	5.97E-04	2.76E-04	2.55E-05	4.87E-07	1.76E-10	6.40E-14	8.43E-21	5.27E-38	0.	0.	0.
AG113	6.51E-06	6.88E-05	2.98E-06	2.42E-10	3.71E-17	8.66E-31	2.02E-44	0.	0.	0.	0.	0.
CD115M	1.06E-11	3.07E-07	3.01E-07	2.86E-07	2.66E-07	2.25E-07	1.93E-07	1.39E-07	6.21E-08	1.23E-08	2.47E-09	2.58E-45
CD115	4.09E-09	6.15E-05	4.51E-05	1.78E-05	3.75E-06	1.68E-07	7.46E-09	1.49E-11	2.63E-18	8.23E-32	2.82E-45	0.
IN115M	5.10E-14	6.50E-05	4.92E-05	1.94E-05	4.09E-06	1.83E-07	8.15E-09	1.62E-11	2.88E-18	8.99E-32	2.82E-45	0.
CD117	9.14E-05	2.00E-06	1.94E-09	1.80E-18	1.61E-33	0.	0.	0.	0.	0.	0.	0.
IN117M	4.40E-09	8.28E-06	9.57E-09	9.23E-18	8.20E-33	0.	0.	0.	0.	0.	0.	0.
IN117	1.77E-13	5.46E-06	6.46E-09	6.26E-18	5.55E-33	0.	0.	0.	0.	0.	0.	0.
SN121	1.94E-06	1.11E-04	5.98E-05	9.43E-06	4.33E-07	9.14E-10	1.93E-12	8.57E-18	3.58E-31	0.	0.	0.
SN123	9.66E-09	1.01E-06	1.00E-06	9.83E-07	9.58E-07	9.05E-07	8.59E-07	7.68E-07	5.82E-07	3.34E-07	1.93E-07	1.93E-15
SN125	2.32E-05	2.15E-05	2.00E-05	1.60E-05	1.10E-05	5.29E-06	2.53E-06	5.79E-07	1.44E-08	9.11E-12	5.71E-15	2.93E-07
SB125	1.39E-07	1.54E-07	1.68E-07	2.06E-07	2.52E-07	3.06E-07	3.29E-07	3.42E-07	3.36E-07	3.13E-07	2.93E-07	1.71E-11
SB126	4.49E-06	4.25E-06	4.02E-06	3.40E-06	2.57E-06	1.48E-06	8.52E-07	2.80E-07	1.75E-08	8.52E-11	1.71E-11	0.
SN127	4.66E-03	1.69E-06	6.14E-10	2.93E-20	1.84E-37	0.	0.	0.	0.	0.	0.	0.
SB127	5.44E-05	2.23E-04	1.87E-04	1.09E-04	4.47E-05	7.46E-06	1.24E-06	3.49E-08	4.54E-12	7.77E-20	1.32E-27	1.15E-06
TE127M	4.39E-13	3.41E-07	6.24E-07	1.21E-06	1.67E-06	1.84E-06	1.78E-06	1.58E-06	1.15E-06	6.08E-07	3.21E-07	3.17E-07
TE127	3.08E-05	1.59E-04	1.57E-04	9.56E-05	4.05E-05	8.29E-06	2.84E-06	1.59E-06	1.14E-06	6.00E-07	3.17E-07	0.
SB128	1.50E-03	2.57E-04	4.05E-05	1.59E-07	1.54E-11	1.45E-19	1.36E-27	1.20E-43	0.	0.	0.	0.
SB129	7.53E-03	3.86E-04	8.05E-06	7.33E-11	2.92E-19	4.60E-36	7.25E-53	0.	0.	0.	0.	0.
TE129M	1.42E-10	1.50E-05	1.50E-05	1.42E-05	1.28E-05	1.04E-05	8.47E-06	5.63E-06	2.03E-06	2.65E-07	3.45E-08	1.30E-06
TE129	5.42E-03	4.51E-04	1.88E-05	9.05E-06	8.17E-06	6.67E-06	5.44E-06	3.62E-06	1.30E-06	1.70E-07	2.21E-08	0.
I130	3.73E-05	9.75E-06	2.55E-06	4.56E-08	5.57E-11	8.30E-17	1.24E-22	2.76E-34	0.	0.	0.	0.
TE131M	6.09E-06	2.14E-02	1.23E-02	2.33E-03	1.46E-04	5.67E-07	2.22E-09	3.39E-14	3.08E-26	0.	0.	0.
TE131	5.63E+00	3.90E-03	2.24E-03	4.26E-04	2.66E-05	1.04E-07	4.05E-10	6.21E-15	5.63E-27	0.	0.	0.
I131	8.18E-04	4.42E-02	4.18E-02	3.35E-02	2.21E-02	9.34E-03	3.94E-03	7.08E-04	9.51E-06	1.73E-09	3.16E-13	2.34E-06
XE131M	2.22E-12	2.05E-05	3.89E-05	8.12E-05	1.16E-04	1.15E-04	8.53E-05	3.51E-05	2.34E-06	7.02E-09	1.98E-11	1.56E-12
TE132	1.16E-03	2.31E-03	1.86E-03	9.79E-04	3.37E-04	4.00E-05	4.74E-06	6.66E-08	1.56E-12	8.53E-22	4.66E-31	1.61E-12
I132	2.85E-03	2.37E-03	1.91E-03	1.01E-03	3.48E-04	4.12E-05	4.89E-06	6.87E-08	1.61E-12	8.74E-22	4.79E-31	0.
I133	4.37E-02	2.44E-01	1.10E-01	1.02E-02	1.95E-04	7.04E-08	2.56E-11	3.37E-18	2.12E-35	0.	0.	0.
XE133M	4.65E-07	5.76E-01	6.82E-01	4.00E-01	9.38E-02	4.40E-03	2.05E-04	4.44E-07	9.74E-14	4.65E-27	2.23E-40	5.27E-05
XE133	8.13E-06	1.11E+01	1.48E+01	1.33E+01	7.23E+00	1.95E+00	5.26E-01	3.79E-02	5.27E-05	1.02E-10	1.98E-16	0.
I135	6.56E-01	1.07E-01	8.93E-03	5.18E-06	2.11E-11	3.48E-22	5.73E-33	1.55E-54	0.	0.	0.	0.
XE135M	1.81E-02	8.33E+00	6.97E-01	4.05E-04	1.65E-09	2.71E-20	4.47E-31	1.22E-52	0.	0.	0.	0.
XE135	1.89E+01	7.20E+01	1.76E+01	1.01E-01	1.24E-05	1.73E-13	2.43E-21	4.80E-37	0.	0.	0.	0.
CS136	1.16E-02	1.10E-02	1.04E-02	8.85E-03	6.81E-03	3.99E-03	2.35E-03	8.05E-04	5.60E-05	2.69E-07	1.31E-09	9.90E-03
CS137	9.19E-04	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03	9.90E-03
BA137M	1.93E-06	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03

B-16

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
BA139	1	60E+01	1	71E-03	1	01E-08	2	08E-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BA140	1	01E+01	6	01E+01	5	71E+01	4	84E+01	3	70E+01	2	15E+01	1	25E+01	4	24E+00	2	83E-01	1	26E-03	5	57E-06
LA140	2	42E-05	2	10E+01	3	37E+01	4	65E+01	4	14E+01	2	48E+01	1	43E+01	4	89E+00	3	25E-01	1	44E-03	6	44E-06
LA141	1	79E+02	7	09E+01	9	97E-01	2	76E-06	1	51E-15	4	50E-34	1	34E-52	0	0	0	0	0	0	0	0
CE141	2	21E-05	2	45E+01	2	43E+01	2	29E+01	2	05E+01	1	66E+01	1	34E+01	8	70E+00	2	99E+00	3	52E-01	4	14E-02
LA142	1	19E-02	2	61E-06	5	05E-11	3	71E-25	0	0	0	0	0	0	0	0	0	0	0	0	0	
CE143	6	37E-05	2	62E-03	1	58E-03	3	49E-04	2	80E-05	1	81E-07	1	17E-09	4	92E-14	5	55E-25	0	0	0	0
PR143	1	86E-11	1	68E-04	2	61E-04	3	37E-04	2	88E-04	1	76E-04	1	06E-04	3	83E-05	3	07E-06	1	95E-08	1	24E-10
CE144	2	27E-06	1	62E-05	1	61E-05	1	60E-05	1	59E-05	1	54E-05	1	51E-05	1	44E-05	1	27E-05	9	99E-06	7	81E-06
PR144	6	21E-10	1	62E-05	1	61E-05	1	60E-05	1	59E-05	1	54E-05	1	51E-05	1	44E-05	1	27E-05	9	99E-06	7	81E-06
PR145	1	17E-04	1	19E-03	7	37E-05	1	75E-08	1	59E-14	1	32E-26	1	09E-38	0	0	0	0	0	0	0	0
ND147	1	63E-08	2	74E-04	2	57E-04	2	13E-04	1	56E-04	8	38E-05	4	47E-05	1	29E-05	5	63E-07	1	10E-09	2	13E-12
PM147	4	52E-17	2	05E-07	3	96E-07	9	05E-07	1	57E-06	2	39E-06	2	82E-06	3	14E-06	3	17E-06	2	96E-06	2	75E-06
ND149	3	30E-02	3	20E-06	3	10E-10	2	82E-22	2	41E-42	0	0	0	0	0	0	0	0	0	0	0	
PM149	4	60E-06	8	49E-04	6	22E-04	2	43E-04	5	08E-05	2	21E-06	9	62E-08	1	83E-10	2	88E-17	7	12E-31	1	78E-44
PM150	4	39E-04	9	26E-07	1	95E-09	1	83E-17	7	66E-31	0	0	0	0	0	0	0	0	0	0	0	
PM151	1	29E-04	8	81E-04	4	86E-04	8	18E-05	4	19E-06	1	10E-08	2	90E-11	2	01E-16	2	51E-29	0	0	0	0
SM153	4	88E-04	3	43E-04	2	41E-04	8	31E-05	1	42E-05	4	11E-07	1	19E-08	1	00E-11	2	06E-19	8	82E-35	3	74E-50
SM156	8	54E-04	1	45E-04	2	48E-05	1	22E-07	1	77E-11	3	62E-19	7	47E-27	3	19E-42	0	0	0	0	0	0
EU155	3	34E-08	1	13E-06	1	13E-06	1	13E-06	1	13E-06	1	12E-06	1	12E-06	1	11E-06	1	09E-06	1	04E-06	1	00E-06
EU156	2	50E-06	2	02E-05	2	25E-05	2	02E-05	1	61E-05	1	01E-05	6	34E-06	2	52E-06	2	50E-07	2	45E-09	2	42E-11
EU157	1	63E-04	1	89E-04	6	35E-05	2	37E-06	1	00E-08	1	76E-13	3	12E-18	9	72E-28	0	0	0	0	0	
GD159	4	15E-05	8	17E-05	3	24E-05	2	03E-06	1	99E-08	1	93E-12	1	87E-16	1	76E-24	1	50E-44	0	0	0	0
TB161	3	68E-07	2	40E-06	2	17E-06	1	61E-06	9	71E-07	3	56E-07	1	30E-07	1	74E-08	1	15E-10	4	99E-15	2	17E-19
TOTAL			2	70E+02	1	50E+02	1	32E+02	1	07E+02	6	51E+01	4	10E+01	1	81E+01	3	71E+00	4	01E-01	7	13E-02

B-17

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY B
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BEFORE H+30 SECONDS AND CONTINUED MORE THAN 15 MINUTES

PAGE 9

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
KR 85	1.27E-05	3.15E-04	3.06E-04	2.96E-04	2.70E-04	2.43E-04	2.14E-04	1.76E-04	9.31E-05	3.56E-05	1.36E-05
SR 89	1.03E-05	2.41E-03	2.11E-04	1.85E-05	1.25E-08	8.44E-12	4.97E-16	2.26E-22	1.64E-43	0.	0.
SR 90	2.44E-05	2.44E-03	2.42E-03	2.40E-03	2.31E-03	2.22E-03	2.11E-03	1.96E-03	1.53E-03	1.06E-03	7.33E-04
Y 90	3.62E-11	2.44E-03	2.42E-03	2.40E-03	2.31E-03	2.22E-03	2.11E-03	1.96E-03	1.53E-03	1.06E-03	7.33E-04
Y 91	1.03E-11	6.96E-07	8.10E-08	9.43E-09	1.47E-11	2.31E-14	4.23E-18	1.04E-23	2.10E-42	0.	0.
ZR 95	7.46E-07	1.92E-06	2.74E-07	3.90E-08	1.14E-10	3.31E-13	1.37E-16	1.15E-21	1.42E-38	0.	0.
NB 95M	1.59E-14	4.06E-08	5.79E-09	8.24E-10	2.41E-12	7.01E-15	2.90E-18	2.45E-23	3.00E-40	0.	0.
NB 95	8.32E-14	4.12E-06	5.93E-07	8.41E-08	2.45E-10	7.10E-13	2.97E-16	2.51E-21	3.07E-38	0.	0.
RU103	1.82E-07	7.06E-07	2.89E-08	1.19E-09	8.12E-14	5.57E-18	1.56E-23	7.34E-32	0.	0.	0.
RH103M	1.21E-11	7.08E-07	2.89E-08	1.19E-09	8.12E-14	5.57E-18	1.56E-23	7.36E-32	0.	0.	0.
RU106	1.95E-06	1.86E-05	1.31E-05	9.31E-06	3.31E-06	1.17E-06	2.95E-07	3.73E-08	3.77E-11	1.21E-15	3.90E-20
RH106	2.11E-08	1.86E-05	1.31E-05	9.31E-06	3.31E-06	1.17E-06	2.95E-07	3.73E-08	3.77E-11	1.21E-15	3.90E-20
SN123	9.66E-09	1.34E-07	4.86E-08	1.76E-08	8.46E-10	4.06E-11	7.08E-13	1.63E-15	2.62E-24	1.68E-37	1.08E-50
SB125	1.39E-07	2.80E-07	2.45E-07	2.16E-07	1.48E-07	1.00E-07	5.99E-08	2.78E-08	2.13E-09	4.53E-11	9.66E-13
TE125M	3.74E-15	1.14E-07	1.01E-07	8.93E-08	6.10E-08	4.14E-08	2.48E-08	1.14E-08	8.81E-10	1.88E-11	4.00E-13
TE127M	4.39E-13	2.10E-07	6.59E-08	2.07E-08	6.34E-10	1.95E-11	1.88E-13	1.77E-16	1.44E-26	1.08E-41	8.07E-57
TE127	3.08E-05	2.08E-07	6.51E-08	2.04E-08	6.26E-10	1.93E-11	1.86E-13	1.74E-16	1.43E-26	1.07E-41	7.99E-57
CS137	9.19E-04	9.68E-03	9.57E-03	9.45E-03	9.12E-03	8.80E-03	8.42E-03	7.86E-03	6.22E-03	4.41E-03	3.12E-03
BA137M	1.93E-06	9.07E-03	8.96E-03	8.86E-03	8.52E-03	8.25E-03	7.86E-03	7.37E-03	5.83E-03	4.12E-03	2.92E-03
CE141	2.21E-05	9.53E-03	1.92E-04	3.85E-06	3.14E-11	2.55E-16	4.18E-23	2.78E-33	0.	0.	0.
CE144	2.27E-06	6.66E-06	4.28E-06	2.73E-06	7.17E-07	1.89E-07	3.16E-08	2.19E-09	2.95E-13	4.62E-19	7.20E-25
PR144	6.21E-10	6.66E-06	4.28E-06	2.73E-06	7.17E-07	1.89E-07	3.16E-08	2.19E-09	2.95E-13	4.62E-19	7.20E-25
PM147	4.52E-17	2.62E-06	2.30E-06	2.01E-06	1.35E-06	9.10E-07	5.35E-07	2.43E-07	1.72E-08	3.26E-10	6.16E-12
EU155	3.34E-08	9.77E-07	9.08E-07	8.46E-07	6.80E-07	5.46E-07	4.08E-07	2.63E-07	6.15E-08	6.93E-09	7.79E-10
TOTAL		3.60E-02	2.41E-02	2.34E-02	2.25E-02	2.17E-02	2.07E-02	1.93E-02	1.52E-02	1.07E-02	7.52E-03

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 UNDERGROUND EVENT CATEGORY C

PAGE 1

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.31E+02	1.33E+04
1.00E+00	3.19E+01	2.96E+03
2.00E+00	1.21E+01	1.55E+03
3.00E+00	6.82E+00	1.15E+03
4.00E+00	4.49E+00	9.52E+02
6.00E+00	2.50E+00	7.46E+02
9.00E+00	1.46E+00	5.92E+02
1.20E+01	1.00E+00	4.97E+02
1.50E+01	7.38E-01	4.28E+02
1.80E+01	5.74E-01	3.71E+02
2.10E+01	4.65E-01	3.23E+02
1.00E+00 DAYS	3.84E-01	2.79E+02
2.00E+00	1.81E-01	1.09E+02
5.00E+00	7.91E-02	4.43E+01
1.00E+01	3.27E-02	2.23E+01
2.00E+01	1.02E-02	6.49E+00
3.00E+01	5.45E-03	2.39E+00
5.00E+01	2.69E-03	7.68E-01
1.00E+02	9.18E-04	3.08E-01
2.00E+02	2.40E-04	1.08E-01
3.00E+02	1.16E-04	6.35E-02
1.00E+00 YEARS	9.14E-05	5.23E-02
1.50E+00	6.12E-05	3.54E-02
2.00E+00	4.45E-05	2.54E-02
3.50E+00	1.85E-05	1.01E-02
5.00E+00	8.91E-06	4.54E-03
7.00E+00	4.71E-06	2.15E-03
1.00E+01	3.14E-06	1.31E-03
2.00E+01	2.19E-06	8.07E-04
3.50E+01	1.54E-06	4.90E-04
5.00E+01	1.09E-06	3.17E-04

MICROCURI/SQ METER
UNDERGROUND EVENT CATEGORY C

PAGE 2

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

GE 75	2.20E-06	1.07E-02	6.43E-03	3.88E-03	2.33E-03	8.47E-04	1.85E-04	4.06E-05	8.83E-06	1.93E-06	4.21E-07
GE 77	3.86E-03	9.95E-03	9.34E-03	8.79E-03	8.30E-03	7.32E-03	6.09E-03	5.06E-03	4.22E-03	3.50E-03	2.92E-03
AS 77	3.99E-05	6.28E-03	6.41E-03	6.41E-03	6.47E-03	6.53E-03	6.53E-03	6.47E-03	6.35E-03	6.22E-03	6.08E-03
SE 77M	1.57E-09	1.89E-05	1.92E-05	1.93E-05	1.93E-05	1.95E-05	1.96E-05	1.95E-05	1.92E-05	1.87E-05	1.82E-05
GE 78	9.99E-01	6.26E-01	3.89E-01	2.44E-01	1.52E-01	5.91E-02	1.44E-02	3.47E-03	8.49E-04	2.06E-04	5.00E-05
AS 78	1.80E-02	2.99E-01	3.68E-01	3.45E-01	2.88E-01	1.70E-01	6.33E-02	2.10E-02	6.50E-03	1.94E-03	5.63E-04
AS 79	1.86E+01	1.83E-01	1.81E-03	1.78E-05	1.75E-07	1.70E-11	1.62E-17	1.55E-23	1.48E-29	1.41E-35	1.34E-41
SE 79M	2.76E-02	3.24E-01	3.19E-03	3.14E-05	3.09E-07	2.99E-11	2.85E-17	2.72E-23	2.60E-29	2.48E-35	2.37E-41
BR 80	1.04E-01	9.81E-03	9.23E-04	8.67E-05	8.17E-06	7.25E-08	6.06E-11	5.06E-14	4.21E-17	3.52E-20	2.93E-23
SE 81M	7.48E-02	3.49E+00	1.68E+00	8.10E-01	3.90E-01	9.10E-02	1.02E-02	1.14E-03	1.28E-04	1.43E-05	1.60E-06
SE 81	9.14E-01	4.13E+00	2.38E+00	1.19E+00	5.78E-01	1.35E-01	1.51E-02	1.69E-03	1.89E-04	2.12E-05	2.38E-06
BR 82	3.71E-04	3.63E-04	3.57E-04	3.50E-04	3.43E-04	3.30E-04	3.11E-04	2.93E-04	2.77E-04	2.61E-04	2.46E-04
SE 83	2.13E+01	4.04E+00	7.61E-01	1.45E-01	2.74E-02	9.84E-04	6.70E-06	4.55E-08	3.11E-10	2.11E-12	1.34E-14
BR 83	1.77E-01	2.64E+00	2.45E+00	1.92E+00	1.46E+00	8.22E-01	3.48E-01	1.47E-01	6.20E-02	2.61E-02	1.10E-02
KR 83M	9.16E-06	5.98E-01	1.22E+00	1.52E+00	1.56E+00	1.31E+00	7.68E-01	3.96E-01	1.91E-01	8.83E-02	3.96E-02
BR 84	3.42E-02	5.90E+00	1.60E+00	4.33E-01	1.17E-01	8.54E-03	1.69E-04	3.34E-06	6.59E-08	1.31E-09	2.58E-11
KR 85M	3.08E-02	6.60E+01	5.61E+01	4.79E+01	4.09E+01	2.99E+01	1.87E+01	1.16E+01	7.24E+00	4.51E+00	2.82E+00
KR 87	5.38E+02	3.10E+02	1.80E+02	1.04E+02	5.99E+01	2.01E+01	3.90E+00	7.55E-01	1.46E-01	2.84E-02	5.47E-03
KR 88	2.37E+02	1.86E+02	1.45E+02	1.13E+02	8.83E+01	5.36E+01	2.56E+01	1.22E+01	5.78E+00	2.76E+00	1.31E+00
RB 88	6.04E+01	1.88E+02	1.60E+02	1.26E+02	9.86E+01	6.00E+01	2.86E+01	1.36E+01	6.51E+00	3.10E+00	1.47E+00
RB 89	5.07E+00	4.75E+00	3.20E-01	2.15E-02	1.44E-03	6.52E-06	1.97E-09	5.95E-13	1.81E-16	5.49E-20	1.67E-23
SR 89	3.87E-07	1.36E-02	1.45E-02	1.45E-02	1.45E-02	1.45E-02	1.45E-02	1.45E-02	1.45E-02	1.44E-02	1.44E-02
SR 90	9.20E-07	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05
SR 91	4.69E-01	8.73E+00	8.14E+00	7.58E+00	7.06E+00	6.11E+00	4.93E+00	3.98E+00	3.22E+00	2.59E+00	2.09E+00
Y 91M	3.16E-05	3.01E+00	4.10E+00	4.40E+00	4.34E+00	3.89E+00	3.19E+00	2.57E+00	2.07E+00	1.67E+00	1.34E+00
Y 91	1.29E-08	2.67E-03	6.17E-03	9.82E-03	1.34E-02	2.02E-02	2.87E-02	3.54E-02	4.10E-02	4.54E-02	4.90E-02
SR 92	2.00E-04	6.96E-04	6.93E-04	5.37E-04	4.16E-04	2.49E-04	1.15E-04	5.37E-05	2.49E-05	1.15E-05	5.37E-06
Y 92	9.23E-06	1.88E-04	2.97E-04	3.51E-04	3.72E-04	3.56E-04	2.73E-04	1.85E-04	1.19E-04	7.34E-05	4.43E-05
SR 93	1.07E-02	1.84E-04	1.02E-06	5.62E-09	3.09E-11	9.48E-16	1.60E-22	2.70E-29	4.57E-36	7.69E-43	1.29E-49
Y 93	1.31E-05	4.23E-04	3.99E-04	3.71E-04	3.46E-04	3.03E-04	2.47E-04	2.02E-04	1.64E-04	1.34E-04	1.09E-04
Y 94	1.76E-03	2.41E-03	3.10E-04	4.00E-05	5.15E-06	8.57E-08	1.84E-10	3.93E-13	8.44E-16	1.84E-18	1.02E-19
Y 95	7.48E-03	7.04E-04	1.55E-05	3.41E-07	7.54E-09	3.66E-12	3.91E-17	4.19E-22	4.47E-27	4.78E-32	5.12E-37
ZR 95	2.81E-08	3.66E-06	3.75E-06	3.75E-06	3.75E-06	3.75E-06	3.75E-06	3.72E-06	3.72E-06	3.72E-06	3.72E-06
NB 95	3.13E-15	2.27E-09	5.27E-09	8.31E-09	1.13E-08	1.74E-08	2.64E-08	3.54E-08	4.44E-08	5.34E-08	6.24E-08
ZR 97	8.06E-05	3.52E-04	3.36E-04	3.23E-04	3.09E-04	2.86E-04	2.52E-04	2.23E-04	1.98E-04	1.75E-04	1.55E-04
NB 97M	4.15E-07	3.36E-04	3.23E-04	3.11E-04	2.98E-04	2.75E-04	2.43E-04	2.15E-04	1.90E-04	1.68E-04	1.48E-04
NB 97	4.05E-05	1.76E-04	2.48E-04	2.83E-04	2.97E-04	2.96E-04	2.69E-04	2.40E-04	2.12E-04	1.87E-04	1.67E-04
NB 98	5.54E-04	2.45E-04	1.09E-04	4.79E-05	2.13E-05	4.15E-06	3.60E-07	3.11E-08	2.71E-09	2.34E-10	2.02E-11
MO 99	1.17E-02	4.81E+00	4.77E+00	4.72E+00	4.67E+00	4.58E+00	4.44E+00	4.30E+00	4.17E+00	4.05E+00	3.92E+00
TC 99M	1.09E-07	4.59E-01	8.63E-01	1.22E+00	1.53E+00	2.05E+00	2.59E+00	2.95E+00	3.16E+00	3.28E+00	3.33E+00

B-20

MICROCURI/SG METER
 UNDERGROUND EVENT CATEGORY C
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
MO101	2	29E+02	1	03E+02	6	02E+00	3	48E-01	2	02E-02	6	78E-05	1	32E-08	2	57E-12	4	98E-16	9	68E-20	1	89E-23
TC101	9	68E+00	2	90E+02	3	17E+01	2	60E+00	1	89E-01	8	55E-04	2	14E-07	4	79E-11	1	02E-14	2	10E-18	4	22E-22
MO102	2	36E+03	5	39E+01	1	23E+00	2	81E-02	6	38E-04	3	32E-07	3	95E-12	4	67E-17	5	55E-22	6	59E-27	7	82E-32
TC102M	1	52E+00	4	55E+01	1	04E+00	2	38E-02	5	43E-04	2	81E-07	3	34E-12	3	95E-17	4	69E-22	5	56E-27	6	61E-32
TC102	7	10E+03	2	70E+01	6	20E-01	1	41E-02	3	22E-04	1	68E-07	1	99E-12	2	36E-17	2	81E-22	3	32E-27	3	94E-32
RU103	2	28E-04	5	29E-01	5	29E-01	5	29E-01	5	29E-01	5	27E-01	5	25E-01	5	25E-01	5	23E-01	5	23E-01	5	21E-01
RH103M	1	52E-08	2	73E-01	4	06E-01	4	70E-01	5	00E-01	5	21E-01	5	25E-01	5	25E-01	5	23E-01	5	23E-01	5	23E-01
TC104	2	42E+02	1	73E+02	1	73E+01	1	72E+00	1	70E-01	1	67E-03	1	64E-06	1	60E-09	1	56E-12	1	52E-15	1	49E-18
RU105	2	42E+00	8	36E+01	7	14E+01	6	13E+01	5	25E+01	3	84E+01	2	40E+01	1	50E+01	9	39E+00	5	87E+00	3	69E+00
RH105M	1	59E-02	8	38E+01	7	16E+01	6	15E+01	5	25E+01	3	84E+01	2	40E+01	1	50E+01	9	43E+00	5	90E+00	3	69E+00
RH105	2	62E-08	1	70E+00	3	15E+00	4	35E+00	5	36E+00	6	86E+00	8	21E+00	8	83E+00	9	00E+00	8	92E+00	8	68E+00
RU106	2	44E-03	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02
RH106	2	65E-05	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02	4	64E-02
RH107	6	05E-01	8	22E+01	1	25E+01	1	88E+00	2	82E-01	6	46E-03	2	22E-05	7	66E-08	2	63E-10	9	03E-14	8	98E-17
PD107M	1	26E-03	1	67E+01	2	53E+00	3	81E-01	5	76E-02	1	31E-03	4	53E-06	1	56E-08	5	37E-11	1	85E-13	6	33E-16
PD109	1	99E-02	1	64E+00	1	56E+00	1	48E+00	1	41E+00	1	27E+00	1	09E+00	9	35E-01	8	01E-01	6	86E-01	5	90E-01
AG109M	1	14E-04	1	64E+00	1	56E+00	1	48E+00	1	41E+00	1	27E+00	1	09E+00	9	35E-01	8	01E-01	6	86E-01	5	90E-01
PD111M	5	45E+00	4	78E+00	4	23E+00	3	72E+00	3	29E+00	2	55E+00	1	75E+00	1	20E+00	8	23E-01	5	63E-01	3	86E-01
PD111	1	94E+00	3	49E+00	3	36E+00	2	99E+00	2	64E+00	2	05E+00	1	41E+00	9	63E-01	6	60E-01	4	53E-01	3	10E-01
AG111M	1	54E-02	4	71E+00	4	41E+00	3	95E+00	3	49E+00	2	69E+00	1	85E+00	1	26E+00	8	67E-01	5	95E-01	4	07E-01
AG111	5	47E-09	1	62E-02	3	40E-02	5	01E-02	6	44E-02	8	76E-02	1	13E-01	1	29E-01	1	40E-01	1	47E-01	1	51E-01
PD112	1	42E+00	1	38E+00	1	33E+00	1	29E+00	1	25E+00	1	17E+00	1	06E+00	9	57E-01	8	67E-01	7	86E-01	7	12E-01
AG112	4	27E-05	2	73E-01	4	80E-01	6	45E-01	7	66E-01	9	20E-01	1	01E+00	1	00E+00	9	57E-01	8	94E-01	8	23E-01
AG113	8	16E-03	1	75E+00	1	53E+00	1	35E+00	1	18E+00	9	07E-01	6	16E-01	4	16E-01	2	81E-01	1	89E-01	1	28E-01
AG115	1	62E+00	1	74E+00	2	16E-01	2	71E-02	3	39E-03	5	29E-05	1	03E-07	2	01E-10	3	92E-13	3	88E-16	3	61E-16
CD115M	1	33E-08	3	54E-04	3	97E-04	4	01E-04	4	01E-04	4	01E-04	4	01E-04	4	01E-04	3	99E-04	3	97E-04	3	97E-04
CD115	5	13E-06	9	67E-02	1	04E-01	1	04E-01	1	02E-01	9	98E-02	9	62E-02	9	23E-02	8	88E-02	8	55E-02	8	22E-02
IN115M	6	39E-11	1	07E-02	2	36E-02	3	52E-02	4	49E-02	5	97E-02	7	38E-02	8	13E-02	8	48E-02	8	55E-02	8	50E-02
CD117	1	15E-01	1	91E+00	1	44E+00	1	07E+00	8	04E-01	4	51E-01	1	89E-01	7	99E-02	3	37E-02	1	41E-02	5	95E-03
IN117M	5	52E-06	6	64E-01	9	62E-01	1	04E+00	1	01E+00	7	95E-01	4	55E-01	2	32E-01	1	12E-01	5	18E-02	2	34E-02
IN117	2	23E-10	1	21E-01	2	94E-01	4	08E-01	4	55E-01	4	17E-01	2	66E-01	1	43E-01	7	09E-02	3	33E-02	1	53E-02
CD118	7	37E+00	3	17E+00	1	36E+00	5	78E-01	2	48E-01	4	54E-02	3	56E-03	2	78E-04	2	19E-05	1	71E-06	1	35E-07
IN118	4	89E-01	3	17E+00	1	36E+00	5	80E-01	2	48E-01	4	54E-02	3	56E-03	2	80E-04	2	19E-05	1	71E-06	1	35E-07
CD119	1	94E+01	3	03E-01	4	72E-03	7	38E-05	1	15E-06	2	81E-10	1	08E-15	4	12E-21	1	56E-26	5	98E-32	2	29E-37
IN119M	2	93E-02	3	28E+00	3	55E-01	3	59E-02	3	57E-03	3	51E-05	3	44E-08	3	36E-11	3	28E-14	3	20E-17	3	13E-20
IN119	1	44E+00	1	72E-01	2	00E-02	2	02E-03	2	02E-04	1	98E-06	1	94E-09	1	90E-12	1	85E-15	1	81E-18	1	77E-21
SN121	2	44E-03	2	51E-01	2	44E-01	2	38E-01	2	32E-01	2	20E-01	2	03E-01	1	89E-01	1	75E-01	1	62E-01	1	51E-01
SN123M	1	29E+00	2	42E+00	8	56E-01	3	03E-01	1	07E-01	1	33E-02	5	90E-04	2	62E-05	1	16E-06	5	10E-08	2	26E-09
SN123	1	21E-05	1	27E-03	1	27E-03	1	27E-03	1	27E-03	1	27E-03	1	27E-03	1	27E-03	1	27E-03	1	27E-03	1	27E-03
SN125	2	91E-02	2	89E-02	2	88E-02	2	88E-02	2	86E-02	2	85E-02	2	82E-02	2	79E-02	2	77E-02	2	74E-02	2	72E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY C
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
SB125	1	74E-04	1	76E-04	1	76E-04	1	77E-04	1	77E-04	1	78E-04	1	81E-04	1	84E-04	1	87E-04	1	88E-04	1	91E-04
SB126	5	63E-03	5	60E-03	5	60E-03	5	59E-03	5	57E-03	5	54E-03	5	51E-03	5	48E-03	5	44E-03	5	39E-03	5	36E-03
SN127	5	84E+00	4	20E+00	3	01E+00	2	17E+00	1	56E+00	8	08E-01	3	00E-01	1	12E-01	4	14E-02	1	54E-02	5	70E-03
SB127	6	83E-02	2	36E-01	2	61E-01	2	78E-01	2	89E-01	3	01E-01	3	06E-01	3	03E-01	2	98E-01	2	92E-01	2	87E-01
TE127	3	86E-02	4	80E-02	5	83E-02	6	92E-02	8	00E-02	1	00E-01	1	28E-01	1	50E-01	1	67E-01	1	80E-01	1	89E-01
SN128	4	49E+01	2	22E+01	1	10E+01	5	42E+00	2	68E+00	6	53E-01	7	89E-02	9	52E-03	1	15E-03	1	39E-04	1	68E-05
SB128M	2	29E-02	2	52E+01	1	31E+01	6	46E+00	3	19E+00	7	80E-01	9	40E-02	1	14E-02	1	37E-03	1	65E-04	2	01E-05
SB128	1	88E+00	1	81E+00	1	71E+00	1	61E+00	1	50E+00	1	28E+00	1	03E+00	8	13E-01	6	46E-01	5	12E-01	4	07E-01
SN129M	2	51E+01	1	25E+01	6	29E+00	3	14E+00	1	57E+00	3	93E-01	4	92E-02	6	15E-03	7	68E-04	9	60E-05	1	20E-05
SN129	1	68E+02	1	65E+00	1	62E-02	1	60E-04	1	57E-06	1	53E-10	1	46E-16	1	39E-22	1	33E-28	1	26E-34	1	21E-40
SB129	9	45E+00	1	58E+01	1	49E+01	1	33E+01	1	17E+01	8	68E+00	5	41E+00	3	34E+00	2	06E+00	1	28E+00	7	83E-01
TE129M	1	78E-07	1	98E-03	4	07E-03	5	99E-03	7	68E-03	1	04E-02	1	32E-02	1	49E-02	1	59E-02	1	66E-02	1	70E-02
TE129	6	80E+00	9	35E+00	1	09E+01	1	14E+01	1	09E+01	9	06E+00	6	04E+00	3	81E+00	2	36E+00	1	47E+00	9	10E-01
SB130M	9	80E-01	1	85E+00	4	86E-03	1	28E-05	3	36E-08	2	31E-13	4	23E-21	7	67E-29	1	39E-36	2	53E-44	4	61E-52
SB130	1	68E+02	5	07E+01	1	45E+01	4	09E+00	1	16E+00	9	32E-02	2	13E-03	4	84E-05	1	11E-06	2	51E-08	5	76E-10
I130	4	67E-02	4	43E-02	4	19E-02	3	96E-02	3	74E-02	3	34E-02	2	83E-02	2	40E-02	2	01E-02	1	71E-02	1	45E-02
SB131	2	79E+02	7	30E+01	1	19E+01	1	96E+00	3	21E-01	8	65E-03	3	81E-05	1	68E-07	7	40E-10	3	26E-12	1	63E-14
TE131M	1	34E-04	7	03E-01	8	01E-01	8	02E-01	7	87E-01	7	53E-01	7	02E-01	6	55E-01	6	11E-01	5	70E-01	5	32E-01
TE131	1	24E+02	1	34E+02	4	38E+01	1	14E+01	2	76E+00	2	60E-01	1	29E-01	1	19E-01	1	11E-01	1	04E-01	9	70E-02
I131	1	80E-02	6	23E-01	9	17E-01	1	00E+00	1	02E+00	1	03E+00	1	03E+00	1	02E+00	1	02E+00	1	01E+00	1	01E+00
TE132	1	46E+00	3	55E+00	3	50E+00	3	49E+00	3	44E+00	3	38E+00	3	29E+00	3	22E+00	3	13E+00	3	03E+00	2	96E+00
I132	3	58E+00	3	57E+00	3	57E+00	3	55E+00	3	52E+00	3	47E+00	3	40E+00	3	31E+00	3	22E+00	3	14E+00	3	06E+00
TE133M	1	11E-01	3	82E+01	1	66E+01	7	24E+00	3	15E+00	5	99E-01	4	92E-02	4	06E-03	3	34E-04	2	76E-05	2	28E-06
TE133	6	19E+02	3	51E+01	3	90E+00	1	29E+00	5	46E-01	1	04E-01	8	56E-03	7	03E-04	5	83E-05	4	79E-06	3	95E-07
I133	9	60E-01	1	04E+01	1	11E+01	1	11E+01	1	10E+01	1	04E+01	9	45E+00	8	56E+00	7	72E+00	7	03E+00	6	35E+00
XE133M	1	17E-06	6	65E-02	1	60E-01	2	57E-01	3	49E-01	5	25E-01	7	60E-01	9	64E-01	1	14E+00	1	29E+00	1	41E+00
XE133	2	04E-05	1	16E+00	2	82E+00	4	50E+00	6	18E+00	9	36E+00	1	37E+01	1	75E+01	2	10E+01	2	40E+01	2	67E+01
TE134	2	05E+02	9	51E+01	3	54E+01	1	32E+01	4	89E+00	6	77E-01	3	46E-02	1	77E-03	9	08E-05	4	66E-06	2	39E-07
I134	9	40E+01	1	26E+02	8	81E+01	5	17E+01	2	77E+01	7	04E+00	7	74E-01	7	90E-02	7	74E-03	7	41E-04	7	04E-05
I135	1	44E+01	2	53E+01	2	28E+01	2	06E+01	1	86E+01	1	51E+01	1	11E+01	8	10E+00	5	95E+00	4	38E+00	3	20E+00
XE135M	4	54E-02	2	09E+02	2	03E+02	1	84E+02	1	65E+02	1	35E+02	9	89E+01	7	24E+01	5	31E+01	3	89E+01	2	85E+01
XE135	4	74E+01	9	37E+01	1	37E+02	1	72E+02	2	01E+02	2	41E+02	2	68E+02	2	68E+02	2	55E+02	2	33E+02	2	08E+02
CS136	4	36E-03	4	33E-03	4	33E-03	4	33E-03	4	31E-03	4	29E-03	4	26E-03	4	24E-03	4	22E-03	4	19E-03	4	15E-03
CS137	3	46E-05	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04
BA137M	7	28E-08	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04
XE138	1	65E+02	1	42E+01	1	23E+00	1	07E-01	9	26E-03	6	95E-05	4	52E-08	2	93E-11	1	91E-14	1	24E-17	8	03E-21
CS138	2	46E+01	4	14E+01	1	43E+01	4	20E+00	1	18E+00	8	98E-02	1	87E-03	3	89E-05	8	03E-07	1	67E-08	3	48E-10
CS139	3	26E+02	1	04E+01	1	31E-01	1	64E-03	2	06E-05	3	23E-09	6	43E-15	1	27E-20	2	51E-26	5	00E-32	9	85E-38
BA139	6	04E+00	6	73E+01	4	14E+01	2	51E+01	1	52E+01	5	59E+00	1	24E+00	2	75E-01	6	14E-02	1	36E-02	3	01E-03
BA140	3	81E-02	2	39E-01	2	39E-01	2	37E-01	2	37E-01	2	35E-01	2	35E-01	2	33E-01	2	31E-01	2	30E-01	2	28E-01

MICROCURI/SQ METER

UNDERGROUND EVENT CATEGORY C

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
LA140	9	09E-08	4	08E-03	8	07E-03	1	20E-02	1	58E-02	2	33E-02	3	41E-02	4	41E-02	5	36E-02	6	26E-02	7	09E-02
BA141	7	28E+01	2	20E+01	2	18E+00	2	17E-01	2	15E-02	2	13E-04	2	08E-07	2	03E-10	1	98E-13	1	94E-16	1	89E-19
LA141	6	73E-01	1	42E+01	1	33E+01	1	13E+01	9	45E+00	6	62E+00	3	86E+00	2	27E+00	1	34E+00	7	84E-01	4	60E-01
CE141	8	31E-08	9	23E-03	2	17E-02	3	26E-02	4	16E-02	5	59E-02	6	95E-02	7	73E-02	8	17E-02	8	42E-02	8	57E-02
BA142	1	95E-02	7	76E-04	1	77E-05	4	03E-07	9	20E-09	4	78E-12	5	68E-17	6	72E-22	7	98E-27	9	49E-32	1	13E-36
LA142	4	49E-04	3	11E-03	2	05E-03	1	30E-03	8	30E-04	3	36E-04	8	66E-05	2	23E-05	5	75E-06	1	48E-06	3	81E-07
LA143	5	99E-03	1	17E-03	5	99E-05	3	08E-06	1	59E-07	4	14E-10	5	59E-14	7	55E-18	1	02E-21	1	37E-25	1	85E-29
CE143	2	40E-06	1	53E-04	1	59E-04	1	54E-04	1	52E-04	1	46E-04	1	37E-04	1	28E-04	1	20E-04	1	13E-04	1	06E-04
PR143	7	02E-13	2	34E-07	5	66E-07	8	94E-07	1	21E-06	1	84E-06	2	71E-06	3	54E-06	4	30E-06	5	00E-06	5	66E-06
CE144	8	53E-08	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07
PR144	2	34E-11	5	56E-07	6	07E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07	6	10E-07
PR145	4	39E-06	6	44E-04	5	72E-04	5	08E-04	4	54E-04	3	60E-04	2	54E-04	1	79E-04	1	27E-04	8	96E-05	6	34E-05
CE146	1	46E-02	7	48E-04	3	83E-05	1	96E-06	1	01E-07	2	66E-10	3	58E-14	4	82E-18	6	49E-22	8	76E-26	1	18E-29
PR146	3	02E-04	2	62E-03	5	95E-04	1	12E-04	2	01E-05	6	31E-07	3	49E-09	1	93E-11	1	07E-13	5	91E-16	3	22E-18
PR147	1	72E-03	4	97E-04	1	55E-05	4	85E-07	1	52E-08	1	48E-11	4	51E-16	1	38E-20	4	21E-25	1	28E-29	3	91E-34
ND147	6	13E-10	1	15E-05	1	18E-05	1	18E-05	1	18E-05	1	17E-05	1	17E-05	1	15E-05	1	15E-05	1	14E-05	1	13E-05
ND149	1	24E-03	8	49E-04	5	74E-04	3	93E-04	2	66E-04	1	23E-04	3	88E-05	1	23E-05	3	86E-06	1	21E-06	3	83E-07
PM149	1	73E-07	1	35E-05	2	25E-05	2	85E-05	3	22E-05	3	62E-05	3	76E-05	3	69E-05	3	60E-05	3	46E-05	3	34E-05
PM150	1	65E-05	1	28E-05	9	86E-06	7	65E-06	5	88E-06	3	54E-06	1	64E-06	7	56E-07	3	51E-07	1	62E-07	7	51E-08
ND151	7	65E-03	2	39E-04	7	50E-06	2	34E-07	7	34E-09	7	14E-12	2	18E-16	6	67E-21	2	03E-25	6	21E-30	1	90E-34
PM151	4	86E-06	5	69E-05	5	74E-05	5	59E-05	5	43E-05	5	17E-05	4	79E-05	4	45E-05	4	14E-05	3	84E-05	3	56E-05
PM152	1	34E-02	1	31E-05	1	27E-08	1	24E-11	1	22E-14	1	16E-20	1	08E-29	1	01E-38	9	39E-48	8	80E-57	8	16E-66
SM153	1	84E-05	1	81E-05	1	79E-05	1	76E-05	1	73E-05	1	68E-05	1	61E-05	1	54E-05	1	47E-05	1	41E-05	1	35E-05
SM155	1	71E-03	2	81E-04	4	60E-05	7	52E-06	1	24E-06	3	33E-08	1	47E-10	6	46E-13	2	85E-15	1	27E-17	3	11E-20
EU155	1	26E-09	3	58E-08	4	15E-08	4	24E-08	4	26E-08	4	26E-08	4	26E-08	4	26E-08	4	26E-08	4	26E-08	4	26E-08
SM156	3	21E-05	2	98E-05	2	77E-05	2	57E-05	2	39E-05	2	06E-05	1	65E-05	1	32E-05	1	06E-05	8	51E-06	6	83E-06
EU156	9	41E-08	1	53E-07	2	08E-07	2	59E-07	3	06E-07	3	91E-07	4	97E-07	5	75E-07	6	41E-07	6	95E-07	7	31E-07
EU157	6	15E-06	2	04E-05	1	94E-05	1	86E-05	1	77E-05	1	62E-05	1	41E-05	1	23E-05	1	07E-05	9	36E-06	8	14E-06
EU158	3	33E-04	1	35E-04	5	44E-05	2	20E-05	8	90E-06	1	46E-06	9	76E-08	6	46E-09	4	29E-10	2	85E-11	1	89E-12
EU159	3	65E-04	3	62E-05	3	59E-06	3	56E-07	3	53E-08	3	48E-10	3	40E-13	3	32E-16	3	24E-19	3	17E-22	3	10E-25
GD159	1	56E-06	6	83E-06	7	11E-06	6	89E-06	6	63E-06	6	14E-06	5	48E-06	4	88E-06	4	34E-06	3	87E-06	3	45E-06
TB161	1	38E-08	9	95E-08	9	90E-08	9	85E-08	9	85E-08	9	75E-08	9	64E-08	9	49E-08	9	39E-08	9	29E-08	9	14E-08
TOTAL	1	33E+04	2	96E+03	1	55E+03	1	15E+03	9	52E+02	7	46E+02	5	92E+02	4	97E+02	4	28E+02	3	71E+02	3	23E+02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY C
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
GE 77	3.86E-03	2.43E-03	5.56E-04	6.71E-06	4.28E-09	1.73E-15	6.96E-22	1.14E-34	0.	0.	0.
AS 77	3.99E-05	5.89E-03	4.26E-03	1.23E-03	1.45E-04	1.96E-06	2.66E-08	4.91E-12	2.28E-21	4.88E-40	1.05E-58
SE 77M	1.57E-09	1.78E-05	1.28E-05	3.70E-06	4.32E-07	5.88E-09	7.99E-11	1.47E-14	6.83E-24	1.46E-42	3.15E-61
AS 78	1.80E-02	1.60E-04	4.69E-09	3.97E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.71E-04	2.31E-04	1.44E-04	3.52E-05	3.33E-06	2.99E-08	2.69E-10	2.17E-14	1.26E-24	4.35E-45	1.48E-65
BR 83	1.77E-01	4.66E-03	4.68E-06	4.76E-15	4.86E-30	0.	0.	0.	0.	0.	0.
KR 83M	9.16E-06	2.03E-02	2.31E-05	2.08E-14	2.14E-29	0.	0.	0.	0.	0.	0.
KR 85M	3.08E-02	1.75E+00	4.00E-02	4.75E-07	2.94E-15	1.11E-31	4.22E-48	0.	0.	0.	0.
KR 85	3.18E-05	8.36E-04	8.52E-04	8.52E-04	8.52E-04	8.52E-04	8.49E-04	8.40E-04	8.24E-04	8.11E-04	8.11E-04
KR 87	5.38E+02	1.06E-03	2.10E-09	1.63E-26	0.	0.	0.	0.	0.	0.	0.
KR 88	2.37E+02	6.25E-01	1.64E-03	2.97E-11	3.75E-24	0.	0.	0.	0.	0.	0.
RB 88	6.04E+01	6.97E-01	1.84E-03	3.33E-11	4.17E-24	0.	0.	0.	0.	0.	0.
SR 89	3.87E-07	1.16E-02	1.14E-02	1.10E-02	1.03E-02	9.00E-03	7.87E-03	6.06E-03	3.09E-03	8.16E-04	2.15E-04
SR 90	9.20E-07	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.35E-05	9.35E-05	9.27E-05
Y 90	1.36E-12	2.16E-05	3.83E-05	6.87E-05	8.76E-05	9.35E-05	9.45E-05	9.45E-05	9.35E-05	9.35E-05	9.27E-05
SR 91	4.69E-01	1.68E+00	3.01E-01	1.73E-03	3.16E-07	1.07E-14	3.63E-22	4.13E-37	0.	0.	0.
Y 91M	3.16E-05	1.09E+00	1.94E-01	1.11E-03	2.05E-07	6.91E-15	2.34E-22	2.66E-37	0.	0.	0.
Y 91	1.29E-08	5.16E-02	6.11E-02	6.11E-02	5.75E-02	5.10E-02	4.54E-02	3.60E-02	1.99E-02	6.14E-03	1.88E-03
SR 92	2.00E-04	2.50E-06	5.40E-09	5.42E-17	2.54E-30	0.	0.	0.	0.	0.	0.
Y 92	9.23E-06	2.62E-05	2.91E-07	2.24E-13	1.31E-23	4.45E-44	1.53E-64	0.	0.	0.	0.
Y 93	1.31E-05	8.84E-05	1.72E-05	1.29E-07	3.74E-11	3.08E-18	2.54E-25	1.74E-39	0.	0.	0.
ZR 95	2.81E-08	3.51E-06	3.47E-06	3.35E-06	3.20E-06	2.86E-06	2.57E-06	2.08E-06	1.22E-06	4.19E-07	1.44E-07
NB 95M	5.99E-16	1.19E-08	2.17E-08	4.13E-08	5.58E-08	5.89E-08	5.43E-08	4.40E-08	2.59E-08	8.90E-09	3.07E-09
NB 95	3.13E-15	6.79E-08	1.34E-07	3.23E-07	5.99E-07	1.03E-06	1.33E-06	1.65E-06	1.59E-06	7.63E-07	2.93E-07
ZR 97	8.06E-05	1.37E-04	5.17E-05	2.73E-06	2.05E-08	1.16E-12	6.48E-17	2.05E-25	1.16E-46	0.	0.
NB 97M	4.15E-07	1.32E-04	4.94E-05	2.64E-06	1.97E-08	1.11E-12	6.25E-17	1.97E-25	1.11E-46	0.	0.
NB 97	4.05E-05	1.38E-04	5.17E-05	2.75E-06	2.07E-08	1.24E-12	6.98E-17	2.22E-25	1.25E-46	0.	0.
MO 99	1.17E-02	3.80E+00	2.96E+00	1.41E+00	4.06E-01	3.39E-02	2.84E-03	1.98E-05	8.03E-11	1.32E-21	2.18E-32
TC 99M	1.09E-07	3.34E+00	2.81E+00	1.35E+00	3.88E-01	3.24E-02	2.71E-03	1.89E-05	7.65E-11	1.26E-21	2.09E-32
RU103	2.28E-04	5.21E-01	5.11E-01	4.84E-01	4.45E-01	3.73E-01	3.12E-01	2.21E-01	9.19E-02	1.59E-02	2.77E-03
RH103M	1.52E-08	5.21E-01	5.11E-01	4.86E-01	4.45E-01	3.73E-01	3.12E-01	2.21E-01	9.19E-02	1.59E-02	2.77E-03
RU105	2.42E+00	2.32E+00	5.45E-02	7.14E-07	5.23E-15	2.79E-31	1.49E-47	0.	0.	0.	0.
RH105M	1.59E-02	2.32E+00	5.45E-02	7.16E-07	5.25E-15	2.81E-31	1.50E-47	0.	0.	0.	0.
RH105	2.62E-08	8.34E+00	5.45E+00	1.36E+00	1.34E-01	1.30E-03	1.26E-05	1.19E-09	1.04E-19	7.78E-40	5.85E-60
RU106	2.44E-03	4.64E-02	4.62E-02	4.59E-02	4.55E-02	4.48E-02	4.36E-02	4.20E-02	3.84E-02	3.18E-02	2.63E-02
RH106	2.65E-05	4.64E-02	4.62E-02	4.59E-02	4.55E-02	4.48E-02	4.36E-02	4.20E-02	3.84E-02	3.18E-02	2.63E-02
PD109	1.99E-02	5.04E-01	1.47E-01	3.65E-03	7.69E-06	3.42E-11	1.52E-16	3.02E-27	0.	0.	0.
AG109M	1.14E-04	5.04E-01	1.47E-01	3.65E-03	7.72E-06	3.43E-11	1.52E-16	3.02E-27	0.	0.	0.
PD111M	5.45E+00	2.64E-01	1.28E-02	1.47E-06	3.98E-13	2.90E-26	2.13E-39	0.	0.	0.	0.
PD111	1.94E+00	2.13E-01	1.03E-02	1.18E-06	3.22E-13	2.34E-26	1.71E-39	0.	0.	0.	0.

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY C
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
AG111M	1	54E-02	2	78E-01	1	35E-02	1	56E-06	4	21E-13	3	08E-26	2	25E-39	0		0		0		0	
AG111	5	47E-09	1	51E-01	1	45E-01	1	11E-01	6	97E-02	2	76E-02	1	10E-02	1	73E-03	1	70E-05	1	65E-09	1	60E-13
PD112	1	42E+00	6	45E-01	2	92E-01	2	71E-02	5	17E-04	1	87E-07	6	82E-11	8	94E-18	5	64E-35	0		0	
AG112	4	27E-05	7	49E-01	3	46E-01	3	20E-02	6	11E-04	2	21E-07	8	03E-11	1	06E-17	6	62E-35	0		0	
AG113	8	16E-03	8	63E-02	3	74E-03	3	04E-07	4	65E-14	1	09E-27	2	54E-41	0		0		0		0	
CD115M	1	33E-08	3	85E-04	3	77E-04	3	59E-04	3	33E-04	2	82E-04	2	42E-04	1	74E-04	7	78E-05	1	55E-05	3	10E-06
CD115	5	13E-06	7	71E-02	5	66E-02	2	23E-02	4	71E-03	2	11E-04	9	36E-06	1	87E-08	3	30E-15	1	03E-28	3	24E-42
IN115M	6	39E-11	8	15E-02	6	17E-02	2	44E-02	5	13E-03	2	29E-04	1	02E-05	2	03E-08	3	61E-15	1	13E-28	3	54E-42
CD117	1	15E-01	2	51E-03	2	43E-06	2	26E-15	2	02E-30	0		0	0	0		0		0		0	
IN117M	5	52E-06	1	04E-02	1	20E-05	1	16E-14	1	03E-29	0		0	0	0		0		0		0	
IN117	2	23E-10	6	85E-03	8	10E-06	7	86E-15	6	96E-30	0		0	0	0		0		0		0	
SN121	2	44E-03	1	39E-01	7	50E-02	1	18E-02	5	43E-04	1	15E-06	2	42E-09	1	08E-14	4	49E-28	0		0	
SN123	1	21E-05	1	27E-03	1	26E-03	1	23E-03	1	20E-03	1	13E-03	1	08E-03	9	63E-04	7	30E-04	4	19E-04	2	42E-04
SN125	2	91E-02	2	70E-02	2	51E-02	2	01E-02	1	39E-02	6	64E-03	3	17E-03	7	26E-04	1	81E-05	1	14E-08	7	16E-12
SB125	1	74E-04	1	94E-04	2	11E-04	2	58E-04	3	16E-04	3	83E-04	4	13E-04	4	30E-04	4	21E-04	3	93E-04	3	68E-04
SB126	5	63E-03	5	33E-03	5	04E-03	4	26E-03	3	23E-03	1	86E-03	1	07E-03	3	52E-04	2	19E-05	1	07E-07	2	15E-08
SN127	5	84E+00	2	12E-03	7	70E-07	3	67E-17	2	31E-34	0		0	0	0		0		0		0	
SB127	6	83E-02	2	80E-01	2	34E-01	1	37E-01	5	61E-02	9	36E-03	1	56E-03	4	37E-05	5	70E-09	9	75E-17	1	66E-24
TE127M	5	51E-10	4	28E-04	7	83E-04	1	52E-03	2	09E-03	2	31E-03	2	23E-03	1	98E-03	1	44E-03	7	62E-04	4	03E-04
TE127	3	86E-02	2	00E-01	1	97E-01	1	20E-01	5	08E-02	1	04E-02	3	56E-03	2	00E-03	1	42E-03	7	53E-04	3	98E-04
SB128	1	88E+00	3	22E-01	5	09E-02	1	99E-04	1	94E-08	1	81E-16	1	70E-24	1	50E-40	0		0		0	
SB129	9	45E+00	4	84E-01	1	01E-02	9	20E-08	3	66E-16	5	77E-33	9	10E-50	0		0		0		0	
TE129M	1	78E-07	1	88E-02	1	88E-02	1	78E-02	1	60E-02	1	31E-02	1	06E-02	7	07E-03	2	54E-03	3	33E-04	4	32E-05
TE129	6	80E+00	5	65E-01	2	36E-02	1	14E-02	1	02E-02	8	37E-03	6	82E-03	4	54E-03	1	64E-03	2	13E-04	2	78E-05
I130	4	67E-02	1	22E-02	3	19E-03	5	72E-05	6	99E-08	1	04E-13	1	55E-19	3	46E-31	0		0		0	
TE131M	1	34E-04	4	70E-01	2	70E-01	5	11E-02	3	20E-03	1	25E-05	4	88E-08	7	44E-13	6	76E-25	0		0	
TE131	1	24E+02	8	57E-02	4	92E-02	9	35E-03	5	83E-04	2	28E-06	8	89E-09	1	36E-13	1	24E-25	0		0	
I131	1	80E-02	9	70E-01	9	17E-01	7	36E-01	4	85E-01	2	05E-01	8	66E-02	1	55E-02	2	09E-04	3	81E-08	6	94E-12
XE131M	4	88E-11	4	50E-04	8	53E-04	1	78E-03	2	55E-03	2	52E-03	1	87E-03	7	72E-04	5	14E-05	1	54E-07	4	34E-10
TE132	1	46E+00	2	90E+00	2	34E+00	1	23E+00	4	23E-01	5	02E-02	5	95E-03	8	36E-05	1	96E-09	1	07E-18	5	84E-28
I132	3	58E+00	2	97E+00	2	40E+00	1	26E+00	4	37E-01	5	17E-02	6	13E-03	8	62E-05	2	02E-09	1	10E-18	6	01E-28
I133	9	60E-01	5	35E+00	2	42E+00	2	24E-01	4	27E-03	1	55E-06	5	61E-10	7	40E-17	4	65E-34	0		0	
XE133M	1	17E-06	1	44E+00	1	71E+00	1	00E+00	2	35E-01	1	10E-02	5	14E-04	1	11E-06	2	44E-13	1	17E-26	5	59E-40
XE133	2	04E-05	2	77E+01	3	72E+01	3	33E+01	1	81E+01	4	89E+00	1	32E+00	9	50E-02	1	32E-04	2	57E-10	4	97E-16
I135	1	44E+01	2	34E+00	1	96E-01	1	14E-04	4	63E-10	7	65E-21	1	26E-31	3	41E-53	0		0		0	
XE135M	4	54E-02	2	09E+01	1	75E+00	1	02E-03	4	14E-09	6	79E-20	1	12E-30	3	05E-52	0		0		0	
XE135	4	74E+01	1	81E+02	4	41E+01	2	53E-01	3	10E-05	4	34E-13	6	10E-21	1	21E-36	0		0		0	
CS136	4	36E-03	4	12E-03	3	91E-03	3	33E-03	2	56E-03	1	50E-03	8	83E-04	3	03E-04	2	11E-05	1	01E-07	4	92E-10
CS137	3	46E-05	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	73E-04	3	70E-04	3	68E-04	3	66E-04
BA137M	7	28E-08	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	48E-04	3	46E-04	3	43E-04	3	41E-04

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY C
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
BA139	6	04E+00	6	43E-04	3	80E-09	7	82E-25	0		0		0		0		0		0		0	
BA140	3	81E-02	2	26E-01	2	15E-01	1	82E-01	1	39E-01	8	07E-02	4	72E-02	1	60E-02	1	06E-03	4	75E-06	2	10E-08
LA140	9	09E-08	7	89E-02	1	27E-01	1	75E-01	1	56E-01	9	32E-02	5	40E-02	1	84E-02	1	22E-03	5	43E-06	2	42E-08
LA141	6	73E-01	2	67E-01	3	75E-03	1	04E-08	5	67E-18	1	69E-36	5	04E-55	0		0		0		0	
CE141	8	31E-08	9	23E-02	9	16E-02	8	61E-02	7	73E-02	6	25E-02	5	04E-02	3	27E-02	1	13E-02	1	32E-03	1	56E-04
LA142	4	49E-04	9	81E-08	1	90E-12	1	40E-26	0		0		0		0		0		0		0	
CE143	2	40E-06	9	86E-05	3	96E-05	1	31E-05	1	06E-06	6	82E-09	4	40E-11	1	85E-15	2	09E-26	0		0	
PR143	7	02E-13	6	32E-06	9	83E-06	1	27E-05	1	09E-05	6	62E-06	4	00E-06	1	44E-06	1	15E-07	7	35E-10	4	67E-12
CE144	8	53E-08	6	10E-07	6	07E-07	6	04E-07	5	97E-07	5	81E-07	5	69E-07	5	40E-07	4	77E-07	3	76E-07	2	94E-07
PR144	2	34E-11	6	10E-07	6	07E-07	6	04E-07	5	97E-07	5	81E-07	5	69E-07	5	40E-07	4	77E-07	3	76E-07	2	94E-07
PR145	4	39E-06	4	46E-05	2	77E-06	6	59E-10	5	98E-16	4	97E-28	4	10E-40	0		0		0		0	
ND147	6	13E-10	1	03E-05	9	67E-06	8	01E-06	5	87E-06	3	15E-06	1	68E-06	4	85E-07	2	12E-08	4	14E-11	8	01E-14
PM147	1	70E-18	7	71E-09	1	49E-08	3	40E-08	5	91E-08	8	99E-08	1	06E-07	1	18E-07	1	19E-07	1	11E-07	1	03E-07
ND149	1	24E-03	1	20E-07	1	17E-11	1	06E-23	9	09E-44	0		0		0		0		0		0	
PM149	1	73E-07	3	20E-05	2	34E-05	9	13E-06	1	91E-06	8	31E-08	3	62E-09	6	90E-12	1	08E-18	2	68E-32	6	69E-46
PM150	1	65E-05	3	48E-08	7	33E-11	6	88E-19	2	88E-32	0		0		0		0		0		0	
PM151	4	86E-06	3	32E-05	1	83E-05	3	08E-06	1	58E-07	4	14E-10	1	09E-12	7	55E-18	9	46E-31	0		0	
SM153	1	84E-05	1	29E-05	9	06E-06	3	13E-06	5	33E-07	1	55E-08	4	49E-10	3	77E-13	7	77E-21	3	32E-36	1	41E-51
SM156	3	21E-05	5	47E-06	9	35E-07	4	60E-09	6	65E-13	1	36E-20	2	81E-28	1	20E-43	0		0		0	
EU155	1	26E-09	4	26E-08	4	25E-08	4	25E-08	4	24E-08	4	22E-08	4	21E-08	4	18E-08	4	10E-08	3	93E-08	3	78E-08
EU156	9	41E-08	7	61E-07	8	45E-07	7	61E-07	6	05E-07	3	79E-07	2	39E-07	9	47E-08	9	41E-09	9	23E-11	9	11E-13
EU157	6	15E-06	7	10E-06	2	39E-06	8	93E-08	3	77E-10	6	64E-15	1	17E-19	3	66E-29	0		0		0	
GD159	1	56E-06	3	07E-06	1	22E-06	7	62E-08	7	51E-10	7	27E-14	7	05E-16	6	61E-26	5	64E-46	0		0	
TB161	1	38E-08	9	04E-08	8	18E-08	6	06E-08	3	66E-08	1	34E-08	4	90E-09	6	56E-10	4	34E-12	1	88E-16	8	18E-21
TOTAL			2	79E+02	1	09E+02	4	43E+01	2	23E+01	6	49E+00	2	39E+00	7	68E-01	3	08E-01	1	08E-01	6	35E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY C
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1	00E+00	1	50E+00	2	00E+00	3	50E+00	5	00E+00	7	00E+00	1	00E+01	2	00E+01	3	50E+01	5	00E+01
KR 85	3	18E-05	7	90E-04	7	67E-04	7	42E-04	6	76E-04	6	11E-04	5	36E-04	4	43E-04	2	34E-04	8	92E-05	3	42E-05
SR 89	3	87E-07	9	07E-05	7	93E-06	6	96E-07	4	69E-10	3	18E-13	1	87E-17	8	50E-24	6	19E-45	0		0	
SR 90	9	20E-07	9	20E-05	9	09E-05	9	02E-05	8	69E-05	8	35E-05	7	94E-05	7	38E-05	5	77E-05	3	98E-05	2	76E-05
Y 90	1	36E-12	9	20E-05	9	09E-05	9	02E-05	8	69E-05	8	35E-05	7	94E-05	7	38E-05	5	77E-05	3	98E-05	2	76E-05
Y 91	1	29E-08	8	73E-04	1	02E-04	1	18E-05	1	85E-08	2	90E-11	5	31E-15	1	31E-20	2	64E-39	0		0	
ZR 95	2	81E-08	7	23E-08	1	03E-08	1	47E-09	4	28E-12	1	24E-14	5	15E-18	4	34E-23	5	34E-40	0		0	
NB 95M	5	99E-16	1	53E-09	2	18E-10	3	10E-11	9	06E-14	2	64E-16	1	09E-19	9	21E-25	1	13E-41	0		0	
NB 95	3	13E-15	1	55E-07	2	23E-08	3	16E-09	9	21E-12	2	67E-14	1	12E-17	9	43E-23	1	15E-39	0		0	
RU103	2	28E-04	8	86E-04	3	63E-05	1	49E-06	1	02E-10	6	99E-15	1	95E-20	9	21E-29	0		0		0	
RH103M	1	52E-08	8	88E-04	3	63E-05	1	49E-06	1	02E-10	6	99E-15	1	95E-20	9	23E-29	0		0		0	
RU106	2	44E-03	2	33E-02	1	65E-02	1	17E-02	4	16E-03	1	47E-03	3	70E-04	4	68E-05	4	73E-08	1	52E-12	4	89E-17
RH106	2	65E-05	2	33E-02	1	65E-02	1	17E-02	4	16E-03	1	47E-03	3	70E-04	4	68E-05	4	73E-08	1	52E-12	4	89E-17
SN123	1	21E-05	1	68E-04	6	09E-05	2	21E-05	1	06E-06	5	09E-08	8	88E-10	2	04E-12	3	28E-21	2	11E-34	1	36E-47
SB125	1	74E-04	3	51E-04	3	08E-04	2	71E-04	1	85E-04	1	26E-04	7	51E-05	3	48E-05	2	67E-06	5	69E-08	1	21E-09
TE125M	4	69E-12	1	43E-04	1	27E-04	1	12E-04	7	65E-05	5	20E-05	3	12E-05	1	43E-05	1	11E-06	2	36E-08	5	01E-10
TE127M	5	51E-10	2	64E-04	8	26E-05	2	59E-05	7	95E-07	2	45E-08	2	36E-10	2	22E-13	1	81E-23	1	36E-38	1	01E-53
TE127	3	86E-02	2	61E-04	8	17E-05	2	56E-05	7	86E-07	2	42E-08	2	33E-10	2	19E-13	1	80E-23	1	34E-38	1	00E-53
CS137	3	46E-05	3	64E-04	3	60E-04	3	56E-04	3	43E-04	3	31E-04	3	17E-04	2	96E-04	2	34E-04	1	66E-04	1	17E-04
BA137M	7	28E-08	3	41E-04	3	37E-04	3	33E-04	3	21E-04	3	10E-04	2	96E-04	2	77E-04	2	20E-04	1	55E-04	1	10E-04
CE141	8	31E-08	3	59E-05	7	21E-07	1	45E-08	1	18E-13	9	60E-19	1	57E-25	1	04E-35	0		0		0	
CE144	8	53E-08	2	51E-07	1	61E-07	1	03E-07	2	70E-08	7	11E-09	1	19E-09	8	25E-11	1	11E-14	1	74E-20	2	71E-26
PR144	2	34E-11	2	51E-07	1	61E-07	1	03E-07	2	70E-08	7	11E-09	1	19E-09	8	25E-11	1	11E-14	1	74E-20	2	71E-26
PM147	1	70E-18	9	86E-08	8	65E-08	7	56E-08	5	08E-08	3	42E-08	2	01E-08	9	14E-09	6	47E-10	1	23E-11	2	32E-13
EU155	1	26E-09	3	68E-08	3	42E-08	3	19E-08	2	56E-08	2	06E-08	1	54E-08	9	91E-09	2	31E-09	2	61E-10	2	93E-11
TOTAL			5	23E-02	3	54E-02	2	54E-02	1	01E-02	4	54E-03	2	15E-03	1	31E-03	8	07E-04	4	90E-04	3	17E-04

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR

PAGE 1

BANEBERRY CATEGORY C1

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.36E+02	1.23E+04
1.00E+00	3.33E+01	2.09E+03
2.00E+00	1.28E+01	8.17E+02
3.00E+00	6.99E+00	5.14E+02
4.00E+00	4.41E+00	3.90E+02
6.00E+00	2.32E+00	2.78E+02
9.00E+00	1.38E+00	2.04E+02
1.20E+01	1.00E+00	1.61E+02
1.50E+01	7.71E-01	1.33E+02
1.80E+01	6.18E-01	1.12E+02
2.10E+01	5.08E-01	9.58E+01
1.00E+00 DAYS	4.21E-01	8.23E+01
2.00E+00	1.90E-01	3.71E+01
5.00E+00	7.50E-02	1.46E+01
1.00E+01	2.81E-02	6.42E+00
2.00E+01	7.35E-03	2.14E+00
3.00E+01	3.72E-03	1.13E+00
5.00E+01	2.03E-03	6.11E-01
1.00E+02	8.46E-04	2.85E-01
2.00E+02	2.31E-04	1.03E-01
3.00E+02	1.11E-04	6.05E-02
1.00E+00 YEARS	8.65E-05	4.96E-02
1.50E+00	5.69E-05	3.32E-02
2.00E+00	4.06E-05	2.35E-02
3.50E+00	1.52E-05	8.56E-03
5.00E+00	5.88E-06	3.20E-03
7.00E+00	1.89E-06	9.50E-04
1.00E+01	5.34E-07	2.43E-04
2.00E+01	1.32E-07	6.80E-05
3.50E+01	8.09E-08	3.42E-05
5.00E+01	5.70E-08	1.98E-05

MICROCURI/SQ METER
BANEERRY CATEGORY C1

PAGE 2

MR/HR AT H+12 HOURS = 1 000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
GE 75	2	16E-06	1	05E-02	6	30E-03	3	80E-03	2	29E-03	8	31E-04	1	81E-04	3	98E-05	8	65E-06	1	89E-06	4	12E-07
GE 77	3	79E-03	9	75E-03	9	15E-03	8	61E-03	8	13E-03	7	18E-03	5	97E-03	4	96E-03	4	13E-03	3	43E-03	2	86E-03
AS 77	3	91E-05	6	16E-03	6	28E-03	6	28E-03	6	34E-03	6	40E-03	6	40E-03	6	34E-03	6	22E-03	6	10E-03	5	96E-03
SE 77M	1	54E-09	1	85E-05	1	88E-05	1	89E-05	1	89E-05	1	91E-05	1	92E-05	1	91E-05	1	88E-05	1	84E-05	1	78E-05
GE 78	9	79E-01	6	14E-01	3	81E-01	2	39E-01	1	49E-01	5	79E-02	1	41E-02	3	40E-03	8	32E-04	2	02E-04	4	90E-05
AS 78	1	76E-02	2	93E-01	3	61E-01	3	38E-01	2	83E-01	1	67E-01	6	20E-02	2	06E-02	6	37E-03	1	90E-03	5	52E-04
AS 79	1	82E-01	1	79E-01	1	77E-03	1	74E-05	1	71E-07	1	66E-11	1	59E-17	1	52E-23	1	45E-29	1	38E-35	1	32E-41
SE 79M	2	70E-02	3	17E-01	3	13E-03	3	08E-05	3	03E-07	2	93E-11	2	79E-17	2	67E-23	2	55E-29	2	43E-35	2	32E-41
BR 80	1	02E-01	9	62E-03	9	04E-04	8	50E-05	8	00E-06	7	10E-08	5	94E-11	4	96E-14	4	13E-17	3	45E-20	2	87E-23
SE 81M	7	34E-02	3	42E+00	1	65E+00	7	93E-01	3	82E-01	8	92E-02	1	00E-02	1	12E-03	1	26E-04	1	40E-05	1	57E-06
SE 81	8	96E-01	4	05E+00	2	34E+00	1	17E+00	5	67E-01	1	33E-01	1	48E-02	1	66E-03	1	86E-04	2	08E-05	2	34E-06
BR 82	3	64E-04	3	56E-04	3	49E-04	3	43E-04	3	36E-04	3	23E-04	3	05E-04	2	87E-04	2	71E-04	2	56E-04	2	41E-04
SE 83	2	98E+01	5	65E+00	1	07E+00	2	03E-01	3	84E-02	1	38E-03	9	38E-06	6	38E-08	4	36E-10	2	95E-12	1	88E-14
BR 83	2	47E-01	3	70E+00	3	42E+00	2	69E+00	2	05E+00	1	15E+00	4	88E-01	2	08E-01	8	68E-02	3	66E-02	1	55E-02
KR 83M	1	28E-05	8	37E-01	1	71E+00	2	12E+00	2	19E+00	1	83E+00	1	08E+00	5	55E-01	2	67E-01	1	24E-01	5	55E-02
BR 84	4	79E-02	8	27E+00	2	24E+00	6	06E-01	1	64E-01	1	20E-02	2	37E-04	4	67E-06	9	23E-08	1	83E-09	3	61E-11
KR 85M	4	53E-03	9	71E+00	8	25E+00	7	04E+00	6	01E+00	4	40E+00	2	75E+00	1	71E+00	1	07E+00	6	64E-01	4	14E-01
KR 87	7	90E+01	4	56E+01	2	65E+01	1	53E+01	8	80E+00	2	95E+00	5	74E-01	1	11E-01	2	15E-02	4	17E-03	8	04E-04
KR 88	3	49E+01	2	73E+01	2	13E+01	1	66E+01	1	30E+01	7	88E+00	3	77E+00	1	79E+00	8	50E-01	4	05E-01	1	93E-01
RB 88	8	88E+00	2	77E+01	2	35E+01	1	85E+01	1	45E+01	8	82E+00	4	21E+00	2	01E+00	9	57E-01	4	55E-01	2	17E-01
RB 89	2	65E-01	2	49E-01	1	67E-02	1	12E-03	7	52E-05	3	41E-07	1	03E-10	3	11E-14	9	48E-18	2	87E-21	8	71E-25
SR 89	2	02E-08	7	10E-04	7	59E-04	7	59E-04	7	59E-04	7	59E-04	7	59E-04	7	56E-04	7	56E-04	7	52E-04	7	52E-04
SR 90	4	81E-08	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06
SR 91	4	60E-01	8	56E+00	7	98E+00	7	43E+00	6	91E+00	5	99E+00	4	83E+00	3	90E+00	3	15E+00	2	53E+00	2	04E+00
Y 91M	3	09E-05	2	95E+00	4	02E+00	4	31E+00	4	25E+00	3	81E+00	3	13E+00	2	52E+00	2	03E+00	1	63E+00	1	31E+00
Y 91	1	26E-08	2	62E-03	6	05E-03	9	62E-03	1	31E-02	1	98E-02	2	81E-02	3	47E-02	4	02E-02	4	45E-02	4	80E-02
SR 92	7	86E-03	3	51E-02	2	72E-02	2	10E-02	1	63E-02	9	75E-03	4	53E-03	2	10E-03	9	75E-04	4	53E-04	2	10E-04
Y 92	3	62E-04	7	38E-03	1	16E-02	1	38E-02	1	46E-02	1	40E-02	1	07E-02	7	27E-03	4	68E-03	2	88E-03	1	73E-03
SR 93	4	20E-01	7	23E-03	4	00E-05	2	20E-07	1	21E-09	3	72E-14	6	27E-21	1	06E-27	1	79E-34	3	02E-41	5	07E-48
Y 93	5	12E-04	1	66E-02	1	56E-02	1	45E-02	1	36E-02	1	19E-02	9	68E-03	7	91E-03	6	42E-03	5	27E-03	4	29E-03
Y 94	6	91E-02	9	44E-02	1	22E-02	1	57E-03	2	02E-04	3	36E-06	7	20E-09	1	54E-11	3	31E-14	7	20E-17	4	00E-18
Y 95	2	93E-01	2	76E-02	6	08E-04	1	34E-05	2	96E-07	1	43E-10	1	53E-15	1	64E-20	1	75E-25	1	87E-30	2	01E-35
ZR 95	1	10E-06	1	43E-04	1	47E-04	1	47E-04	1	47E-04	1	47E-04	1	47E-04	1	46E-04	1	46E-04	1	46E-04	1	46E-04
NB 95	1	23E-13	8	89E-08	2	07E-07	3	26E-07	4	44E-07	6	81E-07	1	03E-06	1	39E-06	1	74E-06	2	09E-06	2	44E-06
ZR 97	3	16E-03	1	38E-02	1	32E-02	1	27E-02	1	21E-02	1	12E-02	9	90E-03	8	75E-03	7	78E-03	6	85E-03	6	09E-03
NB 97M	1	63E-05	1	32E-02	1	27E-02	1	22E-02	1	17E-02	1	08E-02	9	51E-03	8	43E-03	7	45E-03	6	58E-03	5	82E-03
NB 97	1	59E-03	6	90E-03	9	73E-03	1	11E-02	1	16E-02	1	16E-02	1	05E-02	9	41E-03	8	32E-03	7	34E-03	6	53E-03
NB 98	2	17E-02	9	62E-03	4	26E-03	1	88E-03	8	35E-04	1	63E-04	1	41E-05	1	22E-06	1	06E-07	9	19E-09	7	92E-10
MO 99	1	14E-02	4	72E+00	4	68E+00	4	62E+00	4	58E+00	4	49E+00	4	35E+00	4	21E+00	4	09E+00	3	97E+00	3	85E+00
TC 99M	1	06E-07	4	50E-01	8	45E-01	1	19E+00	1	50E+00	2	00E+00	2	54E+00	2	89E+00	3	10E+00	3	22E+00	3	26E+00

MICROCURI/SQ METER
BANE BERRY CATEGORY C1

PAGE 3

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
MO101	2.24E+02	1.01E+02	5.90E+00	3.41E-01	1.98E-02	6.64E-05	1.29E-08	2.52E-12	4.88E-16	9.49E-20	1.85E-23	
TC101	9.49E+00	2.85E+02	3.11E+01	2.55E+00	1.85E-01	8.38E-04	2.10E-07	4.70E-11	9.96E-15	2.05E-18	4.14E-22	
MO102	2.31E+03	5.28E+01	1.20E+00	2.75E-02	6.26E-04	3.25E-07	3.87E-12	4.58E-17	5.43E-22	6.46E-27	7.67E-32	
TC102M	1.49E+00	4.46E+01	1.02E+00	2.33E-02	5.32E-04	2.75E-07	3.27E-12	3.87E-17	4.60E-22	5.45E-27	6.47E-32	
TC102	6.96E+03	2.65E+01	6.07E-01	1.38E-02	3.15E-04	1.64E-07	1.95E-12	2.31E-17	2.75E-22	3.25E-27	3.86E-32	
RU103	2.24E+04	5.18E-01	5.18E-01	5.18E-01	5.18E-01	5.16E-01	5.15E-01	5.15E-01	5.13E-01	5.13E-01	5.11E-01	
RH103M	1.49E-08	2.68E-01	3.98E-01	4.61E-01	4.90E-01	5.11E-01	5.15E-01	5.15E-01	5.13E-01	5.13E-01	5.13E-01	
TC104	2.37E+02	1.70E+02	1.70E+01	1.68E+00	1.66E-01	1.64E-03	1.60E-06	1.57E-09	1.53E-12	1.49E-15	1.46E-18	
RU105	2.37E+00	8.19E+01	7.00E+01	6.01E+01	5.15E+01	3.76E+01	2.35E+01	1.47E+01	9.20E+00	5.76E+00	3.61E+00	
RH105M	1.56E-02	8.22E+01	7.02E+01	6.03E+01	5.15E+01	3.76E+01	2.35E+01	1.47E+01	9.24E+00	5.78E+00	3.61E+00	
RH105	2.56E-08	1.67E+00	3.09E+00	4.27E+00	5.25E+00	6.72E+00	8.05E+00	8.66E+00	8.82E+00	8.74E+00	8.51E+00	
RU106	2.40E-03	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	
RH106	2.60E-05	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	4.55E-02	
RH107	5.93E-01	8.06E+01	1.22E+01	1.84E+00	2.76E-01	6.33E-03	2.18E-05	7.51E-08	2.58E-10	8.85E-14	8.80E-17	
PD107M	1.23E-03	1.64E+01	2.48E+00	3.74E-01	5.65E-02	1.29E-03	4.44E-06	1.53E-08	5.26E-11	1.81E-13	6.20E-16	
PD109	1.95E-02	1.61E+00	1.53E+00	1.45E+00	1.38E+00	1.24E+00	1.07E+00	9.16E-01	7.85E-01	6.72E-01	5.78E-01	
AG109M	1.12E-04	1.61E+00	1.53E+00	1.45E+00	1.38E+00	1.24E+00	1.07E+00	9.16E-01	7.85E-01	6.72E-01	5.78E-01	
PD111M	5.34E+00	4.69E+00	4.15E+00	3.65E+00	3.22E+00	2.50E+00	1.71E+00	1.18E+00	8.07E-01	5.52E-01	3.79E-01	
PD111	1.90E+00	3.42E+00	3.29E+00	2.93E+00	2.59E+00	2.01E+00	1.38E+00	9.44E-01	6.47E-01	4.44E-01	3.04E-01	
AG111M	1.51E-02	4.62E+00	4.33E+00	3.88E+00	3.42E+00	2.64E+00	1.81E+00	1.24E+00	8.49E-01	5.84E-01	3.99E-01	
AG111	5.36E-09	1.59E-02	3.33E-02	4.91E-02	6.31E-02	8.58E-02	1.10E-01	1.27E-01	1.37E-01	1.44E-01	1.43E-01	
PD112	1.39E+00	1.35E+00	1.30E+00	1.26E+00	1.22E+00	1.14E+00	1.04E+00	9.38E-01	8.49E-01	7.70E-01	6.98E-01	
AG112	4.18E-05	2.67E-01	4.71E-01	6.32E-01	7.51E-01	9.02E-01	9.91E-01	9.84E-01	9.38E-01	8.76E-01	8.07E-01	
AG113	8.00E-03	1.71E+00	1.50E+00	1.32E+00	1.16E+00	8.89E-01	6.04E-01	4.08E-01	2.75E-01	1.85E-01	1.25E-01	
AG115	1.59E+00	1.71E+00	2.12E-01	2.66E-02	3.32E-03	5.19E-05	1.01E-07	1.97E-10	3.84E-13	3.81E-16	3.54E-16	
CD115M	1.30E-08	3.46E-04	3.90E-04	3.93E-04	3.93E-04	3.93E-04	3.93E-04	3.93E-04	3.91E-04	3.90E-04	3.90E-04	
CD115	5.03E-06	9.48E-02	1.02E-01	1.02E-01	1.00E-01	9.78E-02	9.42E-02	9.05E-02	8.71E-02	8.38E-02	8.06E-02	
IN115M	6.27E-11	1.05E-02	2.32E-02	3.45E-02	4.40E-02	5.85E-02	7.23E-02	7.97E-02	8.31E-02	8.38E-02	8.33E-02	
CD117	1.12E-01	1.87E+00	1.41E+00	1.05E+00	7.88E-01	4.42E-01	1.85E-01	7.83E-02	3.30E-02	1.38E-02	5.83E-03	
IN117M	5.41E-06	6.51E-01	9.42E-01	1.02E+00	9.88E-01	7.79E-01	4.46E-01	2.27E-01	1.09E-01	5.08E-02	2.29E-02	
IN117	2.18E-10	1.19E-01	2.88E-01	4.00E-01	4.46E-01	4.09E-01	2.60E-01	1.40E-01	6.95E-02	3.26E-02	1.50E-02	
CD118	7.23E+00	3.10E+00	1.33E+00	5.66E-01	2.43E-01	4.45E-02	3.49E-03	2.72E-04	2.14E-05	1.68E-06	1.32E-07	
IN118	4.79E-01	3.10E+00	1.33E+00	5.68E-01	2.43E-01	4.45E-02	3.49E-03	2.74E-04	2.14E-05	1.68E-06	1.32E-07	
CD119	1.90E+01	2.97E-01	4.62E-03	7.23E-05	1.13E-06	2.76E-10	1.05E-15	4.03E-21	1.53E-26	5.86E-32	2.25E-37	
IN119M	2.87E-02	3.22E+00	3.48E-01	3.52E-02	3.50E-03	3.44E-05	3.37E-08	3.29E-11	3.22E-14	3.14E-17	3.06E-20	
IN119	1.41E+00	1.69E-01	1.96E-02	1.98E-03	1.98E-04	1.94E-06	1.90E-09	1.86E-12	1.82E-15	1.77E-18	1.73E-21	
SN121	2.39E-03	2.46E-01	2.39E-01	2.33E-01	2.27E-01	2.16E-01	1.99E-01	1.86E-01	1.72E-01	1.59E-01	1.48E-01	
SN123M	1.26E+00	2.37E+00	8.39E-01	2.97E-01	1.05E-01	1.31E-02	5.79E-04	2.57E-05	1.13E-06	5.00E-08	2.22E-09	
SN123	1.19E-05	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	
SN125	2.85E-02	2.83E-02	2.82E-02	2.82E-02	2.81E-02	2.79E-02	2.77E-02	2.74E-02	2.71E-02	2.68E-02	2.67E-02	

MICROCURI/SQ METER
 BANE BERRY CATEGORY C1
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

PAGE 4

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
SB125	1	71E-04	1	72E-04	1	72E-04	1	73E-04	1	73E-04	1	75E-04	1	78E-04	1	80E-04	1	83E-04	1	84E-04	1	87E-04
SB126	5	52E-03	5	49E-03	5	49E-03	5	48E-03	5	46E-03	5	43E-03	5	40E-03	5	37E-03	5	33E-03	5	28E-03	5	25E-03
SN127	5	73E+00	4	12E+00	2	95E+00	2	13E+00	1	53E+00	7	91E-01	2	94E-01	1	09E-01	4	06E-02	1	51E-02	5	59E-03
SB127	6	69E-02	2	31E-01	2	56E-01	2	72E-01	2	83E-01	2	95E-01	3	00E-01	2	97E-01	2	92E-01	2	86E-01	2	82E-01
TE127	3	78E-02	4	70E-02	5	71E-02	6	78E-02	7	84E-02	9	83E-02	1	26E-01	1	47E-01	1	64E-01	1	76E-01	1	85E-01
SN128	4	40E+01	2	17E+01	1	07E+01	5	31E+00	2	62E+00	6	40E-01	7	73E-02	9	33E-03	1	12E-03	1	36E-04	1	64E-05
SB128M	2	24E-02	2	47E+01	1	28E+01	6	33E+00	3	12E+00	7	64E-01	9	21E-02	1	11E-02	1	34E-03	1	62E-04	1	97E-05
SB128	1	85E+00	1	78E+00	1	68E+00	1	57E+00	1	47E+00	1	26E+00	1	01E+00	7	97E-01	6	33E-01	5	02E-01	3	98E-01
SN129M	2	46E+01	1	23E+01	6	16E+00	3	08E+00	1	54E+00	3	85E-01	4	82E-02	6	03E-03	7	53E-04	9	41E-05	1	18E-05
SN129	1	65E+02	1	61E+00	1	59E-02	1	57E-04	1	54E-06	1	50E-10	1	43E-16	1	36E-22	1	30E-28	1	24E-34	1	19E-40
SB129	9	26E+00	1	55E+01	1	46E+01	1	30E+01	1	15E+01	8	51E+00	5	30E+00	3	28E+00	2	02E+00	1	25E+00	7	68E-01
TE129M	1	74E-07	1	94E-03	3	99E-03	5	87E-03	7	53E-03	1	02E-02	1	29E-02	1	46E-02	1	56E-02	1	62E-02	1	66E-02
TE129	6	67E+00	9	16E+00	1	07E+01	1	11E+01	1	07E+01	8	88E+00	5	92E+00	3	73E+00	2	31E+00	1	44E+00	8	92E-01
SB130M	9	60E-01	1	81E+00	4	76E-03	1	25E-05	3	29E-08	2	27E-13	4	14E-21	7	52E-29	1	36E-36	2	48E-44	4	52E-52
SB130	1	65E+02	4	97E+01	1	42E+01	4	01E+00	1	13E+00	9	13E-02	2	09E-03	4	74E-05	1	08E-06	2	46E-08	5	64E-10
I130	4	58E-02	4	34E-02	4	11E-02	3	88E-02	3	67E-02	3	28E-02	2	77E-02	2	35E-02	1	97E-02	1	68E-02	1	42E-02
SB131	3	90E+02	1	02E+02	1	67E+01	2	75E+00	4	49E-01	1	21E-02	5	33E-05	2	35E-07	1	04E-09	4	56E-12	2	28E-14
TE131M	1	87E-04	9	84E-01	1	12E+00	1	12E+00	1	10E+00	1	05E+00	9	82E-01	9	16E-01	8	56E-01	7	99E-01	7	45E-01
TE131	1	73E+02	1	87E+02	6	13E+01	1	59E+01	3	87E+00	3	64E-01	1	80E-01	1	67E-01	1	56E-01	1	46E-01	1	36E-01
I131	2	51E-02	8	72E-01	1	28E+00	1	41E+00	1	43E+00	1	44E+00	1	44E+00	1	43E+00	1	43E+00	1	42E+00	1	42E+00
TE132	1	43E+00	3	48E+00	3	43E+00	3	42E+00	3	38E+00	3	32E+00	3	23E+00	3	15E+00	3	06E+00	2	97E+00	2	90E+00
I132	3	51E+00	3	49E+00	3	49E+00	3	48E+00	3	45E+00	3	40E+00	3	33E+00	3	24E+00	3	15E+00	3	08E+00	3	00E+00
TE133M	1	55E-01	5	35E+01	2	33E+01	1	01E+01	4	41E+00	8	38E-01	6	89E-02	5	68E-03	4	68E-04	3	86E-05	3	19E-06
TE133	8	67E+02	4	92E+01	5	46E+00	1	31E+00	7	64E-01	1	45E-01	1	20E-02	9	84E-04	8	16E-05	6	71E-06	5	53E-07
I133	1	34E+00	1	45E+01	1	56E+01	1	56E+01	1	53E+01	1	45E+01	1	32E+01	1	20E+01	1	08E+01	9	84E+00	8	89E+00
XE133M	1	72E-07	9	78E-03	2	36E-02	3	77E-02	5	13E-02	7	72E-02	1	12E-01	1	42E-01	1	67E-01	1	89E-01	2	07E-01
XE133	3	00E-06	1	70E-01	4	15E-01	6	61E-01	9	08E-01	1	38E+00	2	02E+00	2	58E+00	3	08E+00	3	53E+00	3	92E+00
TE134	2	87E+02	1	33E+02	4	96E+01	1	84E+01	6	84E+00	9	48E-01	4	85E-02	2	48E-03	1	27E-04	6	53E-06	3	35E-07
I134	1	32E+02	1	76E+02	1	23E+02	7	23E+01	3	88E+01	9	85E+00	1	08E+00	1	11E-01	1	08E-02	1	04E-03	9	85E-05
I135	2	02E+01	3	55E+01	3	20E+01	2	88E+01	2	60E+01	2	11E+01	1	56E+01	1	13E+01	8	34E+00	6	14E+00	4	48E+00
XE135M	6	67E-03	3	07E+01	2	99E+01	2	71E+01	2	43E+01	1	98E+01	1	45E+01	1	06E+01	7	80E+00	5	72E+00	4	19E+00
XE135	6	96E+00	1	38E+01	2	01E+01	2	53E+01	2	95E+01	3	54E+01	3	94E+01	3	94E+01	3	75E+01	3	42E+01	3	05E+01
CS136	2	28E-04	2	27E-04	2	27E-04	2	27E-04	2	25E-04	2	24E-04	2	23E-04	2	22E-04	2	20E-04	2	19E-04	2	17E-04
CS137	1	81E-06	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05
BA137M	3	80E-09	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05
XE138	8	62E+00	7	42E-01	6	44E-02	5	58E-03	4	84E-04	3	63E-06	2	26E-09	1	53E-12	9	96E-16	6	48E-19	4	20E-22
CS138	1	28E+00	2	16E+00	7	48E-01	2	20E-01	6	16E-02	4	69E-03	9	76E-05	2	03E-06	4	20E-08	8	75E-10	1	82E-11
CS139	1	70E+01	5	43E-01	6	83E-03	8	56E-05	1	08E-06	1	69E-10	3	36E-16	6	65E-22	1	31E-27	2	61E-33	5	15E-39
BA139	3	16E-01	3	52E+00	2	16E+00	1	31E+00	7	94E-01	2	92E-01	6	47E-02	1	44E-02	3	21E-03	7	09E-04	1	57E-04
BA140	1	99E-03	1	25E-02	1	25E-02	1	24E-02	1	24E-02	1	23E-02	1	23E-02	1	22E-02	1	21E-02	1	20E-02	1	19E-02

MICROCURI/SQ METER
 BANE BERRY CATEGORY C1
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
LA140	4.75E-09	2.13E-04	4.22E-04	6.27E-04	8.28E-04	1.22E-03	1.78E-03	2.31E-03	2.80E-03	3.27E-03	3.71E-03	
BA141	3.81E+00	1.15E+00	1.14E-01	1.13E-02	1.12E-03	1.11E-05	1.09E-08	1.06E-11	1.03E-14	1.01E-17	9.86E-21	
LA141	3.52E-02	7.44E-01	6.94E-01	5.88E-01	4.94E-01	3.46E-01	2.02E-01	1.19E-01	6.98E-02	4.10E-02	2.40E-02	
CE141	4.35E-09	4.83E-04	1.13E-03	1.70E-03	2.17E-03	2.92E-03	3.63E-03	4.04E-03	4.27E-03	4.40E-03	4.48E-03	
BA142	7.65E-01	3.04E-02	6.93E-04	1.58E-05	3.61E-07	1.87E-10	2.23E-15	2.63E-20	3.13E-25	3.72E-30	4.41E-35	
LA142	1.76E-02	1.22E-01	8.05E-02	5.11E-02	3.25E-02	1.32E-02	3.40E-03	8.75E-04	2.25E-04	5.81E-05	1.49E-05	
LA143	2.35E-01	4.59E-02	2.35E-03	1.21E-04	6.21E-06	1.62E-08	2.19E-12	2.96E-16	3.98E-20	5.37E-24	7.25E-28	
CE143	9.39E-05	5.99E-03	6.21E-03	6.05E-03	5.94E-03	5.72E-03	5.36E-03	5.03E-03	4.72E-03	4.42E-03	4.16E-03	
PR143	2.75E-11	9.19E-06	2.22E-05	3.50E-05	4.76E-05	7.20E-05	1.06E-04	1.39E-04	1.69E-04	1.96E-04	2.22E-04	
CE144	3.34E-06	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	
PR144	9.17E-10	2.18E-05	2.38E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	2.39E-05	
PR145	1.72E-04	2.53E-02	2.24E-02	1.99E-02	1.78E-02	1.41E-02	9.95E-03	7.03E-03	4.98E-03	3.51E-03	2.48E-03	
CE146	5.72E-01	2.93E-02	1.50E-03	7.68E-05	3.95E-06	1.04E-08	1.40E-12	1.89E-16	2.55E-20	3.43E-24	4.63E-28	
PR146	1.18E-02	1.03E-01	2.33E-02	4.38E-03	7.88E-04	2.47E-05	1.37E-07	7.55E-10	4.18E-12	2.32E-14	1.26E-16	
PR147	6.72E-02	1.95E-02	6.08E-04	1.90E-05	5.94E-07	5.80E-10	1.77E-14	5.40E-19	1.65E-23	5.03E-28	1.53E-32	
ND147	2.40E-08	4.51E-04	4.65E-04	4.63E-04	4.63E-04	4.60E-04	4.57E-04	4.53E-04	4.50E-04	4.45E-04	4.42E-04	
ND149	4.87E-02	3.33E-02	2.25E-02	1.54E-02	1.04E-02	4.84E-03	1.52E-03	4.81E-04	1.51E-04	4.75E-05	1.50E-05	
PM149	6.79E-06	5.31E-04	8.82E-04	1.12E-03	1.26E-03	1.42E-03	1.48E-03	1.45E-03	1.41E-03	1.36E-03	1.31E-03	
PM150	6.47E-04	5.00E-04	3.87E-04	3.00E-04	2.31E-04	1.39E-04	6.42E-05	2.96E-05	1.38E-05	6.37E-06	2.94E-06	
ND151	3.00E-01	9.39E-03	2.94E-04	9.18E-06	2.88E-07	2.80E-10	8.56E-15	2.62E-19	7.97E-24	2.43E-28	7.44E-33	
PM151	1.91E-04	2.23E-03	2.25E-03	2.19E-03	2.13E-03	2.03E-03	1.88E-03	1.75E-03	1.62E-03	1.50E-03	1.40E-03	
PM152	5.25E-01	5.12E-04	5.00E-07	4.87E-10	4.77E-13	4.56E-19	4.24E-28	3.95E-37	3.68E-46	3.45E-55	3.20E-64	
SM153	7.21E-04	7.08E-04	7.00E-04	6.88E-04	6.80E-04	6.60E-04	6.31E-04	6.03E-04	5.76E-04	5.52E-04	5.28E-04	
SM155	6.70E-02	1.10E-02	1.80E-03	2.95E-04	4.85E-05	1.30E-06	5.76E-09	2.53E-11	1.12E-13	4.98E-16	1.22E-18	
EU155	4.93E-08	1.41E-06	1.63E-06	1.66E-06	1.67E-06	1.67E-06	1.67E-06	1.67E-06	1.67E-06	1.67E-06	1.67E-06	
SM156	1.26E-03	1.17E-03	1.09E-03	1.01E-03	9.35E-04	8.08E-04	6.49E-04	5.19E-04	4.16E-04	3.34E-04	2.68E-04	
EU156	3.69E-06	6.02E-06	8.15E-06	1.02E-05	1.20E-05	1.53E-05	1.95E-05	2.25E-05	2.51E-05	2.73E-05	2.87E-05	
EU157	2.41E-04	7.99E-04	7.62E-04	7.28E-04	6.94E-04	6.35E-04	5.53E-04	4.83E-04	4.21E-04	3.67E-04	3.19E-04	
EU158	1.30E-02	5.28E-03	2.13E-03	8.64E-04	3.49E-04	5.72E-05	3.83E-06	2.53E-07	1.68E-08	1.12E-09	7.42E-11	
EU159	1.43E-02	1.42E-03	1.41E-04	1.39E-05	1.38E-06	1.36E-08	1.33E-11	1.30E-14	1.27E-17	1.24E-20	1.21E-23	
GD159	6.12E-05	2.68E-04	2.79E-04	2.70E-04	2.60E-04	2.41E-04	2.15E-04	1.91E-04	1.70E-04	1.52E-04	1.35E-04	
TB161	5.42E-07	3.90E-06	3.88E-06	3.86E-06	3.86E-06	3.82E-06	3.78E-06	3.72E-06	3.68E-06	3.64E-06	3.58E-06	

TOTAL 1.23E+04 2.09E+03 8.17E+02 5.14E+02 3.90E+02 2.78E+02 2.04E+02 1.61E+02 1.33E+02 1.12E+02 9.58E+01

MICROCURI/SQ METER

BANE BERRY CATEGORY C1

MR/HR AT H+12 HOURS = 1 000

RELAXATION LENGTH = 0 16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
GE 77	3	79E-03	2	38E-03	5	45E-04	6	53E-06	4	19E-09	1	70E-15	6	82E-22	1	12E-34	0		0		0	
AS 77	3	91E-05	5	77E-03	4	17E-03	1	21E-03	1	42E-04	1	92E-06	2	61E-08	4	81E-12	2	23E-21	4	78E-40	1	03E-58
SE 77M	1	54E-09	1	74E-05	1	25E-05	3	63E-06	4	23E-07	5	76E-09	7	83E-11	1	44E-14	6	70E-24	1	43E-42	3	09E-61
AS 78	1	76E-02	1	57E-04	4	60E-09	3	89E-23	0		0		0		0		0		0		0	
BR 82	3	64E-04	2	27E-04	1	41E-04	3	45E-05	3	26E-06	2	93E-08	2	63E-10	2	13E-14	1	24E-24	4	26E-45	1	45E-65
BR 83	2	47E-01	6	52E-03	6	56E-06	6	66E-15	6	80E-30	0		0		0		0		0		0	
KR 83M	1	28E-05	2	85E-02	3	24E-05	2	91E-14	2	99E-29	0		0		0		0		0		0	
KR 85M	4	53E-03	2	58E-01	5	88E-03	6	98E-08	4	32E-16	1	64E-32	6	21E-49	0		0		0		0	
KR 85	4	68E-06	1	23E-04	1	25E-04	1	25E-04	1	25E-04	1	25E-04	1	25E-04	1	25E-04	1	23E-04	1	21E-04	1	19E-04
KR 87	7	90E+01	1	56E-04	3	09E-10	2	40E-27	0		0		0		0		0		0		0	
KR 88	3	49E+01	9	18E-02	2	41E-04	4	37E-12	5	51E-25	0		0		0		0		0		0	
RB 88	8	88E+00	1	02E-01	2	71E-04	4	89E-12	6	14E-25	0		0		0		0		0		0	
SR 89	2	02E-08	6	07E-04	5	98E-04	5	75E-04	5	39E-04	4	71E-04	4	11E-04	3	17E-04	1	62E-04	4	27E-05	1	12E-05
SR 90	4	81E-08	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	94E-06	4	89E-06	4	89E-06	4	85E-06
Y 90	7	12E-14	1	13E-06	2	00E-06	3	59E-06	4	58E-06	4	89E-06	4	94E-06	4	94E-06	4	89E-06	4	89E-06	4	85E-06
SR 91	4	60E-01	1	65E+00	2	95E-01	1	69E-03	3	09E-07	1	05E-14	3	56E-22	4	05E-37	0		0		0	
Y 91M	3	09E-05	1	07E+00	1	90E-01	1	09E-03	2	01E-07	6	77E-15	2	29E-22	2	61E-37	0		0		0	
Y 91	1	26E-08	5	06E-02	5	99E-02	5	99E-02	5	63E-02	5	00E-02	4	45E-02	3	53E-02	1	95E-02	6	01E-03	1	85E-03
SR 92	7	86E-03	9	80E-05	2	12E-07	2	13E-15	9	94E-29	0		0		0		0		0		0	
Y 92	3	62E-04	1	03E-03	1	14E-05	8	77E-12	5	12E-22	1	75E-42	6	00E-63	0		0		0		0	
Y 93	5	12E-04	3	46E-03	6	76E-04	5	07E-06	1	47E-09	1	21E-16	9	97E-24	6	81E-38	0		0		0	
ZR 95	1	10E-06	1	37E-04	1	36E-04	1	31E-04	1	25E-04	1	12E-04	1	01E-04	8	16E-05	4	78E-05	1	64E-05	5	65E-06
NB 95M	2	35E-14	4	66E-07	8	50E-07	1	62E-06	2	19E-06	2	31E-06	2	13E-06	1	73E-06	1	01E-06	3	49E-07	1	20E-07
NB 95	1	23E-13	2	66E-06	5	27E-06	1	26E-05	2	35E-05	4	04E-05	5	22E-05	6	47E-05	6	23E-05	2	99E-05	1	15E-05
ZR 97	3	16E-03	5	38E-03	2	03E-03	1	07E-04	8	05E-07	4	53E-11	2	54E-15	8	05E-24	4	54E-45	0		0	
NB 97M	1	63E-05	5	16E-03	1	94E-03	1	03E-04	7	72E-07	4	35E-11	2	45E-15	7	72E-24	4	36E-45	0		0	
NB 97	1	59E-03	5	39E-03	2	03E-03	1	08E-04	8	10E-07	4	88E-11	2	74E-15	8	70E-24	4	89E-45	0		0	
MO 99	1	14E-02	3	72E+00	2	90E+00	1	38E+00	3	98E-01	3	33E-02	2	78E-03	1	94E-05	7	87E-11	1	30E-21	2	14E-32
TC 99M	1	06E-07	3	27E+00	2	75E+00	1	32E+00	3	80E-01	3	18E-02	2	66E-03	1	85E-05	7	50E-11	1	24E-21	2	05E-32
RU103	2	24E-04	5	11E-01	5	01E-01	4	74E-01	4	36E-01	3	65E-01	3	06E-01	2	16E-01	9	01E-02	1	56E-02	2	72E-03
RH103M	1	49E-08	5	11E-01	5	01E-01	4	76E-01	4	36E-01	3	65E-01	3	06E-01	2	16E-01	9	01E-02	1	56E-02	2	72E-03
RU105	2	37E+00	2	27E+00	5	34E-02	7	00E-07	5	13E-15	2	73E-31	1	46E-47	0		0		0		0	
RH105M	1	56E-02	2	27E+00	5	34E-02	7	02E-07	5	15E-15	2	75E-31	1	47E-47	0		0		0		0	
RH105	2	56E-08	8	17E+00	5	34E+00	1	33E+00	1	31E-01	1	28E-03	1	24E-05	1	17E-09	1	01E-19	7	63E-40	5	74E-60
RU106	2	40E-03	4	55E-02	4	52E-02	4	50E-02	4	46E-02	4	39E-02	4	28E-02	4	12E-02	3	76E-02	3	11E-02	2	58E-02
RH106	2	60E-05	4	55E-02	4	52E-02	4	50E-02	4	46E-02	4	39E-02	4	28E-02	4	12E-02	3	76E-02	3	11E-02	2	58E-02
PD109	1	95E-02	4	94E-01	1	45E-01	3	57E-03	7	53E-06	3	35E-11	1	49E-16	2	96E-27	0		0		0	
AG109M	1	12E-04	4	94E-01	1	45E-01	3	57E-03	7	56E-06	3	36E-11	1	49E-16	2	96E-27	0		0		0	
PD111M	5	34E+00	2	59E-01	1	26E-02	1	44E-06	3	90E-13	2	84E-26	2	09E-39	0		0		0		0	
PD111	1	90E+00	2	09E-01	1	01E-02	1	16E-06	3	15E-13	2	30E-26	1	68E-39	0		0		0		0	

MICROCURI/SQ METER

BANEBERRY CATEGORY C1

MR/HR AT H+12 HOURS = 1 000

RELAXATION LENGTH = 0 16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

PAGE 7

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
AG111M	1	51E-02	2	73E-01	1	33E-02	1	53E-06	4	12E-13	3	02E-26	2	21E-39	0		0		0		0	
AG111	5	36E-09	1	48E-01	1	42E-01	1	08E-01	6	83E-02	2	70E-02	1	07E-02	1	69E-03	1	67E-05	1	61E-09	1	56E-13
PD112	1	39E+00	6	32E-01	2	86E-01	2	66E-02	5	07E-04	1	83E-07	6	68E-11	8	76E-18	5	53E-35	0		0	
AG112	4	18E-05	7	34E-01	3	39E-01	3	13E-02	5	99E-04	2	17E-07	7	87E-11	1	04E-17	6	49E-35	0		0	
AG113	8	00E-03	8	46E-02	3	67E-03	2	98E-07	4	56E-14	1	06E-27	2	49E-41	0		0		0		0	
CD115M	1	30E-08	3	77E-04	3	70E-04	3	52E-04	3	27E-04	2	76E-04	2	37E-04	1	71E-04	7	63E-05	1	52E-05	3	03E-06
CD115	5	03E-06	7	56E-02	5	55E-02	2	19E-02	4	61E-03	2	06E-04	9	17E-06	1	83E-08	3	23E-15	1	01E-28	3	18E-42
IN115M	6	27E-11	7	99E-02	6	05E-02	2	39E-02	5	03E-03	2	24E-04	1	00E-05	1	99E-08	3	54E-15	1	11E-28	3	46E-42
CD117	1	12E-01	2	46E-03	2	38E-06	2	22E-15	1	98E-30	0		0		0		0		0		0	
IN117M	5	41E-06	1	02E-02	1	18E-05	1	13E-14	1	01E-29	0		0		0		0		0		0	
IN117	2	18E-10	6	71E-03	7	94E-06	7	70E-15	6	82E-30	0		0		0		0		0		0	
SN121	2	39E-03	1	36E-01	7	35E-02	1	16E-02	5	32E-04	1	12E-06	2	37E-09	1	05E-14	4	40E-28	0		0	
SN123	1	19E-05	1	24E-03	1	23E-03	1	21E-03	1	18E-03	1	11E-03	1	06E-03	9	44E-04	7	15E-04	4	10E-04	2	37E-04
SN125	2	85E-02	2	64E-02	2	46E-02	1	97E-02	1	36E-02	6	51E-03	3	11E-03	7	11E-04	1	78E-05	1	12E-08	7	02E-12
SB125	1	71E-04	1	90E-04	2	06E-04	2	53E-04	3	10E-04	3	76E-04	4	05E-04	4	21E-04	4	13E-04	3	85E-04	3	61E-04
SB126	5	52E-03	5	22E-03	4	94E-03	4	18E-03	3	16E-03	1	82E-03	1	05E-03	3	45E-04	2	15E-05	1	05E-07	2	10E-08
SN127	5	73E+00	2	08E-03	7	55E-07	3	60E-17	2	27E-34	0		0		0		0		0		0	
SB127	6	69E-02	2	74E-01	2	30E-01	1	34E-01	5	50E-02	9	17E-03	1	53E-03	4	29E-05	5	59E-09	9	55E-17	1	62E-24
TE127M	5	40E-10	4	19E-04	7	67E-04	1	49E-03	2	05E-03	2	27E-03	2	19E-03	1	94E-03	1	41E-03	7	47E-04	3	95E-04
TE127	3	78E-02	1	96E-01	1	93E-01	1	18E-01	4	98E-02	1	02E-02	3	49E-03	1	96E-03	1	40E-03	7	38E-04	3	90E-04
SB128	1	85E+00	3	16E-01	4	99E-02	1	95E-04	1	90E-08	1	78E-16	1	67E-24	1	47E-40	0		0		0	
SB129	9	26E+00	4	74E-01	9	69E-03	9	01E-08	3	59E-16	5	66E-33	8	92E-50	0		0		0		0	
TE129M	1	74E-07	1	84E-02	1	84E-02	1	74E-02	1	57E-02	1	28E-02	1	04E-02	6	93E-03	2	49E-03	3	26E-04	4	24E-05
TE129	6	67E+00	5	54E-01	2	31E-02	1	11E-02	1	00E-02	8	20E-03	6	68E-03	4	45E-03	1	60E-03	2	09E-04	2	72E-05
I130	4	58E-02	1	20E-02	3	13E-03	5	61E-05	6	85E-08	1	02E-13	1	52E-19	3	39E-31	0		0		0	
TE131M	1	87E-04	6	58E-01	3	78E-01	7	15E-02	4	47E-03	1	74E-05	6	83E-08	1	04E-12	9	47E-25	0		0	
TE131	1	73E-02	1	20E-01	6	88E-02	1	31E-02	8	17E-04	3	19E-06	1	24E-08	1	91E-13	1	73E-25	0		0	
I131	2	51E-02	1	36E+00	1	28E+00	1	03E+00	6	79E-01	2	87E-01	1	21E-01	2	18E-02	2	92E-04	5	33E-08	9	72E-12
XE131M	6	83E-11	6	29E-04	1	19E-03	2	50E-03	3	57E-03	3	53E-03	2	62E-03	1	08E-03	7	20E-05	2	16E-07	6	08E-10
TE132	1	43E+00	2	84E+00	2	29E+00	1	20E+00	4	15E-01	4	92E-02	5	83E-03	8	19E-05	1	92E-09	1	05E-18	5	72E-28
I132	3	51E+00	2	91E+00	2	35E+00	1	24E+00	4	28E-01	5	07E-02	6	01E-03	8	45E-05	1	98E-09	1	07E-18	5	89E-28
I133	1	34E+00	7	49E+00	3	38E+00	3	14E-01	5	98E-03	2	16E-06	7	86E-10	1	04E-16	6	50E-34	0		0	
XE133M	1	72E-07	2	12E-01	2	51E-01	1	47E-01	3	46E-02	1	62E-03	7	56E-05	1	64E-07	3	59E-14	1	72E-27	8	22E-41
XE133	3	00E-06	4	08E+00	5	46E+00	4	89E+00	2	67E+00	7	19E-01	1	94E-01	1	40E-02	1	94E-05	3	77E-11	7	31E-17
I135	2	02E+01	3	28E+00	2	75E-01	1	59E-04	6	48E-10	1	07E-20	1	76E-31	4	78E-53	0		0		0	
XE135M	6	67E-03	3	07E+00	2	57E-01	1	49E-04	6	09E-10	9	99E-21	1	65E-31	4	48E-53	0		0		0	
XE135	6	96E+00	2	66E+01	6	49E+00	3	72E-02	4	56E-06	6	38E-14	8	97E-22	1	77E-37	0		0		0	
CS136	2	28E-04	2	16E-04	2	05E-04	1	72E-04	1	34E-04	7	84E-05	4	62E-05	1	58E-05	1	10E-06	5	30E-09	2	57E-11
CS137	1	81E-06	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	95E-05	1	94E-05	1	93E-05	1	91E-05
BA137M	3	80E-09	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	82E-05	1	81E-05	1	79E-05	1	78E-05

MICROCURI/SG METER

BANE BERRY CATEGORY C1

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SGCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BA139	3.16E-01	3.36E-05	1.98E-10	4.09E-26	0.	0.	0.	0.	0.	0.	0.	0.
BA140	1.99E-03	1.18E-02	1.12E-02	9.53E-03	7.28E-03	4.22E-03	2.47E-03	8.34E-04	5.56E-05	2.49E-07	1.10E-09	
LA140	4.75E-09	4.12E-03	6.63E-03	9.15E-03	8.15E-03	4.87E-03	2.82E-03	9.62E-04	6.39E-05	2.84E-07	1.27E-09	
LA141	3.52E-02	1.39E-02	1.96E-04	5.42E-10	2.96E-19	8.84E-38	2.63E-56	0.	0.	0.	0.	
CE141	4.35E-09	4.83E-03	4.79E-03	4.50E-03	4.04E-03	3.27E-03	2.63E-03	1.71E-03	5.88E-04	6.92E-05	8.15E-06	
LA142	1.76E-02	3.85E-06	7.45E-11	5.48E-25	0.	0.	0.	0.	0.	0.	0.	
CE143	9.39E-05	3.87E-03	2.34E-03	5.15E-04	4.14E-05	2.67E-07	1.73E-09	7.25E-14	8.19E-25	0.	0.	
PR143	2.75E-11	2.48E-04	3.85E-04	4.97E-04	4.26E-04	2.59E-04	1.57E-04	5.66E-05	4.53E-06	2.88E-08	1.83E-10	
CE144	3.34E-06	2.39E-05	2.38E-05	2.37E-05	2.34E-05	2.28E-05	2.23E-05	2.12E-05	1.87E-05	1.47E-05	1.15E-05	
PR144	9.17E-10	2.39E-05	2.38E-05	2.37E-05	2.34E-05	2.28E-05	2.23E-05	2.12E-05	1.87E-05	1.47E-05	1.15E-05	
PR145	1.72E-04	1.75E-03	1.09E-04	2.58E-08	2.34E-14	1.95E-26	1.61E-38	0.	0.	0.	0.	
ND147	2.40E-08	4.04E-04	3.79E-04	3.14E-04	2.30E-04	1.24E-04	6.59E-05	1.90E-05	8.30E-07	1.62E-09	3.14E-12	
PM147	6.67E-17	3.02E-07	5.84E-07	1.33E-06	2.32E-06	3.52E-06	4.16E-06	4.63E-06	4.67E-06	4.37E-06	4.06E-06	
ND149	4.87E-02	4.72E-06	4.57E-10	4.17E-22	3.56E-42	0.	0.	0.	0.	0.	0.	
PM149	6.79E-06	1.25E-03	9.17E-04	3.58E-04	7.49E-05	3.26E-06	1.42E-07	2.70E-10	4.25E-17	1.05E-30	2.62E-44	
PM150	6.47E-04	1.37E-06	2.87E-09	2.70E-17	1.13E-30	0.	0.	0.	0.	0.	0.	
PM151	1.91E-04	1.30E-03	7.18E-04	1.21E-04	6.18E-06	1.62E-08	4.28E-11	2.96E-16	3.71E-29	0.	0.	
SM153	7.21E-04	5.05E-04	3.55E-04	1.23E-04	2.09E-05	6.07E-07	1.76E-08	1.48E-11	3.04E-19	1.30E-34	5.52E-50	
SM156	1.26E-03	2.15E-04	3.67E-05	1.80E-07	2.61E-11	5.33E-19	1.10E-26	4.70E-42	0.	0.	0.	
EU155	4.93E-08	1.67E-06	1.67E-06	1.67E-06	1.66E-06	1.66E-06	1.65E-06	1.64E-06	1.61E-06	1.54E-06	1.48E-06	
EU156	3.69E-06	2.98E-05	3.31E-05	2.98E-05	2.37E-05	1.49E-05	9.35E-06	3.71E-06	3.69E-07	3.62E-09	3.57E-11	
EU157	2.41E-04	2.78E-04	9.37E-05	3.50E-06	1.48E-08	2.60E-13	4.60E-18	1.43E-27	0.	0.	0.	
GD159	6.12E-05	1.21E-04	4.78E-05	2.99E-06	2.94E-08	2.85E-12	2.76E-16	2.59E-24	2.21E-44	0.	0.	
TB161	5.42E-07	3.54E-06	3.21E-06	2.38E-06	1.43E-06	5.25E-07	1.92E-07	2.57E-08	1.70E-10	7.36E-15	3.21E-19	
TOTAL		8.23E+01	3.71E+01	1.46E+01	6.42E+00	2.14E+00	1.13E+00	6.11E-01	2.85E-01	1.03E-01	6.05E-02	

B-35

MICROCURI/SQ METER

BANEERRY CATEGORY C1

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED LESS THAN 2 HOURS

PAGE 9

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
KR 85	4.68E-06	1.16E-04	1.13E-04	1.09E-04	9.94E-05	8.98E-05	7.88E-05	6.51E-05	3.44E-05	1.31E-05	5.02E-06	
SR 89	2.02E-08	4.74E-06	4.15E-07	3.64E-08	2.45E-11	1.66E-14	9.78E-19	4.44E-25	3.23E-46	0	0	0
SR 90	4.81E-08	4.81E-06	4.75E-06	4.71E-06	4.54E-06	4.37E-06	4.15E-06	3.86E-06	3.02E-06	2.08E-06	1.44E-06	
Y 90	7.12E-14	4.81E-06	4.75E-06	4.71E-06	4.54E-06	4.37E-06	4.15E-06	3.86E-06	3.02E-06	2.08E-06	1.44E-06	
Y 91	1.26E-08	8.56E-04	9.96E-05	1.16E-05	1.81E-08	2.84E-11	5.21E-15	1.28E-20	2.59E-39	0	0	0
ZR 95	1.10E-06	2.83E-06	4.04E-07	5.75E-08	1.68E-10	4.88E-13	2.02E-16	1.70E-21	2.09E-38	0	0	0
NB 95M	2.35E-14	5.98E-08	8.55E-09	1.22E-09	3.55E-12	1.03E-14	4.28E-18	3.61E-23	4.43E-40	0	0	0
NB 95	1.23E-13	6.08E-06	8.74E-07	1.24E-07	3.61E-10	1.05E-12	4.38E-16	3.70E-21	4.52E-38	0	0	0
RU103	2.24E-04	8.68E-04	3.56E-05	1.46E-06	9.98E-11	6.85E-15	1.91E-20	9.03E-29	0	0	0	0
RH103M	1.49E-08	8.70E-04	3.56E-05	1.46E-06	9.98E-11	6.85E-15	1.91E-20	9.03E-29	0	0	0	0
RU106	2.40E-03	2.28E-02	1.61E-02	1.14E-02	4.08E-03	1.44E-03	3.63E-04	4.59E-05	4.64E-08	1.49E-12	4.79E-17	
RH106	2.60E-05	2.28E-02	1.61E-02	1.14E-02	4.08E-03	1.44E-03	3.63E-04	4.59E-05	4.64E-08	1.49E-12	4.79E-17	
SN123	1.19E-05	1.65E-04	5.97E-05	2.17E-05	1.04E-06	4.99E-08	8.71E-10	2.00E-12	3.22E-21	2.07E-34	1.33E-47	
SB125	1.71E-04	3.44E-04	3.01E-04	2.66E-04	1.82E-04	1.23E-04	7.36E-05	3.41E-05	2.61E-06	5.57E-08	1.19E-09	
TE125M	4.60E-12	1.40E-04	1.25E-04	1.10E-04	7.50E-05	5.09E-05	3.06E-05	1.40E-05	1.08E-06	2.31E-08	4.91E-10	
TE127M	5.40E-10	2.59E-04	8.10E-05	2.54E-05	7.79E-07	2.40E-08	2.31E-10	2.17E-13	1.78E-23	1.33E-38	9.92E-54	
TE127	3.78E-02	2.56E-04	8.01E-05	2.51E-05	7.70E-07	2.37E-08	2.28E-10	2.14E-13	1.76E-23	1.31E-38	9.83E-54	
CS137	1.81E-06	1.90E-05	1.88E-05	1.86E-05	1.79E-05	1.73E-05	1.66E-05	1.55E-05	1.22E-05	8.68E-06	6.14E-06	
BA137M	3.80E-09	1.78E-05	1.76E-05	1.74E-05	1.68E-05	1.62E-05	1.55E-05	1.45E-05	1.15E-05	8.11E-06	5.74E-06	
CE141	4.35E-09	1.87E-06	3.77E-08	7.58E-10	6.17E-15	5.02E-20	8.23E-27	5.46E-37	0	0	0	0
CE144	3.34E-06	9.82E-06	6.32E-06	4.03E-06	1.06E-06	2.79E-07	4.67E-08	3.23E-09	4.35E-13	6.81E-19	1.06E-24	
PR144	9.17E-10	9.82E-06	6.32E-06	4.03E-06	1.06E-06	2.79E-07	4.67E-08	3.23E-09	4.35E-13	6.81E-19	1.06E-24	
PM147	6.67E-17	3.86E-06	3.39E-06	2.96E-06	1.99E-06	1.34E-06	7.89E-07	3.58E-07	2.54E-08	4.81E-10	9.08E-12	
EU155	4.93E-08	1.44E-06	1.34E-06	1.25E-06	1.00E-06	8.06E-07	6.02E-07	3.88E-07	9.07E-08	1.02E-08	1.15E-09	
TOTAL		4.96E-02	3.32E-02	2.35E-02	8.56E-03	3.20E-03	9.50E-04	2.43E-04	6.80E-05	3.42E-05	1.98E-05	

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
UNDERGROUND EVENT CATEGORY D

PAGE 1

MR/HR AT H+12 HOURS = 1.000

RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.61E+02	2.01E+04
1.00E+00	8.13E+01	5.45E+03
2.00E+00	2.76E+01	2.51E+03
3.00E+00	1.13E+01	1.68E+03
4.00E+00	5.78E+00	1.34E+03
6.00E+00	2.69E+00	1.05E+03
9.00E+00	1.51E+00	8.38E+02
1.20E+01	1.00E+00	7.07E+02
1.50E+01	7.19E-01	6.13E+02
1.80E+01	5.50E-01	5.32E+02
2.10E+01	4.41E-01	4.65E+02
1.00E+00 DAYS	3.66E-01	4.02E+02
2.00E+00	1.84E-01	1.54E+02
5.00E+00	9.32E-02	6.36E+01
1.00E+01	4.57E-02	3.31E+01
2.00E+01	1.81E-02	9.91E+00
3.00E+01	1.02E-02	3.72E+00
5.00E+01	4.45E-03	1.21E+00
1.00E+02	1.18E-03	4.76E-01
2.00E+02	3.60E-04	1.70E-01
3.00E+02	2.30E-04	1.02E-01
1.00E+00 YEARS	2.04E-04	8.58E-02
1.50E+00	1.72E-04	6.55E-02
2.00E+00	1.54E-04	5.48E-02
3.50E+00	1.23E-04	3.81E-02
5.00E+00	1.10E-04	3.15E-02
7.00E+00	1.01E-04	2.78E-02
1.00E+01	9.34E-05	2.52E-02
2.00E+01	7.36E-05	1.96E-02
3.50E+01	5.22E-05	1.37E-02
5.00E+01	3.69E-05	9.61E-03

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY D
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

PAGE 2

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
GE 75	2	24E-06	1	09E-02	6	53E-03	3	94E-03	2	37E-03	8	61E-04	1	88E-04	4	12E-05	8	97E-06	1	96E-06	4	27E-07
GE 77	3	92E-03	1	01E-02	9	48E-03	8	93E-03	8	43E-03	7	44E-03	6	19E-03	5	14E-03	4	28E-03	3	56E-03	2	96E-03
AS 77	4	05E-05	6	38E-03	6	51E-03	6	51E-03	6	57E-03	6	63E-03	6	63E-03	6	57E-03	6	45E-03	6	32E-03	6	17E-03
SE 77M	1	60E-09	1	92E-05	1	95E-05	1	96E-05	1	96E-05	1	98E-05	1	99E-05	1	98E-05	1	95E-05	1	90E-05	1	85E-05
GE 78	1	01E+00	6	36E-01	3	95E-01	2	47E-01	1	55E-01	6	00E-02	1	46E-02	3	53E-03	8	62E-04	2	10E-04	5	08E-05
AS 78	1	83E-02	3	04E-01	3	74E-01	3	51E-01	2	93E-01	1	73E-01	6	43E-02	2	14E-02	6	60E-03	1	97E-03	5	72E-04
AS 79	1	89E+01	1	86E-01	1	84E-03	1	81E-05	1	78E-07	1	73E-11	1	64E-17	1	57E-23	1	50E-29	1	43E-35	1	37E-41
SE 79M	2	80E-02	3	29E-01	3	25E-03	3	19E-05	3	14E-07	3	04E-11	2	90E-17	2	76E-23	2	64E-29	2	52E-35	2	40E-41
BR 80	1	06E-01	9	97E-03	9	37E-04	8	81E-05	8	30E-06	7	36E-08	6	16E-11	5	14E-14	4	28E-17	3	57E-20	2	98E-23
SE 81M	7	60E-02	3	54E+00	1	71E+00	8	22E+00	3	96E-01	9	24E-02	1	04E-02	1	16E-03	1	30E-04	1	46E-05	1	63E-06
SE 81	9	28E-01	4	19E+00	2	42E+00	1	21E+00	5	87E-01	1	37E-01	1	54E-02	1	72E-03	1	92E-04	2	16E-05	2	42E-06
BR 82	3	77E-04	3	69E-04	3	62E-04	3	55E-04	3	48E-04	3	35E-04	3	16E-04	2	98E-04	2	81E-04	2	65E-04	2	50E-04
SE 83	1	54E+01	2	93E+00	5	52E-01	1	05E-01	1	99E-02	7	14E-04	4	86E-06	3	30E-08	2	26E-10	1	53E-12	9	73E-15
BR 83	1	28E-01	1	92E+00	1	77E+00	1	39E+00	1	06E+00	5	96E-01	2	53E-01	1	07E-01	4	50E-02	1	90E-02	8	02E-03
KR 83M	6	65E-06	4	34E-01	8	85E-01	1	10E+00	1	13E+00	9	48E-01	5	57E-01	2	87E-01	1	38E-01	6	40E-02	2	87E-02
BR 84	2	48E-02	4	28E+00	1	16E+00	3	14E-01	8	48E-02	6	20E-03	1	23E-04	2	42E-06	4	79E-08	9	48E-10	1	87E-11
KR 85M	4	70E-02	1	01E+02	8	55E+01	7	30E+01	6	23E+01	4	56E+01	2	85E+01	1	77E+01	1	10E+01	6	88E+00	4	30E+00
KR 87	8	19E+02	4	73E+02	2	75E+02	1	58E+02	9	12E+01	3	06E+01	5	95E+00	1	15E+00	2	23E-01	4	32E-02	8	33E-03
KR 88	3	62E+02	2	83E+02	2	20E+02	1	72E+02	1	34E+02	8	17E+01	3	91E+01	1	86E+01	8	81E+00	4	20E+00	2	00E+00
RB 88	9	21E+01	2	87E+02	2	43E+02	1	92E+02	1	50E+02	9	15E+01	4	37E+01	2	08E+01	9	92E+00	4	72E+00	2	24E+00
RB 89	1	72E+02	1	61E+02	1	08E+01	7	27E-01	4	87E-02	2	21E-04	6	68E-08	2	02E-11	6	14E-15	1	86E-18	5	64E-22
SR 89	1	31E-05	4	60E-01	4	92E-01	4	92E-01	4	92E-01	4	92E-01	4	92E-01	4	89E-01	4	89E-01	4	87E-01	4	87E-01
SR 90	3	11E-05	3	20E-03	3	20E-03	3	20E-03	3	20E-03	3	20E-03	3	20E-03	3	20E-03	3	20E-03	3	20E-03	3	20E-03
SR 91	4	76E-01	8	87E+00	8	27E+00	7	70E+00	7	17E+00	6	21E+00	5	00E+00	4	04E+00	3	27E+00	2	63E+00	2	12E+00
Y 91M	3	21E-05	3	05E+00	4	17E+00	4	47E+00	4	41E+00	3	95E+00	3	24E+00	2	61E+00	2	10E+00	1	69E+00	1	36E+00
Y 91	1	31E-08	2	72E-03	6	27E-03	9	97E-03	1	36E-02	2	05E-02	2	91E-02	3	60E-02	4	17E-02	4	61E-02	4	98E-02
SR 92	2	04E-04	9	10E-04	7	04E-04	5	45E-04	4	22E-04	2	53E-04	1	17E-04	5	45E-05	2	53E-05	1	17E-05	5	45E-06
Y 92	9	37E-06	1	91E-04	3	02E-04	3	56E-04	3	78E-04	3	62E-04	2	77E-04	1	88E-04	1	21E-04	7	46E-05	4	50E-05
SR 93	1	09E-02	1	87E-04	1	04E-06	5	71E-09	3	14E-11	9	63E-16	1	63E-22	2	74E-29	4	64E-36	7	81E-43	1	31E-49
Y 93	1	33E-05	4	30E-04	4	05E-04	3	77E-04	3	51E-04	3	08E-04	2	51E-04	2	05E-04	1	66E-04	1	37E-04	1	11E-04
Y 94	1	79E-03	2	45E-03	3	15E-04	4	06E-05	5	23E-06	8	71E-08	1	87E-10	3	99E-13	8	57E-16	1	87E-18	1	04E-19
Y 95	7	59E-03	7	15E-04	1	58E-05	3	47E-07	7	66E-09	3	72E-12	3	97E-17	4	25E-22	4	54E-27	4	85E-32	5	20E-37
ZR 95	2	85E-08	3	72E-06	3	81E-06	3	81E-06	3	81E-06	3	81E-06	3	81E-06	3	78E-06	3	78E-06	3	78E-06	3	78E-06
NB 95	3	18E-15	2	30E-09	5	36E-09	8	45E-09	1	15E-08	1	76E-08	2	68E-08	3	59E-08	4	51E-08	5	42E-08	6	33E-08
ZR 97	8	19E-05	3	58E-04	3	41E-04	3	28E-04	3	14E-04	2	90E-04	2	56E-04	2	27E-04	2	02E-04	1	78E-04	1	58E-04
NB 97M	4	21E-07	3	41E-04	3	28E-04	3	16E-04	3	03E-04	2	79E-04	2	46E-04	2	18E-04	1	93E-04	1	71E-04	1	51E-04
NB 97	4	11E-05	1	79E-04	2	52E-04	2	88E-04	3	02E-04	3	00E-04	2	73E-04	2	44E-04	2	16E-04	1	90E-04	1	69E-04
NB 98	5	63E-04	2	49E-04	1	10E-04	4	86E-05	2	16E-05	4	21E-06	3	66E-07	3	16E-08	2	75E-09	2	38E-10	2	05E-11
MO 99	1	19E-02	4	89E+00	4	85E+00	4	79E+00	4	75E+00	4	65E+00	4	51E+00	4	37E+00	4	24E+00	4	1E+00	3	99E+00
TC 99M	1	10E-07	4	66E-01	8	76E-01	1	24E+00	1	55E+00	2	08E+00	2	63E+00	3	00E+00	3	21E+00	3	34E+00	3	38E+00

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY D
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PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
MO101	2	32E+02	1	05E+02	6	11E+00	3	53E-01	2	05E-02	6	88E-05	1	34E-08	2	61E-12	5	06E-16	9	84E-20	1	92E-23
TC101	9	84E+00	2	95E+02	3	22E+01	2	64E+00	1	92E-01	8	69E-04	2	18E-07	4	87E-11	1	03E-14	2	13E-18	4	29E-22
MO102	2	40E+03	5	48E+01	1	24E+00	2	85E-02	6	48E-04	3	37E-07	4	02E-12	4	75E-17	5	63E-22	6	69E-27	7	95E-32
TC102M	1	54E+00	4	62E+01	1	06E+00	2	42E-02	5	51E-04	2	85E-07	3	39E-12	4	02E-17	4	76E-22	5	65E-27	6	71E-32
TC102	7	22E+03	2	75E+01	6	29E-01	1	43E-02	3	27E-04	1	70E-07	2	02E-12	2	40E-17	2	85E-22	3	37E-27	4	00E-32
RU103	2	32E-04	5	37E-01	5	37E-01	5	37E-01	5	35E-01	5	33E-01	5	33E-01	5	31E-01	5	31E-01	5	31E-01	5	29E-01
RH103M	1	55E-08	2	78E-01	4	12E-01	4	78E-01	5	08E-01	5	29E-01	5	33E-01	5	33E-01	5	31E-01	5	31E-01	5	31E-01
TC104	2	46E+02	1	76E+02	1	76E+01	1	74E+00	1	73E-01	1	70E-03	1	66E-06	1	62E-09	1	58E-12	1	55E-15	1	51E-18
RU105	2	46E+00	8	49E+01	7	25E+01	6	23E+01	5	34E+01	3	90E+01	2	44E+01	1	52E+01	9	54E+00	5	97E+00	3	75E+00
RH105M	1	62E-02	8	52E+01	7	27E+01	6	25E+01	5	34E+01	3	90E+01	2	44E+01	1	53E+01	9	58E+00	5	99E+00	3	75E+00
RH105	2	66E-08	1	73E+00	3	20E+00	4	42E+00	5	44E+00	6	97E+00	8	34E+00	8	97E+00	9	15E+00	9	06E+00	8	82E+00
RU106	2	48E-03	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02
RH106	2	69E-05	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02	4	71E-02
RH107	6	15E-01	8	35E+01	1	27E+01	1	91E+00	2	87E-01	6	57E-03	2	26E-05	7	78E-08	2	67E-10	9	17-146	9	12E-17
PD107M	1	28E-03	1	70E+01	2	57E+00	3	87E-01	5	85E-02	1	33E-03	4	60E-06	1	59E-08	5	45E-11	1	88E-13	6	43E-16
PD109	2	02E-02	1	67E+00	1	59E+00	1	51E+00	1	43E+00	1	29E+00	1	11E+00	9	50E-01	8	14E-01	6	97E-01	5	99E-01
AG109M	1	16E-04	1	67E+00	1	59E+00	1	51E+00	1	43E+00	1	29E+00	1	11E+00	9	50E-01	8	14E-01	6	97E-01	5	99E-01
PD111M	5	53E+00	4	86E+00	4	30E+00	3	78E+00	3	34E+00	2	59E+00	1	78E+00	1	22E+00	8	36E-01	5	72E-01	3	92E-01
PD111	1	97E+00	3	55E+00	3	41E+00	3	04E+00	2	69E+00	2	08E+00	1	43E+00	9	79E-01	6	70E-01	4	60E-01	3	15E-01
AG111M	1	56E-02	4	79E+00	4	48E+00	4	02E+00	3	55E+00	2	73E+00	1	88E+00	1	28E+00	8	80E-01	6	05E-01	4	13E-01
AG111	5	56E-09	1	65E-02	3	46E-02	5	09E-02	6	54E-02	8	90E-02	1	14E-01	1	31E-01	1	42E-01	1	49E-01	1	53E-01
PD112	1	44E+00	1	40E+00	1	35E+00	1	31E+00	1	27E+00	1	18E+00	1	07E+00	9	73E-01	8	80E-01	7	99E-01	7	23E-01
AG112	4	33E-05	2	77E-01	4	88E-01	6	55E-01	7	78E-01	9	35E-01	1	03E+00	1	02E+00	9	73E-01	9	08E-01	8	36E-01
AG113	8	29E-03	1	78E+00	1	56E+00	1	37E+00	1	20E+00	9	22E-01	6	26E-01	4	22E-01	2	85E-01	1	92E-01	1	30E-01
AG115	1	65E+00	1	77E+00	2	20E-01	2	75E-02	3	44E-03	5	38E-05	1	05E-07	2	05E-10	3	98E-13	3	94-162	3	67E-16
CD115M	1	35E-08	3	59E-04	4	04E-04	4	08E-04	4	08E-04	4	08E-04	4	08E-04	4	08E-04	4	06E-04	4	04E-04	4	04E-04
CD115	5	21E-06	9	82E-02	1	06E-01	1	05E-01	1	04E-01	1	01E-01	9	77E-02	9	38E-02	9	02E-02	8	69E-02	8	35E-02
IN115M	6	49E-11	1	08E-02	2	40E-02	3	57E-02	4	56E-02	6	07E-02	7	50E-02	8	26E-02	8	62E-02	8	69E-02	8	63E-02
CD117	1	16E-01	1	94E+00	1	46E+00	1	09E+00	8	17E-01	4	58E-01	1	92E-01	8	11E-02	3	42E-02	1	43E-02	6	04E-03
IN117M	5	61E-06	6	75E-01	9	77E-01	1	06E+00	1	02E+00	8	08E-01	4	62E-01	2	36E-01	1	13E-01	5	26E-02	2	38E-02
IN117	2	26E-10	1	23E-01	2	98E-01	4	14E-01	4	62E-01	4	24E-01	2	70E-01	1	45E-01	7	20E-02	3	38E-02	1	56E-02
CD118	7	49E+00	3	22E+00	1	38E+00	5	87E-01	2	52E-01	4	61E-02	3	61E-03	2	82E-04	2	22E-05	1	74E-06	1	37E-07
IN118	4	97E-01	3	22E+00	1	38E+00	5	89E-01	2	52E-01	4	61E-02	3	61E-03	2	84E-04	2	22E-05	1	74E-06	1	37E-07
CD119	1	97E+01	3	08E-01	4	79E-03	7	49E-05	1	17E-06	2	86E-10	1	09E-15	4	18E-21	1	59E-26	6	07E-32	2	33E-37
IN119M	2	98E-02	3	33E+00	3	61E-01	3	65E-02	3	63E-03	3	57E-05	3	49E-08	3	41E-11	3	33E-14	3	25E-17	3	18E-20
IN119	1	47E+00	1	75E-01	2	03E-02	2	05E-03	2	05E-04	2	01E-06	1	97E-09	1	93E-12	1	88E-15	1	84E-18	1	79E-21
SN121	2	47E-03	2	55E-01	2	47E-01	2	42E-01	2	36E-01	2	24E-01	2	06E-01	1	92E-01	1	78E-01	1	65E-01	1	53E-01
SN123M	1	31E+00	2	45E+00	8	69E-01	3	08E-01	1	09E-01	1	36E-02	6	00E-04	2	66E-05	1	18E-06	5	19E-08	2	30E-09
SN123	1	23E-05	1	29E-03	1	29E-03	1	29E-03	1	29E-03	1	29E-03	1	29E-03	1	29E-03	1	29E-03	1	29E-03	1	29E-03
SN125	2	95E-02	2	94E-02	2	92E-02	2	92E-02	2	91E-02	2	90E-02	2	87E-02	2	84E-02	2	81E-02	2	78E-02	2	77E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY D
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

PAGE 4

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
SB125	1.77E-04	1.78E-04	1.78E-04	1.80E-04	1.80E-04	1.81E-04	1.84E-04	1.87E-04	1.90E-04	1.91E-04	1.94E-04
SB126	5.72E-03	5.69E-03	5.69E-03	5.68E-03	5.66E-03	5.63E-03	5.60E-03	5.57E-03	5.52E-03	5.48E-03	5.44E-03
SN127	5.93E+00	4.27E+00	3.06E+00	2.21E+00	1.59E+00	8.20E-01	3.05E-01	1.13E-01	4.20E-02	1.56E-02	5.79E-03
SB127	6.93E-02	2.40E-01	2.65E-01	2.82E-01	2.94E-01	3.06E-01	3.11E-01	3.08E-01	3.03E-01	2.97E-01	2.92E-01
TE127	3.92E-02	4.87E-02	5.92E-02	7.03E-02	8.12E-02	1.02E-01	1.30E-01	1.52E-01	1.70E-01	1.82E-01	1.92E-01
SN128	4.56E+01	2.25E+01	1.11E+01	5.51E+00	2.72E+00	6.63E-01	8.01E-02	9.67E-03	1.17E-03	1.41E-04	1.70E-05
SB128M	2.32E-02	2.56E+01	1.33E+01	6.56E+00	3.24E+00	7.92E-01	9.55E-02	1.15E-02	1.39E-03	1.68E-04	2.04E-05
SB128	1.91E+00	1.84E+00	1.74E+00	1.63E+00	1.52E+00	1.31E+00	1.04E+00	8.26E-01	6.56E-01	5.20E-01	4.13E-01
SN129M	2.55E+01	1.27E+01	6.39E+00	3.19E+00	1.60E+00	3.99E-01	5.00E-02	6.25E-03	7.81E-04	9.75E-05	1.22E-05
SN129	1.71E+02	1.67E+00	1.65E-02	1.63E-04	1.60E-06	1.55E-10	1.48E-16	1.41E-22	1.35E-28	1.28E-34	1.23E-40
SB129	9.60E+00	1.61E+01	1.51E+01	1.35E+01	1.19E+01	8.82E+00	5.49E+00	3.40E+00	2.10E+00	1.30E+00	7.96E-01
TE129M	1.81E-07	2.01E-03	4.14E-03	6.08E-03	7.81E-03	1.06E-02	1.34E-02	1.51E-02	1.62E-02	1.68E-02	1.72E-02
TE129	6.91E+00	4.50E+00	1.11E+01	1.15E+01	1.11E+01	9.21E+00	6.13E+00	3.87E+00	2.40E+00	1.49E+00	9.24E-01
SB130M	9.95E-01	1.88E+00	4.93E-03	1.30E-05	3.41E-08	2.35E-13	4.29E-21	7.79E-29	1.41E-36	2.57E-44	4.68E-52
SB130	1.71E+02	5.15E+01	1.47E+01	4.16E+00	1.18E+00	9.46E-02	2.16E-03	4.92E-05	1.12E-06	2.55E-08	5.85E-10
I130	4.75E-02	4.50E-02	4.26E-02	4.02E-02	3.80E-02	3.40E-02	2.87E-02	2.43E-02	2.04E-02	1.74E-02	1.47E-02
SB131	2.02E+02	5.29E+01	8.65E+00	1.42E+00	2.33E-01	6.27E-03	2.76E-05	1.22E-07	5.37E-10	2.37E-12	1.18E-14
TE131M	9.70E-05	5.10E-01	5.81E-01	5.82E-01	5.71E-01	5.46E-01	5.09E-01	4.75E-01	4.44E-01	4.14E-01	3.86E-01
TE131	8.97E+01	9.70E+01	3.18E+01	8.26E+00	2.00E+00	1.88E-01	9.33E-02	8.65E-02	8.07E-02	7.55E-02	7.04E-02
I131	1.30E-02	4.52E-01	6.65E-01	7.29E-01	7.42E-01	7.48E-01	7.48E-01	7.42E-01	7.42E-01	7.35E-01	7.35E-01
TE132	1.48E+00	3.61E+00	3.56E+00	3.54E+00	3.50E+00	3.44E+00	3.34E+00	3.27E+00	3.17E+00	3.08E+00	3.01E+00
I132	3.64E+00	3.62E+00	3.62E+00	3.61E+00	3.58E+00	3.53E+00	3.45E+00	3.36E+00	3.27E+00	3.19E+00	3.11E+00
TE133M	8.02E-02	2.77E+01	1.21E+01	5.25E+00	2.28E+00	4.34E-01	3.57E-02	2.94E-03	2.43E-04	2.00E-05	1.65E-06
TE133	4.49E+02	2.55E+01	2.83E+00	9.37E-01	3.96E-01	7.52E-02	6.21E-03	5.10E-04	4.23E-05	3.48E-06	2.87E-07
I133	6.97E-01	7.52E+00	8.09E+00	8.09E+00	7.95E+00	7.52E+00	6.85E+00	6.21E+00	5.60E+00	5.10E+00	4.61E+00
XE133M	1.78E-06	1.01E-01	2.44E-01	3.91E-01	5.32E-01	8.00E-01	1.16E+00	1.47E+00	1.73E+00	1.96E+00	2.15E+00
XE133	3.11E-05	1.77E+00	4.30E+00	6.85E+00	9.41E+00	1.43E+01	2.09E+01	2.67E+01	3.20E+01	3.66E+01	4.07E+01
TE134	1.49E+02	6.90E+01	2.57E+01	9.55E+00	3.55E+00	4.91E-01	2.51E-02	1.29E-03	6.59E-05	3.38E-06	1.74E-07
I134	6.82E+01	9.12E+01	6.39E+01	3.75E+01	2.01E+01	5.11E+00	5.61E-01	5.73E-02	5.61E-03	5.38E-04	5.11E-05
I135	1.05E+01	1.84E+01	1.66E+01	1.49E+01	1.35E+01	1.10E+01	8.06E+00	5.88E+00	4.32E+00	3.18E+00	2.32E+00
XE135M	6.91E-02	3.19E+02	3.09E+02	2.81E+02	2.52E+02	2.05E+02	1.51E+02	1.10E+02	8.09E+01	5.93E+01	4.35E+01
XE135	7.22E+01	1.43E+02	2.09E+02	2.63E+02	3.06E+02	3.67E+02	4.08E+02	4.08E+02	3.89E+02	3.54E+02	3.17E+02
CS136	4.43E-03	4.40E-03	4.40E-03	4.40E-03	4.38E-03	4.36E-03	4.33E-03	4.31E-03	4.28E-03	4.26E-03	4.21E-03
CS137	1.17E-03	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02	1.26E-02
BA137M	2.46E-06	1.18E-02	1.18E-02	1.18E-02	1.18E-02	1.18E-02	1.18E-02	1.18E-02	1.18E-02	1.18E-02	1.18E-02
XE138	5.59E+03	4.80E+02	4.17E+01	3.62E+00	3.14E-01	2.35E-02	1.53E-06	9.92E-10	6.45E-13	4.19E-16	2.72E-19
CS138	8.31E+02	1.40E+03	4.85E+02	1.42E+02	3.99E+01	3.04E+00	6.32E-02	1.32E-03	2.72E-05	5.67E-07	1.18E-08
CS139	3.31E+02	1.06E+01	1.33E-01	1.66E-03	2.09E-05	3.29E-09	6.54E-15	1.29E-20	2.55E-26	5.08E-32	1.00E-37
BA139	6.13E+00	6.84E+01	4.20E+01	2.55E+01	1.54E+01	5.68E+00	1.26E+00	2.80E-01	6.23E-02	1.38E-02	3.06E-03
BA140	1.29E-01	8.09E-01	8.09E-01	8.02E-01	8.02E-01	7.96E-01	7.96E-01	7.90E-01	7.83E-01	7.78E-01	7.72E-01

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY D
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
LA140	3	08E-07	1	38E-02	2	73E-02	4	06E-02	5	37E-02	7	90E-02	1	15E-01	1	49E-01	1	81E-01	2	12E-01	2	40E-01
BA141	2	47E+02	7	45E+01	7	39E+00	7	34E-01	7	27E-02	7	21E-04	7	04E-07	6	86E-10	6	69E-13	6	56E-16	6	39E-19
LA141	2	28E+00	4	82E+01	4	50E+01	3	81E+01	3	20E+01	2	24E+01	1	31E+01	7	69E+00	4	52E+00	2	65E+00	1	56E+00
CE141	2	82E-07	3	13E-02	7	34E-02	1	10E-01	1	41E-01	1	89E-01	2	35E-01	2	62E-01	2	77E-01	2	85E-01	2	90E-01
BA142	1	98E-02	7	89E-04	1	80E-05	4	09E-07	9	35E-09	4	86E-12	5	77E-17	6	83E-22	8	11E-27	9	64E-32	1	14E-36
LA142	4	56E-04	3	16E-03	2	08E-03	1	33E-03	8	43E-04	3	41E-04	8	80E-05	2	27E-05	5	84E-06	1	50E-06	3	87E-07
LA143	6	08E-03	1	19E-03	6	08E-05	3	13E-06	1	61E-07	4	20E-10	5	68E-14	7	67E-18	1	03E-21	1	39E-25	1	88E-29
CE143	2	43E-06	1	55E-04	1	61E-04	1	57E-04	1	54E-04	1	48E-04	1	39E-04	1	30E-04	1	22E-04	1	15E-04	1	08E-04
PR143	7	13E-13	2	38E-07	5	75E-07	9	08E-07	1	23E-06	1	87E-06	2	75E-06	3	60E-06	4	37E-06	5	08E-06	5	75E-06
CE144	8	67E-08	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07
PR144	2	38E-11	5	65E-07	6	16E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07	6	19E-07
PR145	4	46E-06	6	55E-04	5	81E-04	5	16E-04	4	61E-04	3	66E-04	2	58E-04	1	82E-04	1	29E-04	9	11E-05	6	44E-05
CE146	1	48E-02	7	60E-04	3	89E-05	1	99E-06	1	02E-07	2	70E-10	3	64E-14	4	89E-18	6	60E-22	8	89E-26	1	20E-29
PR146	3	06E-04	2	66E-03	6	04E-04	1	13E-04	2	04E-05	6	41E-07	3	55E-09	1	96E-11	1	08E-13	6	00E-16	3	27E-18
PR147	1	74E-03	5	04E-04	1	57E-05	4	93E-07	1	54E-08	1	50E-11	4	59E-16	1	40E-20	4	28E-25	1	30E-29	3	97E-34
ND147	6	23E-10	1	17E-05	1	20E-05	1	20E-05	1	20E-05	1	19E-05	1	18E-05	1	17E-05	1	17E-05	1	15E-05	1	15E-05
ND149	1	26E-03	8	62E-04	5	83E-04	3	99E-04	2	70E-04	1	25E-04	3	94E-05	1	25E-05	3	92E-06	1	23E-06	3	89E-07
PM149	1	76E-07	1	38E-05	2	29E-05	2	89E-05	3	27E-05	3	68E-05	3	82E-05	3	75E-05	3	65E-05	3	51E-05	3	39E-05
PM150	1	68E-05	1	30E-05	1	00E-05	7	77E-06	5	97E-06	3	59E-06	1	66E-06	7	68E-07	3	57E-07	1	65E-07	7	63E-08
ND151	7	78E-03	2	43E-04	7	62E-06	2	38E-07	7	46E-09	7	25E-12	2	22E-16	6	78E-21	2	06E-25	6	30E-30	1	93E-34
PM151	4	94E-06	5	78E-05	5	83E-05	5	67E-05	5	52E-05	5	25E-05	4	87E-05	4	52E-05	4	21E-05	3	90E-05	3	62E-05
PM152	1	36E-02	1	33E-05	1	29E-08	1	26E-11	1	24E-14	1	18E-20	1	10E-29	1	02E-38	9	53E-48	8	94E-57	8	29E-66
SM153	1	87E-05	1	84E-05	1	81E-05	1	78E-05	1	76E-05	1	71E-05	1	64E-05	1	56E-05	1	49E-05	1	43E-05	1	37E-05
SM155	1	74E-03	2	85E-04	4	68E-05	7	63E-06	1	26E-06	3	38E-08	1	49E-10	6	56E-13	2	89E-15	1	29E-17	3	16E-20
EU155	1	28E-09	3	64E-08	4	22E-08	4	31E-08	4	32E-08	4	32E-08	4	32E-08	4	32E-08	4	32E-08	4	32E-08	4	32E-08
SM156	3	26E-05	3	03E-05	2	81E-05	2	61E-05	2	42E-05	2	09E-05	1	68E-05	1	35E-05	1	08E-05	8	65E-06	6	94E-06
EU156	9	56E-08	1	56E-07	2	11E-07	2	63E-07	3	11E-07	3	97E-07	5	05E-07	5	84E-07	6	52E-07	7	06E-07	7	43E-07
EU157	6	25E-06	2	07E-05	1	98E-05	1	89E-05	1	80E-05	1	65E-05	1	43E-05	1	25E-05	1	09E-05	9	51E-06	8	27E-06
EU158	3	38E-04	1	37E-04	5	53E-05	2	24E-05	9	04E-06	1	48E-06	9	92E-08	6	56E-09	4	36E-10	2	90E-11	1	92E-12
EU159	3	70E-04	3	68E-05	3	65E-06	3	61E-07	3	58E-08	3	53E-10	3	45E-13	3	37E-16	3	29E-19	3	22E-22	3	15E-25
GD159	1	59E-06	6	94E-06	7	22E-06	7	00E-06	6	74E-06	6	24E-06	5	56E-06	4	96E-06	4	41E-06	3	93E-06	3	50E-06
TB161	1	41E-08	1	01E-07	1	01E-07	1	00E-07	1	00E-07	9	90E-08	9	80E-08	9	64E-08	9	54E-08	9	44E-08	9	28E-08
TOTAL	2	01E+04	5	45E+03	2	51E+03	1	68E+03	1	34E+03	1	05E+03	8	38E+02	7	07E+02	6	13E+02	5	32E+02	4	65E+02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY D
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
GE 77	3.92E-03	2.47E-03	5.65E-04	6.82E-06	4.35E-09	1.76E-15	7.07E-22	1.16E-34	0.	0.	0.
AS 77	4.05E-05	5.98E-03	4.33E-03	1.25E-03	1.47E-04	1.99E-06	2.70E-08	4.98E-12	2.31E-21	4.95E-40	1.07E-58
SE 77M	1.60E-09	1.80E-05	1.30E-05	3.76E-06	4.39E-07	5.97E-09	8.12E-11	1.49E-14	6.94E-24	1.48E-42	3.20E-61
AS 78	1.83E-02	1.62E-04	4.77E-09	4.03E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.77E-04	2.35E-04	1.46E-04	3.57E-05	3.38E-06	3.04E-08	2.73E-10	2.21E-14	1.28E-24	4.41E-45	1.51E-65
BR 83	1.28E-01	3.38E-03	3.40E-06	3.45E-15	3.52E-30	0.	0.	0.	0.	0.	0.
KR 83M	6.65E-06	1.48E-02	1.68E-05	1.51E-14	1.55E-29	0.	0.	0.	0.	0.	0.
KR 85M	4.70E-02	2.67E+00	6.10E-02	7.23E-07	4.47E-15	1.70E-31	6.43E-48	0.	0.	0.	0.
KR 85	4.85E-05	1.27E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.30E-03	1.29E-03	1.28E-03	1.26E-03	1.24E-03
KR 87	8.19E+02	1.62E-03	3.20E-09	2.48E-26	0.	0.	0.	0.	0.	0.	0.
KR 88	3.62E+02	9.52E-01	2.49E-03	4.53E-11	5.72E-24	0.	0.	0.	0.	0.	0.
RB 88	9.21E+01	1.06E+00	2.81E-03	5.07E-11	6.36E-24	0.	0.	0.	0.	0.	0.
SR 89	1.31E-05	8.93E-01	3.88E-01	3.73E-01	3.49E-01	3.05E-01	2.66E-01	2.05E-01	1.05E-01	2.76E-02	7.27E-03
SR 90	3.11E-05	3.20E-03	3.20E-03	3.20E-03	3.20E-03	3.20E-03	3.20E-03	3.20E-03	3.17E-03	3.17E-03	3.14E-03
Y 90	4.61E-11	7.33E-04	1.30E-03	2.33E-03	2.97E-03	3.17E-03	3.20E-03	3.20E-03	3.17E-03	3.17E-03	3.14E-03
SR 91	4.76E-01	1.71E+00	3.05E-01	1.75E-03	3.21E-07	1.09E-14	3.69E-22	4.19E-37	0.	0.	0.
Y 91M	3.21E-05	1.10E+00	1.97E-01	1.13E-03	2.08E-07	7.02E-15	2.38E-22	2.71E-37	0.	0.	0.
Y 91	1.31E-08	5.24E-02	6.21E-02	6.21E-02	5.84E-02	5.18E-02	4.61E-02	3.66E-02	2.02E-02	6.23E-03	1.91E-03
SR 92	2.04E-04	2.54E-06	5.48E-09	5.51E-17	2.58E-30	0.	0.	0.	0.	0.	0.
Y 92	9.37E-06	2.66E-05	2.96E-07	2.27E-13	1.33E-23	4.52E-44	1.55E-64	0.	0.	0.	0.
Y 93	1.33E-05	8.98E-05	1.75E-05	1.31E-07	3.80E-11	3.13E-18	2.58E-25	1.76E-39	0.	0.	0.
ZR 95	2.85E-08	3.56E-06	3.53E-06	3.40E-06	3.25E-06	2.90E-06	2.62E-06	2.11E-06	1.24E-06	4.25E-07	1.47E-07
NB 95M	6.08E-16	1.21E-08	2.20E-08	4.19E-08	5.67E-08	5.99E-08	5.51E-08	4.47E-08	2.63E-08	9.04E-09	3.12E-09
NB 95	3.18E-15	6.90E-08	1.36E-07	3.28E-07	6.08E-07	1.05E-06	1.35E-06	1.68E-06	1.61E-06	7.75E-07	2.98E-07
ZR 97	8.19E-05	1.39E-04	5.25E-05	2.78E-06	2.09E-08	1.17E-12	6.59E-17	2.09E-25	1.13E-46	0.	0.
NB 97M	4.21E-07	1.34E-04	5.02E-05	2.68E-06	2.00E-08	1.13E-12	6.35E-17	2.00E-25	1.13E-46	0.	0.
NB 97	4.11E-05	1.40E-04	5.25E-05	2.79E-06	2.10E-08	1.26E-12	7.09E-17	2.25E-25	1.27E-46	0.	0.
MO 99	1.19E-02	3.86E+00	3.01E+00	1.43E+00	4.13E-01	3.45E-02	2.88E-03	2.01E-05	8.15E-11	1.34E-21	2.22E-32
TC 99M	1.10E-07	3.39E+00	2.85E+00	1.37E+00	3.94E-01	3.29E-02	2.76E-03	1.92E-05	7.77E-11	1.28E-21	2.12E-32
RU103	2.32E-04	5.29E-01	5.19E-01	4.92E-01	4.52E-01	3.79E-01	3.17E-01	2.24E-01	9.34E-02	1.62E-02	2.82E-03
RH103M	1.55E-08	5.29E-01	5.19E-01	4.94E-01	4.52E-01	3.79E-01	3.17E-01	2.24E-01	9.34E-02	1.62E-02	2.82E-03
RU105	2.46E+00	2.35E+00	5.53E-02	7.25E-07	5.31E-15	2.83E-31	1.52E-47	0.	0.	0.	0.
RH105M	1.62E-02	2.35E+00	5.53E-02	7.27E-07	5.34E-15	2.85E-31	1.52E-47	0.	0.	0.	0.
RH105	2.66E-08	8.47E+00	5.53E+00	1.38E+00	1.36E-01	1.32E-03	1.28E-05	1.21E-09	1.05E-19	7.91E-40	5.95E-60
RU106	2.48E-03	4.71E-02	4.69E-02	4.67E-02	4.62E-02	4.55E-02	4.43E-02	4.27E-02	3.90E-02	3.23E-02	2.67E-02
RH106	2.69E-05	4.71E-02	4.69E-02	4.67E-02	4.62E-02	4.55E-02	4.43E-02	4.27E-02	3.90E-02	3.23E-02	2.67E-02
PD109	2.02E-02	5.12E-01	1.50E-01	3.70E-03	7.81E-06	3.48E-11	1.55E-16	3.07E-27	0.	0.	0.
AG109M	1.16E-04	5.12E-01	1.50E-01	3.70E-03	7.84E-06	3.49E-11	1.55E-16	3.07E-27	0.	0.	0.
PD111M	5.53E+00	2.69E-01	1.30E-02	1.49E-06	4.04E-13	2.94E-26	2.16E-39	0.	0.	0.	0.
PD111	1.97E+00	2.16E-01	1.05E-02	1.20E-06	3.27E-13	2.38E-26	1.74E-39	0.	0.	0.	0.

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY D
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
AG111M	1	56E-02	2	83E-01	1	38E-02	1	58E-06	4	27E-13	3	13E-26	2	29E-39	0		0		0		0	
AG111	5	56E-09	1	54E-01	1	48E-01	1	12E-01	7	08E-02	2	80E-02	1	11E-02	1	75E-03	1	73E-05	1	67E-09	1	62E-13
PD112	1	44E+00	6	55E-01	2	97E-01	2	76E-02	5	26E-04	1	90E-07	6	93E-11	9	08E-18	5	73E-35	0		0	
AG112	4	33E-05	7	61E-01	3	51E-01	3	25E-02	6	21E-04	2	25E-07	8	16E-11	1	07E-17	6	72E-35	0		0	
AG113	8	29E-03	8	77E-02	3	80E-03	3	09E-07	4	73E-14	1	10E-27	2	58E-41	0		0		0		0	
CD115M	1	35E-08	3	91E-04	3	83E-04	3	65E-04	3	39E-04	2	87E-04	2	46E-04	1	77E-04	7	91E-05	1	57E-05	3	14E-06
CD115	5	21E-06	7	83E-02	5	75E-02	2	27E-02	4	78E-03	2	14E-04	9	51E-06	1	90E-08	3	35E-15	1	05E-28	3	29E-42
IN115M	6	49E-11	8	28E-02	6	27E-02	2	47E-02	5	21E-03	2	33E-04	1	04E-05	2	07E-08	3	67E-15	1	15E-28	3	59E-42
CD117	1	16E-01	2	55E-03	2	47E-06	2	30E-15	2	05E-30	0		0		0		0		0		0	
IN117M	5	61E-06	1	05E-02	1	22E-05	1	18E-14	1	05E-29	0		0		0		0		0		0	
IN117	2	26E-10	6	96E-03	8	23E-06	7	96E-15	7	07E-30	0		0		0		0		0		0	
SN121	2	47E-03	1	41E-01	7	62E-02	1	20E-02	5	52E-04	1	16E-06	2	46E-09	1	09E-14	4	56E-28	0		0	
SN123	1	23E-05	1	29E-03	1	28E-03	1	25E-03	1	22E-03	1	15E-03	1	09E-03	9	78E-04	7	42E-04	4	25E-04	2	45E-04
SN125	2	95E-02	2	74E-02	2	55E-02	2	04E-02	1	41E-02	6	75E-03	3	22E-03	7	37E-04	1	84E-05	1	16E-08	7	27E-12
SB125	1	77E-04	1	97E-04	2	14E-04	2	62E-04	3	21E-04	3	89E-04	4	19E-04	4	36E-04	4	28E-04	3	99E-04	3	74E-04
SB126	5	72E-03	5	41E-03	5	12E-03	4	33E-03	3	28E-03	1	89E-03	1	09E-03	3	57E-04	2	23E-05	1	09E-07	2	18E-08
SN127	5	93E+00	2	16E-03	7	82E-07	3	73E-17	2	35E-34	0		0		0		0		0		0	
SB127	6	93E-02	2	84E-01	2	38E-01	1	39E-01	5	70E-02	9	50E-03	1	59E-03	4	44E-05	5	79E-09	9	90E-17	1	68E-24
TE127M	5	60E-10	4	35E-04	7	95E-04	1	54E-03	2	13E-03	2	35E-03	2	27E-03	2	02E-03	1	47E-03	7	74E-04	4	09E-04
TE127	3	92E-02	2	03E-01	2	00E-01	1	22E-01	5	16E-02	1	06E-02	3	62E-03	2	03E-03	1	45E-03	7	65E-04	4	05E-04
SB128	1	91E+00	3	27E-01	5	17E-02	2	02E-04	1	97E-08	1	84E-16	1	73E-24	1	52E-40	0		0		0	
SB129	9	60E+00	4	92E-01	1	03E-02	9	34E-08	3	72E-16	5	86E-33	9	24E-50	0		0		0		0	
TE129M	1	81E-07	1	91E-02	1	91E-02	1	81E-02	1	63E-02	1	33E-02	1	08E-02	7	18E-03	2	58E-03	3	38E-04	4	39E-05
TE129	6	91E+00	5	74E-01	2	40E-02	1	15E-02	1	04E-02	8	50E-03	6	93E-03	4	61E-03	1	66E-03	2	16E-04	2	82E-05
I130	4	75E-02	1	24E-02	3	24E-03	5	81E-05	7	10E-08	1	06E-13	1	58E-19	3	52E-31	0		0		0	
TE131M	9	70E-05	3	41E-01	1	96E-01	3	71E-02	2	32E-03	9	04E-06	3	54E-08	5	40E-13	4	91E-25	0		0	
TE131	8	97E+01	6	22E-02	3	57E-02	6	78E-03	4	23E-04	1	65E-06	6	45E-09	9	89E-14	8	97E-26	0		0	
I131	1	30E-02	7	04E-01	6	65E-01	5	34E-01	3	52E-01	1	49E-01	6	28E-02	1	13E-02	1	52E-04	2	76E-08	5	04E-12
XE131M	3	54E-11	3	26E-04	6	19E-04	1	29E-03	1	85E-03	1	83E-03	1	36E-03	5	60E-04	3	73E-05	1	12E-07	3	15E-10
TE132	1	48E+00	2	94E+00	2	37E+00		25E+00	4	30E-01	5	10E-02	6	04E-03	8	49E-05	1	99E-09	1	09E-18	5	93E-28
I132	3	64E+00	3	02E+00	2	44E+00	1	28E+00	4	44E-01	5	26E-02	6	23E-03	8	75E-05	2	05E-09	1	11E-18	6	10E-28
I133	6	97E-01	3	88E+00	1	75E+00	1	63E-01	3	10E-03	1	12E-06	4	07E-10	5	37E-17	3	37E-34	0		0	
XE133M	1	78E-06	2	20E+00	2	61E+00	1	53E+00	3	59E-01	1	68E-02	7	83E-04	1	70E-06	3	73E-13	1	78E-26	8	52E-40
XE133	3	11E-05	4	23E+01	5	66E+01	5	07E+01	2	76E+01	7	45E+00	2	01E+00	1	45E-01	2	01E-04	3	91E-10	7	58E-16
I135	1	05E+01	1	70E+00	1	42E-01	8	25E-05	3	36E-10	5	55E-21	9	13E-32	2	48E-53	0		0		0	
XE135M	6	91E-02	3	19E+01	2	66E+00	1	55E-03	6	31E-09	1	04E-19	1	71E-30	4	65E-52	0		0		0	
XE135	7	22E+01	2	75E+02	6	73E+01	3	85E-01	4	72E-05	6	61E-13	9	30E-21	1	84E-36	0		0		0	
CS136	4	43E-03	4	19E-03	3	98E-03	3	38E-03	2	60E-03	1	52E-03	8	97E-04	3	08E-04	2	14E-05	1	03E-07	4	99E-10
CS137	1	17E-03	1	26E-02	1	26E-02	1	26E-02	1	26E-02	1	26E-02	1	26E-02	1	26E-02	1	25E-02	1	25E-02	1	24E-02
BA137M	2	46E-06	1	18E-02	1	18E-02	1	18E-02	1	18E-02	1	18E-02	1	18E-02	1	18E-02	1	17E-02	1	16E-02	1	16E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY D
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM

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VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BA139	6.13E+00	6.54E-04	3.86E-09	7.94E-25	0.	0.	0.	0.	0.	0.	0.
BA140	1.29E-01	7.65E-01	7.28E-01	6.17E-01	4.71E-01	2.73E-01	1.60E-01	5.40E-02	3.60E-03	1.61E-05	7.10E-08
LA140	3.08E-07	2.67E-01	4.29E-01	5.93E-01	5.28E-01	3.16E-01	1.83E-01	6.24E-02	4.14E-03	1.84E-05	8.20E-08
LA141	2.28E+00	9.03E-01	1.27E-02	3.51E-08	1.92E-17	5.73E-36	1.71E-54	0.	0.	0.	0.
CE141	2.82E-07	3.13E-01	3.10E-01	2.91E-01	2.62E-01	2.12E-01	1.71E-01	1.11E-01	3.81E-02	4.48E-03	5.28E-04
LA142	4.56E-04	9.97E-08	1.93E-12	1.42E-26	0.	0.	0.	0.	0.	0.	0.
CE143	2.43E-06	1.00E-04	6.05E-05	1.33E-05	1.07E-06	6.93E-09	4.47E-11	1.88E-15	2.12E-26	0.	0.
PR143	7.13E-13	6.42E-06	9.98E-06	1.29E-05	1.10E-05	6.72E-06	4.07E-06	1.47E-06	1.17E-07	7.46E-10	4.74E-12
CE144	8.67E-08	6.19E-07	6.16E-07	6.13E-07	6.07E-07	5.91E-07	5.78E-07	5.49E-07	4.85E-07	3.82E-07	2.99E-07
PR144	2.38E-11	6.19E-07	6.16E-07	6.13E-07	6.07E-07	5.91E-07	5.78E-07	5.49E-07	4.85E-07	3.82E-07	2.99E-07
PR145	4.46E-06	4.53E-05	2.82E-06	6.69E-10	6.07E-16	5.05E-28	4.17E-40	0.	0.	0.	0.
ND147	6.23E-10	1.05E-05	9.82E-06	8.14E-06	5.96E-06	3.20E-06	1.71E-06	4.93E-07	2.15E-08	4.20E-11	8.14E-14
PM147	1.73E-18	7.83E-09	1.51E-08	3.46E-08	6.00E-08	9.13E-08	1.08E-07	1.20E-07	1.21E-07	1.13E-07	1.05E-07
ND149	1.26E-03	1.22E-07	1.18E-11	1.08E-23	9.23E-44	0.	0.	0.	0.	0.	0.
PM149	1.76E-07	3.25E-05	2.38E-05	9.27E-06	1.94E-06	8.45E-08	3.68E-09	7.01E-12	1.10E-18	2.72E-32	6.79E-46
PM150	1.68E-05	3.54E-08	7.45E-11	6.99E-19	2.93E-32	0.	0.	0.	0.	0.	0.
PM151	4.94E-06	3.37E-05	1.86E-05	3.13E-06	1.60E-07	4.21E-10	1.11E-12	7.67E-18	9.61E-31	0.	0.
SM153	1.87E-05	1.31E-05	9.20E-06	3.18E-06	5.42E-07	1.57E-08	4.57E-10	3.83E-13	7.89E-21	3.37E-36	1.43E-51
SM156	3.26E-05	5.56E-06	9.50E-07	4.67E-09	6.76E-13	1.38E-20	2.86E-28	1.22E-43	0.	0.	0.
EU155	1.28E-09	4.32E-08	4.32E-08	4.32E-08	4.31E-08	4.29E-08	4.28E-08	4.24E-08	4.16E-08	3.99E-08	3.84E-08
EU156	9.56E-08	7.73E-07	8.59E-07	7.73E-07	6.15E-07	3.85E-07	2.42E-07	9.62E-08	9.56E-09	9.38E-11	9.26E-13
EU157	6.25E-06	7.21E-06	2.43E-06	9.07E-08	3.83E-10	6.74E-15	1.19E-19	3.72E-29	0.	0.	0.
GD159	1.59E-06	3.12E-06	1.24E-06	7.74E-08	7.62E-10	7.38E-14	7.16E-18	6.71E-26	5.73E-46	0.	0.
TB161	1.41E-08	9.18E-08	8.31E-08	6.16E-08	3.71E-08	1.36E-08	4.98E-09	6.67E-10	4.41E-12	1.91E-16	8.31E-21
TOTAL		4.02E+02	1.54E+02	6.36E+01	3.31E+01	9.91E+00	3.72E+00	1.21E+00	4.76E-01	1.70E-01	1.02E-01

MICROCURIES/SQ METER
UNDERGROUND EVENT CATEGORY D
MR/HR AT H+12 HOURS = 1.000

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RELAXATION LENGTH = 0.16 GM/SQCM

VENTING STARTED BETWEEN H+30 SECONDS AND H+20 MINUTES AND CONTINUED MORE THAN 2 HOURS

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
KR 85	4.85E-05	1.20E-03	1.17E-03	1.13E-03	1.03E-03	9.30E-04	8.17E-04	6.74E-04	3.56E-04	1.36E-04	5.21E-05
SR 89	1.31E-05	3.07E-03	2.69E-04	2.36E-05	1.59E-08	1.08E-11	6.33E-16	2.88E-22	2.09E-43	0.	0.
SR 90	3.11E-05	3.11E-03	3.08E-03	3.05E-03	2.94E-03	2.83E-03	2.69E-03	2.50E-03	1.95E-03	1.35E-03	9.34E-04
Y 90	4.61E-11	3.11E-03	3.08E-03	3.05E-03	2.94E-03	2.83E-03	2.69E-03	2.50E-03	1.95E-03	1.35E-03	9.34E-04
Y 91	1.31E-08	8.87E-04	1.03E-04	1.20E-05	1.88E-08	2.95E-11	5.40E-15	1.33E-20	2.68E-39	0.	0.
ZR 95	2.85E-08	7.34E-08	1.05E-08	1.49E-09	4.35E-12	1.26E-14	5.23E-18	4.41E-23	5.42E-40	0.	0.
NB 95M	6.08E-16	1.55E-09	2.22E-10	3.15E-11	9.20E-14	2.68E-16	1.11E-19	9.36E-25	1.15E-41	0.	0.
NB 95	3.18E-15	1.58E-07	2.27E-08	3.21E-09	9.36E-12	2.72E-14	1.13E-17	9.58E-23	1.17E-39	0.	0.
RU103	2.32E-04	9.00E-04	3.69E-05	1.52E-06	1.03E-10	7.10E-15	1.98E-20	9.36E-29	0.	0.	0.
RH103M	1.55E-08	9.02E-04	3.69E-05	1.52E-06	1.03E-10	7.10E-15	1.98E-20	9.36E-29	0.	0.	0.
RU106	2.48E-03	2.37E-02	1.67E-02	1.19E-02	4.22E-03	1.50E-03	3.76E-04	4.76E-05	4.80E-08	1.55E-12	4.97E-17
RH106	2.69E-05	2.37E-02	1.67E-02	1.19E-02	4.22E-03	1.50E-03	3.76E-04	4.76E-05	4.80E-08	1.55E-12	4.97E-17
SN123	1.23E-05	1.71E-04	6.19E-05	2.25E-05	1.08E-06	5.17E-08	9.02E-10	2.07E-12	3.34E-21	2.14E-34	1.38E-47
SB125	1.77E-04	3.57E-04	3.12E-04	2.75E-04	1.88E-04	1.28E-04	7.63E-05	3.54E-05	2.71E-06	5.78E-08	1.23E-09
TE125M	4.76E-12	1.45E-04	1.29E-04	1.14E-04	7.77E-05	5.28E-05	3.17E-05	1.45E-05	1.12E-06	2.40E-08	5.09E-10
TE127M	5.60E-10	2.68E-04	8.39E-05	2.63E-05	8.08E-07	2.49E-08	2.40E-10	2.25E-13	1.84E-23	1.38E-38	1.03E-53
TE127	3.92E-02	2.65E-04	8.30E-05	2.60E-05	7.98E-07	2.46E-08	2.36E-10	2.22E-13	1.82E-23	1.36E-38	1.02E-53
CS137	1.17E-03	1.23E-02	1.22E-02	1.20E-02	1.16E-02	1.12E-02	1.07E-02	1.00E-02	7.92E-03	5.62E-03	3.98E-03
BA137M	2.46E-06	1.16E-02	1.14E-02	1.13E-02	1.09E-02	1.05E-02	1.00E-02	9.39E-03	7.43E-03	5.26E-03	3.72E-03
CE141	2.82E-07	1.21E-04	2.44E-06	4.91E-08	4.00E-13	3.25E-18	5.33E-25	3.54E-35	0.	0.	0.
CE144	8.67E-08	2.55E-07	1.64E-07	1.04E-07	2.74E-08	7.22E-09	1.21E-09	8.38E-11	1.13E-14	1.77E-20	2.75E-26
PR144	2.38E-11	2.55E-07	1.64E-07	1.04E-07	2.74E-08	7.22E-09	1.21E-09	8.38E-11	1.13E-14	1.77E-20	2.75E-26
PM147	1.73E-18	1.00E-07	8.79E-08	7.68E-08	5.16E-08	3.48E-08	2.04E-08	9.29E-09	6.57E-10	1.25E-11	2.35E-13
EU155	1.28E-09	3.74E-08	3.47E-08	3.24E-08	2.60E-08	2.09E-08	1.56E-08	1.01E-08	2.35E-09	2.65E-10	2.98E-11
TOTAL		8.58E-02	6.55E-02	5.48E-02	3.81E-02	3.15E-02	2.78E-02	2.52E-02	1.96E-02	1.37E-02	9.61E-03

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TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

PAGE 1

TIME		MR/HR	MICROCURIES/SQ METER
ZERO TIME	HOURS	1.17E+02	1.39E+04
1.00E+00		2.61E+01	4.19E+03
2.00E+00		1.05E+01	2.70E+03
3.00E+00		6.56E+00	2.16E+03
4.00E+00		4.69E+00	1.85E+03
6.00E+00		2.82E+00	1.49E+03
9.00E+00		1.59E+00	1.21E+03
1.20E+01		1.00E+00	1.03E+03
1.50E+01		6.85E-01	9.02E+02
1.80E+01		5.03E-01	7.87E+02
2.10E+01		3.93E-01	6.90E+02
1.00E+00	DAYS	3.20E-01	5.97E+02
2.00E+00		1.53E-01	2.23E+02
5.00E+00		6.71E-02	9.08E+01
1.00E+01		2.55E-02	4.71E+01
2.00E+01		6.62E-03	1.29E+01
3.00E+01		3.53E-03	4.01E+00
5.00E+01		2.07E-03	8.14E-01
1.00E+02		8.85E-04	2.87E-01
2.00E+02		2.49E-04	1.05E-01
3.00E+02		1.17E-04	6.26E-02
1.00E+00	YEARS	8.91E-05	5.15E-02
1.50E+00		5.65E-05	3.49E-02
2.00E+00		4.01E-05	2.51E-02
3.50E+00		1.52E-05	1.01E-02
5.00E+00		6.09E-06	4.67E-03
7.00E+00		2.17E-06	2.27E-03
1.00E+01		8.30E-07	1.34E-03
2.00E+01		3.66E-07	6.56E-04
3.50E+01		2.46E-07	2.77E-04
5.00E+01		1.73E-07	1.26E-04

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

PAGE 2

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2.00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1.20E+01	1.50E+01	1	80E+01	2.10E+01		
GE 75	2	10E-06	1	02E-02	6.13E-03	3	70E-03	2	23E-03	8	08E-04	1	76E-04	3.87E-05	8	42E-06	1	84E-06	4	01E-07
GE 77	3	68E-03	9	48E-03	8.90E-03	8	38E-03	7	91E-03	6	98E-03	5	81E-03	4.83E-03	4	02E-03	3	34E-03	2	78E-03
AS 77	3	80E-05	5	99E-03	6.11E-03	6	11E-03	6	17E-03	6	22E-03	6	22E-03	6.17E-03	6	05E-03	5	93E-03	5	79E-03
SE 77M	1	50E-09	1	80E-05	1.83E-05	1	84E-05	1	84E-05	1	86E-05	1	87E-05	1.86E-05	1	83E-05	1	79E-05	1	73E-05
GE 78	9	52E-01	5	97E-01	3.71E-01	2	32E-01	1	45E-01	5	63E-02	1	37E-02	3.31E-03	8	09E-04	1	97E-04	4	77E-05
AS 78	1	71E-02	2	85E-01	3.51E-01	3	29E-01	2	75E-01	1	62E-01	6	03E-02	2.00E-02	6	20E-03	1	85E-03	5	37E-04
AS 79	1	77E+01	1	74E-01	1.73E-03	1	70E-05	1	67E-07	1	62E-11	1	54E-17	1.47E-23	1	41E-29	1	34E-35	1	28E-41
SE 79M	2	63E-02	3	08E-01	3.05E-03	3	00E-05	2	95E-07	2	85E-11	2	72E-17	2.59E-23	2	48E-29	2	36E-35	2	26E-41
BR 80	9	91E-02	9	35E-03	8.79E-04	8	27E-05	7	79E-06	6	91E-08	5	78E-11	4.82E-14	4	01E-17	3	35E-20	2	80E-23
SE 81M	7	14E-02	3	32E+00	1.60E+00	7	72E-01	3	72E-01	8	67E-02	9	74E-03	1.09E-03	1	22E-04	1	37E-05	1	53E-06
SE 81	8	71E-01	3	94E+00	2.27E+00	1	14E+00	5	51E-01	1	29E-01	1	44E-02	1.61E-03	1	81E-04	2	03E-05	2	27E-06
BR 82	3	54E-04	3	47E-04	3.40E-04	3	33E-04	3	27E-04	3	15E-04	2	97E-04	2.80E-04	2	64E-04	2	49E-04	2	34E-04
SE 83	1	01E+01	1	92E+00	3.63E-01	6	90E-02	1	31E-02	4	69E-04	3	19E-06	2.17E-08	1	46E-10	1	01E-12	6	39E-15
BR 83	8	41E-02	1	26E+00	1.17E+00	9	15E-01	6	97E-01	3	92E-01	1	66E-01	7.00E-02	2	95E-02	1	25E-02	5	27E-03
KR 83M	4	37E-06	2	85E-01	5.81E-01	7	23E-01	1	57E-02	1	63E-01	3	66E-01	1.89E-01	9	09E-02	4	21E-02	1	89E-02
BR 84	1	63E-02	2	81E+00	7.62E-01	2	06E-01	5	57E-02	4	07E-03	8	06E-05	1.59E-06	3	14E-08	6	23E-10	1	23E-11
KR 85M	7	35E-02	1	57E+02	1.34E+02	1	14E+02	9	75E+01	7	14E+01	4	46E+01	2.77E+01	1	73E+01	1	08E+01	6	72E+00
KR 87	1	28E+03	7	40E+02	4.30E+02	2	47E+02	1	43E+02	4	78E+01	9	30E+00	1.80E+00	3	49E-01	6	76E-02	1	30E-02
KR 88	5	66E+02	4	42E+02	3.45E+02	2	69E+02	2	10E+02	1	28E+02	6	11E+01	2.90E+01	1	38E+01	6	57E+00	3	12E+00
RB 88	1	44E+02	4	49E+02	3.80E+02	3	01E+02	2	35E+02	1	43E+02	6	83E+01	3.25E+01	1	55E+01	7	38E+00	3	51E+00
RB 89	3	06E-01	7	56E-01	5.08E-02	3	41E-03	2	29E-04	1	04E-06	3	13E-10	9.46E-14	2	88E-17	8	73E-21	2	65E-24
SR 89	6	15E-08	2	16E-03	2.31E-03	2	31E-03	2	31E-03	2	31E-03	2	31E-03	2.30E-03	2	30E-03	2	29E-03	2	29E-03
SR 90	1	46E-07	1	50E-05	1.50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1.50E-05	1	50E-05	1	50E-05	1	50E-05
SR 91	4	47E-01	8	32E+00	7.76E+00	7	23E+00	6	73E+00	5	82E+00	4	70E+00	3.79E+00	3	07E+00	2	46E+00	1	99E+00
Y 91M	3	01E-05	2	87E+00	3.91E+00	4	19E+00	4	14E+00	3	71E+00	3	04E+00	2.45E+00	1	97E+00	1	59E+00	1	28E+00
Y 91	1	23E-08	2	55E-03	5.88E-03	9	36E-03	1	28E-02	1	92E-02	2	73E-02	3.38E-02	3	91E-02	4	33E-02	4	67E-02
SR 92	3	19E-01	1	42E+00	1.10E+00	8	53E-01	6	60E-01	3	95E-01	1	83E-01	8.53E-02	3	95E-02	1	83E-02	8	53E-03
Y 92	1	47E-02	2	99E-01	4.72E-01	5	57E-01	5	92E-01	5	66E-01	4	33E-01	2.95E-01	1	90E-01	1	17E-01	7	03E-02
SR 93	1	70E+01	2	93E-01	1.62E-03	8	93E-06	4	91E-08	1	51E-12	2	54E-19	4.29E-26	7	26E-33	1	22E-39	2	06E-46
Y 93	2	08E-02	6	72E-01	6.33E-01	5	89E-01	5	50E-01	4	82E-01	3	92E-01	3.21E-01	2	60E-01	2	14E-01	1	74E-01
Y 94	2	80E+00	3	83E+00	4.93E-01	6	35E-02	8	18E-03	1	36E-04	2	92E-07	6.24E-10	1	34E-12	2	92E-15	1	62E-16
Y 95	1	19E+01	1	12E+00	2.46E-02	5	42E-04	1	20E-05	5	82E-09	6	21E-14	6.65E-19	7	10E-24	7	59E-29	8	13E-34
ZR 95	4	46E-05	5	82E-03	5.96E-03	5	96E-03	5	96E-03	5	96E-03	5	96E-03	5.91E-03	5	91E-03	5	91E-03	5	91E-03
NB 95	4	98E-12	3	60E-06	8.38E-06	1	32E-05	1	80E-05	2	76E-05	4	19E-05	5.62E-05	7	05E-05	8	48E-05	9	91E-05
ZR 97	1	28E-01	5	60E-01	5.33E-01	5	14E-01	4	92E-01	4	54E-01	4	01E-01	3.55E-01	3	15E-01	2	78E-01	2	47E-01
NB 97M	6	59E-04	5	33E-01	5.14E-01	4	94E-01	4	74E-01	4	36E-01	3	85E-01	3.42E-01	3	02E-01	2	67E-01	2	36E-01
NB 97	6	43E-02	2	80E-01	3.94E-01	4	50E-01	4	72E-01	4	70E-01	4	27E-01	3.81E-01	3	37E-01	2	98E-01	2	65E-01
NB 98	8	80E-01	3	90E-01	1.72E-01	7	61E-02	3	38E-02	6	59E-03	5	72E-04	4.94E-05	4	31E-06	3	73E-07	3	21E-08
MO 99	1	11E-02	4	59E+00	4.55E+00	4	50E+00	4	46E+00	4	36E+00	4	23E+00	4.10E+00	3	98E+00	3	86E+00	3	74E+00
TC 99M	1	03E-07	4	38E-01	8.22E-01	1	16E+00	1	46E+00	1	95E+00	2	47E+00	2.81E+00	3	01E+00	3	13E+00	3	17E+00

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY E
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 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
M0101	2.18E+02	9.87E+01	5.73E+00	3.31E-01	1.92E-02	6.46E-05	1.25E-08	2.45E-12	4.75E-16	9.23E-20	1.80E-23
TC101	9.23E+00	2.77E+02	3.03E+01	2.48E+00	1.80E-01	8.16E-04	2.04E-07	4.57E-11	9.68E-15	2.00E-18	4.02E-22
M0102	2.25E+03	5.14E+01	1.17E+00	2.68E-02	6.09E-04	3.17E-07	3.77E-12	4.45E-17	5.29E-22	6.28E-27	7.46E-32
TC102M	1.45E+00	4.34E+01	9.95E-01	2.27E-02	5.17E-04	2.68E-07	3.18E-12	3.77E-17	4.47E-22	5.30E-27	6.30E-32
TC102	6.77E+03	2.58E+01	5.91E-01	1.34E-02	3.07E-04	1.60E-07	1.89E-12	2.25E-17	2.68E-22	3.17E-27	3.75E-32
RU103	2.18E-04	5.04E-01	5.04E-01	5.04E-01	5.04E-01	5.02E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01	4.97E-01
RH103M	1.45E-08	2.60E-01	3.87E-01	4.48E-01	4.76E-01	4.97E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01	4.99E-01
TC104	2.31E+02	1.65E+02	1.65E+01	1.64E+00	1.62E-01	1.59E-03	1.56E-06	1.52E-09	1.49E-12	1.45E-15	1.42E-18
RU105	2.31E+00	7.97E+01	6.81E+01	5.85E+01	5.01E+01	3.66E+01	2.29E+01	1.43E+01	8.95E+00	5.60E+00	3.52E+00
RH105M	1.52E-02	7.99E+01	6.83E+01	5.87E+01	5.01E+01	3.66E+01	2.29E+01	1.43E+01	8.99E+00	5.62E+00	3.52E+00
RU105	2.49E-08	1.62E+00	3.00E+00	4.15E+00	5.11E+00	6.54E+00	7.83E+00	8.42E+00	8.58E+00	8.50E+00	8.28E+00
RU106	2.33E-03	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02
RH106	2.53E-05	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02
RH107	5.77E-01	7.84E+01	1.19E+01	1.79E+00	2.69E-01	6.16E-03	2.12E-05	7.30E-08	2.51E-10	8.61E-14	8.56E-17
PD107M	1.20E-03	1.59E+01	2.41E+00	3.63E-01	5.49E-02	1.25E-03	4.32E-06	1.49E-08	5.12E-11	1.76E-13	6.03E-16
PD109	1.89E-02	1.57E+00	1.49E+00	1.42E+00	1.34E+00	1.21E+00	1.04E+00	8.91E-01	7.64E-01	6.54E-01	5.62E-01
AG109M	1.09E-04	1.57E+00	1.49E+00	1.42E+00	1.34E+00	1.21E+00	1.04E+00	8.91E-01	7.64E-01	6.54E-01	5.62E-01
PD111M	5.19E+00	4.56E+00	4.03E+00	3.55E+00	3.13E+00	2.43E+00	1.67E+00	1.14E+00	7.85E-01	5.37E-01	3.68E-01
PD111	1.85E+00	3.33E+00	3.20E+00	2.85E+00	2.52E+00	1.96E+00	1.34E+00	9.18E-01	6.29E-01	4.32E-01	2.96E-01
AG111M	1.47E-02	4.49E+00	4.21E+00	3.77E+00	3.33E+00	2.56E+00	1.76E+00	1.21E+00	8.26E-01	5.68E-01	3.88E-01
AG111	5.22E-09	1.55E-02	3.24E-02	4.78E-02	6.14E-02	8.35E-02	1.07E-01	1.23E-01	1.33E-01	1.40E-01	1.44E-01
PD112	1.35E+00	1.31E+00	1.27E+00	1.23E+00	1.19E+00	1.11E+00	1.01E+00	9.13E-01	8.26E-01	7.49E-01	6.79E-01
AG112	4.07E-05	2.60E-01	4.58E-01	6.15E-01	7.30E-01	8.77E-01	9.64E-01	9.58E-01	9.13E-01	8.52E-01	7.85E-01
AG113	7.78E-03	1.67E+00	1.46E+00	1.28E+00	1.13E+00	8.65E-01	5.87E-01	3.96E-01	2.68E-01	1.80E-01	1.22E-01
AG115	1.55E+00	1.66E+00	2.06E-01	2.58E-02	3.23E-03	5.05E-05	9.87E-08	1.92E-10	3.74E-13	3.70E-16	3.44E-16
CD115M	1.27E-08	3.37E-04	3.79E-04	3.82E-04	3.82E-04	3.82E-04	3.82E-04	3.82E-04	3.81E-04	3.79E-04	3.79E-04
CD115	4.89E-06	9.22E-02	9.92E-02	9.88E-02	9.76E-02	9.52E-02	9.17E-02	8.80E-02	8.47E-02	8.16E-02	7.84E-02
IN115M	6.09E-11	1.02E-02	2.25E-02	3.35E-02	4.28E-02	5.69E-02	7.04E-02	7.75E-02	8.09E-02	8.16E-02	8.10E-02
CD117	1.09E-01	1.82E+00	1.37E+00	1.02E+00	7.67E-01	4.30E-01	1.80E-01	7.62E-02	3.21E-02	1.34E-02	5.67E-03
IN117M	5.26E-06	6.33E-01	9.17E-01	9.95E-01	9.61E-01	7.58E-01	4.33E-01	2.21E-01	1.06E-01	4.94E-02	2.23E-02
IN117	2.12E-10	1.15E-01	2.80E-01	3.89E-01	4.33E-01	3.98E-01	2.53E-01	1.36E-01	6.76E-02	3.17E-02	1.46E-02
CD118	7.03E+00	3.02E+00	1.29E+00	5.51E-01	2.37E-01	4.33E-02	3.39E-03	2.65E-04	2.08E-05	1.63E-06	1.28E-07
IN118	4.66E-01	3.02E+00	1.29E+00	5.53E-01	2.37E-01	4.33E-02	3.39E-03	2.67E-04	2.08E-05	1.63E-06	1.28E-07
CD119	1.85E+01	2.89E-01	4.50E-03	7.03E-05	1.10E-06	2.68E-10	1.03E-15	3.92E-21	1.49E-26	5.70E-32	2.18E-37
IN119M	2.79E-02	3.13E+00	3.39E-01	3.42E-02	3.41E-03	3.35E-05	3.28E-08	3.20E-11	3.13E-14	3.05E-17	2.98E-20
IN119	1.38E+00	1.64E-01	1.91E-02	1.92E-03	1.92E-04	1.89E-06	1.85E-09	1.81E-12	1.77E-15	1.72E-18	1.68E-21
SN121	2.32E-03	2.40E-01	2.32E-01	2.27E-01	2.21E-01	2.10E-01	1.94E-01	1.81E-01	1.67E-01	1.55E-01	1.44E-01
SN123M	1.23E+00	2.30E+00	8.16E-01	2.89E-01	1.02E-01	1.27E-02	5.63E-04	2.50E-05	1.10E-06	4.87E-08	2.16E-09
SN123	1.16E-05	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03
SN125	2.77E-02	2.76E-02	2.74E-02	2.74E-02	2.73E-02	2.72E-02	2.69E-02	2.66E-02	2.64E-02	2.61E-02	2.60E-02

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PAGE 4

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
SB125	1	66E-04	1	67E-04	1	67E-04	1	69E-04	1	69E-04	1	70E-04	1	73E-04	1	75E-04	1	78E-04	1	79E-04	1	82E-04
SB126	5	37E-03	5	34E-03	5	34E-03	5	33E-03	5	31E-03	5	28E-03	5	25E-03	5	23E-03	5	18E-03	5	14E-03	5	11E-03
SN127	5	57E+00	4	01E+00	2	87E+00	2	07E+00	1	49E+00	7	70E-01	2	86E-01	1	06E-01	3	95E-02	1	47E-02	5	44E-03
SB127	6	51E-02	2	25E-01	2	49E-01	2	65E-01	2	75E-01	2	87E-01	2	92E-01	2	89E-01	2	84E-01	2	78E-01	2	74E-01
TE127	3	68E-02	4	57E-02	5	55E-02	6	60E-02	7	62E-02	9	56E-02	1	22E-01	1	43E-01	1	59E-01	1	71E-01	1	80E-01
SN128	4	28E+01	2	11E+01	1	05E+01	5	17E+00	2	55E+00	6	23E-01	7	52E-02	9	08E-03	1	09E-03	1	33E-04	1	60E-05
SB128M	2	18E-02	2	40E+01	1	25E+01	6	16E+00	3	04E+00	7	43E-01	8	96E-02	1	08E-02	1	30E-03	1	58E-04	1	91E-05
SB128	1	80E+00	1	73E+00	1	63E+00	1	53E+00	1	43E+00	1	22E+00	9	78E-01	7	75E-01	6	16E-01	4	88E-01	3	88E-01
SN129M	2	39E+01	1	20E+01	5	99E+00	3	00E+00	1	50E+00	3	74E-01	4	69E-02	5	87E-03	7	33E-04	9	15E-05	1	14E-05
SN129	1	60E+02	1	57E+00	1	55E-02	1	53E-04	1	50E-06	1	46E-10	1	39E-16	1	33E-22	1	27E-28	1	21E-34	1	15E-40
SB129	9	01E+00	1	51E+01	1	42E+01	1	27E+01	1	11E+01	8	28E+00	5	15E+00	3	19E+00	1	97E+00	1	22E+00	7	47E-01
TE129M	1	70E-07	1	89E-03	3	88E-03	5	71E-03	7	33E-03	9	93E-03	1	26E-02	1	42E-02	1	52E-02	1	58E-02	1	62E-02
TE129	6	49E+00	8	91E+00	1	04E+01	1	08E+01	1	04E+01	8	64E+00	5	76E+00	3	63E+00	2	25E+00	1	40E+00	8	67E-01
SB130M	9	34E-01	1	76E+00	4	63E-03	1	22E-05	3	20E-08	2	20E-13	4	03E-21	7	31E-29	1	33E-36	2	41E-44	4	39E-52
SB130	1	60E+02	4	84E+01	1	38E+01	3	90E+00	1	10E+00	8	88E-02	2	03E-03	4	62E-05	1	05E-06	2	39E-08	5	49E-10
I130	4	46E-02	4	22E-02	4	00E-02	3	77E-02	3	57E-02	3	19E-02	2	70E-02	2	28E-02	1	92E-02	1	63E-02	1	38E-02
SB131	1	33E+02	3	48E+01	5	68E+00	9	35E-01	1	53E-01	4	12E-03	1	81E-05	8	01E-08	3	53E-10	1	55E-12	7	77E-15
TE131M	6	37E-05	3	35E-01	3	82E-01	3	82E-01	3	75E-01	3	59E-01	3	34E-01	3	12E-01	2	91E-01	2	72E-01	2	54E-01
TE131	5	89E+01	6	37E+01	2	09E+01	5	43E+00	1	32E+00	1	24E-01	6	13E-02	5	68E-02	5	30E-02	4	96E-02	4	63E-02
I131	8	56E-03	2	97E-01	4	37E-01	4	79E-01	4	87E-01	4	92E-01	4	92E-01	4	87E-01	4	87E-01	4	83E-01	4	83E-01
TE132	1	39E+00	3	38E+00	3	34E+00	3	33E+00	3	28E+00	3	23E+00	3	14E+00	3	07E+00	2	98E+00	2	89E+00	2	82E+00
I132	3	41E+00	3	40E+00	3	40E+00	3	38E+00	3	36E+00	3	31E+00	3	24E+00	3	15E+00	3	07E+00	2	99E+00	2	92E+00
TE133M	5	27E-02	1	82E+01	7	62E+00	3	45E+00	1	50E+00	2	85E-01	2	34E-02	1	93E-03	1	59E-04	1	31E-05	1	09E-06
TE133	2	95E+02	1	67E+01	1	86E+00	6	15E-01	2	60E-01	4	94E-02	4	08E-03	3	35E-04	2	78E-05	2	28E-06	1	88E-07
I133	4	58E-01	4	94E+00	5	31E+00	5	31E+00	5	22E+00	4	94E+00	4	50E+00	4	08E+00	3	68E+00	3	35E+00	3	03E+00
XE133M	2	78E-06	1	58E-01	3	82E-01	6	11E-01	8	32E-01	1	25E+00	1	81E+00	2	30E+00	2	71E+00	3	06E+00	3	36E+00
XE133	4	86E-05	2	76E+00	6	73E+00	1	07E+01	1	47E+01	2	23E+01	3	27E+01	4	18E+01	5	00E+01	5	72E+01	6	36E+01
TE134	9	76E+01	4	53E+01	1	69E+01	6	27E+00	2	33E+00	3	23E-01	1	65E-02	8	44E-04	4	33E-05	2	22E-06	1	14E-07
I134	4	48E+01	5	99E+01	4	20E+01	2	46E+01	1	32E+01	3	35E+00	3	69E-01	3	76E-02	3	69E-03	3	53E-04	3	35E-05
I135	6	87E+00	1	21E+01	1	09E+01	9	81E+00	8	85E+00	7	20E+00	5	30E+00	3	86E+00	2	84E+00	2	09E+00	1	53E+00
XE135M	1	08E-01	4	98E+02	4	84E+02	4	39E+02	3	94E+02	3	21E+02	2	36E+02	1	73E+02	1	26E+02	9	28E+01	6	80E+01
XE135	1	13E+02	2	23E+02	3	26E+02	4	11E+02	4	79E+02	5	74E+02	6	38E+02	6	38E+02	6	09E+02	5	54E+02	4	95E+02
CS136	1	38E-02	1	38E-02	1	38E-02	1	38E-02	1	37E-02	1	36E-02	1	35E-02	1	35E-02	1	34E-02	1	33E-02	1	32E-02
CS137	5	49E-06	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05
BA137M	1	16E-08	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05
XE138	2	62E+01	2	25E+00	1	96E-01	1	70E-02	1	47E-03	1	10E-05	7	18E-09	4	65E-12	3	03E-15	1	97E-18	1	28E-21
CS138	3	90E+00	6	58E+00	2	27E+00	6	68E-01	1	87E-01	1	43E-02	2	97E-04	6	18E-06	1	28E-07	2	66E-09	5	52E-11
CS139	1	04E+03	3	30E+01	4	15E-01	5	21E-03	6	54E-05	1	03E-08	2	04E-14	4	04E-20	7	99E-26	1	59E-31	3	13E-37
BA139	1	92E+01	2	14E+02	1	31E+02	7	99E+01	4	83E+01	1	78E+01	3	93E+00	8	75E-01	1	95E-01	4	31E-02	9	56E-03
BA140	6	06E-03	3	80E-02	3	80E-02	3	77E-02	3	77E-02	3	74E-02	3	74E-02	3	71E-02	3	68E-02	3	65E-02	3	62E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
LA140	1.44E-08	6.48E-04	1.28E-03	1.91E-03	2.52E-03	3.71E-03	5.41E-03	7.01E-03	8.51E-03	9.95E-03	1.13E-02	
BA141	1.16E+01	3.50E+00	3.47E-01	3.44E-02	3.41E-03	3.38E-05	3.30E-08	3.22E-11	3.14E-14	3.08E-17	3.00E-20	
LA141	1.07E-01	2.26E+00	2.11E+00	1.79E+00	1.50E+00	1.05E+00	6.14E-01	3.61E-01	2.12E-01	1.24E-01	7.31E-02	
CE141	1.32E-08	1.47E-03	3.44E-03	5.17E-03	6.60E-03	8.88E-03	1.10E-02	1.23E-02	1.30E-02	1.34E-02	1.36E-02	
BA142	3.10E+01	1.23E+00	2.81E-02	6.40E-04	1.46E-05	7.60E-09	9.02E-14	1.07E-18	1.27E-23	1.51E-28	1.79E-33	
LA142	7.14E-01	4.94E+00	3.26E+00	2.07E+00	1.32E+00	5.33E-01	1.38E-01	3.55E-02	9.14E-03	2.35E-03	6.05E-04	
LA143	9.52E+00	1.86E+00	9.52E-02	4.90E-03	2.52E-04	6.57E-07	8.89E-11	1.20E-14	1.61E-18	2.18E-22	2.94E-26	
CE143	3.81E-03	2.43E-01	2.52E-01	2.45E-01	2.41E-01	2.32E-01	2.17E-01	2.04E-01	1.91E-01	1.79E-01	1.69E-01	
PR143	1.11E-09	3.72E-04	8.99E-04	1.42E-03	1.93E-03	2.92E-03	4.30E-03	5.63E-03	6.84E-03	7.94E-03	8.99E-03	
CE144	1.36E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	
PR144	3.72E-08	8.84E-04	9.64E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	
PR145	6.98E-03	1.02E+00	9.10E-01	8.07E-01	7.21E-01	5.72E-01	4.03E-01	2.85E-01	2.02E-01	1.42E-01	1.01E-01	
CE146	2.32E+01	1.19E+00	6.09E-02	3.11E-03	1.60E-04	4.23E-07	5.69E-11	7.65E-15	1.03E-18	1.39E-22	1.88E-26	
PR146	4.79E-01	4.17E+00	9.45E-01	1.77E-01	3.19E-02	1.00E-03	5.55E-06	3.06E-08	1.69E-10	9.39E-13	5.12E-15	
PR147	2.73E+00	7.89E-01	2.46E-02	7.71E-04	2.41E-05	2.35E-08	7.17E-13	2.19E-17	6.69E-22	2.04E-26	6.22E-31	
ND147	9.74E-07	1.83E-02	1.88E-02	1.88E-02	1.88E-02	1.86E-02	1.85E-02	1.84E-02	1.82E-02	1.81E-02	1.79E-02	
ND149	1.97E+00	1.35E+00	9.13E-01	6.24E-01	4.22E-01	1.96E-01	6.16E-02	1.95E-02	6.13E-03	1.93E-03	6.09E-04	
PM149	2.75E-04	2.15E-02	3.58E-02	4.52E-02	5.12E-02	5.75E-02	5.98E-02	5.86E-02	5.71E-02	5.50E-02	5.30E-02	
PM150	2.62E-02	2.03E-02	1.57E-02	1.21E-02	9.35E-03	5.62E-03	2.60E-03	1.20E-03	5.58E-04	2.58E-04	1.19E-04	
ND151	1.22E+01	3.80E-01	1.19E-02	3.72E-04	1.17E-05	1.13E-08	3.47E-13	1.06E-17	3.23E-22	9.86E-27	3.02E-31	
PM151	7.72E-03	9.04E-02	9.12E-02	8.87E-02	8.63E-02	8.22E-02	7.62E-02	7.08E-02	6.58E-02	6.10E-02	5.66E-02	
PM152	2.13E+01	2.08E-02	2.03E-05	1.97E-08	1.93E-11	1.85E-17	1.72E-26	1.60E-35	1.49E-44	1.40E-53	1.30E-62	
SM153	2.92E-02	2.87E-02	2.84E-02	2.79E-02	2.76E-02	2.67E-02	2.56E-02	2.44E-02	2.34E-02	2.24E-02	2.14E-02	
SM155	2.72E+00	4.46E-01	7.31E-02	1.19E-02	1.97E-03	5.28E-05	2.34E-07	1.03E-09	4.52E-12	2.02E-14	4.95E-17	
EU155	2.00E-06	5.70E-05	6.59E-05	6.74E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	
SM156	5.11E-02	4.73E-02	4.40E-02	4.09E-02	3.79E-02	3.28E-02	2.63E-02	2.11E-02	1.69E-02	1.35E-02	1.09E-02	
EU156	1.50E-04	2.44E-04	3.31E-04	4.11E-04	4.87E-04	6.21E-04	7.90E-04	9.13E-04	1.02E-03	1.10E-03	1.16E-03	
EU157	9.77E-03	3.24E-02	3.09E-02	2.95E-02	2.81E-02	2.57E-02	2.24E-02	1.96E-02	1.70E-02	1.49E-02	1.29E-02	
EU158	5.28E-01	2.14E-01	8.65E-02	3.50E-02	1.41E-02	2.32E-03	1.55E-04	1.03E-05	6.82E-07	4.53E-08	3.01E-09	
EU159	5.79E-01	5.75E-02	5.70E-03	5.65E-04	5.60E-05	5.53E-07	5.40E-10	5.28E-13	5.15E-16	5.04E-19	4.92E-22	
GD159	2.48E-03	1.09E-02	1.13E-02	1.10E-02	1.05E-02	9.76E-03	8.70E-03	7.76E-03	6.90E-03	6.15E-03	5.48E-03	
TB161	2.20E-05	1.58E-04	1.57E-04	1.56E-04	1.56E-04	1.55E-04	1.53E-04	1.51E-04	1.49E-04	1.48E-04	1.45E-04	
TOTAL	1.39E+04	4.19E+03	2.70E+03	2.16E+03	1.85E+03	1.49E+03	1.21E+03	1.03E+03	9.02E+02	7.87E+02	6.90E+02	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME 1	00E+00	2.00E+00	5 00E+00	1 00E+01	2 00E+01	3 00E+01	5 00E+01	1.00E+02	2 00E+02	3.00E+02
GE 77	3.68E-03	2.32E-03	5.31E-04	6.40E-06	4.08E-09	1.65E-15	6.63E-22	1.09E-34	0.	0.	0.	0.
AS 77	3.80E-05	5.61E-03	4.06E-03	1.18E-03	1.38E-04	1.87E-06	2.54E-08	4.68E-12	2.17E-21	4.65E-40	1.00E-58	1.00E-61
SE 77M	1.50E-09	1.69E-05	1.22E-05	3.53E-06	4.12E-07	5.60E-09	7.62E-11	1.40E-14	6.51E-24	1.39E-42	3.00E-61	3.00E-61
AS 78	1.71E-02	1.52E-04	4.47E-09	3.78E-23	0	0	0	0	0	0	0	0
BR 82	3.54E-04	2.20E-04	1.37E-04	3.35E-05	3.17E-06	2.85E-08	2.56E-10	2.07E-14	1.21E-24	4.14E-45	1.41E-65	1.41E-65
BR 83	8.41E-02	2.22E-03	2.23E-06	2.27E-15	2.32E-30	0	0	0	0	0	0	0
KR 83M	4.37E-06	9.70E-03	1.10E-05	9.92E-15	1.02E-29	0	0	0	0	0	0	0
KR 85M	7.35E-02	4.18E+00	9.54E-02	1.13E-06	7.00E-15	2.66E-31	1.01E-47	0.	0.	0.	0.	0.
KR 85	7.59E-05	1.99E-03	2.03E-03	2.03E-03	2.03E-03	2.03E-03	2.03E-03	2.02E-03	2.00E-03	1.96E-03	1.93E-03	1.93E-03
KR 87	1.28E+03	2.53E-03	5.01E-09	3.88E-26	0	0.	0.	0.	0.	0.	0.	0.
KR 88	5.66E+02	1.49E+00	3.90E-03	7.09E-11	8.94E-24	0	0	0	0	0	0	0
RB 88	1.44E+02	1.66E+00	4.39E-03	7.93E-11	9.95E-24	0	0	0	0	0	0	0
SR 89	6.15E-08	1.85E-03	1.82E-03	1.75E-03	1.64E-03	1.43E-03	1.25E-03	9.63E-04	4.91E-04	1.30E-04	3.41E-05	3.41E-05
SR 90	1.46E-07	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.49E-05	1.49E-05	1.47E-05	1.47E-05
Y 90	2.16E-13	3.44E-06	6.09E-06	1.09E-05	1.39E-05	1.49E-05	1.50E-05	1.50E-05	1.49E-05	1.49E-05	1.47E-05	1.47E-05
SR 91	4.47E-01	1.60E+00	2.87E-01	1.65E-03	3.01E-07	1.02E-14	3.46E-22	3.94E-37	0	0	0	0
Y 91M	3.01E-05	1.04E+00	1.85E-01	1.06E-03	1.96E-07	6.58E-15	2.23E-22	2.54E-37	0	0	0	0
Y 91	1.23E-08	4.92E-02	5.82E-02	5.82E-02	5.48E-02	4.86E-02	4.33E-02	3.43E-02	1.90E-02	5.85E-03	1.80E-03	1.80E-03
SR 92	3.19E-01	3.97E-03	8.57E-06	8.62E-14	4.03E-27	0	0	0	0	0	0	0
Y 92	1.47E-02	4.16E-02	4.63E-04	3.55E-10	2.08E-20	7.07E-41	2.43E-61	0	0	0	0	0
Y 93	2.08E-02	1.40E-01	2.74E-02	2.06E-04	5.94E-08	4.89E-15	4.04E-22	2.76E-36	0.	0.	0.	0.
ZR 95	4.46E-05	5.57E-03	5.52E-03	5.32E-03	5.08E-03	4.54E-03	4.09E-03	3.31E-03	1.94E-03	6.65E-04	2.29E-04	2.29E-04
NB 95M	9.51E-13	1.89E-05	3.45E-05	6.56E-05	8.87E-05	9.36E-05	8.63E-05	7.00E-05	4.11E-05	1.41E-05	4.87E-06	4.87E-06
NB 95	4.98E-12	1.08E-04	2.13E-04	5.13E-04	9.51E-04	1.64E-03	2.11E-03	2.62E-03	2.52E-03	1.21E-03	4.66E-04	4.66E-04
ZR 97	1.28E-01	2.18E-01	8.21E-02	4.34E-03	3.26E-05	1.84E-09	1.03E-13	3.26E-22	1.84E-43	0	0	0
NB 97M	6.59E-04	2.09E-01	7.84E-02	4.19E-03	3.13E-05	1.76E-09	9.94E-14	3.13E-22	1.77E-43	0	0	0
NB 97	6.43E-02	2.19E-01	8.21E-02	4.36E-03	3.28E-05	1.98E-09	1.11E-13	3.52E-22	1.98E-43	0.	0.	0.
MO 99	1.11E-02	3.62E+00	2.83E+00	1.34E+00	3.87E-01	3.24E-02	2.71E-03	1.88E-05	7.65E-11	1.26E-21	2.08E-32	2.08E-32
TC 99M	1.03E-07	3.18E+00	2.68E+00	1.28E+00	3.70E-01	3.09E-02	2.59E-03	1.80E-05	7.30E-11	1.20E-21	1.99E-32	1.99E-32
RU103	2.18E-04	4.97E-01	4.88E-01	4.61E-01	4.24E-01	3.55E-01	2.98E-01	2.10E-01	8.76E-02	1.52E-02	2.64E-03	2.64E-03
RH103M	1.45E-08	4.97E-01	4.88E-01	4.63E-01	4.24E-01	3.55E-01	2.98E-01	2.10E-01	8.76E-02	1.52E-02	2.64E-03	2.64E-03
RU105	2.31E+00	2.21E+00	5.19E-02	6.81E-07	4.99E-15	2.66E-31	1.42E-47	0.	0.	0.	0.	0.
RH105M	1.52E-02	2.21E+00	5.19E-02	6.83E-07	5.01E-15	2.68E-31	1.43E-47	0	0.	0.	0.	0.
RH105	2.49E-08	7.95E+00	5.19E+00	1.30E+00	1.28E-01	1.24E-03	1.21E-05	1.14E-09	9.87E-20	7.42E-40	5.58E-60	5.58E-60
RU106	2.33E-03	4.42E-02	4.40E-02	4.38E-02	4.33E-02	4.27E-02	4.16E-02	4.01E-02	3.66E-02	3.03E-02	2.50E-02	2.50E-02
RH106	2.53E-05	4.42E-02	4.40E-02	4.38E-02	4.33E-02	4.27E-02	4.16E-02	4.01E-02	3.66E-02	3.03E-02	2.50E-02	2.50E-02
PD109	1.89E-02	4.81E-01	1.41E-01	3.48E-03	7.33E-06	3.26E-11	1.45E-16	2.88E-27	0	0	0	0
AG109M	1.09E-04	4.81E-01	1.41E-01	3.48E-03	7.36E-06	3.27E-11	1.45E-16	2.88E-27	0	0	0	0
PD111M	5.19E+00	2.52E-01	1.22E-02	1.40E-06	3.79E-13	2.76E-26	2.03E-39	0	0.	0.	0.	0.
PD111	1.85E+00	2.03E-01	9.84E-03	1.13E-06	3.07E-13	2.24E-26	1.63E-39	0	0.	0.	0.	0.

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

PAGE 7

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
AG111M	1.47E-02	2.65E-01	1.29E-02	1.48E-06	4.01E-13	2.94E-26	2.15E-39	0.	0.	0.	0.	0.
AG111	5.22E-09	1.44E-01	1.39E-01	1.05E-01	6.64E-02	2.63E-02	1.05E-02	1.65E-03	1.62E-05	1.57E-09	1.52E-13	
PD112	1.35E+00	6.15E-01	2.79E-01	2.59E-02	4.93E-04	1.78E-07	6.50E-11	8.52E-18	5.38E-35	0.	0.	0.
AG112	4.07E-05	7.14E-01	3.30E-01	3.05E-02	5.83E-04	2.11E-07	7.65E-11	1.01E-17	6.31E-35	0.	0.	0.
AG113	7.78E-03	8.23E-02	3.57E-03	2.90E-07	4.44E-14	1.04E-27	2.42E-41	0.	0.	0.	0.	0.
CD115M	1.27E-08	3.67E-04	3.60E-04	3.42E-04	3.18E-04	2.69E-04	2.31E-04	1.66E-04	7.42E-05	1.47E-05	2.95E-06	
CD115	4.89E-06	7.35E-02	5.40E-02	2.13E-02	4.49E-03	2.01E-04	8.92E-06	1.78E-08	3.14E-15	9.85E-29	3.09E-42	
IN115M	6.09E-11	7.77E-02	5.88E-02	2.32E-02	4.89E-03	2.18E-04	9.74E-06	1.94E-08	3.44E-15	1.08E-28	3.37E-42	
CD117	1.09E-01	2.39E-03	2.32E-06	2.16E-15	1.93E-30	0.	0.	0.	0.	0.	0.	0.
IN117M	5.26E-06	9.90E-03	1.14E-05	1.10E-14	9.81E-30	0.	0.	0.	0.	0.	0.	0.
IN117	2.12E-10	6.53E-03	7.72E-06	7.49E-15	6.63E-30	0.	0.	0.	0.	0.	0.	0.
SN121	2.32E-03	1.33E-01	7.15E-02	1.13E-02	5.18E-04	1.09E-06	2.30E-09	1.02E-14	4.28E-28	0.	0.	0.
SN123	1.16E-05	1.21E-03	1.20E-03	1.18E-03	1.15E-03	1.08E-03	1.03E-03	9.18E-04	6.96E-04	3.99E-04	2.30E-04	
SN125	2.77E-02	2.57E-02	2.40E-02	1.91E-02	1.32E-02	6.33E-03	3.03E-03	6.92E-04	1.73E-05	1.09E-08	6.83E-12	
SB125	1.66E-04	1.85E-04	2.01E-04	2.46E-04	3.01E-04	3.65E-04	3.94E-04	4.10E-04	4.02E-04	3.75E-04	3.51E-04	
SB126	5.37E-03	5.08E-03	4.80E-03	4.06E-03	3.08E-03	1.77E-03	1.02E-03	3.35E-04	2.09E-05	1.02E-07	2.05E-08	
SN127	5.57E+00	2.03E-03	7.34E-07	3.50E-17	2.20E-34	0.	0.	0.	0.	0.	0.	0.
SB127	6.51E-02	2.67E-01	2.23E-01	1.30E-01	5.35E-02	8.92E-03	1.49E-03	4.17E-05	5.44E-09	9.29E-17	1.58E-24	
TE127M	5.26E-10	4.08E-04	7.46E-04	1.45E-03	2.00E-03	2.20E-03	2.13E-03	1.39E-03	1.38E-03	7.27E-04	3.84E-04	
TE127	3.68E-02	1.91E-01	1.88E-01	1.14E-01	4.84E-02	9.92E-03	3.40E-03	1.91E-03	1.36E-03	7.18E-04	3.80E-04	
SB128	1.80E+00	3.07E-01	4.85E-02	1.90E-04	1.85E-08	1.73E-16	1.62E-24	1.43E-40	0.	0.	0.	0.
SB129	9.01E+00	4.61E-01	9.62E-03	8.77E-08	3.49E-16	5.50E-33	8.67E-50	0.	0.	0.	0.	0.
TE129M	1.70E-07	1.79E-02	1.79E-02	1.70E-02	1.53E-02	1.25E-02	1.01E-02	6.74E-03	2.43E-03	3.17E-04	4.12E-05	
TE129	6.49E+00	5.39E-01	2.25E-02	1.08E-02	9.77E-03	7.98E-03	6.50E-03	4.33E-03	1.56E-03	2.03E-04	2.65E-05	
I130	4.46E-02	1.17E-02	3.05E-03	5.46E-05	6.66E-08	9.93E-14	1.48E-19	3.30E-31	0.	0.	0.	0.
TE131M	6.37E-05	2.24E-01	1.29E-01	2.43E-02	1.52E-03	5.94E-06	2.32E-08	3.54E-13	3.22E-25	0.	0.	0.
TE131	5.89E+01	4.08E-02	2.34E-02	4.46E-03	2.78E-04	1.09E-06	4.24E-09	6.49E-14	5.89E-26	0.	0.	0.
I131	8.56E-03	4.63E-01	4.37E-01	3.51E-01	2.31E-01	9.77E-02	4.13E-02	7.41E-03	9.95E-05	1.81E-08	3.31E-12	
XE131M	2.32E-11	2.14E-04	4.07E-04	8.50E-04	1.21E-03	1.20E-03	8.92E-04	3.68E-04	2.45E-05	7.34E-08	2.07E-10	
TE132	1.39E+00	2.76E+00	2.23E+00	1.17E+00	4.04E-01	4.79E-02	5.67E-03	7.97E-05	1.87E-09	1.02E-18	5.57E-28	
I132	3.41E+00	2.83E+00	2.29E+00	1.20E+00	4.17E-01	4.93E-02	5.84E-03	8.22E-05	1.92E-09	1.05E-18	5.73E-28	
I133	4.58E-01	2.55E+00	1.15E+00	1.07E-01	2.04E-03	7.37E-07	2.68E-10	3.53E-17	2.21E-34	0.	0.	0.
XE133M	2.78E-06	3.44E+00	4.08E+00	2.39E+00	5.61E-01	2.63E-02	1.23E-03	2.66E-06	5.83E-13	2.78E-26	1.33E-39	
XE133	4.86E-05	6.61E+01	8.86E+01	7.92E+01	4.32E+01	1.17E+01	3.14E+00	2.26E-01	3.15E-04	6.11E-10	1.19E-15	
I135	6.87E+00	1.12E+00	9.35E-02	5.42E-05	2.21E-10	3.64E-21	6.00E-32	1.63E-53	0.	0.	0.	0.
XE135M	1.08E-01	4.98E+01	4.17E+00	2.42E-03	9.87E-09	1.62E-19	2.67E-30	7.27E-52	0.	0.	0.	0.
XE135	1.13E+02	4.31E+02	1.05E+02	6.03E-01	7.39E-05	1.03E-12	1.45E-20	2.87E-36	0.	0.	0.	0.
CS136	1.38E-02	1.31E-02	1.24E-02	1.06E-02	8.14E-03	4.77E-03	2.81E-03	9.63E-04	6.69E-05	3.22E-07	1.56E-09	
CS137	5.49E-06	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.88E-05	5.85E-05	5.82E-05	
BA137M	1.16E-08	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.49E-05	5.46E-05	5.42E-05	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02	
BA139	1	92E+01	2	04E-03	1	21E-08	2	49E-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BA140	6	06E-03	3	59E-02	3	42E-02	2	90E-02	2	21E-02	1	28E-02	7	49E-03	2	54E-03	1	69E-04	7	55E-07	3	33E-09	
LA140	1	44E-08	1	25E-02	2	01E-02	2	78E-02	2	48E-02	1	48E-02	8	57E-03	2	93E-03	1	94E-04	8	63E-07	3	85E-09	
LA141	1	07E-01	4	24E-02	5	96E-04	1	65E-09	9	00E-19	2	69E-37	8	01E-56	0	0	0	0	0	0	0	0	
CE141	1	32E-08	1	47E-02	1	46E-02	1	37E-02	1	23E-02	9	94E-03	8	01E-03	5	20E-03	1	79E-03	2	10E-04	2	48E-05	
LA142	7	14E-01	1	56E-04	3	02E-09	2	22E-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CE143	3	81E-03	1	57E-01	9	47E-02	2	09E-02	1	68E-03	1	08E-05	6	99E-08	2	94E-12	3	32E-23	0	0	0	0	0
PR143	1	11E-09	1	00E-02	1	56E-02	2	01E-02	1	72E-02	1	05E-02	6	36E-03	2	29E-03	1	84E-04	1	17E-06	7	41E-09	
CE144	1	36E-04	9	69E-04	9	64E-04	9	59E-04	9	49E-04	9	24E-04	9	04E-04	8	59E-04	7	58E-04	5	97E-04	4	67E-04	
PR144	3	72E-08	9	69E-04	9	64E-04	9	59E-04	9	49E-04	9	24E-04	9	04E-04	8	59E-04	7	58E-04	5	97E-04	4	67E-04	
PR145	6	98E-03	7	09E-02	4	40E-03	1	05E-06	9	50E-13	7	89E-25	6	52E-37	0	0	0	0	0	0	0	0	
ND147	9	74E-07	1	64E-02	1	54E-02	1	27E-02	9	32E-03	5	01E-03	2	67E-03	7	71E-04	3	37E-05	6	57E-08	1	27E-10	
PM147	2	70E-15	1	23E-05	2	37E-05	5	41E-05	9	38E-05	1	43E-04	1	69E-04	1	88E-04	1	89E-04	1	77E-04	1	64E-04	
ND149	1	97E+00	1	91E-04	1	85E-08	1	69E-20	1	44E-40	0	0	0	0	0	0	0	0	0	0	0	0	
PM149	2	75E-04	5	08E-02	3	72E-02	1	45E-02	3	04E-03	1	32E-04	5	75E-06	1	10E-08	1	72E-15	4	26E-29	1	06E-42	
PM150	2	62E-02	5	54E-05	1	16E-07	1	09E-15	4	58E-29	0	0	0	0	0	0	0	0	0	0	0	0	
PM151	7	72E-03	5	27E-02	2	91E-02	4	89E-03	2	51E-04	6	58E-07	1	73E-09	1	20E-14	1	50E-27	0	0	0	0	0
SM153	2	92E-02	2	05E-02	1	44E-02	4	97E-03	8	47E-04	2	46E-05	7	14E-07	6	00E-10	1	23E-17	5	27E-33	2	24E-48	
SM156	5	11E-02	8	70E-03	1	49E-03	7	31E-06	1	06E-09	2	16E-17	4	47E-25	1	91E-40	0	0	0	0	0	0	
EU155	2	00E-06	6	76E-05	6	75E-05	6	75E-05	6	74E-05	6	71E-05	6	69E-05	6	64E-05	6	51E-05	6	25E-05	6	00E-05	
EU156	1	50E-04	1	21E-03	1	34E-03	1	21E-03	9	62E-04	6	02E-04	3	79E-04	1	51E-04	1	50E-05	1	47E-07	1	45E-09	
EU157	9	77E-03	1	13E-02	3	80E-03	1	42E-04	5	98E-07	1	05E-11	1	86E-16	5	81E-26	0	0	0	0	0	0	
GD159	2	48E-03	4	89E-03	1	94E-03	1	21E-04	1	19E-06	1	15E-10	1	12E-14	1	05E-22	8	97E-43	0	0	0	0	
TB161	2	20E-05	1	44E-04	1	30E-04	9	63E-05	5	81E-05	2	13E-05	7	78E-06	1	04E-06	6	90E-09	2	98E-13	1	30E-17	
TOTAL			5	97E+02	2	23E+02	9	08E+01	4	71E+01	1	29E+01	4	01E+00	8	14E-01	2	87E-01	1	05E-01	6	26E-02	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY E
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED LESS THAN 12 HOURS

PAGE 9

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
KR 85	7.59E-05	1.88E-03	1.83E-03	1.77E-03	1.61E-03	1.46E-03	1.28E-03	1.05E-03	5.57E-04	2.13E-04	8.15E-05	
SR 89	6.15E-08	1.44E-05	1.26E-06	1.11E-07	7.45E-11	5.05E-14	2.97E-18	1.35E-24	9.83E-46	0.	0.	0.
SR 90	1.46E-07	1.46E-05	1.44E-05	1.43E-05	1.38E-05	1.33E-05	1.26E-05	1.17E-05	9.17E-06	6.33E-06	4.38E-06	
Y 90	2.16E-13	1.46E-05	1.44E-05	1.43E-05	1.38E-05	1.33E-05	1.26E-05	1.17E-05	9.17E-06	6.33E-06	4.38E-06	
Y 91	1.23E-08	8.32E-04	9.69E-05	1.13E-05	1.76E-08	2.77E-11	5.06E-15	1.24E-20	2.52E-39	0.	0.	0.
ZR 95	4.46E-05	1.15E-04	1.64E-05	2.33E-06	6.80E-09	1.98E-11	8.18E-15	6.90E-20	8.48E-37	0.	0.	0.
NB 95M	9.51E-13	2.43E-06	3.47E-07	4.93E-08	1.44E-10	4.19E-13	1.73E-16	1.46E-21	1.79E-38	0.	0.	0.
NB 95	4.98E-12	2.46E-04	3.54E-05	5.03E-06	1.46E-08	4.25E-11	1.77E-14	1.50E-19	1.83E-36	0.	0.	0.
RU103	2.18E-04	8.45E-04	3.46E-05	1.42E-06	9.71E-11	6.66E-15	1.86E-20	8.78E-29	0.	0.	0.	0.
RH103M	1.45E-08	8.47E-04	3.46E-05	1.42E-06	9.71E-11	6.66E-15	1.86E-20	8.80E-29	0.	0.	0.	0.
RU106	2.33E-03	2.22E-02	1.57E-02	1.11E-02	3.96E-03	1.40E-03	3.53E-04	4.47E-05	4.51E-08	1.45E-12	4.66E-17	
RH106	2.53E-05	2.22E-02	1.57E-02	1.11E-02	3.96E-03	1.40E-03	3.53E-04	4.47E-05	4.51E-08	1.45E-12	4.66E-17	
SN123	1.16E-05	1.60E-04	5.81E-05	2.11E-05	1.01E-06	4.85E-08	8.47E-10	1.95E-12	3.13E-21	2.01E-34	1.29E-47	
SB125	1.66E-04	3.35E-04	2.93E-04	2.58E-04	1.77E-04	1.20E-04	7.16E-05	3.32E-05	2.54E-06	5.42E-08	1.16E-09	
TE125M	4.47E-12	1.37E-04	1.21E-04	1.07E-04	7.30E-05	4.95E-05	2.97E-05	1.37E-05	1.05E-06	2.25E-08	4.78E-10	
TE127M	5.26E-10	2.52E-04	7.88E-05	2.47E-05	7.58E-07	2.34E-08	2.25E-10	2.11E-13	1.73E-23	1.30E-38	9.65E-54	
TE127	3.68E-02	2.49E-04	7.79E-05	2.44E-05	7.49E-07	2.31E-08	2.22E-10	2.08E-13	1.71E-23	1.28E-38	9.56E-54	
CS137	5.49E-06	5.79E-05	5.72E-05	5.65E-05	5.46E-05	5.26E-05	5.03E-05	4.70E-05	3.72E-05	2.64E-05	1.87E-05	
BA137M	1.16E-08	5.42E-05	5.36E-05	5.30E-05	5.10E-05	4.93E-05	4.70E-05	4.41E-05	3.49E-05	2.47E-05	1.74E-05	
CE141	1.32E-08	5.70E-06	1.15E-07	2.30E-09	1.88E-14	1.53E-19	2.50E-26	1.66E-36	0.	0.	0.	0.
CE144	1.36E-04	3.98E-04	2.56E-04	1.63E-04	4.29E-05	1.13E-05	1.69E-06	1.31E-07	1.76E-11	2.76E-17	4.31E-23	
PR144	3.72E-08	3.98E-04	2.56E-04	1.63E-04	4.29E-05	1.13E-05	1.89E-06	1.31E-07	1.76E-11	2.76E-17	4.31E-23	
PM147	2.70E-15	1.57E-04	1.37E-04	1.20E-04	8.07E-05	5.44E-05	3.20E-05	1.45E-05	1.03E-06	1.95E-08	3.68E-10	
EU155	2.00E-06	5.84E-05	5.43E-05	5.06E-05	4.07E-05	3.27E-05	2.44E-05	1.57E-05	3.66E-06	4.14E-07	4.66E-08	
TOTAL		5.15E-02	3.49E-02	2.51E-02	1.01E-02	4.67E-03	2.27E-03	1.34E-03	6.56E-04	2.77E-04	1.26E-04	

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

PAGE 1

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.17E+02	1.39E+04
1.00E+00	2.61E+01	4.19E+03
2.00E+00	1.05E+01	2.70E+03
3.00E+00	6.56E+00	2.16E+03
4.00E+00	4.69E+00	1.85E+03
6.00E+00	2.82E+00	1.49E+03
9.00E+00	1.59E+00	1.21E+03
1.20E+01	1.00E+00	1.03E+03
1.50E+01	6.85E-01	9.02E+02
1.80E+01	5.03E-01	7.87E+02
2.10E+01	3.93E-01	6.90E+02
1.00E+00 DAYS	3.20E-01	5.97E+02
2.00E+00	1.53E-01	2.23E+02
5.00E+00	6.71E-02	9.08E+01
1.00E+01	2.55E-02	4.71E+01
2.00E+01	6.62E-03	1.29E+01
3.00E+01	3.53E-03	4.01E+00
5.00E+01	2.07E-03	8.14E-01
1.00E+02	8.85E-04	2.87E-01
2.00E+02	2.49E-04	1.05E-01
3.00E+02	1.17E-04	6.26E-02
1.00E+00 YEARS	8.91E-05	5.15E-02
1.50E+00	5.65E-05	3.49E-02
2.00E+00	4.01E-05	2.51E-02
3.50E+00	1.52E-05	1.01E-02
5.00E+00	6.09E-06	4.67E-03
7.00E+00	2.17E-06	2.27E-03
1.00E+01	8.30E-07	1.34E-03
2.00E+01	3.66E-07	6.56E-04
3.50E+01	2.46E-07	2.77E-04
5.00E+01	1.73E-07	1.26E-04

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MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
GE 75	2	10E-06	1	02E-02	6	13E-03	3	70E-03	2	23E-03	8	08E-04	1	76E-04	3	87E-05	8	42E-06	1	84E-06	4	01E-07
GE 77	3	68E-03	9	48E-03	8	90E-03	8	38E-03	7	91E-03	6	98E-03	5	81E-03	4	83E-03	4	02E-03	3	34E-03	2	78E-03
AS 77	3	80E-05	5	99E-03	6	11E-03	6	11E-03	6	17E-03	6	22E-03	6	22E-03	6	17E-03	6	05E-03	5	93E-03	5	79E-03
SE 77M	1	50E-09	1	80E-05	1	83E-05	1	84E-05	1	84E-05	1	86E-05	1	87E-05	1	86E-05	1	83E-05	1	79E-05	1	73E-05
GE 78	9	52E-01	5	97E-01	3	71E-01	2	32E-01	1	45E-01	5	63E-02	1	37E-02	3	31E-03	8	09E-04	1	97E-04	4	77E-05
AS 78	1	71E-02	2	85E-01	3	51E-01	3	29E-01	2	75E-01	1	62E-01	6	03E-02	2	00E-02	6	20E-03	1	85E-03	5	37E-04
AS 79	1	77E+01	1	74E-01	1	73E-03	1	70E-05	1	67E-07	1	62E-11	1	54E-17	1	47E-23	1	41E-29	1	34E-35	1	28E-41
SE 79M	2	63E-02	3	08E-01	3	05E-03	3	00E-05	2	95E-07	2	85E-11	2	72E-17	2	59E-23	2	48E-29	2	36E-35	2	26E-41
BR 80	9	91E-02	9	35E-03	8	79E-04	8	27E-05	7	79E-06	6	91E-08	5	78E-11	4	82E-14	4	01E-17	3	35E-20	2	80E-23
SE 81M	7	14E-02	3	32E+00	1	60E+00	7	72E-01	3	72E-01	8	67E-02	9	74E-03	1	09E-03	1	22E-04	1	37E-05	1	53E-06
SE 81	8	71E-01	3	94E+00	2	27E+00	1	14E+00	5	51E-01	1	29E-01	1	44E-02	1	61E-03	1	81E-04	2	03E-05	2	27E-06
BR 82	3	54E-04	3	47E-04	3	40E-04	3	33E-04	3	27E-04	3	15E-04	2	97E-04	2	80E-04	2	64E-04	2	49E-04	2	34E-04
SE 83	1	01E+01	1	92E+00	3	63E-01	6	90E-02	1	31E-02	4	69E-04	3	19E-06	2	17E-08	1	48E-10	1	01E-12	6	39E-15
BR 83	8	41E-02	1	26E+00	1	17E+00	9	15E-01	6	97E-01	3	92E-01	1	66E-01	7	00E-02	2	95E-02	1	25E-02	5	27E-03
KR 83M	4	37E-06	2	85E-01	5	81E-01	7	23E-01	7	45E-01	6	23E-01	3	66E-01	1	89E-01	9	09E-02	4	21E-02	1	89E-02
BR 84	1	63E-02	2	81E+00	7	62E-01	2	06E-01	5	57E-02	4	07E-03	8	06E-05	1	59E-06	3	14E-08	6	23E-10	1	23E-11
KR 85M	7	35E-02	1	57E+02	1	34E+02	1	14E+02	9	75E+01	7	14E+01	4	46E+01	2	77E+01	1	73E+01	1	08E+01	6	72E+00
KR 87	1	28E+03	7	40E+02	4	30E+02	2	47E+02	1	43E+02	4	78E+01	9	30E+00	1	80E+00	3	49E-01	6	76E-02	1	30E-02
KR 88	5	66E+02	4	42E+02	3	45E+02	2	69E+02	2	10E+02	1	28E+02	6	11E+01	2	90E+01	1	38E+01	6	57E+00	3	12E+00
RB 88	1	44E+02	4	49E+02	3	80E+02	3	01E+02	2	35E+02	1	43E+02	5	83E+01	3	25E+01	1	55E+01	7	38E+00	3	51E+00
RB 89	8	06E-01	7	56E-01	5	08E-02	3	41E-03	2	29E-04	1	04E-06	3	13E-10	9	46E-14	2	88E-17	8	73E-21	2	65E-24
SR 89	6	15E-08	2	16E-03	2	31E-03	2	31E-03	2	31E-03	2	31E-03	2	31E-03	2	30E-03	2	30E-03	2	29E-03	2	29E-03
SR 90	1	46E-07	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05
SR 91	4	47E-01	8	32E+00	7	76E+00	7	23E+00	6	73E+00	5	82E+00	4	70E+00	3	79E+00	3	07E+00	2	46E+00	1	99E+00
Y 91M	3	01E-05	2	87E+00	3	91E+00	4	19E+00	4	14E+00	3	71E+00	3	04E+00	2	45E+00	1	97E+00	1	59E+00	1	28E+00
Y 91	1	23E-08	2	55E-03	5	88E-03	9	36E-03	1	28E-02	1	92E-02	2	73E-02	3	38E-02	3	91E-02	4	33E-02	4	67E-02
SR 92	3	19E-01	1	42E+00	1	10E+00	8	53E-01	6	60E-01	3	95E-01	1	83E-01	8	53E-02	3	95E-02	1	83E-02	8	53E-03
Y 92	1	47E-02	2	99E-01	4	72E-01	5	57E-01	5	92E-01	5	66E-01	4	33E-01	2	95E-01	1	90E-01	1	17E-01	7	03E-02
SR 93	1	70E+01	2	93E-01	1	62E-03	8	93E-06	4	91E-08	1	51E-12	2	54E-19	4	29E-26	7	26E-33	1	22E-39	2	06E-46
Y 93	2	08E-02	6	72E-01	6	33E-01	5	89E-01	5	50E-01	4	82E-01	3	92E-01	3	21E-01	2	60E-01	2	14E-01	1	74E-01
Y 94	2	80E+00	3	83E+00	4	93E-01	6	35E-02	8	18E-03	1	36E-04	2	92E-07	6	24E-10	1	34E-12	2	92E-15	1	62E-16
Y 95	1	19E+01	1	12E+00	2	46E-02	5	42E-04	1	20E-05	5	82E-09	6	21E-14	6	65E-19	7	10E-24	7	59E-29	8	13E-34
ZR 95	4	46E-05	5	82E-03	5	96E-03	5	96E-03	5	96E-03	5	96E-03	5	96E-03	5	91E-03	5	91E-03	5	91E-03	5	91E-03
NB 95	4	98E-12	3	60E-06	8	38E-06	1	32E-05	1	80E-05	2	76E-05	4	19E-05	5	62E-05	7	05E-05	8	48E-05	9	91E-05
ZR 97	1	28E-01	5	60E-01	5	33E-01	5	14E-01	4	92E-01	4	54E-01	4	01E-01	3	55E-01	3	15E-01	2	78E-01	2	47E-01
NB 97M	6	59E-04	5	33E-01	5	14E-01	4	94E-01	4	74E-01	4	36E-01	3	85E-01	3	42E-01	3	02E-01	2	67E-01	2	36E-01
NB 97	6	43E-02	2	80E-01	3	94E-01	4	50E-01	4	72E-01	4	70E-01	4	27E-01	3	81E-01	3	37E-01	2	98E-01	2	65E-01
NB 98	8	80E-01	3	90E-01	1	72E-01	7	61E-02	3	38E-02	6	59E-03	5	72E-04	4	94E-05	4	31E-06	3	73E-07	3	21E-08
MO 99	1	11E-02	4	59E+00	4	55E+00	4	50E+00	4	46E+00	4	36E+00	4	23E+00	4	10E+00	3	98E+00	3	86E+00	3	74E+00
TC 99M	1	03E-07	4	38E-01	8	22E-01	1	16E+00	1	46E+00	1	95E+00	2	47E+00	2	81E+00	3	01E+00	3	13E+00	3	17E+00

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
MO101	2.18E+02	9.87E+01	5.73E+00	3.31E-01	1.92E-02	6.46E-05	1.25E-08	2.45E-12	4.75E-16	9.23E-20	1.80E-23
TC101	9.23E+00	2.77E+02	3.03E+01	2.48E+00	1.80E-01	8.16E-04	2.04E-07	4.57E-11	9.68E-15	2.00E-18	4.02E-22
MO102	2.25E+03	5.14E+01	1.17E+00	2.68E-02	6.09E-04	3.17E-07	3.77E-12	4.45E-17	5.29E-22	6.28E-27	7.46E-32
TC102M	1.45E+00	4.34E+01	9.95E-01	2.27E-02	5.17E-04	2.68E-07	3.18E-12	3.77E-17	4.47E-22	5.30E-27	6.30E-32
TC102	6.77E+03	2.58E+01	5.91E-01	1.34E-02	3.07E-04	1.60E-07	1.89E-12	2.25E-17	2.68E-22	3.17E-27	3.75E-32
RU103	2.18E-04	5.04E-01	5.04E-01	5.04E-01	5.04E-01	5.02E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01	4.97E-01
RH103M	1.45E-08	2.60E-01	3.87E-01	4.48E-01	4.76E-01	4.97E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01	4.99E-01
TC104	2.31E+02	1.65E+02	1.65E+01	1.64E+00	1.62E-01	1.59E-03	1.56E-06	1.52E-09	1.49E-12	1.45E-15	1.42E-18
RU105	2.31E+00	7.97E+01	6.81E+01	5.85E+01	5.01E+01	3.66E+01	2.29E+01	1.43E+01	8.95E+00	5.60E+00	3.52E+00
RH105M	1.52E-02	7.99E+01	6.83E+01	5.87E+01	5.01E+01	3.66E+01	2.29E+01	1.43E+01	8.99E+00	5.62E+00	3.52E+00
RH105	2.49E-08	1.62E+00	3.00E+00	4.15E+00	5.11E+00	6.54E+00	7.83E+00	8.42E+00	8.58E+00	8.50E+00	8.28E+00
RU106	2.33E-03	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02
RH106	2.53E-05	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02
RH107	5.77E-01	7.84E+01	1.19E+01	1.79E+00	2.69E-01	6.16E-03	2.12E-05	7.30E-08	2.51E-10	8.61E-14	8.56E-17
PD107M	1.20E-03	1.59E+01	2.41E+00	3.63E-01	5.49E-02	1.25E-03	4.32E-06	1.49E-08	5.12E-11	1.76E-13	6.03E-16
PD109	1.89E-02	1.57E+00	1.49E+00	1.42E+00	1.34E+00	1.21E+00	1.04E+00	8.91E-01	7.64E-01	6.54E-01	5.62E-01
AG109M	1.09E-04	1.57E+00	1.49E+00	1.42E+00	1.34E+00	1.21E+00	1.04E+00	8.91E-01	7.64E-01	6.54E-01	5.62E-01
PD111M	5.19E+00	4.56E+00	4.03E+00	3.55E+00	3.13E+00	2.43E+00	1.67E+00	1.14E+00	7.85E-01	5.37E-01	3.68E-01
PD111	1.85E+00	3.33E+00	3.20E+00	2.85E+00	2.52E+00	1.96E+00	1.34E+00	9.18E-01	6.29E-01	4.32E-01	2.96E-01
AG111M	1.47E-02	4.49E+00	4.21E+00	3.77E+00	3.33E+00	2.56E+00	1.76E+00	1.21E+00	8.26E-01	5.68E-01	3.88E-01
AG111	5.22E-09	1.55E-02	3.24E-02	4.78E-02	6.14E-02	8.35E-02	1.07E-01	1.23E-01	1.33E-01	1.40E-01	1.44E-01
PD112	1.35E+00	1.31E+00	1.27E+00	1.23E+00	1.19E+00	1.11E+00	1.01E+00	9.13E-01	8.26E-01	7.49E-01	6.79E-01
AG112	4.07E-05	2.60E-01	4.58E-01	6.15E-01	7.30E-01	8.77E-01	9.64E-01	9.58E-01	9.13E-01	8.52E-01	7.85E-01
AG113	7.78E-03	1.67E+00	1.46E+00	1.28E+00	1.13E+00	8.65E-01	5.87E-01	3.96E-01	2.68E-01	1.80E-01	1.22E-01
AG115	1.55E+00	1.66E+00	2.06E-01	2.58E-02	3.23E-03	5.05E-05	9.87E-08	1.92E-10	3.74E-13	3.70E-16	3.44E-16
CD115M	1.27E-08	3.37E-04	3.79E-04	3.82E-04	3.82E-04	3.82E-04	3.82E-04	3.82E-04	3.81E-04	3.79E-04	3.79E-04
CD115	4.89E-06	9.22E-02	9.92E-02	9.88E-02	9.76E-02	9.52E-02	9.17E-02	8.80E-02	8.47E-02	8.16E-02	7.84E-02
IN115M	6.09E-11	1.02E-02	2.25E-02	3.35E-02	4.28E-02	5.69E-02	7.04E-02	7.75E-02	8.09E-02	8.16E-02	8.10E-02
CD117	1.09E-01	1.82E+00	1.37E+00	1.02E+00	7.67E-01	4.30E-01	1.80E-01	7.62E-02	3.21E-02	1.34E-02	5.67E-03
IN117M	5.26E-06	6.33E-01	9.17E-01	9.95E-01	9.61E-01	7.58E-01	4.33E-01	2.21E-01	1.06E-01	4.94E-02	2.23E-02
IN117	2.12E-10	1.15E-01	2.80E-01	3.89E-01	4.33E-01	3.98E-01	2.53E-01	1.36E-01	6.76E-02	3.17E-02	1.46E-02
CD118	7.03E+00	3.02E+00	1.29E+00	5.51E-01	2.37E-01	4.33E-02	3.39E-03	2.65E-04	2.08E-05	1.63E-06	1.28E-07
IN118	4.66E-01	3.02E+00	1.29E+00	5.53E-01	2.37E-01	4.33E-02	3.39E-03	2.67E-04	2.08E-05	1.63E-06	1.28E-07
CD119	1.85E+01	2.89E-01	4.50E-03	7.03E-05	1.10E-06	2.68E-10	1.03E-15	3.92E-21	1.49E-26	5.70E-32	2.18E-37
IN119M	2.79E-02	3.13E+00	3.39E-01	3.42E-02	3.41E-03	3.35E-05	3.28E-08	3.20E-11	3.13E-14	3.05E-17	2.98E-20
IN119	1.38E+00	1.64E-01	1.91E-02	1.92E-03	1.92E-04	1.89E-06	1.85E-09	1.81E-12	1.77E-15	1.72E-18	1.68E-21
SN121	2.32E-03	2.40E-01	2.32E-01	2.27E-01	2.21E-01	2.10E-01	1.94E-01	1.81E-01	1.67E-01	1.55E-01	1.44E-01
SN123M	1.23E+00	2.30E+00	8.16E-01	2.89E-01	1.02E-01	1.27E-02	5.63E-04	2.50E-05	1.10E-06	4.87E-08	2.16E-09
SN123	1.16E-05	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03
SN125	2.77E-02	2.76E-02	2.74E-02	2.74E-02	2.73E-02	2.72E-02	2.69E-02	2.66E-02	2.64E-02	2.61E-02	2.60E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
SB125	1	66E-04	1	67E-04	1	67E-04	1	69E-04	1	69E-04	1	70E-04	1	73E-04	1	75E-04	1	78E-04	1	79E-04	1	82E-04
SB126	5	37E-03	5	34E-03	5	34E-03	5	33E-03	5	31E-03	5	28E-03	5	25E-03	5	23E-03	5	18E-03	5	14E-03	5	11E-03
SN127	5	57E+00	4	01E+00	2	87E+00	2	07E+00	1	49E+00	7	70E-01	2	86E-01	1	06E-01	3	95E-02	1	47E-02	5	44E-03
SB127	6	51E-02	2	25E-01	2	49E-01	2	65E-01	2	75E-01	2	87E-01	2	92E-01	2	89E-01	2	84E-01	2	78E-01	2	74E-01
TE127	3	68E-02	4	57E-02	5	55E-02	6	60E-02	7	62E-02	9	56E-02	1	22E-01	1	43E-01	1	59E-01	1	71E-01	1	80E-01
SN128	4	28E+01	2	11E+01	1	05E+01	5	17E+00	2	55E+00	6	23E-01	7	52E-02	9	08E-03	1	09E-03	1	33E-04	1	60E-05
SB128M	2	18E-02	2	40E+01	1	25E+01	6	16E+00	3	04E+00	7	43E-01	8	96E-02	1	08E-02	1	30E-03	1	58E-04	1	91E-05
SB128	1	80E+00	1	73E+00	1	63E+00	1	53E+00	1	43E+00	1	22E+00	9	78E-01	7	75E-01	6	16E-01	4	88E-01	3	88E-01
SN129M	2	39E+01	1	20E+01	5	99E+00	3	00E+00	1	50E+00	3	74E-01	4	69E-02	5	87E-03	7	33E-04	9	15E-05	1	14E-05
SN129	1	60E+02	1	57E+00	1	55E-02	1	53E-04	1	50E-06	1	46E-10	1	39E-16	1	33E-22	1	27E-28	1	21E-34	1	15E-40
SB129	9	01E+00	1	51E+01	1	42E+01	1	27E+01	1	11E+01	8	28E+00	5	15E+00	3	19E+00	1	97E+00	1	22E+00	7	47E-01
TE129M	1	70E-07	1	89E-03	3	88E-03	5	71E-03	7	33E-03	9	93E-03	1	26E-02	1	42E-02	1	52E-02	1	58E-02	1	62E-02
TE129	6	49E+00	6	91E+00	1	04E+01	1	08E+01	1	04E+01	8	64E+00	5	76E+00	3	63E+00	2	25E+00	1	40E+00	8	67E-01
SB130M	9	34E-01	1	76E+00	4	63E-03	1	22E-05	3	20E-08	2	20E-13	4	03E-21	7	31E-29	1	33E-36	2	41E-44	4	39E-52
SB130	1	60E+02	4	84E+01	1	38E+01	3	90E+00	1	10E+00	8	88E-02	2	03E-03	4	62E-05	1	05E-06	2	39E-08	5	49E-10
I130	4	46E-02	4	22E-02	4	00E-02	3	77E-02	3	57E-02	3	19E-02	2	70E-02	2	28E-02	1	92E-02	1	63E-02	1	38E-02
SB131	1	33E+02	3	48E+01	5	68E+00	9	35E-01	1	53E-01	4	12E-03	1	81E-05	8	01E-08	3	53E-10	1	55E-12	7	77E-15
TE131M	6	37E-05	3	35E-01	3	82E-01	3	82E-01	3	75E-01	3	59E-01	3	34E-01	3	12E-01	2	91E-01	2	72E-01	2	54E-01
TE131	5	89E+01	6	37E+01	2	09E+01	5	43E+00	1	32E+00	1	24E-01	6	13E-02	5	68E-02	5	30E-02	4	96E-02	4	63E-02
I131	8	56E-03	2	97E-01	4	37E-01	4	79E-01	4	87E-01	4	92E-01	4	92E-01	4	87E-01	4	87E-01	4	83E-01	4	83E-01
TE132	1	39E+00	3	38E+00	3	34E+00	3	33E+00	3	28E+00	3	23E+00	3	14E+00	3	07E+00	2	98E+00	2	89E+00	2	82E+00
I132	3	41E+00	3	40E+00	3	40E+00	3	38E+00	3	36E+00	3	31E+00	3	24E+00	3	15E+00	3	07E+00	2	99E+00	2	92E+00
TE133M	5	27E-02	1	82E+01	7	92E+00	3	45E+00	1	50E+00	2	85E-01	2	34E-02	1	93E-03	1	59E-04	1	31E-05	1	09E-06
TE133	2	95E+02	1	67E+01	1	86E+00	6	15E-01	2	60E-01	4	94E-02	4	08E-03	3	35E-04	2	78E-05	2	28E-06	1	88E-07
I133	4	58E-01	4	94E+00	5	31E+00	5	31E+00	5	22E+00	4	94E+00	4	50E+00	4	08E+00	3	68E+00	3	35E+00	3	03E+00
XE133M	2	78E-06	1	58E-01	3	82E-01	6	41E-01	8	32E-01	1	25E+00	1	81E+00	2	30E+00	2	71E+00	3	06E+00	3	36E+00
XE133	4	86E-05	2	76E+00	6	73E+00	1	07E+01	1	47E+01	2	23E+01	3	27E+01	4	18E+01	5	00E+01	5	72E+01	6	36E+01
TE134	9	76E+01	4	53E+01	1	69E+01	6	27E+00	2	33E+00	3	23E-01	1	65E-02	8	44E-04	4	33E-05	2	22E-06	1	14E-07
I134	4	48E+01	5	99E+01	4	20E+01	2	46E+01	1	32E+01	3	35E+00	3	69E-01	3	76E-02	3	69E-03	3	53E-04	3	35E-05
I135	6	87E+00	1	21E+01	1	09E+01	9	81E+00	8	85E+00	7	20E+00	5	30E+00	3	86E+00	2	84E+00	2	09E+00	1	53E+00
XE135M	1	08E-01	4	98E+02	4	84E+02	4	39E+02	3	94E+02	3	21E+02	2	36E+02	1	73E+02	1	26E+02	9	28E+01	6	80E+01
XE135	1	13E+02	2	23E+02	3	26E+02	4	11E+02	4	79E+02	5	74E+02	6	38E+02	6	38E+02	6	09E+02	5	54E+02	4	95E+02
CS136	1	38E-02	1	38E-02	1	38E-02	1	38E-02	1	37E-02	1	36E-02	1	35E-02	1	35E-02	1	34E-02	1	33E-02	1	32E-02
CS137	5	49E-06	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05
BA137M	1	16E-08	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05
XE138	2	62E+01	2	25E+00	1	96E-01	1	70E-02	1	47E-03	1	10E-05	7	18E-09	4	65E-12	3	03E-15	1	97E-18	1	28E-21
CS138	3	90E+00	6	58E+00	2	27E+00	6	68E-01	1	87E-01	1	43E-02	2	97E-04	6	18E-06	1	28E-07	2	66E-09	5	52E-11
CS139	1	04E+03	3	30E+01	4	15E-01	5	21E-03	6	54E-05	1	03E-08	2	04E-14	4	04E-20	7	99E-26	1	59E-31	3	13E-37
BA139	1	92E+01	2	14E+02	1	31E+02	7	99E+01	4	83E+01	1	78E+01	3	93E+00	8	75E-01	1	95E-01	4	31E-02	9	56E-03
BA140	6	06E-03	3	80E-02	3	80E-02	3	77E-02	3	77E-02	3	74E-02	3	74E-02	3	71E-02	3	68E-02	3	65E-02	3	62E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
LA140	1.44E-08	6.48E-04	1.28E-03	1.91E-03	2.52E-03	3.71E-03	5.41E-03	7.01E-03	8.51E-03	9.95E-03	1.13E-02	
BA141	1.16E+01	3.50E+00	3.47E-01	3.44E-02	3.41E-03	3.38E-05	3.30E-08	3.22E-11	3.14E-14	3.08E-17	3.00E-20	
LA141	1.07E-01	2.26E+00	2.11E+00	1.79E+00	1.50E+00	1.05E+00	6.14E-01	3.61E-01	2.12E-01	1.24E-01	7.31E-02	
CE141	1.32E-08	1.47E-03	3.44E-03	5.17E-03	6.60E-03	8.88E-03	1.10E-02	1.23E-02	1.30E-02	1.34E-02	1.36E-02	
BA142	3.10E+01	1.23E+00	2.81E-02	6.40E-04	1.46E-05	7.60E-09	9.02E-14	1.07E-18	1.27E-23	1.51E-28	1.79E-33	
LA142	7.14E-01	4.94E+00	3.26E+00	2.07E+00	1.32E+00	5.33E-01	1.38E-01	3.55E-02	9.14E-03	2.35E-03	6.05E-04	
LA143	9.52E+00	1.86E+00	9.52E-02	4.90E-03	2.52E-04	6.57E-07	8.89E-11	1.20E-14	1.61E-18	2.18E-22	2.94E-26	
CE143	3.81E-03	2.43E-01	2.52E-01	2.45E-01	2.41E-01	2.32E-01	2.17E-01	2.04E-01	1.91E-01	1.79E-01	1.69E-01	
PR143	1.11E-09	3.72E-04	8.99E-04	1.42E-03	1.93E-03	2.92E-03	4.30E-03	5.63E-03	6.84E-03	7.94E-03	8.99E-03	
CE144	1.36E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	
PR144	3.72E-08	8.84E-04	9.64E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	
PR145	6.98E-03	1.02E+00	9.10E-01	8.07E-01	7.21E-01	5.72E-01	4.03E-01	2.85E-01	2.02E-01	1.42E-01	1.01E-01	
CE146	2.32E+01	1.19E+00	6.09E-02	3.11E-03	1.60E-04	4.23E-07	5.69E-11	7.65E-15	1.03E-18	1.39E-22	1.88E-26	
PR146	4.79E-01	4.17E+00	9.45E-01	1.77E-01	3.19E-02	1.00E-03	5.55E-06	3.06E-08	1.69E-10	9.39E-13	5.12E-15	
PR147	2.73E+00	7.89E-01	2.46E-02	7.71E-04	2.41E-05	2.35E-08	7.17E-13	2.19E-17	6.69E-22	2.04E-26	6.22E-31	
ND147	9.74E-07	1.83E-02	1.88E-02	1.88E-02	1.88E-02	1.86E-02	1.85E-02	1.84E-02	1.82E-02	1.81E-02	1.79E-02	
ND149	1.97E+00	1.35E+00	9.13E-01	6.24E-01	4.22E-01	1.96E-01	6.16E-02	1.95E-02	6.13E-03	1.93E-03	6.09E-04	
PM149	2.75E-04	2.15E-02	3.58E-02	4.52E-02	5.12E-02	5.75E-02	5.98E-02	5.86E-02	5.71E-02	5.50E-02	5.30E-02	
PM150	2.62E-02	2.03E-02	1.57E-02	1.21E-02	9.35E-03	5.62E-03	2.60E-03	1.20E-03	5.58E-04	2.58E-04	1.19E-04	
ND151	1.22E+01	3.80E-01	1.19E-02	3.72E-04	1.17E-05	1.13E-08	3.47E-13	1.06E-17	3.23E-22	9.86E-27	3.02E-31	
PM151	7.72E-03	9.04E-02	9.12E-02	8.87E-02	8.63E-02	8.22E-02	7.62E-02	7.08E-02	6.58E-02	6.10E-02	5.66E-02	
PM152	2.13E+01	2.08E-02	2.03E-05	1.97E-08	1.93E-11	1.85E-17	1.72E-26	1.60E-35	1.49E-44	1.40E-53	1.30E-62	
SM153	2.92E-02	2.87E-02	2.84E-02	2.79E-02	2.76E-02	2.67E-02	2.56E-02	2.44E-02	2.34E-02	2.24E-02	2.14E-02	
SM155	2.72E+00	4.46E-01	7.31E-02	1.19E-02	1.97E-03	5.28E-05	2.34E-07	1.03E-09	4.52E-12	2.02E-14	4.95E-17	
EU155	2.00E-06	5.70E-05	6.59E-05	6.74E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	
SM156	5.11E-02	4.73E-02	4.40E-02	4.09E-02	3.79E-02	3.28E-02	2.63E-02	2.11E-02	1.69E-02	1.35E-02	1.09E-02	
EU156	1.50E-04	2.44E-04	3.31E-04	4.11E-04	4.87E-04	6.21E-04	7.90E-04	9.13E-04	1.02E-03	1.10E-03	1.16E-03	
EU157	9.77E-03	3.24E-02	3.09E-02	2.95E-02	2.81E-02	2.57E-02	2.24E-02	1.96E-02	1.70E-02	1.49E-02	1.29E-02	
EU158	5.28E-01	2.14E-01	8.65E-02	3.50E-02	1.41E-02	2.32E-03	1.55E-04	1.03E-05	6.82E-07	4.53E-08	3.01E-09	
EU159	5.79E-01	5.75E-02	5.70E-03	5.65E-04	5.60E-05	5.53E-07	5.40E-10	5.28E-13	5.15E-16	5.04E-19	4.92E-22	
GD159	2.48E-03	1.09E-02	1.13E-02	1.10E-02	1.05E-02	9.76E-03	8.70E-03	7.76E-03	6.90E-03	6.15E-03	5.48E-03	
TB161	2.20E-05	1.58E-04	1.57E-04	1.56E-04	1.56E-04	1.55E-04	1.53E-04	1.51E-04	1.49E-04	1.48E-04	1.45E-04	
TOTAL	1.39E+04	4.19E+03	2.70E+03	2.16E+03	1.85E+03	1.49E+03	1.21E+03	1.03E+03	9.02E+02	7.87E+02	6.90E+02	

MICROCURI/SG METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
GE 77	3.68E-03	2.32E-03	5.31E-04	6.40E-06	4.08E-09	1.65E-15	6.63E-22	1.09E-34	0.	0.	0.	0.
AS 77	3.80E-05	5.61E-03	4.06E-03	1.18E-03	1.38E-04	1.87E-06	2.54E-08	4.68E-12	2.17E-21	4.65E-40	1.00E-58	1.00E-61
SE 77M	1.50E-09	1.69E-05	1.22E-05	3.53E-06	4.12E-07	5.60E-09	7.62E-11	1.40E-14	6.51E-24	1.39E-42	3.00E-61	0.
AS 78	1.71E-02	1.52E-04	4.47E-09	3.78E-23	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	3.54E-04	2.20E-04	1.37E-04	3.35E-05	3.17E-06	2.85E-08	2.56E-10	2.07E-14	1.21E-24	4.14E-45	1.41E-65	0.
BR 83	8.41E-02	2.22E-03	2.23E-06	2.27E-15	2.32E-30	0.	0.	0.	0.	0.	0.	0.
KR 83M	4.37E-06	9.70E-03	1.10E-05	9.92E-15	1.02E-29	0.	0.	0.	0.	0.	0.	0.
KR 85M	7.35E-02	4.18E+00	9.54E-02	1.13E-06	7.00E-15	2.66E-31	1.01E-47	0.	0.	0.	0.	0.
KR 85	7.59E-05	1.99E-03	2.03E-03	2.03E-03	2.03E-03	2.03E-03	2.02E-03	2.00E-03	1.96E-03	1.93E-03	0.	0.
KR 87	1.28E+03	2.53E-03	5.01E-09	3.88E-26	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	5.66E+02	1.49E+00	3.90E-03	7.09E-11	8.94E-24	0.	0.	0.	0.	0.	0.	0.
RB 88	1.44E+02	1.66E+00	4.39E-03	7.93E-11	9.95E-24	0.	0.	0.	0.	0.	0.	0.
SR 89	6.15E-08	1.85E-03	1.82E-03	1.75E-03	1.64E-03	1.43E-03	1.25E-03	9.63E-04	4.91E-04	1.30E-04	3.41E-05	0.
SR 90	1.46E-07	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.49E-05	1.49E-05	1.49E-05	1.47E-05	0.
Y 90	2.16E-13	3.44E-06	6.09E-06	1.09E-05	1.39E-05	1.49E-05	1.50E-05	1.50E-05	1.49E-05	1.49E-05	1.47E-05	0.
SR 91	4.47E-01	1.60E+00	2.87E-01	1.65E-03	3.01E-07	1.02E-14	3.46E-22	3.94E-37	0.	0.	0.	0.
Y 91M	3.01E-05	1.04E+00	1.85E-01	1.06E-03	1.96E-07	6.58E-15	2.23E-22	2.54E-37	0.	0.	0.	0.
Y 91	1.23E-08	4.92E-02	5.82E-02	5.82E-02	5.48E-02	4.86E-02	4.33E-02	3.43E-02	1.90E-02	5.85E-03	1.80E-03	0.
SR 92	3.19E-01	3.97E-03	8.57E-06	8.62E-14	4.03E-27	0.	0.	0.	0.	0.	0.	0.
Y 92	1.47E-02	4.16E-02	4.63E-04	3.55E-10	2.08E-20	7.07E-41	2.43E-61	0.	0.	0.	0.	0.
Y 93	2.08E-02	1.40E-01	2.74E-02	2.06E-04	5.94E-08	4.89E-15	4.04E-22	2.76E-36	0.	0.	0.	0.
ZR 95	4.46E-05	5.57E-03	5.52E-03	5.32E-03	5.08E-03	4.54E-03	4.09E-03	3.31E-03	1.94E-03	6.65E-04	2.29E-04	0.
NB 95M	9.51E-13	1.89E-05	3.45E-05	6.56E-05	8.87E-05	9.36E-05	8.63E-05	7.00E-05	4.11E-05	1.41E-05	4.87E-06	0.
NB 95	4.98E-12	1.08E-04	2.13E-04	5.13E-04	9.51E-04	1.64E-03	2.11E-03	2.62E-03	2.52E-03	1.21E-03	4.66E-04	0.
ZR 97	1.28E-01	2.18E-01	8.21E-02	4.34E-03	3.26E-05	1.84E-09	1.03E-13	3.26E-22	1.84E-43	0.	0.	0.
NB 97M	6.59E-04	2.09E-01	7.84E-02	4.19E-03	3.13E-05	1.76E-09	9.94E-14	3.13E-22	1.77E-43	0.	0.	0.
NB 97	6.43E-02	2.19E-01	8.21E-02	4.36E-03	3.28E-05	1.98E-09	1.11E-13	3.52E-22	1.98E-43	0.	0.	0.
MO 99	1.11E-02	3.62E+00	2.83E+00	1.34E+00	3.87E-01	3.24E-02	2.71E-03	1.88E-05	7.65E-11	1.26E-21	2.08E-32	0.
TC 99M	1.03E-07	3.18E+00	2.68E+00	1.28E+00	3.70E-01	3.09E-02	2.59E-03	1.80E-05	7.30E-11	1.20E-21	1.99E-32	0.
RU103	2.18E-04	4.97E-01	4.88E-01	4.61E-01	4.24E-01	3.55E-01	2.98E-01	2.10E-01	8.76E-02	1.52E-02	2.64E-03	0.
RH103M	1.45E-08	4.97E-01	4.88E-01	4.63E-01	4.24E-01	3.55E-01	2.98E-01	2.10E-01	8.76E-02	1.52E-02	2.64E-03	0.
RU105	2.31E+00	2.21E+00	5.19E-02	6.81E-07	4.99E-15	2.66E-31	1.42E-47	0.	0.	0.	0.	0.
RH105M	1.52E-02	2.21E+00	5.19E-02	6.83E-07	5.01E-15	2.68E-31	1.43E-47	0.	0.	0.	0.	0.
RH105	2.49E-08	7.95E+00	5.19E+00	1.30E+00	1.28E-01	1.24E-03	1.21E-05	1.14E-09	9.87E-20	7.42E-40	5.58E-60	0.
RU106	2.33E-03	4.42E-02	4.40E-02	4.38E-02	4.33E-02	4.27E-02	4.16E-02	4.01E-02	3.66E-02	3.03E-02	2.50E-02	0.
RH106	2.53E-05	4.42E-02	4.40E-02	4.38E-02	4.33E-02	4.27E-02	4.16E-02	4.01E-02	3.66E-02	3.03E-02	2.50E-02	0.
PD109	1.89E-02	4.81E-01	1.41E-01	3.48E-03	7.33E-06	3.26E-11	1.45E-16	2.88E-27	0.	0.	0.	0.
AG109M	1.09E-04	4.81E-01	1.41E-01	3.48E-03	7.36E-06	3.27E-11	1.45E-16	2.88E-27	0.	0.	0.	0.
PD111M	5.19E+00	2.52E-01	1.22E-02	1.40E-06	3.79E-13	2.76E-26	2.03E-39	0.	0.	0.	0.	0.
PD111	1.85E+00	2.03E-01	9.84E-03	1.13E-06	3.07E-13	2.24E-26	1.63E-39	0.	0.	0.	0.	0.

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
AG111M	1.47E-02	2.65E-01	1.29E-02	1.48E-06	4.01E-13	2.94E-26	2.15E-39	0.	0.	0.	0.
AG111	5.22E-09	1.44E-01	1.39E-01	1.05E-01	6.64E-02	2.63E-02	1.05E-02	1.65E-03	1.62E-05	1.57E-09	1.52E-13
PD112	1.35E+00	6.15E-01	2.79E-01	2.59E-02	4.93E-04	1.78E-07	6.50E-11	8.52E-18	5.38E-35	0.	0.
AG112	4.07E-05	7.14E-01	3.30E-01	3.05E-02	5.83E-04	2.11E-07	7.65E-11	1.01E-17	6.31E-35	0.	0.
AG113	7.78E-03	8.23E-02	3.57E-03	2.90E-07	4.44E-14	1.04E-27	2.42E-41	0.	0.	0.	0.
CD115M	1.27E-08	3.67E-04	3.60E-04	3.42E-04	3.18E-04	2.69E-04	2.31E-04	1.66E-04	7.42E-05	1.47E-05	2.95E-06
CD115	4.89E-06	7.35E-02	5.40E-02	2.13E-02	4.49E-03	2.01E-04	6.92E-06	1.78E-08	3.14E-15	9.85E-29	3.09E-42
IN115M	6.09E-11	7.77E-02	5.88E-02	2.32E-02	4.89E-03	2.18E-04	9.74E-06	1.94E-08	3.44E-15	1.08E-28	3.37E-42
CD117	1.09E-01	2.39E-03	2.32E-06	2.16E-15	1.93E-30	0.	0.	0.	0.	0.	0.
IN117M	5.26E-06	9.90E-03	1.14E-05	1.10E-14	9.81E-30	0.	0.	0.	0.	0.	0.
IN117	2.12E-10	6.53E-03	7.72E-06	7.49E-15	6.63E-30	0.	0.	0.	0.	0.	0.
SN121	2.32E-03	1.33E-01	7.15E-02	1.13E-02	5.18E-04	1.09E-06	2.30E-09	1.02E-14	4.28E-28	0.	0.
SN123	1.16E-05	1.21E-03	1.20E-03	1.18E-03	1.15E-03	1.08E-03	1.03E-03	9.18E-04	6.96E-04	3.99E-04	2.30E-04
SN125	2.77E-02	2.57E-02	2.40E-02	1.91E-02	1.32E-02	6.33E-03	3.03E-03	6.92E-04	1.73E-05	1.09E-08	6.83E-12
SB125	1.66E-04	1.85E-04	2.01E-04	2.46E-04	3.01E-04	3.65E-04	3.94E-04	4.10E-04	4.02E-04	3.75E-04	3.51E-04
SB126	5.37E-03	5.08E-03	4.80E-03	4.06E-03	3.08E-03	1.77E-03	1.02E-03	3.35E-04	2.09E-05	1.02E-07	2.05E-08
SN127	5.57E+00	2.03E-03	7.34E-07	3.50E-17	2.20E-34	0.	0.	0.	0.	0.	0.
SB127	6.51E-02	2.67E-01	2.23E-01	1.30E-01	5.35E-02	8.92E-03	1.49E-03	4.17E-05	5.44E-09	9.29E-17	1.58E-24
TE127M	5.26E-10	4.08E-04	7.46E-04	1.45E-03	2.00E-03	2.20E-03	2.13E-03	1.89E-03	1.38E-03	7.27E-04	3.84E-04
TE127	3.68E-02	1.91E-01	1.88E-01	1.14E-01	4.84E-02	9.92E-03	3.40E-03	1.91E-03	1.36E-03	7.18E-04	3.80E-04
SB128	1.80E+00	3.07E-01	4.85E-02	1.90E-04	1.85E-08	1.73E-16	1.62E-24	1.43E-40	0.	0.	0.
SB129	9.01E+00	4.61E-01	9.62E-03	8.77E-08	3.49E-16	5.50E-33	8.67E-50	0.	0.	0.	0.
TE129M	1.70E-07	1.79E-02	1.79E-02	1.70E-02	1.53E-02	1.25E-02	1.01E-02	6.74E-03	2.43E-03	3.17E-04	4.12E-05
TE129	6.49E+00	5.39E-01	2.25E-02	1.08E-02	9.77E-03	7.98E-03	6.50E-03	4.33E-03	1.56E-03	2.03E-04	2.65E-05
I130	4.46E-02	1.17E-02	3.05E-03	5.46E-05	6.66E-08	9.93E-14	1.48E-19	3.30E-31	0.	0.	0.
TE131M	6.37E-05	2.24E-01	1.29E-01	2.43E-02	1.52E-03	5.94E-06	2.32E-08	3.54E-13	3.22E-25	0.	0.
TE131	5.89E+01	4.08E-02	2.34E-02	4.46E-03	2.78E-04	1.09E-06	4.24E-09	6.49E-14	5.89E-26	0.	0.
I131	8.56E-03	4.63E-01	4.37E-01	3.51E-01	2.31E-01	9.77E-02	4.13E-02	7.41E-03	9.95E-05	1.81E-08	3.31E-12
XE131M	2.32E-11	2.14E-04	4.07E-04	8.50E-04	1.21E-03	1.20E-03	8.92E-04	3.68E-04	2.45E-05	7.34E-08	2.07E-10
TE132	1.39E+00	2.76E+00	2.23E+00	1.17E+00	4.04E-01	4.79E-02	5.67E-03	7.97E-05	1.87E-09	1.02E-18	5.57E-28
I132	3.41E+00	2.83E+00	2.29E+00	1.20E+00	4.17E-01	4.93E-02	5.84E-03	8.22E-05	1.92E-09	1.05E-18	5.73E-28
I133	4.58E-01	2.55E+00	1.15E+00	1.07E-01	2.04E-03	7.37E-07	2.68E-10	3.53E-17	2.21E-34	0.	0.
XE133M	2.78E-06	3.44E+00	4.08E+00	2.39E+00	5.61E-01	2.63E-02	1.23E-03	2.66E-06	5.83E-13	2.78E-26	1.33E-39
XE133	4.86E-05	6.61E+01	8.86E+01	7.92E+01	4.32E+01	1.17E+01	3.14E+00	2.26E-01	3.15E-04	6.11E-10	1.19E-15
I135	6.87E+00	1.12E+00	9.35E-02	5.42E-05	2.21E-10	3.64E-21	6.00E-32	1.63E-53	0.	0.	0.
XE135M	1.08E-01	4.98E+01	4.17E+00	2.42E-03	9.87E-09	1.62E-19	2.67E-30	7.27E-52	0.	0.	0.
XE135	1.13E+02	4.31E+02	1.05E+02	6.03E-01	7.39E-05	1.03E-12	1.45E-20	2.87E-36	0.	0.	0.
CS136	1.38E-02	1.31E-02	1.24E-02	1.06E-02	8.14E-03	4.77E-03	2.81E-03	9.63E-04	6.69E-05	3.22E-07	1.56E-09
CS137	5.49E-06	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.88E-05	5.85E-05	5.82E-05
BA137M	1.16E-08	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.49E-05	5.46E-05	5.42E-05

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2.00E+00	5.00E+00	1	00E+01	2.00E+01	3	00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02							
BA139	1.	92E+01	2	04E-03	1	21E-08	2.	49E-24	0	0.	0.	0.	0.	0	0.							
BA140	6	06E-03	3	59E-02	3	42E-02	2.	90E-02	2	21E-02	1.	28E-02	7.	49E-03	2.	54E-03	1.	69E-04	7	55E-07	3.	33E-09
LA140	1	44E-08	1	25E-02	2.	01E-02	2.	78E-02	2	48E-02	1.	48E-02	8	57E-03	2.	93E-03	1.	94E-04	8.	63E-07	3.	85E-09
LA141	1	07E-01	4	24E-02	5.	96E-04	1	65E-09	9	00E-19	2	69E-37	8.	01E-56	0.	0.	0.	0.	0.	0.	0.	
CE141	1.	32E-08	1	47E-02	1	46E-02	1	37E-02	1	23E-02	9	94E-03	8.	01E-03	5.	20E-03	1.	79E-03	2	10E-04	2	48E-05
LA142	7	14E-01	1	56E-04	3.	02E-09	2	22E-23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	3	81E-03	1	57E-01	9.	47E-02	2	09E-02	1	68E-03	1.	08E-05	6.	99E-08	2.	94E-12	3.	32E-23	0.	0.	0.	0.
PR143	1.	11E-09	1	00E-02	1	56E-02	2.	01E-02	1	72E-02	1.	05E-02	6.	36E-03	2.	29E-03	1.	84E-04	1	17E-06	7.	41E-09
CE144	1	36E-04	9	69E-04	9	64E-04	9	59E-04	9	49E-04	9	24E-04	9	04E-04	8	59E-04	7	58E-04	5	97E-04	4.	67E-04
PR144	3	72E-08	9.	69E-04	9	64E-04	9	59E-04	9	49E-04	9	24E-04	9	04E-04	8	59E-04	7	58E-04	5.	97E-04	4.	67E-04
PR145	6.	98E-03	7	09E-02	4	40E-03	1	05E-06	9	50E-13	7	89E-25	6	52E-37	0.	0.	0.	0.	0.	0.	0.	
ND147	9	74E-07	1	64E-02	1.	54E-02	1.	27E-02	9	32E-03	5.	01E-03	2.	67E-03	7	71E-04	3.	37E-05	6	57E-08	1	27E-10
PM147	2	70E-15	1	23E-05	2.	37E-05	5	41E-05	9	38E-05	1.	43E-04	1	69E-04	1	88E-04	1	89E-04	1	77E-04	1.	64E-04
ND149	1	97E+00	1	91E-04	1	85E-08	1	69E-20	1	44E-40	0	0	0	0	0	0	0	0	0	0	0.	
PM149	2.	75E-04	5	08E-02	3.	72E-02	1	45E-02	3.	04E-03	1	32E-04	5	75E-06	1.	10E-08	1.	72E-15	4	26E-29	1	06E-42
PM150	2	62E-02	5	54E-05	1	16E-07	1.	09E-15	4	58E-29	0.	0.	0	0	0	0	0	0	0	0	0.	
PM151	7.	72E-03	5	27E-02	2	91E-02	4	89E-03	2	51E-04	6	58E-07	1	73E-09	1	20E-14	1	50E-27	0	0.	0.	0.
SM153	2	92E-02	2	05E-02	1	44E-02	4	97E-03	8	47E-04	2.	46E-05	7	14E-07	6	00E-10	1.	23E-17	5	27E-33	2	24E-48
SM156	5	11E-02	8	70E-03	1	49E-03	7	31E-06	1	06E-09	2	16E-17	4	47E-25	1	91E-40	0	0.	0.	0.	0.	0.
EU155	2	00E-06	6	76E-05	6	75E-05	6	75E-05	6	74E-05	6	71E-05	6	69E-05	6	64E-05	6	51E-05	6	25E-05	6.	00E-05
EU156	1.	50E-04	1	21E-03	1	34E-03	1	21E-03	9	62E-04	6	02E-04	3	79E-04	1	51E-04	1.	50E-05	1	47E-07	1	45E-09
EU157	9.	77E-03	1	13E-02	3	80E-03	1	42E-04	5	98E-07	1.	05E-11	1	86E-16	5	81E-26	0.	0.	0.	0.	0.	0.
GD159	2.	48E-03	4	89E-03	1.	94E-03	1	21E-04	1	19E-06	1	15E-10	1	12E-14	1	05E-22	8	97E-43	0.	0.	0.	0.
TB161	2	20E-05	1	44E-04	1	30E-04	9	63E-05	5	81E-05	2	13E-05	7	78E-06	1	04E-06	6	90E-09	2	98E-13	1	30E-17
TOTAL			5	97E+02	2	23E+02	9	08E+01	4	71E+01	1.	29E+01	4	01E+00	8.	14E-01	2.	87E-01	1	05E-01	6.	26E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY F
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 VENTING STARTED AFTER H+20 MINUTES AND CONTINUED MORE THAN 12 HOURS

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DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME 1	00E+00	1	50E+00	2	00E+00	3	50E+00	5	00E+00	7	00E+00	1	00E+01	2	00E+01	3	50E+01	5	00E+01	
KR 85	7	59E-05	1	88E-03	1	83E-03	1	77E-03	1	61E-03	1	46E-03	1	28E-03	1	05E-03	5	57E-04	2	13E-04	8	15E-05
SR 89	6	15E-08	1	44E-05	1	26E-06	1	11E-07	7	45E-11	5	05E-14	2	97E-18	1	35E-24	9	83E-46	0		0	
SR 90	1	46E-07	1	46E-05	1	44E-05	1	43E-05	1	38E-05	1	33E-05	1	26E-05	1	17E-05	9	17E-06	6	33E-06	4	38E-06
Y 91	2	16E-13	1	46E-05	1	44E-05	1	43E-05	1	38E-05	1	33E-05	1	26E-05	1	17E-05	9	17E-06	6	33E-06	4	38E-06
Y 91	1	23E-08	8	32E-04	9	69E-05	1	13E-05	1	76E-08	2	77E-11	5	06E-15	1	24E-20	2	52E-39	0		0	
ZR 95	4	46E-05	1	15E-04	1	64E-05	2	33E-06	6	80E-09	1	98E-11	8	18E-15	6	90E-20	8	48E-37	0		0	
NB 95M	9	51E-13	2	43E-06	3	47E-07	4	93E-08	1	44E-10	4	19E-13	1	73E-16	1	46E-21	1	79E-38	0		0	
NB 95	4	98E-12	2	46E-04	3	54E-05	5	03E-06	1	46E-08	4	25E-11	1	77E-14	1	50E-19	1	83E-36	0		0	
RU103	2	18E-04	8	45E-04	3	46E-05	1	42E-06	9	71E-11	6	66E-15	1	86E-20	8	78E-29	0		0		0	
RH103M	1	45E-08	8	47E-04	3	46E-05	1	42E-06	9	71E-11	6	66E-15	1	86E-20	8	80E-29	0		0		0	
RU106	2	33E-03	2	22E-02	1	57E-02	1	11E-02	3	96E-03	1	40E-03	3	53E-04	4	47E-05	4	51E-08	1	45E-12	4	66E-17
RU106	2	53E-05	2	22E-02	1	57E-02	1	11E-02	3	96E-03	1	40E-03	3	53E-04	4	47E-05	4	51E-08	1	45E-12	4	66E-17
SN123	1	16E-05	1	60E-04	5	81E-05	2	11E-05	1	01E-06	4	85E-08	8	47E-10	1	95E-12	3	13E-21	2	01E-34	1	29E-47
SB125	1	66E-04	3	35E-04	2	93E-04	2	58E-04	1	77E-04	1	20E-04	7	16E-05	3	32E-05	2	54E-06	5	42E-08	1	16E-09
TE125M	4	47E-12	1	37E-04	1	21E-04	1	07E-04	7	30E-05	4	95E-05	2	97E-05	1	37E-05	1	05E-06	2	25E-08	4	78E-10
TE127M	5	26E-10	2	52E-04	7	88E-05	2	47E-05	7	58E-07	2	34E-08	2	25E-10	2	11E-13	1	73E-23	1	30E-38	9	65E-54
TE127	3	68E-02	2	49E-04	7	79E-05	2	44E-05	7	49E-07	2	31E-08	2	22E-10	2	08E-13	1	71E-23	1	28E-38	9	56E-54
CS137	5	49E-06	5	79E-05	5	72E-05	5	65E-05	5	46E-05	5	26E-05	5	03E-05	4	70E-05	3	72E-05	2	64E-05	1	87E-05
BA137M	1	16E-08	5	42E-05	5	36E-05	5	30E-05	5	10E-05	4	93E-05	4	70E-05	4	41E-05	3	49E-05	2	47E-05	1	74E-05
CE141	1	32E-08	5	70E-06	1	15E-07	2	30E-09	1	88E-14	1	53E-19	2	50E-26	1	66E-36	0		0		0	
CE144	1	36E-04	3	98E-04	2	56E-04	1	63E-04	4	29E-05	1	13E-05	1	89E-06	1	31E-07	1	76E-11	2	76E-17	4	31E-23
PR144	3	72E-08	3	98E-04	2	56E-04	1	63E-04	4	29E-05	1	13E-05	1	89E-06	1	31E-07	1	76E-11	2	76E-17	4	31E-23
PM147	2	70E-15	1	57E-04	1	37E-04	1	20E-04	8	07E-05	5	44E-05	3	20E-05	1	45E-05	1	03E-06	1	95E-08	3	68E-10
EU155	2	00E-06	5	84E-05	5	43E-05	5	06E-05	4	07E-05	3	27E-05	2	44E-05	1	57E-05	3	68E-06	4	14E-07	4	66E-08
TOTAL			5	15E-02	3	49E-02	2	51E-02	1	01E-02	4	67E-03	2	27E-03	1	34E-03	6	56E-04	2	77E-04	1	26E-04

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TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 1

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.17E+02	1.39E+04
1.00E+00	2.61E+01	4.19E+03
2.00E+00	1.05E+01	2.70E+03
3.00E+00	6.56E+00	2.16E+03
4.00E+00	4.69E+00	1.85E+03
6.00E+00	2.82E+00	1.49E+03
9.00E+00	1.59E+00	1.21E+03
1.20E+01	1.00E+00	1.03E+03
1.50E+01	6.85E-01	9.02E+02
1.80E+01	5.03E-01	7.87E+02
2.10E+01	3.93E-01	6.90E+02
1.00E+00 DAYS	3.20E-01	5.97E+02
2.00E+00	1.53E-01	2.23E+02
5.00E+00	6.71E-02	9.08E+01
1.00E+01	2.55E-02	4.71E+01
2.00E+01	6.62E-03	1.29E+01
3.00E+01	3.53E-03	4.01E+00
5.00E+01	2.07E-03	8.14E-01
1.00E+02	8.85E-04	2.87E-01
2.00E+02	2.49E-04	1.05E-01
3.00E+02	1.17E-04	6.26E-02
1.00E+00 YEARS	8.91E-05	5.15E-02
1.50E+00	5.65E-05	3.49E-02
2.00E+00	4.01E-05	2.51E-02
3.50E+00	1.52E-05	1.01E-02
5.00E+00	6.09E-06	4.67E-03
7.00E+00	2.17E-06	2.27E-03
1.00E+01	8.30E-07	1.34E-03
2.00E+01	3.66E-07	6.56E-04
3.50E+01	2.46E-07	2.77E-04
5.00E+01	1.73E-07	1.26E-04

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MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SOCCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 2

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
GE 75	2	10E-06	1	02E-02	6	13E-03	3	70E-03	2	23E-03	8	08E-04	1	76E-04	3	87E-05	8	42E-06	1	84E-06	4	01E-07
GE 77	3	68E-03	9	48E-03	8	90E-03	8	38E-03	7	91E-03	6	98E-03	5	81E-03	4	83E-03	4	02E-03	3	34E-03	2	78E-03
AS 77	3	80E-05	5	99E-03	6	11E-03	6	11E-03	6	17E-03	6	22E-03	6	22E-03	6	17E-03	6	05E-03	5	93E-03	5	79E-03
SE 77M	1	50E-09	1	80E-05	1	83E-05	1	84E-05	1	84E-05	1	86E-05	1	87E-05	1	86E-05	1	83E-05	1	79E-05	1	73E-05
GE 78	9	52E-01	5	97E-01	3	71E-01	2	32E-01	1	45E-01	5	63E-02	1	37E-02	3	31E-03	8	09E-04	1	97E-04	4	77E-05
AS 78	1	71E-02	2	85E-01	3	51E-01	3	29E-01	2	75E-01	1	62E-01	6	03E-02	2	00E-02	6	20E-03	1	85E-03	5	37E-04
AS 79	1	77E+01	1	74E-01	1	73E-03	1	70E-05	1	67E-07	1	62E-11	1	54E-17	1	47E-23	1	41E-29	1	34E-35	1	28E-41
SE 79M	2	63E-02	3	08E-01	3	05E-03	3	00E-05	2	95E-07	2	85E-11	2	72E-17	2	59E-23	2	48E-29	2	36E-35	2	26E-41
BR 80	9	91E-02	9	35E-03	8	79E-04	8	27E-05	7	79E-06	6	91E-08	5	78E-11	4	82E-14	4	01E-17	3	35E-20	2	80E-23
SE 81M	7	14E-02	3	32E+00	1	60E+00	7	72E-01	3	72E-01	8	67E-02	9	74E-03	1	09E-03	1	22E-04	1	37E-05	1	53E-06
SE 81	8	71E-01	3	94E+00	2	27E+00	1	14E+00	5	51E-01	1	29E-01	1	44E-02	1	61E-03	1	81E-04	2	03E-05	2	27E-06
BR 82	3	54E-04	3	47E-04	3	40E-04	3	33E-04	3	27E-04	3	15E-04	2	97E-04	2	80E-04	2	64E-04	2	49E-04	2	34E-04
SE 83	1	01E+01	1	92E+00	3	63E-01	6	90E-02	1	31E-02	4	69E-04	3	19E-06	2	17E-08	1	48E-10	1	01E-12	6	39E-15
BR 83	8	41E-02	1	26E+00	1	17E+00	9	15E-01	6	97E-01	3	92E-01	1	66E-01	7	00E-02	2	95E-02	1	25E-02	5	27E-03
KR 83M	4	37E-06	2	85E-01	5	81E-01	7	23E-01	7	45E-01	6	23E-01	3	66E-01	1	89E-01	9	09E-02	4	21E-02	1	89E-02
BR 84	1	63E-02	2	81E+00	7	62E-01	2	06E-01	5	57E-02	4	07E-03	8	06E-05	1	59E-06	3	14E-08	6	23E-10	1	23E-11
KR 85M	7	35E-02	1	57E+02	1	34E+02	1	14E+02	9	75E+01	7	14E+01	4	46E+01	2	77E+01	1	73E+01	1	08E+01	6	72E+00
KR 87	1	28E+03	7	40E+02	4	30E+02	2	47E+02	1	43E+02	4	78E+01	9	30E+00	1	80E+00	3	49E-01	6	76E-02	1	30E-02
KR 88	5	66E+02	4	42E+02	3	45E+02	2	69E+02	2	10E+02	1	28E+02	6	11E+01	2	90E+01	1	33E+01	6	57E+00	3	12E+00
RB 88	1	44E+02	4	49E+02	3	80E+02	3	01E+02	2	35E+02	1	43E+02	6	83E+01	3	25E+01	1	55E+01	7	38E+00	3	51E+00
RB 89	8	06E-01	7	56E-01	5	08E-02	3	41E-03	2	29E-04	1	04E-06	3	13E-10	9	46E-14	2	88E-17	8	73E-21	2	65E-24
SR 89	6	15E-08	2	16E-03	2	31E-03	2	31E-03	2	31E-03	2	31E-03	2	31E-03	2	30E-03	2	30E-03	2	29E-03	2	29E-03
SR 90	1	46E-07	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05
SR 91	4	47E-01	8	32E+00	7	76E+00	7	23E+00	6	73E+00	5	82E+00	4	70E+00	3	79E+00	3	07E+00	2	46E+00	1	99E+00
Y 91M	3	01E-05	2	87E+00	3	91E+00	4	19E+00	4	14E+00	3	71E+00	3	04E+00	2	45E+00	1	97E+00	1	59E+00	1	28E+00
Y 91	1	23E-08	2	55E-03	5	88E-03	9	36E-03	1	28E-02	1	92E-02	2	73E-02	3	38E-02	3	91E-02	4	33E-02	4	67E-02
SR 92	3	19E-01	1	42E+00	1	10E+00	8	53E-01	6	60E-01	3	95E-01	1	83E-01	8	53E-02	3	95E-02	1	83E-02	8	53E-03
Y 92	1	47E-02	2	99E-01	4	72E-01	5	57E-01	5	92E-01	5	66E-01	4	33E-01	2	95E-01	1	90E-01	1	17E-01	7	03E-02
SR 93	1	70E+01	2	93E-01	1	62E-03	8	93E-06	4	91E-08	1	51E-12	2	54E-19	4	29E-26	7	26E-33	1	22E-39	2	06E-46
Y 93	2	08E-02	6	72E-01	6	33E-01	5	89E-01	5	50E-01	4	82E-01	3	92E-01	3	21E-01	2	60E-01	2	14E-01	1	74E-01
Y 94	2	80E+00	3	83E+00	4	93E-01	6	35E-02	8	18E-03	1	36E-04	2	92E-07	6	24E-10	1	34E-12	2	92E-15	1	62E-16
Y 95	1	19E+01	1	12E+00	2	46E-02	5	42E-04	1	20E-05	5	82E-09	6	21E-14	6	65E-19	7	10E-24	7	59E-29	8	13E-34
ZR 95	4	46E-05	5	82E-03	5	96E-03	5	96E-03	5	96E-03	5	96E-03	5	96E-03	5	91E-03	5	91E-03	5	91E-03	5	91E-03
NB 95	4	98E-12	3	60E-06	8	38E-06	1	32E-05	1	80E-05	2	76E-05	4	19E-05	5	62E-05	7	05E-05	8	48E-05	9	91E-05
ZR 97	1	28E-01	5	60E-01	5	33E-01	5	14E-01	4	92E-01	4	54E-01	4	01E-01	3	55E-01	3	15E-01	2	78E-01	2	47E-01
NB 97M	6	59E-04	5	33E-01	5	14E-01	4	94E-01	4	74E-01	4	36E-01	3	85E-01	3	42E-01	3	02E-01	2	67E-01	2	36E-01
NB 97	6	43E-02	2	80E-01	3	94E-01	4	50E-01	4	72E-01	4	70E-01	4	27E-01	3	81E-01	3	37E-01	2	98E-01	2	65E-01
NB 98	8	80E-01	3	90E-01	1	72E-01	7	61E-02	3	38E-02	6	59E-03	5	72E-04	4	94E-05	4	31E-06	3	73E-07	3	21E-08
MO 99	1	11E-02	4	59E+00	4	55E+00	4	50E+00	4	46E+00	4	36E+00	4	23E+00	4	10E+00	3	98E+00	3	86E+00	3	74E+00
TC 99M	1	03E-07	4	38E-01	8	22E-01	1	16E+00	1	46E+00	1	95E+00	2	47E+00	2	81E+00	3	01E+00	3	13E+00	3	17E+00

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 3

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
MO101	2.18E+02	9.87E+01	5.73E+00	3.31E-01	1.92E-02	6.46E-05	1.25E-08	2.45E-12	4.75E-16	9.23E-20	1.80E-23	
TC101	9.23E+00	2.77E+02	3.03E+01	2.48E+00	1.80E-01	8.16E-04	2.04E-07	4.57E-11	9.68E-15	2.00E-18	4.02E-22	
MO102	2.25E+03	5.14E+01	1.17E+00	2.68E-02	6.09E-04	3.17E-07	3.77E-12	4.45E-17	5.29E-22	6.28E-27	7.46E-32	
TC102M	1.45E+00	4.34E+01	9.95E-01	2.27E-02	5.17E-04	2.68E-07	3.18E-12	3.77E-17	4.47E-22	5.30E-27	6.30E-32	
TC102	6.77E+03	2.58E+01	5.91E-01	1.34E-02	3.07E-04	1.60E-07	1.89E-12	2.25E-17	2.68E-22	3.17E-27	3.75E-32	
RU103	2.18E-04	5.04E-01	5.04E-01	5.04E-01	5.04E-01	5.02E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01	4.97E-01	
RH103M	1.45E-08	2.60E-01	3.87E-01	4.48E-01	4.76E-01	4.97E-01	5.01E-01	5.01E-01	4.99E-01	4.99E-01	4.99E-01	
TC104	2.31E+02	1.65E+02	1.65E+01	1.64E+00	1.62E-01	1.59E-03	1.56E-06	1.52E-09	1.49E-12	1.45E-15	1.42E-18	
RU105	2.31E+00	7.97E+01	6.81E+01	5.85E+01	5.01E+01	3.66E+01	2.29E+01	1.43E+01	8.95E+00	5.60E+00	3.52E+00	
RH105M	1.52E-02	7.99E+01	6.83E+01	5.87E+01	5.01E+01	3.66E+01	2.29E+01	1.43E+01	8.99E+00	5.62E+00	3.52E+00	
RH105	2.49E-08	1.62E+00	3.00E+00	4.15E+00	5.11E+00	6.54E+00	7.83E+00	8.42E+00	8.58E+00	8.50E+00	8.28E+00	
RU106	2.33E-03	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	
RH106	2.53E-05	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	4.42E-02	
RH107	5.77E-01	7.84E+01	1.19E+01	1.79E+00	2.69E-01	6.16E-03	2.12E-05	7.30E-08	2.51E-10	8.61E-14	8.56E-17	
PD107M	1.20E-03	1.59E+01	2.41E+00	3.63E-01	5.49E-02	1.25E-03	4.32E-06	1.49E-08	5.12E-11	1.76E-13	6.03E-16	
PD109	1.89E-02	1.57E+00	1.49E+00	1.42E+00	1.34E+00	1.21E+00	1.04E+00	8.91E-01	7.64E-01	6.54E-01	5.62E-01	
AG109M	1.09E-04	1.57E+00	1.49E+00	1.42E+00	1.34E+00	1.21E+00	1.04E+00	8.91E-01	7.64E-01	6.54E-01	5.62E-01	
PD111M	5.19E+00	4.56E+00	4.03E+00	3.55E+00	3.13E+00	2.43E+00	1.67E+00	1.14E+00	7.85E-01	5.37E-01	3.68E-01	
PD111	1.85E+00	3.33E+00	3.20E+00	2.85E+00	2.52E+00	1.96E+00	1.34E+00	9.18E-01	6.29E-01	4.32E-01	2.96E-01	
AG111M	1.47E-02	4.49E+00	4.21E+00	3.77E+00	3.33E+00	2.56E+00	1.76E+00	1.21E+00	8.26E-01	5.68E-01	3.88E-01	
AG111	5.22E-09	1.55E-02	3.24E-02	4.78E-02	6.14E-02	8.35E-02	1.07E-01	1.23E-01	1.33E-01	1.40E-01	1.44E-01	
PD112	1.35E+00	1.31E+00	1.27E+00	1.23E+00	1.19E+00	1.11E+00	1.01E+00	9.13E-01	8.26E-01	7.49E-01	6.79E-01	
AG112	4.07E-05	2.60E-01	4.58E-01	6.15E-01	7.30E-01	8.77E-01	9.64E-01	9.58E-01	9.13E-01	8.52E-01	7.85E-01	
AG113	7.78E-03	1.67E+00	1.46E+00	1.28E+00	1.13E+00	8.65E-01	5.87E-01	3.96E-01	2.68E-01	1.80E-01	1.22E-01	
AG115	1.55E+00	1.66E+00	2.06E-01	2.58E-02	3.23E-03	5.05E-05	9.87E-08	1.92E-10	3.74E-13	3.70E-16	3.44E-16	
CD115M	1.27E-08	3.37E-04	3.79E-04	3.82E-04	3.82E-04	3.82E-04	3.82E-04	3.82E-04	3.81E-04	3.79E-04	3.79E-04	
CD115	4.89E-06	9.22E-02	9.92E-02	9.88E-02	9.76E-02	9.52E-02	9.17E-02	8.80E-02	8.47E-02	8.16E-02	7.84E-02	
IN115M	6.09E-11	1.02E-02	2.25E-02	3.35E-02	4.28E-02	5.69E-02	7.04E-02	7.75E-02	8.09E-02	8.16E-02	8.10E-02	
CD117	1.09E-01	1.82E+00	1.37E+00	1.02E+00	7.67E-01	4.30E-01	1.80E-01	7.62E-02	3.21E-02	1.34E-02	5.67E-03	
IN117M	5.26E-06	6.33E-01	9.17E-01	9.95E-01	9.61E-01	7.58E-01	4.33E-01	2.21E-01	1.06E-01	4.94E-02	2.23E-02	
IN117	2.12E-10	1.15E-01	2.80E-01	3.89E-01	4.33E-01	3.98E-01	2.53E-01	1.36E-01	6.76E-02	3.17E-02	1.46E-02	
CD118	7.03E+00	3.02E+00	1.29E+00	5.51E-01	2.37E-01	4.33E-02	3.39E-03	2.65E-04	2.08E-05	1.63E-06	1.28E-07	
IN118	4.66E-01	3.02E+00	1.29E+00	5.53E-01	2.37E-01	4.33E-02	3.39E-03	2.67E-04	2.08E-05	1.63E-06	1.28E-07	
CD119	1.85E+01	2.89E-01	4.50E-03	7.03E-05	1.10E-06	2.68E-10	1.03E-15	3.92E-21	1.49E-26	5.70E-32	2.18E-37	
IN119M	2.79E-02	3.13E+00	3.39E-01	3.42E-02	3.41E-03	3.35E-05	3.28E-08	3.20E-11	3.13E-14	3.05E-17	2.98E-20	
IN119	1.38E+00	1.64E-01	1.91E-02	1.92E-03	1.92E-04	1.89E-06	1.85E-09	1.81E-12	1.77E-15	1.72E-18	1.68E-21	
SN121	2.32E+03	2.40E-01	2.32E-01	2.27E-01	2.21E-01	2.10E-01	1.94E-01	1.81E-01	1.67E-01	1.55E-01	1.44E-01	
SN123M	1.23E+00	2.30E+00	8.16E-01	2.89E-01	1.02E-01	1.27E-02	5.63E-04	2.50E-05	1.10E-06	4.87E-08	2.16E-09	
SN123	1.16E-05	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	1.21E-03	
SN125	2.77E-02	2.76E-02	2.74E-02	2.74E-02	2.73E-02	2.72E-02	2.69E-02	2.66E-02	2.64E-02	2.61E-02	2.60E-02	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 4

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
SB125	1	66E-04	1	67E-04	1	67E-04	1	69E-04	1	69E-04	1	70E-04	1	73E-04	1	75E-04	1	78E-04	1	79E-04	1	82E-04
SB126	5	37E-03	5	34E-03	5	34E-03	5	33E-03	5	31E-03	5	28E-03	5	25E-03	5	23E-03	5	18E-03	5	14E-03	5	11E-03
SN127	5	57E+00	4	01E+00	2	87E+00	2	07E+00	1	49E+00	7	70E-01	2	86E-01	1	06E-01	3	95E-02	1	47E-02	5	44E-03
SB127	6	51E-02	2	25E-01	2	49E-01	2	65E-01	2	75E-01	2	87E-01	2	92E-01	2	89E-01	2	84E-01	2	78E-01	2	74E-01
TE127	3	68E-02	4	57E-02	5	55E-02	6	60E-02	7	62E-02	9	56E-02	1	22E-01	1	43E-01	1	59E-01	1	71E-01	1	80E-01
SN128	4	28E+01	2	11E+01	1	05E+01	5	17E+00	2	55E+00	6	23E-01	7	52E-02	9	08E-03	1	09E-03	1	33E-04	1	60E-05
SB128M	2	18E-02	2	40E+01	1	25E+01	6	16E+00	3	04E+00	7	43E-01	8	96E-02	1	08E-02	1	30E-03	1	58E-04	1	91E-05
SB128	1	80E+00	1	73E+00	1	63E+00	1	53E+00	1	43E+00	1	22E+00	9	78E-01	7	75E-01	6	16E-01	4	88E-01	3	88E-01
SN129M	2	39E+01	1	20E+01	5	99E+00	3	00E+00	1	50E+00	3	74E-01	4	69E-02	5	87E-03	7	33E-04	9	15E-05	1	14E-05
SN129	1	60E+02	1	57E+00	1	55E-02	1	53E-04	1	50E-06	1	46E-10	1	39E-16	1	33E-22	1	27E-28	1	21E-34	1	15E-40
SB129	9	01E+00	1	51E+01	1	42E+01	1	27E+01	1	11E+01	8	28E+00	5	15E+00	3	19E+00	1	97E+00	1	22E+00	7	47E-01
TE129M	1	70E-07	1	89E-03	3	88E-03	5	71E-03	7	33E-03	9	93E-03	1	26E-02	1	42E-02	1	52E-02	1	58E-02	1	62E-02
TE129	6	49E+00	8	91E+00	1	04E+01	1	08E+01	1	04E+01	8	64E+00	5	76E+00	3	63E+00	2	25E+00	1	40E+00	8	67E-01
SB130M	9	34E-01	1	76E+00	4	63E-03	1	22E-05	3	20E-08	2	20E-13	4	03E-21	7	31E-29	1	33E-36	2	41E-44	4	39E-52
SB130	1	60E+02	4	84E+01	1	38E+01	3	90E+00	1	10E+00	8	88E-02	2	03E-03	4	62E-05	1	05E-06	2	39E-08	5	49E-10
I130	4	46E-02	4	22E-02	4	00E-02	3	77E-02	3	57E-02	3	19E-02	2	70E-02	2	28E-02	1	92E-02	1	63E-02	1	38E-02
SB131	1	33E+02	3	48E+01	5	68E+00	9	35E-01	1	53E-01	4	12E-03	1	81E-05	8	01E-08	3	53E-10	1	55E-12	7	77E-15
TE131M	6	37E-05	3	35E-01	3	82E-01	3	82E-01	3	75E-01	3	59E-01	3	34E-01	3	12E-01	2	91E-01	2	72E-01	2	54E-01
TE131	5	89E+01	6	37E+01	2	09E+01	5	43E+00	1	32E+00	1	24E-01	6	13E-02	5	68E-02	5	30E-02	4	96E-02	4	63E-02
I131	8	56E-03	2	97E-01	4	37E-01	4	79E-01	4	87E-01	4	92E-01	4	92E-01	4	87E-01	4	87E-01	4	83E-01	4	83E-01
TE132	1	39E+00	3	38E+00	3	34E+00	3	33E+00	3	28E+00	3	23E+00	3	14E+00	3	07E+00	2	98E+00	2	89E+00	2	82E+00
I132	3	41E+00	3	40E+00	3	40E+00	3	38E+00	3	36E+00	3	31E+00	3	24E+00	3	15E+00	3	07E+00	2	99E+00	2	92E+00
TE133M	5	27E-02	1	82E+01	7	92E+00	3	45E+00	1	50E+00	2	85E-01	2	34E-02	1	93E-03	1	59E-04	1	31E-05	1	09E-06
TE133	2	95E+02	1	67E+01	1	86E+00	6	15E-01	2	60E-01	4	94E-02	4	08E-03	3	35E-04	2	78E-05	2	28E-06	1	88E-07
I133	4	58E-01	4	94E+00	5	31E+00	5	31E+00	5	22E+00	4	94E+00	4	50E+00	4	08E+00	3	68E+00	3	35E+00	3	03E+00
XE133M	2	78E-06	1	58E-01	3	82E-01	6	11E-01	8	32E-01	1	25E+00	1	81E+00	2	30E+00	2	71E+00	3	06E+00	3	36E+00
XE133	4	86E-05	2	76E+00	6	73E+00	1	07E+01	1	47E+01	2	23E+01	3	27E+01	4	18E+01	5	00E+01	5	72E+01	6	36E+01
TE134	9	76E+01	4	53E+01	1	69E+01	6	27E+00	2	33E+00	3	23E-01	1	65E-02	8	44E-04	4	33E-05	2	22E-06	1	14E-07
I134	4	48E+01	5	99E+01	4	20E+01	2	46E+01	1	32E+01	3	35E+00	3	69E-01	3	76E-02	3	69E-03	3	53E-04	3	35E-05
I135	6	87E+00	1	21E+01	1	09E+01	9	81E+00	8	85E+00	7	20E+00	5	30E+00	3	86E+00	2	84E+00	2	09E+00	1	53E+00
XE135M	1	08E-01	4	98E+02	4	84E+02	4	39E+02	3	94E+02	3	21E+02	2	36E+02	1	73E+02	1	26E+02	9	28E+01	6	80E+01
XE135	1	13E+02	2	23E+02	3	26E+02	4	11E+02	4	79E+02	5	74E+02	6	38E+02	6	38E+02	6	09E+02	5	54E+02	4	95E+02
CS136	1	38E-02	1	38E-02	1	38E-02	1	38E-02	1	37E-02	1	36E-02	1	35E-02	1	35E-02	1	34E-02	1	33E-02	1	32E-02
CS137	5	49E-06	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05	5	92E-05
BA137M	1	16E-08	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05	5	53E-05
XE138	2	62E+01	2	25E+00	1	96E-01	1	70E-02	1	47E-03	1	10E-05	7	18E-09	4	65E-12	3	03E-15	1	97E-18	1	28E-21
CS138	3	90E+00	6	58E+00	2	27E+00	6	68E-01	1	87E-01	1	43E-02	2	97E-04	6	18E-06	1	28E-07	2	66E-09	5	52E-11
CS139	1	04E+03	3	30E+01	4	15E-01	5	21E-03	6	54E-05	1	03E-08	2	04E+14	4	04E-20	7	99E-26	1	59E-31	3	13E-37
BA139	1	92E+01	2	14E+02	1	31E+02	7	99E+01	4	83E+01	1	78E+01	3	93E+00	8	75E-01	1	95E-01	4	31E-02	9	56E-03
BA140	6	06E-03	3	80E-02	3	80E-02	3	77E-02	3	77E-02	3	74E-02	3	74E-02	3	71E-02	3	68E-02	3	65E-02	3	62E-02

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY 9
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 5

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01					
LA140	1	44E-08	6.48E-04	1.28E-03	1.91E-03	2.52E-03	3.71E-03	5.41E-03	7.01E-03	8.51E-03	9.95E-03	1.13E-02					
BA141	1	16E+01	3.50E+00	3.47E-01	3.44E-02	3.41E-03	3.38E-05	3.30E-08	3.22E-11	3.14E-14	3.08E-17	3.00E-20					
LA141	1	07E-01	2.26E+00	2.11E+00	1.79E+00	1.50E+00	1.05E+00	6.14E-01	3.61E-01	2.12E-01	1.24E-01	7.31E-02					
CE141	1	32E-08	1.47E-03	3.44E-03	5.17E-03	6.60E-03	8.88E-03	1.10E-02	1.23E-02	1.30E-02	1.34E-02	1.36E-02					
BA142	3	10E+01	1.23E+00	2.81E-02	6.40E-04	1.46E-05	7.60E-09	9.02E-14	1.07E-18	1.27E-23	1.51E-28	1.79E-33					
LA142	7	14E-01	4.94E+00	3.26E+00	2.07E+00	1.32E+00	5.33E-01	1.38E-01	3.55E-02	9.14E-03	2.35E-03	6.05E-04					
LA143	9	52E+00	1.86E+00	9.52E-02	4.90E-03	2.52E-04	6.57E-07	8.89E-11	1.20E-14	1.61E-18	2.18E-22	2.94E-26					
CE143	3	81E-03	2.43E-01	2.52E-01	2.45E-01	2.41E-01	2.32E-01	2.17E-01	2.04E-01	1.91E-01	1.79E-01	1.69E-01					
PR143	1	11E-09	3.72E-04	8.99E-04	1.42E-03	1.93E-03	2.92E-03	4.30E-03	5.63E-03	6.84E-03	7.94E-03	8.99E-03					
CE144	1	36E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04					
PR144	3	72E-08	8.84E-04	9.64E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04	9.69E-04					
PR145	6	98E-03	1.02E+00	9.10E-01	8.07E-01	7.21E-01	5.72E-01	4.03E-01	2.85E-01	2.02E-01	1.42E-01	1.01E-01					
CE146	2	32E+01	1.19E+00	6.09E-02	3.11E-03	1.60E-04	4.23E-07	5.69E-11	7.65E-15	1.03E-18	1.39E-22	1.88E-26					
PR146	4	79E-01	4.17E+00	9.45E-01	1.77E-01	3.19E-02	1.00E-03	5.55E-06	3.06E-08	1.69E-10	9.39E-13	5.12E-15					
PR147	2	73E+00	7.89E-01	2.46E-02	7.71E-04	2.41E-05	2.35E-08	7.17E-13	2.19E-17	6.69E-22	2.04E-26	6.22E-31					
ND147	9	74E-07	1.83E-02	1.88E-02	1.88E-02	1.88E-02	1.86E-02	1.85E-02	1.84E-02	1.82E-02	1.81E-02	1.79E-02					
ND149	1	97E+00	1.35E+00	9.13E-01	6.24E-01	4.22E-01	1.96E-01	6.16E-02	1.95E-02	6.13E-03	1.93E-03	6.09E-04					
PM149	2	75E-04	2.15E-02	3.58E-02	4.52E-02	5.12E-02	5.75E-02	5.98E-02	5.86E-02	5.71E-02	5.50E-02	5.30E-02					
PM150	2	62E-02	2.03E-02	1.57E-02	1.21E-02	9.35E-03	5.62E-03	2.60E-03	1.20E-03	5.58E-04	2.58E-04	1.19E-04					
ND151	1	22E+01	3.80E-01	1.19E-02	3.72E-04	1.17E-05	1.13E-08	3.47E-13	1.06E-17	3.23E-22	9.86E-27	3.02E-31					
PM151	7	72E-03	9.04E-02	9.12E-02	8.87E-02	8.63E-02	8.22E-02	7.62E-02	7.08E-02	6.58E-02	6.10E-02	5.66E-02					
PM152	2	13E+01	2.08E-02	2.03E-05	1.97E-08	1.93E-11	1.85E-17	1.72E-26	1.60E-35	1.49E-44	1.40E-53	1.30E-62					
SM153	2	92E-02	2.87E-02	2.84E-02	2.79E-02	2.76E-02	2.67E-02	2.56E-02	2.44E-02	2.34E-02	2.24E-02	2.14E-02					
SM155	2	72E+00	4.46E-01	7.31E-02	1.19E-02	1.97E-03	5.28E-05	2.34E-07	1.03E-09	4.52E-12	2.02E-14	4.95E-17					
EU155	2	00E-06	5.70E-05	6.59E-05	6.74E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05	6.76E-05					
SM156	5	11E-02	4.73E-02	4.40E-02	4.09E-02	3.79E-02	3.28E-02	2.63E-02	2.11E-02	1.69E-02	1.35E-02	1.09E-02					
EU156	1	50E-04	2.44E-04	3.31E-04	4.11E-04	4.87E-04	6.21E-04	7.90E-04	9.13E-04	1.02E-03	1.10E-03	1.16E-03					
EU157	9	77E-03	3.24E-02	3.09E-02	2.95E-02	2.81E-02	2.57E-02	2.24E-02	1.96E-02	1.70E-02	1.49E-02	1.29E-02					
EU158	5	28E-01	2.14E-01	8.65E-02	3.50E-02	1.41E-02	2.32E-03	1.55E-04	1.03E-05	6.82E-07	4.53E-08	3.01E-09					
EU159	5	79E-01	5.75E-02	5.70E-03	5.65E-04	5.60E-05	5.53E-07	5.40E-10	5.28E-13	5.15E-16	5.04E-19	4.92E-22					
GD159	2	48E-03	1.09E-02	1.13E-02	1.10E-02	1.05E-02	9.76E-03	8.70E-03	7.76E-03	6.90E-03	6.15E-03	5.48E-03					
TB161	2	20E-05	1.58E-04	1.57E-04	1.56E-04	1.56E-04	1.55E-04	1.53E-04	1.51E-04	1.49E-04	1.48E-04	1.45E-04					
TOTAL	1	39E+04	4	19E+03	2.70E+03	2.16E+03	1.85E+03	1.49E+03	1	21E+03	1	03E+03	9.02E+02	7	87E+02	6	90E+02

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 6

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
GE 77	3	68E-03	2	32E-03	5	31E-04	6	40E-06	4	08E-09	1	65E-15	6	63E-22	1	09E-34	0		0		0	
AS 77	3	80E-05	5	61E-03	4	06E-03	1	18E-03	1	38E-04	1	87E-06	2	54E-08	4	68E-12	2	17E-21	4	65E-40	1	00E-58
SE 77M	1	50E-09	1	69E-05	1	22E-05	3	53E-06	4	12E-07	5	60E-09	7	62E-11	1	40E-14	6	51E-24	1	39E-42	3	00E-61
AS 78	1	71E-02	1	52E-04	4	47E-09	3	78E-23	0		0		0		0		0		0		0	
BR 82	3	54E-04	2	20E-04	1	37E-04	3	35E-05	3	17E-06	2	85E-08	2	56E-10	2	07E-14	1	21E-24	4	14E-45	1	41E-65
BR 83	8	41E-02	2	22E-03	2	23E-06	2	27E-15	2	32E-30	0		0		0		0		0		0	
KR 83M	4	37E-06	9	70E-03	1	10E-05	9	92E-15	1	02E-29	0		0		0		0		0		0	
KR 85M	7	35E-02	4	18E+00	9	54E-02	1	13E-06	7	00E-15	2	66E-31	1	01E-47	0		0		0		0	
KR 85	7	59E-05	1	99E-03	2	03E-03	2	03E-03	2	03E-03	2	03E-03	2	03E-03	2	02E-03	2	00E-03	1	96E-03	1	93E-03
KR 87	1	28E+03	2	53E-03	5	01E-09	3	88E-26	0		0		0		0		0		0		0	
KR 88	5	66E+02	1	49E+00	3	90E-03	7	09E-11	8	94E-24	0		0		0		0		0		0	
RB 88	1	44E+02	1	66E+00	4	39E-03	7	93E-11	9	95E-24	0		0		0		0		0		0	
SR 89	6	15E-08	1	85E-03	1	82E-03	1	75E-03	1	64E-03	1	43E-03	1	25E-03	9	63E-04	4	91E-04	1	30E-04	3	41E-05
SR 90	1	46E-07	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	50E-05	1	49E-05	1	49E-05	1	47E-05
Y 90	2	16E-13	3	44E-06	6	09E-06	1	09E-05	1	39E-05	1	49E-05	1	50E-05	1	50E-05	1	49E-05	1	49E-05	1	47E-05
SR 91	4	47E-01	1	60E+00	2	87E-01	1	65E-03	3	01E-07	1	02E-14	3	46E-22	3	94E-37	0		0		0	
Y 91M	3	01E-05	1	04E+00	1	85E-01	1	06E-03	1	96E-07	6	58E-15	2	23E-22	2	54E-37	0		0		0	
Y 91	1	23E-08	4	92E-02	5	82E-02	5	82E-02	5	48E-02	4	86E-02	4	33E-02	3	43E-02	1	90E-02	5	85E-03	1	80E-03
SR 92	3	19E-01	3	97E-03	8	57E-06	8	62E-14	4	03E-27	0		0		0		0		0		0	
Y 92	1	47E-02	4	16E-02	4	63E-04	3	55E-10	2	08E-20	7	07E-41	2	43E-61	0		0		0		0	
Y 93	2	08E-02	1	40E-01	2	74E-02	2	06E-04	5	94E-08	4	89E-15	4	04E-22	2	76E-36	0		0		0	
ZR 95	4	46E-05	5	57E-03	5	52E-03	5	32E-03	5	08E-03	4	54E-03	4	09E-03	3	31E-03	1	94E-03	6	65E-04	2	29E-04
NB 95M	9	51E-13	1	89E-05	3	45E-05	6	56E-05	8	87E-05	9	36E-05	8	63E-05	7	00E-05	4	11E-05	1	41E-05	4	87E-06
NB 95	4	98E-12	1	08E-04	2	13E-04	5	13E-04	9	51E-04	1	64E-03	2	11E-03	2	62E-03	2	52E-03	1	21E-03	4	66E-04
ZR 97	1	28E-01	2	18E-01	8	21E-02	4	34E-03	3	26E-05	1	84E-09	1	03E-13	3	26E-22	1	84E-43	0		0	
NB 97M	6	59E-04	2	09E-01	7	84E-02	4	19E-03	3	13E-05	1	76E-09	9	94E-14	3	13E-22	1	77E-43	0		0	
NB 97	6	43E-02	2	19E-01	8	21E-02	4	36E-03	3	28E-05	1	98E-09	1	11E-13	3	52E-22	1	98E-43	0		0	
MO 99	1	11E-02	3	62E+00	2	83E+00	1	34E+00	3	87E-01	3	24E-02	2	71E-03	1	88E-05	7	65E-11	1	26E-21	2	08E-32
TC 99M	1	03E-07	3	18E+00	2	68E+00	1	28E+00	3	70E-01	3	09E-02	2	59E-03	1	80E-05	7	30E-11	1	20E-21	1	99E-32
RU103	2	18E-04	4	97E-01	4	88E-01	4	61E-01	4	24E-01	3	55E-01	2	98E-01	2	10E-01	8	76E-02	1	52E-02	2	64E-03
RH103M	1	45E-08	4	97E-01	4	88E-01	4	63E-01	4	24E-01	3	55E-01	2	98E-01	2	10E-01	8	76E-02	1	52E-02	2	64E-03
RU105	2	31E+00	2	21E+00	5	19E-02	6	81E-07	4	99E-15	2	66E-31	1	42E-47	0		0		0		0	
RH105M	1	52E-02	2	21E+00	5	19E-02	6	83E-07	5	01E-15	2	68E-31	1	43E-47	0		0		0		0	
RH105	2	49E-08	7	95E+00	5	19E+00	1	30E+00	1	28E-01	1	24E-03	1	21E-05	1	14E-09	9	87E-20	7	42E-40	5	58E-60
RU106	2	33E-03	4	42E-02	4	40E-02	4	38E-02	4	33E-02	4	27E-02	4	16E-02	4	01E-02	3	66E-02	3	03E-02	2	50E-02
RH106	2	53E-05	4	42E-02	4	40E-02	4	38E-02	4	33E-02	4	27E-02	4	16E-02	4	01E-02	3	66E-02	3	03E-02	2	50E-02
PD109	1	89E-02	4	81E-01	1	41E-01	3	48E-03	7	33E-06	3	26E-11	1	45E-16	2	88E-27	0		0		0	
AG109M	1	09E-04	4	81E-01	1	41E-01	3	48E-03	7	36E-06	3	27E-11	1	45E-16	2	88E-27	0		0		0	
PD111M	5	19E+00	2	52E-01	1	22E-02	1	40E-06	3	79E-13	2	76E-26	2	03E-39	0		0		0		0	
PD111	1	85E+00	2	03E-01	9	84E-03	1	13E-06	3	07E-13	2	24E-26	1	63E-39	0		0		0		0	

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 7

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
AG111M	1.47E-02	2.65E-01	1.29E-02	1.48E-06	4.01E-13	2.94E-26	2.15E-39	0.	0.	0.	0.	0.
AG111	5.22E-09	1.44E-01	1.39E-01	1.05E-01	6.64E-02	2.63E-02	1.05E-02	1.65E-03	1.62E-05	1.57E-09	1.52E-13	0.
PD112	1.35E+00	6.15E-01	2.79E-01	2.59E-02	4.93E-04	1.78E-07	6.50E-11	8.52E-18	5.38E-35	0.	0.	0.
AG112	4.07E-05	7.14E-01	3.30E-01	3.05E-02	5.83E-04	2.11E-07	7.65E-11	1.01E-17	6.31E-35	0.	0.	0.
AG113	7.78E-03	8.23E-02	3.57E-03	2.90E-07	4.44E-14	1.04E-27	2.42E-41	0.	0.	0.	0.	0.
CD115M	1.27E-08	3.67E-04	3.60E-04	3.42E-04	3.18E-04	2.69E-04	2.31E-04	1.66E-04	7.42E-05	1.47E-05	2.95E-06	0.
CD115	4.89E-06	7.35E-02	5.40E-02	2.13E-02	4.49E-03	2.01E-04	8.92E-06	1.78E-08	3.14E-15	9.85E-29	3.09E-42	0.
IN115M	6.09E-11	7.77E-02	5.88E-02	2.32E-02	4.89E-03	2.18E-04	9.74E-06	1.94E-08	3.44E-15	1.08E-28	3.37E-42	0.
CD117	1.09E-01	2.39E-03	2.32E-06	2.16E-15	1.93E-30	0.	0.	0.	0.	0.	0.	0.
IN117M	5.26E-06	9.90E-03	1.14E-05	1.10E-14	9.81E-30	0.	0.	0.	0.	0.	0.	0.
IN117	2.12E-10	6.53E-03	7.72E-06	7.49E-15	6.63E-30	0.	0.	0.	0.	0.	0.	0.
SN121	2.32E-03	1.33E-01	7.15E-02	1.13E-02	5.18E-04	1.09E-06	2.30E-09	1.02E-14	4.28E-28	0.	0.	0.
SN123	1.16E-05	1.21E-03	1.20E-03	1.18E-03	1.15E-03	1.08E-03	1.03E-03	9.18E-04	6.96E-04	3.99E-04	2.30E-04	0.
SN125	2.77E-02	2.57E-02	2.40E-02	1.91E-02	1.32E-02	6.33E-03	3.03E-03	6.92E-04	1.73E-05	1.09E-08	6.83E-12	0.
SB125	1.66E-04	1.85E-04	2.01E-04	2.46E-04	3.01E-04	3.65E-04	3.94E-04	4.10E-04	4.02E-04	3.75E-04	3.51E-04	0.
SB126	5.37E-03	5.08E-03	4.80E-03	4.06E-03	3.08E-03	1.77E-03	1.02E-03	3.35E-04	2.09E-05	1.02E-07	2.05E-08	0.
SN127	5.57E+00	2.03E-03	7.34E-07	3.50E-17	2.20E-34	0.	0.	0.	0.	0.	0.	0.
SB127	6.31E-02	2.67E-01	2.23E-01	1.30E-01	5.35E-02	8.92E-03	1.49E-03	4.17E-05	5.44E-09	9.29E-17	1.58E-24	0.
TE127M	5.26E-10	4.08E-04	7.46E-04	1.45E-03	2.00E-03	2.20E-03	2.13E-03	1.89E-03	1.38E-03	7.27E-04	3.84E-04	0.
TE127	3.68E-02	1.91E-01	1.88E-01	1.14E-01	4.84E-02	9.92E-03	3.40E-03	1.91E-03	1.36E-03	7.18E-04	3.80E-04	0.
SB128	1.80E+00	3.07E-01	4.85E-02	1.90E-04	1.85E-08	1.73E-16	1.62E-24	1.43E-40	0.	0.	0.	0.
SB129	9.01E+00	4.61E-01	9.62E-03	8.77E-08	3.49E-16	5.50E-33	8.67E-50	0.	0.	0.	0.	0.
TE129M	1.70E-07	1.79E-02	1.79E-02	1.70E-02	1.53E-02	1.25E-02	1.01E-02	6.74E-03	2.43E-03	3.17E-04	4.12E-05	0.
TE129	6.49E+00	5.39E-01	2.25E-02	1.08E-02	9.77E-03	7.98E-03	6.50E-03	4.33E-03	1.56E-03	2.03E-04	2.65E-05	0.
I130	4.46E-02	1.17E-02	3.05E-03	5.46E-05	6.66E-08	9.93E-14	1.48E-19	3.30E-31	0.	0.	0.	0.
TE131M	6.37E-05	2.24E-01	1.29E-01	2.43E-02	1.52E-03	5.94E-06	2.32E-08	3.54E-13	3.22E-25	0.	0.	0.
TE131	5.89E+01	4.08E-02	2.34E-02	4.46E-03	2.78E-04	1.09E-06	4.24E-09	6.49E-14	5.69E-26	0.	0.	0.
I131	8.56E-03	4.63E-01	4.37E-01	3.51E-01	2.31E-01	9.77E-02	4.13E-02	7.41E-03	9.95E-05	1.81E-08	3.31E-12	0.
XE131M	2.32E-11	2.14E-04	4.07E-04	8.50E-04	1.21E-03	1.20E-03	8.92E-04	3.68E-04	2.45E-05	7.34E-08	2.07E-10	0.
TE132	1.39E+00	2.76E+00	2.23E+00	1.17E+00	4.04E-01	4.79E-02	5.67E-03	7.97E-05	1.87E-09	1.02E-18	5.57E-28	0.
I132	3.41E+00	2.83E+00	2.29E+00	1.20E+00	4.17E-01	4.93E-02	5.84E-03	8.22E-05	1.92E-09	1.05E-18	5.73E-28	0.
I133	4.58E-01	2.55E+00	1.15E+00	1.07E-01	2.04E-03	7.37E-07	2.68E-10	3.53E-17	2.21E-34	0.	0.	0.
XE133M	2.78E-06	3.44E+00	4.08E+00	2.39E+00	5.61E-01	2.63E-02	1.23E-03	2.66E-06	5.83E-13	2.78E-26	1.33E-39	0.
XE133	4.86E-05	6.61E+01	8.86E+01	7.92E+01	4.32E+01	1.17E+01	3.14E+00	2.26E-01	3.15E-04	6.11E-10	1.19E-15	0.
I135	6.87E+00	1.12E+00	9.35E-02	5.42E-05	2.21E-10	3.64E-21	6.00E-32	1.63E-53	0.	0.	0.	0.
XE135M	1.08E-01	4.98E+01	4.17E+00	2.42E-03	9.87E-09	1.62E-19	2.67E-30	7.27E-52	0.	0.	0.	0.
XE135	1.13E+02	4.31E+02	1.05E+02	6.03E-01	7.39E-05	1.03E-12	1.45E-20	2.87E-36	0.	0.	0.	0.
CS136	1.38E-02	1.31E-02	1.24E-02	1.06E-02	8.14E-03	4.77E-03	2.81E-03	9.63E-04	6.69E-05	3.22E-07	1.56E-09	0.
CS137	5.49E-06	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.92E-05	5.88E-05	5.85E-05	5.82E-05	0.
BA137M	1.16E-08	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.53E-05	5.49E-05	5.46E-05	5.42E-05	0.

MICROCURI/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
BA139	1	92E+01	2	04E-03	1	21E-08	2	49E-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BA140	6	06E-03	3	59E-02	3	42E-02	2	90E-02	2	21E-02	1	28E-02	7	49E-03	2	54E-03	1	69E-04	7	55E-07	3	33E-09
LA140	1	44E-08	1	25E-02	2	01E-02	2	78E-02	2	48E-02	1	48E-02	8	57E-03	2	93E-03	1	94E-04	8	63E-07	3	85E-09
LA141	1	07E-01	4	24E-02	5	96E-04	1	65E-09	9	00E-19	2	69E-37	8	01E-56	0	0	0	0	0	0	0	0
CE141	1	32E-08	1	47E-02	1	46E-02	1	37E-02	1	23E-02	9	94E-03	8	01E-03	5	20E-03	1	79E-03	2	10E-04	2	48E-05
LA142	7	14E-01	1	56E-04	3	02E-09	2	22E-23	0	0	0	0	0	0	0	0	0	0	0	0	0	
CE143	3	81E-03	1	57E-01	9	47E-02	2	09E-02	1	68E-03	1	08E-05	6	99E-08	2	94E-12	3	32E-23	0	0	0	0
PR143	1	11E-09	1	00E-02	1	56E-02	2	01E-02	1	72E-02	1	05E-02	6	36E-03	2	29E-03	1	84E-04	1	17E-06	7	41E-09
CE144	1	36E-04	9	69E-04	9	64E-04	9	59E-04	9	49E-04	9	24E-04	9	04E-04	8	59E-04	7	58E-04	5	97E-04	4	67E-04
PR144	3	72E-08	9	69E-04	9	64E-04	9	59E-04	9	49E-04	9	24E-04	9	04E-04	8	59E-04	7	58E-04	5	97E-04	4	67E-04
PR145	6	98E-03	7	09E-02	4	40E-03	1	05E-06	9	50E-13	7	89E-25	6	52E-37	0	0	0	0	0	0	0	0
ND147	9	74E-07	1	64E-02	1	54E-02	1	27E-02	9	32E-03	5	01E-03	2	67E-03	7	71E-04	3	37E-05	6	57E-08	1	27E-10
PM147	2	70E-15	1	23E-05	2	37E-05	5	41E-05	9	38E-05	1	43E-04	1	69E-04	1	88E-04	1	89E-04	1	77E-04	1	64E-04
ND149	1	97E+00	1	91E-04	1	85E-08	1	69E-20	1	44E-40	0	0	0	0	0	0	0	0	0	0	0	
PM149	2	75E-04	5	08E-02	3	72E-02	1	45E-02	3	04E-03	1	32E-04	5	75E-06	1	10E-08	1	72E-15	4	26E-29	1	06E-42
PM150	2	62E-02	5	54E-05	1	16E-07	1	09E-15	4	58E-29	0	0	0	0	0	0	0	0	0	0	0	
PM151	7	72E-03	5	27E-02	2	91E-02	4	89E-03	2	51E-04	6	58E-07	1	73E-09	1	20E-14	1	50E-27	0	0	0	0
SM153	2	92E-02	2	05E-02	1	44E-02	4	97E-03	8	47E-04	2	46E-05	7	14E-07	6	00E-10	1	23E-17	5	27E-33	2	24E-48
SM156	5	11E-02	8	70E-03	1	49E-03	7	31E-06	1	06E-09	2	16E-17	4	47E-25	1	91E-40	0	0	0	0	0	0
EU155	2	00E-06	6	76E-05	6	75E-05	6	75E-05	6	74E-05	6	71E-05	6	69E-05	6	64E-05	6	51E-05	6	25E-05	6	00E-05
EU156	1	50E-04	1	21E-03	1	34E-03	1	21E-03	9	62E-04	6	02E-04	3	79E-04	1	51E-04	1	50E-05	1	47E-07	1	45E-09
EU157	9	77E-03	1	13E-02	3	80E-03	1	42E-04	5	98E-07	1	05E-11	1	86E-16	5	81E-26	0	0	0	0	0	0
GD159	2	48E-03	4	89E-03	1	94E-03	1	21E-04	1	19E-06	1	15E-10	1	12E-14	1	05E-22	8	97E-43	0	0	0	0
TB161	2	20E-05	1	44E-04	1	30E-04	9	63E-05	5	81E-05	2	13E-05	7	78E-06	1	04E-06	6	90E-09	2	98E-13	1	30E-17
TOTAL			5	97E+02	2	23E+02	9	08E+01	4	71E+01	1	29E+01	4	01E+00	8	14E-01	2	87E-01	1	05E-01	6	26E-02

MICROCURIES/SQ METER
 UNDERGROUND EVENT CATEGORY G
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 EFFLUENT EITHER SEEPED THROUGH CABLES OR WAS FILTERED THROUGH THE SOIL

PAGE 9

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1	00E+00	1	50E+00	2	00E+00	3	50E+00	5	00E+00	7	00E+00	1	00E+01	2	00E+01	3	50E+01	5	00E+01
KR 85	7	59E-05	1	88E-03	1	83E-03	1	77E-03	1	61E-03	1	46E-03	1	28E-03	1	05E-03	5	57E-04	2	13E-04	8	15E-05
SR 89	6	15E-08	1	44E-05	1	26E-06	1	11E-07	7	45E-11	5	05E-14	2	97E-18	1	35E-24	9	83E-46	0		0	
SR 90	1	46E-07	1	46E-05	1	44E-05	1	43E-05	1	38E-05	1	33E-05	1	26E-05	1	17E-05	9	17E-06	6	33E-06	4	38E-06
Y 90	2	16E-13	1	46E-05	1	44E-05	1	43E-05	1	38E-05	1	33E-05	1	26E-05	1	17E-05	9	17E-06	6	33E-06	4	38E-06
Y 91	1	23E-08	8	32E-04	9	69E-05	1	13E-05	1	76E-08	2	77E-11	5	06E-15	1	24E-20	2	52E-39	0		0	
ZR 95	4	46E-05	1	15E-04	1	64E-05	2	33E-06	6	80E-09	1	98E-11	8	18E-15	6	90E-20	8	48E-37	0		0	
NB 95M	9	51E-13	2	43E-06	3	47E-07	4	93E-08	1	44E-10	4	19E-13	1	73E-16	1	46E-21	1	79E-38	0		0	
NB 95	4	98E-12	2	46E-04	3	54E-05	5	03E-06	1	46E-08	4	25E-11	1	77E-14	1	50E-19	1	83E-36	0		0	
RU103	2	18E-04	8	45E-04	3	46E-05	1	42E-06	9	71E-11	6	66E-15	1	86E-20	8	78E-29	0		0		0	
RH103M	1	45E-08	8	47E-04	3	46E-05	1	42E-06	9	71E-11	6	66E-15	1	86E-20	8	80E-29	0		0		0	
RU106	2	33E-03	2	22E-02	1	57E-02	1	11E-02	3	96E-03	1	40E-03	3	53E-04	4	47E-05	4	51E-08	1	45E-12	4	66E-17
RH106	2	53E-05	2	22E-02	1	57E-02	1	11E-02	3	96E-03	1	40E-03	3	53E-04	4	47E-05	4	51E-08	1	45E-12	4	66E-17
SN123	1	16E-05	1	60E-04	5	81E-05	2	11E-05	1	01E-06	4	85E-08	8	47E-10	1	95E-12	3	13E-21	2	01E-34	1	29E-47
SB125	1	66E-04	8	35E-04	2	93E-04	2	58E-04	1	77E-04	1	20E-04	7	16E-05	3	32E-05	2	54E-06	5	42E-08	1	16E-09
TE125M	4	47E-12	1	37E-04	1	21E-04	1	07E-04	7	30E-05	4	95E-05	2	97E-05	1	37E-05	1	05E-06	2	25E-08	4	78E-10
TE127M	5	26E-10	2	52E-04	7	88E-05	2	47E-05	7	58E-07	2	34E-08	2	25E-10	2	11E-13	1	73E-23	1	30E-38	9	65E-54
TE127	3	68E-02	2	49E-04	7	79E-05	2	44E-05	7	49E-07	2	31E-08	2	22E-10	2	08E-13	1	71E-23	1	28E-38	9	56E-54
CS137	5	49E-06	5	79E-05	5	72E-05	5	65E-05	5	46E-05	5	26E-05	5	03E-05	4	70E-05	3	72E-05	2	64E-05	1	87E-05
BA137M	1	16E-08	5	42E-05	5	36E-05	5	30E-05	5	10E-05	4	93E-05	4	70E-05	4	41E-05	3	49E-05	2	47E-05	1	74E-05
CE141	1	32E-08	5	70E-06	1	15E-07	2	30E-09	1	88E-14	1	53E-19	2	50E-26	1	66E-36	0		0		0	
CE144	1	36E-04	3	98E-04	2	56E-04	1	63E-04	4	29E-05	1	13E-05	1	89E-06	1	31E-07	1	76E-11	2	76E-17	4	31E-23
PR144	3	72E-08	3	98E-04	2	56E-04	1	63E-04	4	29E-05	1	13E-05	1	89E-06	1	31E-07	1	76E-11	2	76E-17	4	31E-23
PM147	2	70E-15	1	57E-04	1	37E-04	1	20E-04	8	07E-05	5	44E-05	3	20E-05	1	45E-05	1	03E-06	1	95E-08	3	68E-10
EU155	2	00E-06	5	84E-05	5	43E-05	5	06E-05	4	07E-05	3	27E-05	2	44E-05	1	57E-05	3	68E-06	4	14E-07	4	66E-08
TOTAL			5	15E-02	3	49E-02	2	51E-02	1	01E-02	4	67E-03	2	27E-03	1	34E-03	6	56E-04	2	77E-04	1	26E-04

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APPENDIX C
Calculated Concentrations for Releases from
Tests of Nuclear Rocket Engines

Nuclear rocket engine tests C(iii)
Total microcuries per square meter as a function of time and normalized mR/hr C-1
Calculated results (microcuries per square meter for individual radionuclides) C-2

NUCLEAR ROCKET ENGINE TESTS

ENGINE NAME	DATE	MW-SEC	CURIES
KIWI A	590701	2 0E+04	8 4E+02
KIWI A PRIME	600708	6 0E+04	2 5E+03
KIWI A3	601019	6 0E+04	2 5E+03
KIWI B-1A	611207	3 0E+04	1 3E+03
KIWI B-1B	620901	1 0E+04	4 2E+02
KIWI B-4A	621128	4 0E+04	1 7E+03
KIWI B-4D	640513	1 1E+05	4 6E+03
KIWI B-4E	640828	5 0E+05	2 1E+04
KIWI B-4E	640910	1 8E+05	7 6E+03
NRX-A2	640924	3 0E+05	1 1E+03
NRX-A2	641015	3 0E+05	1 1E+03
KIWI (TNT)	650112	9 0E+03	1 5E+04
NRX-A3	650423	3 2E+05	5 3E+02
NRX-A3	650520	8 4E+05	2 4E+03
NRX-A3	650528	5 0E+05	1 2E+03
PHOEBUS-1A	650625	7 4E+05	2 2E+04
NRX-A4/EST	660203	3 9E+05	1 2E+01
NRX-A4/EST	660303	8 8E+05	1 0E+02
NRX-A4/EST	660316	1 0E+06	2 7E+04
NRX-A4/EST	660325	1 1E+06	2 8E+04
NRX-A5	660608	1 2E+06	1 2E+03
NRX-A5	660623	1 0E+06	8 0E+04
PHOEBUS-1B	670210	1 4E+05	3 4E+04
PHOEBUS-1B	670223	2 6E+06	2 4E+05
NRX-A6	671215	4 5E+06	5 3E+04
PHOEBUS-2A	680608	6 4E+05	7 1E+03
PHOEBUS-2A	680626	4 5E+06	5 1E+04
PHOEBUS-2A	680718	2 7E+06	2 1E+03
PEEWEE-1	681204	1 6E+06	2 3E+05
XE PRIME	690611	4 2E+05	8 2E+02
XE PRIME	690828	3 4E+05	5 3E+02

CURIES RELEASED AS MEASURED AT H+12
HOURS ARE PRECISE TO A FACTOR OF TWO

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 NUCLEAR ROCKET ENGINE TEST
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM

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TIME		MR/HR	MICROCURIES/SQ METER
ZERO TIME	HOURS	1 04E+02	7 69E+03
1 00E+00		3 72E+01	2 10E+03
2 00E+00		1 52E+01	9 10E+02
3 00E+00		8 18E+00	5 60E+02
4 00E+00		5 08E+00	4 02E+02
6 00E+00		2 59E+00	2 58E+02
9 00E+00		1 44E+00	1 67E+02
1 20E+01		1 00E+00	1 20E+02
1 50E+01		7 66E-01	9 12E+01
1 80E+01		6 20E-01	7 26E+01
2 10E+01		5 21E-01	6 00E+01
1 00E+00	DAYS	4 42E-01	5 02E+01
2 00E+00		2 15E-01	2 30E+01
5 00E+00		8 85E-02	8 80E+00
1 00E+01		4 08E-02	4 22E+00
2 00E+01		1 51E-02	1 92E+00
3 00E+01		8 19E-03	1 22E+00
5 00E+01		3 62E-03	6 67E-01
1 00E+02		1 26E-03	2 87E-01
2 00E+02		4 52E-04	1 05E-01
3 00E+02		1 75E-04	5 19E-02
1 00E+00	YEARS	9 95E-05	3 76E-02
1 50E+00		2 85E-05	2 12E-02
2 00E+00		1 63E-05	1 50E-02
3 50E+00		1 03E-05	7 69E-03
5 00E+00		8 43E-06	5 34E-03
7 00E+00		7 25E-06	4 18E-03
1 00E+01		6 32E-06	3 48E-03
2 00E+01		4 71E-06	2 50E-03
3 50E+01		3 32E-06	1 72E-03
5 00E+01		2 35E-06	1 20E-03

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MICROCURIES/SQ METER
NUCLEAR ROCKET ENGINE TEST
MR/HR AT H+12 HOURS = 1 000
RELAXATION LENGTH = 0 16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

		ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
GE	75	1	69E-06	8	18E-03	4	92E-03	2	97E-03	1	79E-03	6	48E-04	1	41E-04	3	10E-05	6	75E-06	1	47E-06	3	22E-07
GE	77	2	76E-03	7	10E-03	6	66E-03	6	27E-03	5	92E-03	5	23E-03	4	35E-03	3	61E-03	3	01E-03	2	50E-03	2	08E-03
AS	77	2	85E-05	4	48E-03	4	57E-03	4	57E-03	4	62E-03	4	66E-03	4	66E-03	4	62E-03	4	53E-03	4	44E-03	4	34E-03
SE	77M	1	12E-09	1	35E-05	1	37E-05	1	38E-05	1	38E-05	1	39E-05	1	40E-05	1	39E-05	1	37E-05	1	34E-05	1	30E-05
GE	78	6	49E-01	4	07E-01	2	53E-01	1	58E-01	9	89E-02	3	84E-02	9	34E-03	2	26E-03	5	52E-04	3	34E-04	3	25E-05
AS	78	1	17E-02	1	94E-01	2	39E-01	2	24E-01	1	87E-01	1	11E-01	4	11E-02	1	37E-02	4	22E-03	1	26E-03	3	66E-04
AS	79	1	63E+01	1	60E-01	1	58E-03	1	55E-05	1	53E-07	1	48E-11	1	41E-17	1	35E-23	1	29E-29	1	23E-35	1	17E-41
SE	79M	2	41E-02	2	83E-01	2	79E-03	2	75E-05	2	70E-07	2	61E-11	2	49E-17	2	38E-23	2	27E-29	2	16E-35	2	07E-41
BR	80	1	04E-01	9	78E-03	9	20E-04	8	65E-05	8	15E-06	7	23E-08	6	05E-11	5	04E-14	4	20E-17	3	51E-20	2	92E-23
SE	81M	8	58E-02	4	00E+00	1	93E+00	9	28E-01	4	47E-01	1	04E-01	1	17E-02	1	31E-03	1	47E-04	1	64E-05	1	84E-06
SE	81	1	05E+00	4	73E+00	2	73E+00	1	37E+00	6	63E-01	1	55E-01	1	74E-02	1	94E-03	2	17E-04	2	44E-05	2	73E-06
BR	82	5	22E-04	5	11E-04	5	02E-04	4	92E-04	4	82E-04	4	64E-04	4	38E-04	4	13E-04	3	89E-04	3	67E-04	3	46E-04
SE	83	5	45E+01	1	03E+01	1	95E+00	3	71E-01	7	02E-02	2	52E-03	1	71E-05	1	17E-07	7	96E-10	5	40E-12	3	43E-14
BR	83	4	52E-01	6	76E+00	6	26E+00	4	91E+00	3	74E+00	2	10E+00	8	91E-01	3	76E-01	1	59E-01	6	69E-02	2	83E-02
BR	84	1	03E-01	1	77E+01	4	80E+00	1	30E+00	3	51E-01	2	57E-02	5	08E-04	1	00E-05	1	98E-07	3	93E-09	7	75E-11
RB	88	1	31E+01	4	09E+01	3	47E+01	2	74E+01	2	14E+01	1	30E+01	6	23E+00	2	96E+00	1	41E+00	6	73E-01	3	20E-01
RB	89	6	88E+01	6	45E+01	4	34E+00	2	91E-01	1	95E-02	8	85E-05	2	67E-08	8	08E-12	2	46E-15	7	45E-19	2	26E-22
SR	89	5	25E-06	1	84E-01	1	97E-01	1	97E-01	1	97E-01	1	97E-01	1	97E-01	1	96E-01	1	96E-01	1	95E-01	1	95E-01
SR	90	1	19E-05	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03
SR	91	8	48E-01	1	58E+01	1	47E+01	1	37E+01	1	28E+01	1	10E+01	8	90E+00	7	19E+00	5	82E+00	4	67E+00	3	77E+00
Y	91M	5	70E-05	5	43E+00	7	42E+00	7	95E+00	7	84E+00	7	04E+00	5	77E+00	4	64E+00	3	74E+00	3	01E+00	2	42E+00
Y	91	2	33E-08	4	83E-03	1	12E-02	1	77E-02	2	42E-02	3	64E-02	5	18E-02	6	40E-02	7	42E-02	8	21E-02	8	86E-02
SR	92	9	43E+00	4	21E+01	3	26E+01	2	53E+01	1	95E+01	1	17E+01	5	43E+00	2	53E+00	1	17E+00	5	43E-01	2	53E-01
Y	92	4	34E-01	8	86E+00	1	40E+01	1	65E+01	1	75E+01	1	68E+01	1	28E+01	8	72E+00	5	61E+00	3	45E+00	2	08E+00
SR	93	3	68E+02	6	33E+00	3	50E-02	1	93E-04	1	06E-06	3	25E-11	5	49E-18	9	26E-25	1	57E-31	2	64E-38	4	44E-45
Y	93	4	48E-01	1	45E+01	1	37E+01	1	27E+01	1	19E+01	1	04E+01	8	47E+00	6	92E+00	5	62E+00	4	61E+00	3	75E+00
Y	94	5	55E+01	7	59E+01	9	77E+00	1	26E+00	1	62E-01	2	70E-03	5	79E-06	1	24E-08	2	66E-11	5	79E-14	3	21E-15
Y	95	2	06E+02	1	94E+01	4	26E-01	9	38E-03	2	07E-04	1	01E-07	1	07E-12	1	15E-17	1	23E-22	1	31E-27	1	41E-32
ZR	95	7	72E-04	1	01E-01	1	03E-01	1	03E-01	1	03E-01	1	03E-01	1	03E-01	1	02E-01	1	02E-01	1	02E-01	1	02E-01
NB	95	8	61E-11	6	23E-05	1	45E-04	2	29E-04	3	11E-04	4	78E-04	7	25E-04	9	72E-04	1	22E-03	1	47E-03	1	71E-03
ZR	97	1	71E+00	7	46E+00	7	11E+00	6	84E+00	6	55E+00	6	05E+00	5	35E+00	4	73E+00	4	20E+00	3	70E+00	3	29E+00
NB	97M	8	78E-03	7	11E+00	6	84E+00	6	58E+00	6	31E+00	5	81E+00	5	14E+00	4	55E+00	4	02E+00	3	55E+00	3	14E+00
NB	97	8	57E-01	3	73E+00	5	25E+00	5	99E+00	6	29E+00	6	26E+00	5	69E+00	5	08E+00	4	50E+00	3	97E+00	3	53E+00
NB	98	1	09E+01	4	84E+00	2	14E+00	9	44E-01	4	20E-01	8	17E-02	7	10E-03	6	13E-04	5	34E-05	4	62E-06	3	98E-07
MO	99	3	54E-03	1	46E+00	1	45E+00	1	43E+00	1	42E+00	1	39E+00	1	35E+00	1	30E+00	1	27E+00	1	23E+00	1	19E+00
TC	99M	3	29E-08	1	39E-01	2	62E-01	3	70E-01	4	64E-01	6	21E-01	7	85E-01	8	95E-01	9	58E-01	9	96E-01	1	01E+00
MO1	101	4	51E+01	2	04E+01	1	19E+00	6	87E-02	3	98E-03	1	34E-05	2	60E-09	5	08E-13	9	84E-17	1	91E-20	3	73E-24
TC1	101	1	91E+00	5	74E+01	6	27E+00	5	14E-01	3	73E-02	1	69E-04	4	23E-08	9	47E-12	2	01E-15	4	14E-19	8	34E-23
MO1	102	5	64E+02	1	29E+01	2	93E-01	6	71E-03	1	53E-04	7	93E-08	9	45E-13	1	12E-17	1	32E-22	1	57E-27	1	87E-32
TC1	102M	3	63E-01	1	09E+01	2	49E-01	5	68E-03	1	30E-04	6	71E-08	7	97E-13	9	45E-18	1	12E-22	1	33E-27	1	58E-32

MICROCURI/SQ METER
NUCLEAR ROCKET ENGINE TEST
MR/HR AT H+12 HOURS = 1 000
RELAXATION LENGTH = 0 16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
TC102	1	70E+03	6	46E+00	1	48E-01	3	36E-03	7	69E-05	4	00E-08	4	74E-13	5	64E-18	6	71E-23	7	93E-28	9	41E-33
RU103	4	01E-05	9	29E-02	9	29E-02	9	29E-02	9	29E-02	9	26E-02	9	22E-02	9	22E-02	9	19E-02	9	19E-02	9	15E-02
RH103M	2	67E-09	4	80E-02	7	13E-02	8	26E-02	8	78E-02	9	15E-02	9	22E-02	9	22E-02	9	19E-02	9	19E-02	9	19E-02
TC104	2	62E+01	1	88E+01	1	88E+00	1	86E-01	1	84E-02	1	81E-04	1	77E-07	1	73E-10	1	69E-13	1	65E-16	1	61E-19
RU105	2	28E-01	7	87E+00	6	72E+00	5	77E+00	4	94E+00	3	61E+00	2	26E+00	1	41E+00	8	84E-01	5	53E-01	3	47E-01
RH105M	1	50E-03	7	89E+00	6	74E+00	5	79E+00	4	94E+00	3	61E+00	2	26E+00	1	42E+00	8	88E-01	5	55E-01	3	47E-01
RU106	2	46E-09	1	60E-01	2	97E-01	4	10E-01	5	04E-01	6	46E-01	7	73E-01	8	31E-01	8	47E-01	8	39E-01	8	17E-01
RH106	1	35E-04	2	56E-03	2	56E-03	2	56E-03	2	56E-03	2	56E-03	2	56E-03	2	56E-03	2	56E-03	2	56E-03	2	56E-03
PD107M	2	25E-02	3	06E+00	4	63E-01	6	99E-02	1	05E-02	2	40E-04	8	26E-07	2	85E-09	9	79E-12	3	36E-14	3	34E-18
AG109M	4	67E-05	6	21E-01	9	40E-02	1	42E-02	2	14E-03	4	88E-05	1	68E-07	5	80E-10	2	00E-12	6	86E-15	2	35E-17
PD109	1	01E-03	8	34E-02	7	94E-02	7	54E-02	7	14E-02	6	44E-02	5	54E-02	4	75E-02	4	07E-02	3	49E-02	3	00E-02
AG109M	5	79E-06	8	34E-02	7	94E-02	7	54E-02	7	14E-02	6	44E-02	5	54E-02	4	75E-02	4	07E-02	3	49E-02	3	00E-02
PD111M	7	16E+00	6	29E+00	5	56E+00	4	90E+00	4	32E+00	3	35E+00	2	30E+00	1	08E+00	7	40E-01	5	08E-01		
PD111	2	54E+00	4	59E+00	4	41E+00	3	93E+00	3	48E+00	2	70E+00	1	85E+00	1	27E+00	8	67E-01	5	95E-01	4	08E-01
AG111M	2	02E-02	6	20E+00	5	80E+00	5	20E+00	4	59E+00	3	54E+00	2	43E+00	1	66E+00	1	14E+00	7	83E-01	5	35E-01
AG111	7	19E-09	2	13E-02	4	47E-02	6	59E-02	8	46E-02	1	15E-01	1	48E-01	1	70E-01	1	84E-01	1	93E-01	1	98E-01
PD112	4	81E-01	4	66E-01	4	50E-01	4	35E-01	4	23E-01	3	94E-01	3	58E-01	3	24E-01	2	93E-01	2	66E-01	2	41E-01
AG112	1	44E-05	9	23E-02	1	63E-01	2	18E-01	2	59E-01	3	11E-01	3	42E-01	3	40E-01	3	24E-01	3	02E-01	2	78E-01
AG113	2	41E-02	5	17E+00	4	53E+00	3	98E+00	3	49E+00	2	68E+00	1	82E+00	1	23E+00	8	30E-01	5	59E-01	3	78E-01
AG115	1	15E+01	1	23E+01	1	53E+00	1	92E-01	2	40E-02	3	75E-04	7	34E-07	1	43E-09	2	78E-12	2	75E-16	2	56E-15
CD115M	9	42E-08	2	51E-03	2	82E-03	2	84E-03	2	84E-03	2	84E-03	2	84E-03	2	84E-03	2	83E-03	2	82E-03	2	82E-03
CD115	3	64E-05	6	86E-01	7	38E-01	7	35E-01	7	26E-01	7	08E-01	6	82E-01	6	55E-01	6	30E-01	6	06E-01	5	83E-01
IN115M	4	53E-10	7	57E-02	1	68E-01	2	49E-01	3	18E-01	4	23E-01	5	23E-01	5	77E-01	6	01E-01	6	06E-01	6	03E-01
CD117	8	24E-01	1	37E+01	1	03E+01	7	72E+00	5	78E+00	3	24E+00	1	36E+00	5	74E-01	2	42E-01	1	01E-01	4	27E-02
IN117M	3	97E-05	4	77E+00	6	91E+00	7	50E+00	7	25E+00	5	71E+00	3	27E+00	1	67E+00	8	02E-01	3	72E-01	1	68E-01
IN117	1	60E-09	8	70E-01	2	11E+00	2	93E+00	3	27E+00	3	00E+00	1	91E+00	1	02E+00	5	09E-01	2	39E-01	1	10E-01
CD118	5	37E+01	2	31E+01	9	89E+00	4	21E+00	1	81E+00	3	31E-01	2	59E-02	2	02E-03	1	59E-04	1	25E-05	9	79E-07
IN118	3	56E+00	2	31E+01	9	89E+00	4	22E+00	1	81E+00	3	31E-01	2	59E-02	2	04E-03	1	59E-04	1	25E-05	9	79E-07
CD119	1	03E+02	1	61E+00	2	50E-02	3	92E-04	6	12E-06	1	49E-09	5	71E-15	2	18E-20	8	29E-26	3	17E-31	1	22E-36
IN119M	1	56E-01	1	74E+01	1	89E+00	1	91E-01	1	90E-02	1	86E-04	1	82E-07	1	78E-10	1	74E-13	1	70E-16	1	66E-19
IN119	7	65E+00	9	14E-01	1	06E-01	1	07E-02	1	07E-03	1	05E-05	1	03E-08	1	01E-11	9	83E-15	9	60E-18	9	38E-21
SN121	8	69E-03	8	97E-01	8	69E-01	8	49E-01	8	28E-01	7	86E-01	7	24E-01	6	76E-01	6	25E-01	5	79E-01	5	38E-01
SN123M	3	55E+00	6	65E+00	2	36E+00	8	34E-01	2	94E-01	3	67E-02	1	63E-03	7	21E-05	3	18E-06	1	41E-07	6	23E-09
SN123	3	33E-05	3	49E-03	3	49E-03	3	49E-03	3	49E-03	3	49E-03	3	49E-03	3	49E-03	3	49E-03	3	49E-03	3	49E-03
SN125	4	39E-02	4	37E-02	4	35E-02	4	35E-02	4	33E-02	4	31E-02	4	27E-02	4	22E-02	4	18E-02	4	14E-02	4	12E-02
SB125	2	63E-04	2	65E-04	2	65E-04	2	67E-04	2	67E-04	2	69E-04	2	74E-04	2	78E-04	2	82E-04	2	84E-04	2	89E-04
SB126	8	55E-03	8	51E-03	8	51E-03	8	48E-03	8	46E-03	8	41E-03	8	37E-03	8	32E-03	8	25E-03	8	18E-03	8	14E-03
SN127	7	88E+00	5	67E+00	4	07E+00	2	93E+00	2	11E+00	1	09E+00	4	05E-01	1	50E-01	5	58E-02	2	07E-02	7	69E-03
SB127	9	21E-02	3	18E-01	3	52E-01	3	75E-01	3	90E-01	4	07E-01	4	13E-01	4	09E-01	4	02E-01	3	94E-01	3	88E-01

MICROCURIES/SQ METER
NUCLEAR ROCKET ENGINE TEST
MR/HR AT H+12 HOURS = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
TE127	5.20E-02	6.47E-02	7.86E-02	9.33E-02	1.08E-01	1.35E-01	1.73E-01	2.02E-01	2.25E-01	2.42E-01	2.55E-01
SN128	8.77E+01	4.33E+01	2.14E+01	1.06E+01	5.23E+00	1.28E+00	1.54E-01	1.86E-02	2.24E-03	2.72E-04	3.28E-05
SB128M	4.47E-02	4.92E+01	2.56E+01	1.26E+01	6.23E+00	1.52E+00	1.84E-01	2.22E-02	2.67E-03	3.23E-04	3.92E-05
SB128	3.68E+00	3.54E+00	3.35E+00	3.14E+00	2.93E+00	2.51E+00	2.01E+00	1.59E+00	1.26E+00	1.00E+00	7.94E-01
SN129M	4.80E+01	2.40E+01	1.20E+01	6.01E+00	3.00E+00	7.50E-01	9.41E-02	1.18E-02	1.47E-03	1.83E-04	2.30E-05
SN129	3.21E+02	3.15E+00	3.11E-02	3.07E-04	3.00E-06	2.92E-10	2.78E-16	2.66E-22	2.54E-28	2.42E-34	2.31E-40
SB129	1.81E+01	3.03E+01	2.84E+01	2.54E+01	2.23E+01	1.66E+01	1.03E+01	6.39E+00	3.94E+00	2.44E+00	1.50E+00
TE129M	3.40E-07	3.78E-03	7.79E-03	1.14E-02	1.47E-02	1.99E-02	2.52E-02	2.84E-02	3.05E-02	3.17E-02	3.24E-02
TE129	1.30E+01	1.79E+01	2.09E+01	2.17E+01	2.09E+01	1.73E+01	1.15E+01	7.28E+00	4.51E+00	2.80E+00	1.74E+00
SB130M	1.48E+00	2.80E+00	7.36E-03	1.93E-05	5.09E-08	3.50E-13	6.40E-21	1.16E-28	2.11E-36	3.83E-44	6.98E-52
SB130	2.55E+02	7.69E+01	2.19E+01	6.20E+00	1.75E+00	1.41E-01	3.23E-03	7.33E-05	1.68E-06	3.81E-08	8.72E-10
I130	7.08E-02	6.70E-02	6.35E-02	6.00E-02	5.67E-02	5.07E-02	4.28E-02	3.63E-02	3.05E-02	2.60E-02	2.19E-02
SB131	3.42E+02	8.96E+01	1.46E+01	2.41E+00	3.94E-01	1.06E-02	4.67E-05	2.06E-07	9.08E-10	4.00E-12	2.00E-14
TE131M	1.64E-04	8.63E-01	9.83E-01	9.85E-01	9.66E-01	9.24E-01	8.61E-01	8.04E-01	7.50E-01	7.00E-01	6.53E-01
TE131	1.52E+02	1.64E+02	5.38E+01	1.40E+01	3.39E+00	3.19E-01	1.58E-01	1.46E-01	1.36E-01	1.28E-01	1.19E-01
I131	2.20E-02	7.64E-01	1.13E+00	1.23E+00	1.26E+00	1.27E+00	1.27E+00	1.26E+00	1.26E+00	1.24E+00	1.24E+00
TE132	1.46E+00	3.56E+00	3.51E+00	3.50E+00	3.45E+00	3.39E+00	3.30E+00	3.22E+00	3.13E+00	3.04E+00	2.97E+00
I132	3.59E+00	3.57E+00	3.57E+00	3.56E+00	3.53E+00	3.48E+00	3.41E+00	3.31E+00	3.22E+00	3.15E+00	3.07E+00
TE133M	1.08E-01	3.75E+01	1.63E+01	7.09E+00	3.09E+00	5.86E-01	4.82E-02	3.98E-03	3.28E-04	2.70E-05	2.23E-06
TE133	6.06E+02	3.44E+01	3.82E+00	1.26E+00	5.35E-01	1.02E-01	8.38E-03	6.89E-04	5.71E-05	4.69E-06	3.87E-07
I133	9.41E-01	1.02E+01	1.09E+01	1.09E+01	1.07E+01	1.02E+01	9.26E+00	8.38E+00	7.56E+00	6.89E+00	6.22E+00
TE134	2.07E+02	9.63E+01	3.59E+01	1.33E+01	4.95E+00	6.86E-01	3.51E-02	1.79E-03	9.20E-05	4.72E-06	2.43E-07
I134	9.52E+01	1.27E+02	8.92E+01	5.23E+01	2.81E+01	7.13E+00	7.84E-01	8.00E-02	7.84E-03	7.51E-04	7.13E-05
I135	2.66E+00	4.68E+00	4.22E+00	3.80E+00	3.43E+00	2.79E+00	2.05E+00	1.50E+00	1.10E+00	8.10E-01	5.92E-01
CS136	3.69E-04	3.67E-04	3.67E-04	3.67E-04	3.65E-04	3.63E-04	3.61E-04	3.59E-04	3.57E-04	3.55E-04	3.51E-04
CS137	7.45E-05	8.03E-04	8.03E-04	8.03E-04	8.03E-04	8.03E-04	8.03E-04	8.03E-04	8.03E-04	8.03E-04	8.03E-04
BA137M	1.57E-07	7.49E-04	7.49E-04	7.49E-04	7.49E-04	7.49E-04	7.49E-04	7.49E-04	7.49E-04	7.49E-04	7.49E-04
CS138	7.25E+01	1.22E+02	4.23E+01	1.24E+01	3.48E+00	2.65E-01	5.51E-03	1.15E-04	2.37E-06	4.94E-08	1.03E-09
CS139	6.67E+02	2.13E+01	2.67E-01	3.35E-03	4.21E-05	6.61E-09	1.32E-14	2.60E-20	5.15E-26	1.02E-31	2.02E-37
BA139	1.24E+01	1.36E+02	8.47E+01	5.15E+01	3.11E+01	1.14E+01	2.53E+00	5.63E-01	1.26E-01	2.78E-02	6.16E-03
BA140	1.03E-01	6.48E-01	6.48E-01	6.43E-01	6.43E-01	6.38E-01	6.38E-01	6.33E-01	6.27E-01	6.23E-01	6.18E-01
LA140	2.47E-07	1.11E-02	2.19E-02	3.26E-02	4.30E-02	6.33E-02	9.24E-02	1.20E-01	1.45E-01	1.70E-01	1.92E-01
BA141	1.88E+02	5.67E+01	5.62E+00	5.58E-01	5.53E-02	5.49E-04	5.35E-07	5.22E-10	5.09E-13	4.99E-16	4.86E-19
LA141	1.73E+00	3.67E+01	3.42E+01	2.90E+01	2.44E+01	1.71E+01	9.95E+00	5.85E+00	3.44E+00	2.02E+00	1.18E+00
CE141	2.14E-07	2.38E-02	5.58E-02	8.39E-02	1.07E-01	1.44E-01	1.79E-01	1.99E-01	2.10E-01	2.17E-01	2.21E-01
BA142	5.06E+02	2.01E+01	4.59E-01	1.04E-02	2.39E-04	1.24E-07	1.47E-12	1.74E-17	2.07E-22	2.46E-27	2.92E-32
LA142	1.17E+01	8.06E+01	5.32E+01	3.38E+01	2.15E+01	8.71E+00	2.25E+00	5.79E-01	1.49E-01	3.64E-02	9.88E-03
LA143	1.82E+02	3.55E+01	1.82E+00	9.35E-02	4.80E-03	1.25E-05	1.69E-09	2.29E-13	3.08E-17	4.15E-21	5.61E-25
CE143	7.26E-02	4.63E+00	4.80E+00	4.67E+00	4.59E+00	4.42E+00	4.14E+00	3.89E+00	3.65E+00	3.42E+00	3.22E+00
PR143	2.13E-08	7.10E-03	1.71E-02	2.71E-02	3.68E-02	5.57E-02	8.20E-02	1.07E-01	1.30E-01	1.51E-01	1.71E-01

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PROPOSED SC METER
 NUCLEAR ROCKET ENGINE TEST
 MR HP AT 4+12 HOURS = 1,000
 RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
CE144	2.94E-03	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02
PR144	8.06E-07	1.92E-02	2.09E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02	2.10E-02
PR145	1.22E-01	1.79E+01	1.59E+01	1.41E+01	1.26E+01	1.00E+01	7.05E+00	4.98E+00	3.53E+00	2.49E+00	1.76E+00	
CE146	2.82E+02	1.45E+01	7.41E-01	3.79E-02	1.95E-03	5.14E-06	6.92E-10	9.31E-14	1.26E-17	1.69E-21	2.28E-25	
PR146	5.83E+00	5.07E+01	1.15E+01	2.16E+00	3.89E-01	1.22E-02	6.75E-05	3.72E-07	2.06E-09	1.14E-11	6.23E-14	
PR147	4.12E+01	1.19E+01	3.73E-01	1.17E-02	3.64E-04	3.55E-07	1.09E-11	3.31E-16	1.01E-20	3.08E-25	9.41E-30	
ND147	1.47E-05	2.77E-01	2.85E-01	2.84E-01	2.84E-01	2.82E-01	2.80E-01	2.78E-01	2.76E-01	2.73E-01	2.71E-01	
ND149	2.12E+01	1.45E+01	9.81E+00	6.71E+00	4.54E+00	2.11E+00	6.63E-01	2.09E-01	6.59E-02	2.07E-02	6.55E-03	
PM149	2.96E-03	2.31E-01	3.84E-01	4.86E-01	5.51E-01	6.19E-01	6.43E-01	6.31E-01	6.14E-01	5.91E-01	5.70E-01	
PM150	2.21E-01	1.71E-01	1.32E-01	1.02E-01	7.88E-02	4.74E-02	2.20E-02	1.01E-02	4.71E-03	2.18E-03	1.01E-03	
ND151	8.62E+01	2.70E+00	8.45E-02	2.64E-03	8.27E-05	8.04E-08	2.46E-12	7.52E-17	2.29E-21	6.99E-26	2.14E-30	
PM151	5.48E-02	6.41E-01	6.47E-01	6.29E-01	6.12E-01	5.83E-01	5.40E-01	5.02E-01	4.67E-01	4.32E-01	4.01E-01	
PM152	9.77E+01	9.54E-02	9.31E-05	9.07E-08	8.88E-11	8.49E-17	7.90E-26	7.36E-35	6.85E-44	6.42E-53	5.96E-62	
SM153	1.38E-01	1.36E-01	1.35E-01	1.32E-01	1.31E-01	1.27E-01	1.21E-01	1.16E-01	1.11E-01	1.06E-01	1.01E-01	
SM155	4.69E+00	7.69E-01	1.26E-01	2.06E-02	3.39E-03	9.12E-05	4.03E-07	1.77E-09	7.80E-12	3.48E-14	8.53E-17	
EU155	3.45E-06	9.83E-05	1.14E-04	1.16E-04	1.17E-04	1.17E-04	1.17E-04	1.17E-04	1.17E-04	1.17E-04	1.17E-04	
SM156	6.39E-02	5.93E-02	5.51E-02	5.12E-02	4.75E-02	4.10E-02	3.29E-02	2.64E-02	2.11E-02	1.69E-02	1.36E-02	
EU156	1.87E-04	3.05E-04	4.14E-04	5.15E-04	6.09E-04	7.78E-04	9.89E-04	1.14E-03	1.28E-03	1.38E-03	1.45E-03	
EU157	7.37E-03	2.44E-02	2.33E-02	2.23E-02	2.12E-02	1.94E-02	1.69E-02	1.48E-02	1.29E-02	1.12E-02	9.75E-03	
EU158	1.77E-01	7.15E-02	2.89E-02	1.17E-02	4.72E-03	7.75E-04	5.18E-05	3.43E-06	2.28E-07	1.51E-08	1.00E-09	
EU159	1.92E-01	1.91E-02	1.89E-03	1.87E-04	1.86E-05	1.83E-07	1.79E-10	1.75E-13	1.71E-16	1.67E-19	1.63E-22	
GD159	8.21E-04	3.59E-03	3.74E-03	3.63E-03	3.49E-03	3.23E-03	2.88E-03	2.57E-03	2.28E-03	2.03E-03	1.81E-03	
TB161	2.97E-06	2.13E-05	2.12E-05	2.11E-05	2.11E-05	2.09E-05	2.07E-05	2.04E-05	2.01E-05	1.99E-05	1.96E-05	
TOTAL	7.69E+03	2.10E+03	9.10E+02	5.60E+02	4.02E+02	2.58E+02	1.67E+02	1.20E+02	9.12E+01	7.26E+01	6.00E+01	

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MICROCURIRES/SQ METER
 NUCLEAR ROCKET ENGINE TEST
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 300 DAYS

		ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02	
GE 77	2	76E-03	1	73E-03	3	97E-04	4	79E-06	3	05E-09	1	24E-15	4	96E-22	8	14E-35	0		0		0		0	
AS 77	2	85E-05	4	20E-03	3	04E-03	8	80E-04	1	03E-04	1	40E-06	1	90E-08	3	50E-12	1	62E-21	3	48E-40	7	49E-59		
SE 77M	1	12E-09	1	27E-05	9	10E-06	2	64E-06	3	08E-07	4	19E-09	5	70E-11	1	05E-14	4	88E-24	1	04E-42	2	25E-61		
AS 78	1	17E-02	1	04E-04	3	05E-09	2	58E-23	0		0		0		0		0		0		0			
BR 82	5	22E-04	3	25E-04	2	03E-04	4	95E-05	4	68E-06	4	21E-08	3	78E-10	3	06E-14	1	78E-24	6	11E-45	2	08E-65		
BR 83	4	52E-01	1	19E-02	1	20E-05	1	22E-14	1	24E-29	0		0		0		0		0		0			
RB 88	1	31E+01	1	52E-01	4	00E-04	7	23E-12	9	07E-25	0		0		0		0		0		0			
SR 89	5	25E-06	1	58E-01	1	55E-01	1	49E-01	1	40E-01	1	22E-01	1	07E-01	8	22E-02	4	20E-02	1	11E-02	2	91E-03		
SR 90	1	19E-05	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	22E-03	1	21E-03	1	21E-03	1	20E-03		
Y 90	1	76E-11	2	80E-04	4	95E-04	8	89E-04	1	13E-03	1	21E-03	1	22E-03	1	22E-03	1	21E-03	1	21E-03	1	20E-03		
SR 91	8	48E-01	3	04E+00	5	43E-01	3	12E-03	5	70E-07	1	93E-14	6	56E-22	7	46E-37	0		0		0			
Y 91M	5	70E-05	1	96E+00	3	50E-01	2	01E-03	3	71E-07	1	25E-14	4	23E-22	4	82E-37	0		0		0			
Y 91	2	33E-08	9	33E-02	1	10E-01	1	10E-01	1	04E-01	9	22E-02	8	21E-02	6	51E-02	3	60E-02	1	11E-02	3	41E-03		
SR 92	9	43E+00	1	18E-01	2	54E-04	2	55E-12	1	19E-25	0		0		0		0		0		0			
Y 92	4	34E-01	1	23E+00	1	37E-02	1	05E-08	6	14E-19	2	09E-39	7	20E-60	0		0		0		0			
Y 93	4	48E-01	3	03E+00	5	91E-01	4	44E-03	1	28E-06	1	06E-13	8	72E-21	5	96E-35	0		0		0			
ZR 95	7	72E-04	9	64E-02	9	55E-02	9	21E-02	8	78E-02	7	85E-02	7	08E-02	5	72E-02	3	35E-02	1	15E-02	3	97E-03		
NB 95M	1	65E-11	3	27E-04	5	96E-04	1	13E-03	1	53E-03	1	62E-03	1	49E-03	1	21E-03	7	11E-04	2	45E-04	8	43E-05		
NB 95	8	61E-11	1	87E-03	3	69E-03	8	87E-03	1	65E-02	2	83E-02	3	66E-02	4	54E-02	4	37E-02	2	10E-02	8	06E-03		
ZR 97	1	71E+00	2	91E+00	1	09E+00	5	78E-02	4	35E-04	2	45E-08	1	37E-12	4	35E-21	2	45E-42	0		0			
NB 97M	8	78E-03	2	79E+00	1	05E+00	5	58E-02	4	17E-04	2	35E-08	1	32E-12	4	17E-21	2	36E-42	0		0			
NB 97	8	57E-01	2	91E+00	1	09E+00	5	81E-02	4	38E-04	2	63E-08	1	48E-12	4	70E-21	2	64E-42	0		0			
MO 99	3	54E-03	1	15E+00	8	99E-01	4	26E-01	1	23E-01	1	03E-02	8	61E-04	6	00E-06	2	44E-11	4	02E-22	6	63E-33		
TC 99M	3	29E-08	1	01E+00	8	53E-01	4	08E-01	1	18E-01	9	84E-03	8	23E-04	5	74E-06	2	32E-11	3	83E-22	6	33E-33		
RU103	4	01E-05	9	15E-02	8	98E-02	8	50E-02	7	82E-02	6	55E-02	5	48E-02	3	87E-02	1	61E-02	2	80E-03	4	87E-04		
RH103M	2	67E-09	9	15E-02	8	98E-02	8	54E-02	7	82E-02	6	55E-02	5	48E-02	3	87E-02	1	61E-02	2	80E-03	4	87E-04		
RU105	2	28E-01	2	18E-01	5	12E-03	6	72E-08	4	92E-16	2	62E-32	1	41E-48	0		0		0		0			
RH105M	1	50E-03	2	18E-01	5	12E-03	6	74E-08	4	94E-16	2	64E-32	1	41E-48	0		0		0		0			
RH105	2	46E-09	7	85E-01	5	12E-01	1	28E-01	1	26E-02	1	23E-04	1	19E-06	1	12E-10	9	74E-21	7	32E-41	5	51E-61		
RU106	1	35E-04	2	56E-03	2	54E-03	2	53E-03	2	51E-03	2	47E-03	2	41E-03	2	32E-03	2	12E-03	1	75E-03	1	45E-03		
RH106	1	46E-06	2	56E-03	2	54E-03	2	53E-03	2	51E-03	2	47E-03	2	41E-03	2	32E-03	2	12E-03	1	75E-03	1	45E-03		
PD109	1	01E-03	2	56E-02	7	49E-03	1	85E-04	3	91E-07	1	74E-12	7	74E-18	1	53E-28	0		0		0			
AG109M	5	79E-06	2	56E-02	7	49E-03	1	85E-04	3	92E-07	1	74E-12	7	74E-18	1	53E-28	0		0		0			
PD111M	7	16E+00	3	48E-01	1	69E-02	1	93E-06	5	23E-13	3	81E-26	2	80E-39	0		0		0		0			
PD111	2	54E+00	2	80E-01	1	36E-02	1	56E-06	4	23E-13	3	08E-26	2	23E-39	0		0		0		0			
AG111M	2	02E-02	3	66E-01	1	78E-02	2	05E-06	5	53E-13	4	05E-26	2	96E-39	0		0		0		0			
AG111	7	19E-09	1	99E-01	1	91E-01	1	45E-01	9	16E-02	3	63E-02	1	44E-02	2	27E-03	2	23E-05	2	16E-09	2	10E-13		
PD112	4	81E-01	2	18E-01	9	89E-02	9	18E-03	1	75E-04	6	33E-08	2	31E-11	3	02E-18	1	91E-35	0		0			
AG112	1	44E-05	2	53E-01	1	17E-01	1	08E-02	2	07E-04	7	48E-08	2	72E-11	3	58E-18	2	24E-35	0		0			
AG113	2	41E-02	2	55E-01	1	11E-02	8	99E-07	1	38E-13	3	21E-27	7	51E-41	0		0		0		0			

MICROCURIERS/SQ METER
 NUCLEAR ROCKET ENGINE TEST
 MR/HR AT H+12 HOURS = 1 000
 RELAXATION LENGTH = 0 16 GM/SQCM

PAGE 7

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2	00E+00	5	00E+00	1	00E+01	2	00E+01	3	00E+01	5	00E+01	1	00E+02	2	00E+02	3	00E+02
CD115M	9	42E-08	2	73E-03	2	68E-03	2	55E-03	2	36E-03	2	00E-03	1	71E-03	1	23E-03	5	52E-04	1	10E-04	2	19E-05
CD115	3	64E-05	5	47E-01	4	01E-01	1	58E-01	3	34E-02	1	49E-03	6	64E-05	1	32E-07	2	34E-14	7	32E-28	2	30E-41
IN115M	4	53E-10	5	78E-01	4	38E-01	1	73E-01	3	64E-02	1	62E-03	7	25E-05	1	44E-07	2	56E-14	8	00E-28	2	51E-41
CD117	8	24E-01	1	80E-02	1	75E-05	1	63E-14	1	45E-29	0	0	0	0	0	0	0	0	0	0	0	
IN117M	3	97E-05	7	46E-02	8	63E-05	8	32E-14	7	39E-29	0	0	0	0	0	0	0	0	0	0	0	
IN117	1	60E-09	4	92E-02	5	82E-05	5	65E-14	5	00E-29	0	0	0	0	0	0	0	0	0	0	0	
SN121	8	69E-03	4	97E-01	2	68E-01	4	22E-02	1	94E-03	4	09E-06	8	62E-09	3	84E-14	1	60E-27	0	0	0	0
SN123	3	33E-05	3	49E-03	3	46E-03	3	40E-03	3	31E-03	3	12E-03	2	96E-03	2	65E-03	2	01E-03	1	15E-03	6	65E-04
SN125	4	39E-02	4	07E-02	3	80E-02	3	03E-02	2	09E-02	1	00E-02	4	80E-03	1	10E-03	2	74E-05	1	73E-08	1	08E-11
SB125	2	63E-04	2	93E-04	3	18E-04	3	90E-04	4	77E-04	5	79E-04	6	24E-04	6	49E-04	6	37E-04	5	94E-04	5	56E-04
SB126	8	55E-03	8	09E-03	7	65E-03	6	47E-03	4	90E-03	2	82E-03	1	62E-03	5	34E-04	3	33E-05	1	62E-07	3	26E-08
SN127	7	88E+00	2	87E-03	1	04E-06	4	95E-17	3	12E-34	0	0	0	0	0	0	0	0	0	0	0	
SB127	9	21E-02	3	77E-01	3	16E-01	1	85E-01	7	56E-02	1	26E-02	2	11E-03	5	90E-05	7	69E-09	1	31E-16	2	23E-24
TE127M	7	44E-10	5	77E-04	1	06E-03	2	05E-03	2	82E-03	3	12E-03	3	01E-03	2	68E-03	1	95E-03	1	03E-03	5	44E-04
TE127	5	20E-02	2	70E-01	2	66E-01	1	62E-01	6	85E-02	1	40E-02	4	80E-03	2	70E-03	1	92E-03	1	02E-03	5	37E-04
SB128	3	68E+00	6	29E-01	9	94E-02	3	89E-04	3	78E-08	3	54E-16	3	33E-24	2	93E-40	0	0	0	0	0	
SB129	1	81E+01	9	25E-01	1	93E-02	1	76E-07	6	99E-16	1	10E-32	1	74E-49	0	0	0	0	0	0	0	
TE129M	3	40E-07	3	59E-02	3	59E-02	3	40E-02	3	07E-02	2	50E-02	2	03E-02	1	35E-02	4	86E-03	6	36E-04	8	27E-05
TE129	1	30E+01	1	08E+00	4	51E-02	2	17E-02	1	96E-02	1	60E-02	1	30E-02	8	68E-03	3	13E-03	4	07E-04	5	31E-05
I130	7	08E-02	1	85E-02	4	84E-03	8	67E-05	1	06E-07	1	58E-13	2	35E-19	5	24E-31	0	0	0	0	0	
TE131M	1	64E-04	5	77E-01	3	31E-01	6	27E-02	3	92E-03	1	53E-05	5	99E-08	9	13E-13	8	30E-25	0	0	0	
TE131	1	52E+02	1	05E-01	6	03E-02	1	15E-02	7	16E-04	2	80E-06	1	09E-08	1	67E-13	1	52E-25	0	0	0	
I131	2	20E-02	1	19E+00	1	13E+00	9	04E-01	5	96E-01	2	52E-01	1	06E-01	1	91E-02	2	56E-04	4	67E-08	8	52E-12
XE131M	5	99E-11	5	52E-04	1	05E-03	2	19E-03	3	13E-03	3	10E-03	2	30E-03	9	47E-04	6	32E-05	1	89E-07	5	33E-10
TE132	1	46E+00	2	90E+00	2	34E+00	1	23E+00	4	24E-01	5	03E-02	5	96E-03	8	38E-05	1	96E-09	1	07E-18	5	85E-28
I132	3	59E+00	2	98E+00	2	40E+00	1	27E+00	4	38E-01	5	19E-02	6	14E-03	8	64E-05	2	02E-09	1	10E-18	6	02E-28
I133	9	41E-01	5	24E+00	2	37E+00	2	19E-01	4	19E-03	1	51E-06	5	50E-10	7	25E-17	4	55E-34	0	0	0	
I135	2	66E+00	4	33E-01	3	62E-02	2	10E-05	8	54E-11	1	41E-21	2	32E-32	6	30E-54	0	0	0	0	0	
CS136	3	69E-04	3	49E-04	3	31E-04	2	82E-04	2	17E-04	1	27E-04	7	48E-05	2	56E-05	1	78E-06	8	58E-09	4	16E-11
CS137	7	45E-05	8	03E-04	8	03E-04	8	03E-04	8	03E-04	8	03E-04	8	03E-04	8	03E-04	7	98E-04	7	94E-04	7	89E-04
BA137M	1	57E-07	7	49E-04	7	49E-04	7	49E-04	7	49E-04	7	49E-04	7	49E-04	7	49E-04	7	45E-04	7	40E-04	7	36E-04
BA139	1	24E+01	1	32E-03	7	77E-09	1	60E-24	0	0	0	0	0	0	0	0	0	0	0	0	0	
BA140	1	03E-01	6	13E-01	5	83E-01	4	94E-01	3	78E-01	2	19E-01	1	28E-01	4	33E-02	2	89E-03	1	29E-05	5	69E-08
LA140	2	47E-07	2	14E-01	3	44E-01	4	75E-01	4	23E-01	2	53E-01	1	46E-01	5	00E-02	3	32E-03	1	47E-05	6	57E-08
LA141	1	73E+00	6	87E-01	9	66E-03	2	67E-08	1	46E-17	4	36E-36	1	30E-54	0	0	0	0	0	0	0	
CE141	2	14E-07	2	38E-01	2	36E-01	2	22E-01	1	99E-01	1	61E-01	1	30E-01	8	43E-02	2	90E-02	3	41E-03	4	02E-04
LA142	1	17E+01	2	55E-03	4	93E-08	3	63E-22	0	0	0	0	0	0	0	0	0	0	0	0	0	
CE143	7	26E-02	2	99E+00	1	81E+00	3	98E-01	3	20E-02	2	07E-04	1	33E-06	5	61E-11	6	33E-22	0	0	0	0
PR143	2	13E-08	1	92E-01	2	98E-01	3	84E-01	3	29E-01	2	01E-01	1	21E-01	4	37E-02	3	50E-03	2	23E-05	1	41E-07
CE144	2	94E-03	2	10E-02	2	09E-02	2	08E-02	2	06E-02	2	00E-02	1	96E-02	1	86E-02	1	64E-02	1	30E-02	1	01E-02

MICROCURI/SQ METER
 NUCLEAR ROCKET ENGINE TEST
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PR144	8.06E-07	2.10E-02	2.09E-02	2.08E-02	2.06E-02	2.00E-02	1.96E-02	1.86E-02	1.64E-02	1.30E-02	1.01E-02
PR145	1.22E-01	1.24E+00	7.70E-02	1.83E-05	1.66E-11	1.38E-23	1.14E-35	0.	0.	0.	0.
ND147	1.47E-05	2.48E-01	2.32E-01	1.93E-01	1.41E-01	7.58E-02	4.04E-02	1.17E-02	5.09E-04	9.95E-07	1.93E-09
PM147	4.09E-14	1.85E-04	3.58E-04	8.18E-04	1.42E-03	2.16E-03	2.55E-03	2.84E-03	2.87E-03	2.68E-03	2.49E-03
ND149	2.12E+01	2.06E-03	1.99E-07	1.82E-19	1.55E-39	0.	0.	0.	0.	0.	0.
PM149	2.96E-03	5.46E-01	4.00E-01	1.56E-01	3.27E-02	1.42E-03	6.19E-05	1.18E-07	1.85E-14	4.58E-28	1.14E-41
PM150	2.21E-01	4.67E-04	9.82E-07	9.22E-15	3.86E-28	0.	0.	0.	0.	0.	0.
PM151	5.48E-02	3.73E-01	2.06E-01	3.47E-02	1.78E-03	4.67E-06	1.23E-08	8.51E-14	1.07E-26	0.	0.
SM153	1.38E-01	9.71E-02	6.82E-02	2.36E-02	4.02E-03	1.17E-04	3.38E-06	2.84E-09	5.85E-17	2.50E-32	1.06E-47
SM156	6.39E-02	1.09E-02	1.86E-03	9.15E-06	1.32E-09	2.71E-17	5.59E-25	2.39E-40	0.	0.	0.
EU155	3.45E-06	1.17E-04	1.17E-04	1.17E-04	1.16E-04	1.16E-04	1.15E-04	1.14E-04	1.12E-04	1.08E-04	1.04E-04
EU156	1.87E-04	1.51E-03	1.68E-03	1.51E-03	1.20E-03	7.54E-04	4.75E-04	1.88E-04	1.87E-05	1.84E-07	1.81E-09
EU157	7.37E-03	8.51E-03	2.86E-03	1.07E-04	4.51E-07	7.95E-12	1.41E-16	4.38E-26	0.	0.	0.
GD159	8.21E-04	1.62E-03	6.42E-04	4.01E-05	3.95E-07	3.82E-11	3.71E-15	3.48E-23	2.97E-43	0.	0.
TB161	2.97E-06	1.94E-05	1.75E-05	1.30E-05	7.84E-06	2.87E-06	1.05E-06	1.41E-07	9.31E-10	4.03E-14	1.75E-18
TOTAL		5.02E+01	2.30E+01	8.80E+00	4.22E+00	1.92E+00	1.22E+00	6.67E-01	2.87E-01	1.05E-01	5.19E-02

MICROCURIES/SQ METER
NUCLEAR ROCKET ENGINE TEST
MR/HR AT H+12 HOURS = 1 000
RELAXATION LENGTH = 0 16 GM/SQCM

PAGE 9

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1	00E+00	1	50E+00	2	00E+00	3	50E+00	5	00E+00	7	00E+00	1	00E+01	2	00E+01	3	50E+01	5	00E+01
SR 89	5	25E-06	1	23E-03	1	08E-04	9	45E-06	6	36E-09	4	31E-12	2	54E-16	1	15E-22	8	39E-44	0		0	
SR 90	1	19E-05	1	19E-03	1	18E-03	1	17E-03	1	12E-03	1	08E-03	1	03E-03	9	55E-04	7	46E-04	5	15E-04	3	57E-04
Y 90	1	76E-11	1	19E-03	1	18E-03	1	17E-03	1	12E-03	1	08E-03	1	03E-03	9	55E-04	7	46E-04	5	15E-04	3	57E-04
Y 91	2	33E-08	1	58E-03	1	84E-04	2	14E-05	3	34E-08	5	24E-11	9	60E-15	2	36E-20	4	77E-39	0		0	
ZR 95	7	72E-04	1	99E-03	2	83E-04	4	03E-05	1	18E-07	3	42E-10	1	42E-13	1	19E-18	1	47E-35	0		0	
NB 95M	1	65E-11	4	20E-05	5	99E-06	8	53E-07	2	49E-09	7	25E-12	3	00E-15	2	53E-20	3	10E-37	0		0	
NB 95	8	61E-11	4	26E-03	6	13E-04	8	70E-05	2	53E-07	7	35E-10	3	07E-13	2	59E-18	3	17E-35	0		0	
RU103	4	01E-05	1	56E-04	6	38E-06	2	62E-07	1	79E-11	1	23E-15	3	43E-21	1	62E-29	0		0		0	
RH103M	2	67E-09	1	56E-04	6	38E-06	2	62E-07	1	79E-11	1	23E-15	3	43E-21	1	62E-29	0		0		0	
RU106	1	35E-04	1	28E-03	9	07E-04	6	43E-04	2	29E-04	8	12E-05	2	04E-05	2	58E-06	2	61E-09	8	39E-14	2	69E-18
RH106	1	46E-06	1	28E-03	9	07E-04	6	43E-04	2	29E-04	8	12E-05	2	04E-05	2	58E-06	2	61E-09	8	39E-14	2	69E-18
SN123	3	33E-05	4	62E-04	1	68E-04	6	09E-05	2	92E-06	1	40E-07	2	44E-09	5	62E-12	9	04E-21	5	81E-34	3	73E-47
SB125	2	63E-04	5	31E-04	4	65E-04	4	10E-04	2	80E-04	1	90E-04	1	14E-04	5	26E-05	4	03E-06	8	59E-08	1	83E-09
TE125M	7	09E-12	2	16E-04	1	92E-04	1	69E-04	1	16E-04	7	85E-05	4	71E-05	2	16E-05	1	67E-06	3	56E-08	7	58E-10
TE127M	7	44E-10	3	56E-04	1	11E-04	3	50E-05	1	07E-06	3	31E-08	3	18E-10	2	99E-13	2	44E-23	1	83E-38	1	37E-53
TE127	5	20E-02	3	52E-04	1	10E-04	3	46E-05	1	06E-06	3	27E-08	3	14E-10	2	95E-13	2	42E-23	1	81E-38	1	35E-53
CS137	7	45E-05	7	85E-04	7	76E-04	7	67E-04	7	40E-04	7	14E-04	6	83E-04	6	38E-04	5	04E-04	3	58E-04	2	53E-04
BA137M	1	57E-07	7	36E-04	7	27E-04	7	18E-04	6	91E-04	6	69E-04	6	38E-04	5	98E-04	4	73E-04	3	34E-04	2	37E-04
CE141	2	14E-07	9	24E-05	1	86E-06	3	73E-08	3	04E-13	2	47E-18	4	06E-25	2	69E-35	0		0		0	
CE144	2	94E-03	8	64E-03	5	55E-03	3	54E-03	9	30E-04	2	45E-04	4	11E-05	2	84E-06	3	82E-10	5	99E-16	9	34E-22
PR144	8	06E-07	8	64E-03	5	55E-03	3	54E-03	9	30E-04	2	45E-04	4	11E-05	2	84E-06	3	82E-10	5	99E-16	9	34E-22
PM147	4	09E-14	2	37E-03	2	08E-03	1	82E-03	1	22E-03	8	23E-04	4	84E-04	2	20E-04	1	56E-05	2	95E-07	5	57E-09
EU155	3	45E-06	1	01E-04	9	37E-05	8	73E-05	7	02E-05	5	63E-05	4	21E-05	2	72E-05	6	34E-06	7	15E-07	8	04E-08
TOTAL			3	76E-02	2	12E-02	1	50E-02	7	69E-03	5	34E-03	4	18E-03	3	48E-03	2	50E-03	1	72E-03	1	20E-03

APPENDIX D
Calculated Concentrations for Releases from
Tests of Nuclear Ramjet Engines

Nuclear ramjet tests	D(iii)
Total microcuries per square meter as a function of time and normalized mR/hr	D-1
Calculated results (microcuries per square meter for individual radionuclides)	D-2

NUCLEAR RAMJET TESTS

ENGINE NAME	DATE	CURIES
TORY IIA	610514	4.00E+01
TORY IIA	610928	1.20E+02
TORY IIA	611005	2.20E+02
TORY IIA	611006	5.80E+02
TORY IIC	640512	2.30E+02
TORY IIC	640620	6.80E+02

CURIES RELEASED AS MEASURED
 AT H+12 HOURS ARE PRECISE TO
 PLUS OR MINUS 20 PERCENT

TOTAL MICROCURIES/SQ METER AS A FUNCTION OF TIME AND NORMALIZED MR/HR
 NUCLEAR RAMJET ENGINE TEST
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM

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TIME		MR/HR	MICROCURIES/SQ METER
ZERO TIME	HOURS	1 20E+02	9 79E+03
1.00E+00		3 45E+01	2 04E+03
2.00E+00		1.41E+01	8 15E+02
3.00E+00		7.70E+00	5.00E+02
4.00E+00		4.82E+00	3.62E+02
6.00E+00		2.47E+00	2.36E+02
9.00E+00		1.40E+00	1.58E+02
1 20E+01		1.00E+00	1.19E+02
1 50E+01		7 82E-01	9 39E+01
1.80E+01		6 39E-01	7 70E+01
2 10E+01		5 37E-01	6 48E+01
1 00E+00	DAYS	4 52E-01	5 49E+01
2 00E+00		2.00E-01	2 49E+01
5 00E+00		7 54E-02	8 81E+00
1 00E+01		3.75E-02	4 16E+00
2 00E+01		1 64E-02	1 99E+00
3 00E+01		9 71E-03	1 32E+00
5.00E+01		4.64E-03	7 49E-01
1 00E+02		1.72E-03	3 23E-01
2 00E+02		6 06E-04	1 17E-01
3.00E+02		2.28E-04	5.73E-02
1.00E+00	YEARS	1 26E-04	4.11E-02
1 50E+00		3 20E-05	2.26E-02
2.00E+00		1.65E-05	1 55E-02
3.50E+00		1.01E-05	7 18E-03
5.00E+00		8 61E-06	4.58E-03
7.00E+00		7.79E-06	3 39E-03
1.00E+01		7.15E-06	2 74E-03
2 00E+01		5 61E-06	1 94E-03
3.50E+01		3 97E-06	1 34E-03
5 00E+01		2 81E-06	9 42E-04

MICROCURI/SQ METER
NUCLEAR RAMJET ENGINE TEST
MR/HR AT H+12 HOURS = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
GE 75	8.41E-07	4.08E-03	2.45E-03	1.48E-03	8.90E-04	3.23E-04	7.05E-05	1.55E-05	3.37E-06	7.34E-07	1.60E-07	
GE 77	1.37E-03	3.54E-03	3.32E-03	3.13E-03	2.95E-03	2.61E-03	2.17E-03	1.80E-03	1.50E-03	1.25E-03	1.04E-03	
AS 77	1.42E-05	2.24E-03	2.28E-03	2.28E-03	2.30E-03	2.32E-03	2.32E-03	2.30E-03	2.26E-03	2.21E-03	2.16E-03	
SE 77M	5.60E-10	6.71E-06	6.82E-06	6.86E-06	6.86E-06	6.93E-06	6.97E-06	6.93E-06	6.82E-06	6.67E-06	6.47E-06	
GE 78	3.24E-01	2.03E-01	1.26E-01	7.89E-02	4.93E-02	1.91E-02	4.66E-03	1.13E-03	2.75E-04	6.69E-05	1.62E-05	
AS 78	5.83E-03	9.68E-02	1.19E-01	1.12E-01	9.34E-02	5.52E-02	2.05E-02	6.81E-03	2.11E-03	6.29E-04	1.83E-04	
AS 79	8.11E+00	7.97E-02	7.89E-04	7.75E-06	7.62E-08	7.40E-12	7.05E-18	6.74E-24	6.43E-30	6.12E-36	5.86E-42	
SE 79M	1.20E-02	1.41E-01	1.39E-03	1.37E-05	1.35E-07	1.30E-11	1.24E-17	1.19E-23	1.13E-29	1.08E-35	1.03E-41	
BR 80	5.17E-02	4.88E-03	4.59E-04	4.31E-05	4.06E-06	3.60E-08	3.02E-11	2.52E-14	2.09E-17	1.75E-20	1.46E-23	
SE 81M	4.28E-02	1.99E+00	9.63E-01	4.63E-01	2.23E-01	5.20E-02	5.85E-03	6.53E-04	7.33E-05	8.19E-06	9.17E-07	
SE 81	5.23E-01	2.36E+00	1.36E+00	6.82E-01	3.31E-01	7.74E-02	8.65E-03	9.68E-04	1.08E-04	1.21E-05	1.36E-06	
BR 82	2.61E-04	2.55E-04	2.50E-04	2.45E-04	2.40E-04	2.31E-04	2.18E-04	2.06E-04	1.94E-04	1.83E-04	1.73E-04	
SE 83	2.72E+01	5.15E+00	9.72E-01	1.85E-01	3.50E-02	1.26E-03	8.55E-06	5.81E-08	3.97E-10	2.69E-12	1.71E-14	
BR 83	2.25E-01	3.37E+00	3.12E+00	2.45E+00	1.87E+00	1.05E+00	4.44E-01	1.87E-01	7.91E-02	3.34E-02	1.41E-02	
BR 84	5.13E-02	8.84E+00	2.40E+00	6.48E-01	1.75E-01	1.28E-02	2.53E-04	5.00E-06	9.87E-08	1.96E-09	3.86E-11	
RB 88	6.55E+00	2.04E+01	1.73E+01	1.37E+01	1.07E+01	6.51E+00	3.10E+00	1.48E+00	7.05E-01	3.36E-01	1.60E-01	
RB 89	3.43E+01	3.22E+01	2.16E+00	1.45E-01	9.73E-03	4.41E-05	1.33E-08	4.03E-12	1.23E-15	3.71E-19	1.13E-22	
SR 89	2.62E-06	9.19E-02	9.82E-02	9.82E-02	9.82E-02	9.82E-02	9.82E-02	9.78E-02	9.78E-02	9.73E-02	9.73E-02	
SR 90	5.93E-06	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	
SR 91	8.05E-01	1.50E+01	1.40E+01	1.30E+01	1.21E+01	1.05E+01	8.46E+00	6.83E+00	5.52E+00	4.44E+00	3.58E+00	
Y 91M	5.42E-05	5.16E+00	7.04E+00	7.56E+00	7.45E+00	6.68E+00	5.48E+00	4.41E+00	3.55E+00	2.86E+00	2.30E+00	
Y 91	2.21E-08	4.59E-03	1.06E-02	1.69E-02	2.30E-02	3.46E-02	4.92E-02	6.08E-02	7.04E-02	7.80E-02	8.41E-02	
SR 92	1.03E+01	4.58E+01	3.55E+01	2.75E+01	2.13E+01	1.27E+01	5.91E+00	2.75E+00	1.27E+00	5.91E-01	2.75E-01	
Y 92	4.72E-01	9.64E+00	1.52E+01	1.80E+01	1.91E+01	1.82E+01	1.39E+01	9.49E+00	6.10E+00	3.76E+00	2.26E+00	
SR 93	4.68E+02	8.06E+00	4.45E-02	2.46E-04	1.35E-06	4.14E-11	6.99E-18	1.18E-24	2.00E-31	3.36E-38	5.65E-45	
Y 93	5.71E-01	1.85E+01	1.74E+01	1.62E+01	1.51E+01	1.32E+01	1.08E+01	8.81E+00	7.15E+00	5.87E+00	4.78E+00	
Y 94	7.22E+01	9.87E+01	1.27E+01	1.64E+00	2.11E-01	3.51E-03	7.53E-06	1.61E-08	3.46E-11	7.53E-14	4.18E-15	
Y 95	2.73E+02	2.57E+01	5.67E-01	1.25E-02	2.76E-04	1.34E-07	1.43E-12	1.53E-17	1.63E-22	1.75E-27	1.87E-32	
ZR 95	1.03E-03	1.34E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.37E-01	1.36E-01	1.36E-01	1.36E-01	1.36E-01	
NB 95	1.15E-10	8.29E-05	1.93E-04	3.04E-04	4.14E-04	6.35E-04	9.64E-04	1.29E-03	1.62E-03	1.95E-03	2.28E-03	
ZR 97	2.49E+00	1.09E+01	1.04E+01	9.99E+00	9.56E+00	8.83E+00	7.80E+00	6.90E+00	6.13E+00	5.40E+00	4.80E+00	
NB 97M	1.28E-02	1.04E+01	9.99E+00	9.60E+00	9.22E+00	8.48E+00	7.50E+00	6.64E+00	5.87E+00	5.19E+00	4.59E+00	
NB 97	1.25E+00	5.44E+00	7.67E+00	8.75E+00	9.18E+00	9.13E+00	8.31E+00	7.42E+00	6.56E+00	5.79E+00	5.15E+00	
NB 98	1.59E+01	7.06E+00	3.12E+00	1.38E+00	6.13E-01	1.19E-01	1.04E-02	8.95E-04	7.80E-05	6.75E-06	5.81E-07	
MO 99	9.22E-03	3.80E+00	3.77E+00	3.72E+00	3.69E+00	3.61E+00	3.50E+00	3.39E+00	3.30E+00	3.20E+00	3.10E+00	
TC 99M	8.57E-08	3.62E-01	6.81E-01	9.62E-01	1.21E+00	1.61E+00	2.04E+00	2.33E+00	2.49E+00	2.59E+00	2.63E+00	
MO101	1.35E+02	6.12E+01	3.56E+00	2.05E-01	1.19E-02	4.01E-05	7.78E-09	1.52E-12	2.95E-16	5.72E-20	1.12E-23	
TC101	5.72E+00	1.72E+02	1.88E+01	1.54E+00	1.12E-01	5.06E-04	1.27E-07	2.83E-11	6.00E-15	1.24E-18	2.50E-22	
MO102	1.13E+03	2.57E+01	5.84E-01	1.34E-02	3.04E-04	1.58E-07	1.88E-12	2.23E-17	2.64E-22	3.14E-27	3.73E-32	
TC102M	7.24E-01	2.17E+01	4.98E-01	1.13E-02	2.59E-04	1.34E-07	1.59E-12	1.88E-17	2.23E-22	2.65E-27	3.15E-32	

MICROCURI/SG METER
NUCLEAR RAMJET ENGINE TEST
MR/HR AT H+12 HOURS = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	6	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01
TC102	3	39E+03	1	29E+01	2	95E-01	6	70E-03	1	53E-04	7	99E-08	9	46E-13	1	13E-17	1	34E-22	1	58E-27	1	88E-32
RU103	8	00E-05	1	85E-01	1	85E-01	1	85E-01	1	85E-01	1	85E-01	1	84E-01	1	84E-01	1	83E-01	1	83E-01	1	83E-01
RH103M	5	33E-09	9	57E-02	1	42E-01	1	65E-01	1	75E-01	1	83E-01	1	84E-01	1	84E-01	1	83E-01	1	83E-01	1	83E-01
TC104	5	23E+01	3	75E+01	3	75E+00	3	71E-01	3	67E-02	3	61E-04	3	53E-07	3	45E-10	3	37E-13	3	29E-16	3	21E-19
RU105	3	41E-01	1	18E+01	1	00E+01	8	63E+00	7	39E+00	5	40E+00	3	38E+00	2	11E+00	1	32E+00	8	27E-01	5	19E-01
RH105M	2	24E-03	1	18E+01	1	01E+01	8	66E+00	7	39E+00	5	40E+00	3	38E+00	2	12E+00	1	33E+00	8	30E-01	5	19E-01
RH105	3	68E-09	2	40E-01	4	44E-01	6	13E-01	7	54E-01	9	66E-01	1	16E+00	1	24E+00	1	27E+00	1	26E+00	1	22E+00
RU106	1	61E-04	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03
RH106	1	75E-06	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03	3	06E-03
RH107	1	92E-02	2	61E+00	3	96E-01	5	98E-02	8	96E-03	2	05E-04	7	06E-07	2	43E-09	8	37E-12	2	87-147	2	85E-18
PD107M	3	99E-05	5	31E-01	8	04E-02	1	21E-02	1	83E-03	4	17E-05	1	44E-07	4	96E-10	1	71E-12	5	87E-15	2	01E-17
PD109	6	04E-04	4	99E-02	4	75E-02	4	51E-02	4	27E-02	3	86E-02	3	32E-02	2	84E-02	2	44E-02	2	09E-02	1	79E-02
AG109M	3	47E-06	4	99E-02	4	75E-02	4	51E-02	4	27E-02	3	86E-02	3	32E-02	2	84E-02	2	44E-02	2	09E-02	1	79E-02
PD111M	1	86E-01	1	64E-01	1	45E-01	1	27E-01	1	12E-01	8	73E-02	5	98E-02	4	10E-02	2	82E-02	1	93E-02	1	32E-02
PD111	6	62E-02	1	20E-01	1	15E-01	1	02E-01	9	04E-02	7	01E-02	4	81E-02	3	29E-02	2	26E-02	1	55E-02	1	06E-02
AG111M	5	26E-04	1	61E-01	1	51E-01	1	35E-01	1	20E-01	9	20E-02	6	31E-02	4	32E-02	2	96E-02	2	04E-02	1	39E-02
AG111	1	87E-10	5	55E-04	1	16E-03	1	71E-03	2	20E-03	3	00E-03	3	85E-03	4	42E-03	4	78E-03	5	02E-03	5	15E-03
PD112	5	75E-02	5	58E-02	5	39E-02	5	21E-02	5	06E-02	4	72E-02	4	28E-02	3	88E-02	3	51E-02	3	18E-02	2	88E-02
AG112	1	73E-06	1	10E-02	1	95E-02	2	61E-02	3	10E-02	3	73E-02	4	09E-02	4	07E-02	3	88E-02	3	62E-02	3	33E-02
AG113	6	28E-04	1	35E-01	1	18E-01	1	04E-01	9	08E-02	6	98E-02	4	74E-02	3	20E-02	2	16E-02	1	46E-02	9	84E-03
AG115	1	72E-01	1	85E-01	2	29E-02	2	88E-03	3	59E-04	5	61E-06	1	10E-08	2	14E-11	4	16E-14	4	12-163	3	83E-17
CD115M	1	41E-09	3	75E-05	4	22E-05	4	25E-05	4	25E-05	4	25E-05	4	25E-05	4	25E-05	4	24E-05	4	22E-05	4	22E-05
CD115	5	44E-07	1	03E-02	1	10E-02	1	10E-02	1	09E-02	1	06E-02	1	02E-02	9	79E-03	9	42E-03	9	07E-03	8	72E-03
IN115M	6	78E-12	1	13E-03	2	51E-03	3	73E-03	4	76E-03	6	33E-03	7	83E-03	8	63E-03	9	00E-03	9	07E-03	9	01E-03
CD117	1	23E-02	2	05E-01	1	55E-01	1	15E-01	8	65E-02	4	85E-02	2	03E-02	8	59E-03	3	62E-03	1	52E-03	6	39E-04
IN117M	5	93E-07	7	14E-02	1	03E-01	1	12E-01	1	08E-01	8	55E-02	4	89E-02	2	49E-02	1	20E-02	5	57E-03	2	51E-03
IN117	2	39E-11	1	30E-02	3	16E-02	4	38E-02	4	89E-02	4	48E-02	2	86E-02	1	53E-02	7	62E-03	3	58E-03	1	65E-03
CD118	8	03E-01	3	45E-01	1	48E-01	6	30E-02	2	70E-02	4	94E-03	3	88E-04	3	03E-05	2	38E-06	1	87E-07	1	47E-08
IN118	5	33E-02	3	45E-01	1	48E-01	6	32E-02	2	70E-02	4	94E-03	3	88E-04	3	05E-05	2	38E-06	1	87E-07	1	47E-08
CD119	2	05E+00	3	21E-02	4	99E-04	7	81E-06	1	22E-07	2	98E-11	1	14E-16	4	36E-22	1	65E-27	6	33E-33	2	43E-38
IN119M	3	10E-03	3	47E-01	3	76E-02	3	80E-03	3	78E-04	3	72E-06	3	64E-09	3	56E-12	3	47E-15	3	39E-18	3	31E-21
IN119	1	53E-01	1	82E-02	2	12E-03	2	14E-04	2	14E-05	2	10E-07	2	05E-10	2	01E-13	1	96E-16	1	92E-19	1	87E-22
SN121	2	48E-04	2	56E-02	2	48E-02	2	42E-02	2	36E-02	2	24E-02	2	06E-02	1	93E-02	1	78E-02	1	65E-02	1	53E-02
SN123M	1	42E-01	2	65E-01	9	40E-02	3	33E-02	1	17E-02	1	46E-03	6	48E-05	2	88E-06	1	27E-07	5	61E-09	2	49E-10
SN123	1	33E-06	1	39E-04	1	39E-04	1	39E-04	1	39E-04	1	39E-04	1	39E-04	1	39E-04	1	39E-04	1	39E-04	1	39E-04
SN125	2	92E-03	2	91E-03	2	89E-03	2	89E-03	2	88E-03	2	86E-03	2	84E-03	2	81E-03	2	78E-03	2	75E-03	2	74E-03
SB125	1	75E-05	1	76E-05	1	76E-05	1	78E-05	1	78E-05	1	79E-05	1	82E-05	1	85E-05	1	88E-05	1	89E-05	1	92E-05
SB126	5	69E-04	5	66E-04	5	66E-04	5	64E-04	5	62E-04	5	59E-04	5	56E-04	5	53E-04	5	49E-04	5	44E-04	5	41E-04
SN127	9	25E-01	6	65E-01	4	77E-01	3	44E-01	2	47E-01	1	28E-01	4	75E-02	1	77E-02	6	55E-03	2	43E-03	9	02E-04
SB127	1	08E-02	3	73E-02	4	13E-02	4	40E-02	4	57E-02	4	77E-02	4	85E-02	4	80E-02	4	72E-02	4	62E-02	4	55E-02

MICROCURI/SQ METER
NUCLEAR RAMJET ENGINE TEST
MR/HR AT H+12 HOURS = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1	00E+00	2	00E+00	3	00E+00	4	00E+00	5	00E+00	6	00E+00	7	00E+00	8	00E+00	9	00E+00	1	20E+01	1	50E+01	1	80E+01	2	10E+01	
TE127	6	11E-03	7	59E-03	9	22E-03	1	10E-02	1	27E-02	1	59E-02	2	03E-02	2	37E-02	2	65E-02	2	84E-02	2	99E-02							
SN128	1	14E+01	5	64E+00	2	79E+00	1	38E+00	6	80E-01	1	66E-01	2	00E-02	2	42E-03	2	92E-04	3	54E-05	4	26E-06							
SB128M	5	82E-03	6	40E+00	3	33E+00	1	64E+00	8	10E-01	1	98E-01	2	39E-02	2	89E-03	3	48E-04	4	21E-05	5	10E-06							
SB128	4	79E-01	4	61E-01	4	35E-01	4	08E-01	3	81E-01	3	27E-01	2	61E-01	2	07E-01	1	64E-01	1	30E-01	1	03E-01							
SN129M	9	58E+00	4	78E+00	2	40E+00	1	20E+00	5	99E-01	1	50E-01	1	88E-02	2	35E-03	2	93E-04	3	66E-05	4	58E-06							
SN129	6	40E+01	6	28E-01	6	20E-03	6	12E-05	5	99E-07	5	83E-11	5	55E-17	5	31E-23	5	06E-29	4	82E-35	4	62E-41							
SB129	3	60E+00	6	04E+00	5	67E+00	5	06E+00	4	46E+00	3	31E+00	2	06E+00	1	27E+00	7	86E-01	4	86E-01	2	99E-01							
TE129M	6	79E-08	7	55E-04	1	55E-03	2	28E-03	2	93E-03	3	97E-03	5	02E-03	5	67E-03	6	08E-03	6	32E-03	6	47E-03							
TE129	2	59E+00	3	56E+00	4	17E+00	4	33E+00	4	17E+00	3	46E+00	2	30E+00	1	45E+00	9	00E-01	5	59E-01	3	47E-01							
SB130M	4	23E-01	7	97E-01	2	10E-03	5	51E-06	1	45E-08	9	98E-14	1	82E-21	3	31E-29	6	01E-37	1	09E-44	1	99E-52							
SB130	7	25E+01	2	19E+01	6	24E+00	1	77E+00	5	00E-01	4	02E-02	9	19E-04	2	09E-05	4	78E-07	1	08E-08	2	48E-10							
I130	2	02E-02	1	91E-02	1	81E-02	1	71E-02	1	62E-02	1	44E-02	1	22E-02	1	03E-02	8	69E-03	7	40E-03	6	24E-03							
SB131	2	05E+02	5	36E+01	8	76E+00	1	44E+00	2	36E-01	6	35E-03	2	80E-05	1	23E-07	5	44E-10	2	40E-12	1	20E-14							
TE131M	9	82E-05	5	16E-01	5	88E-01	5	89E-01	5	78E-01	5	53E-01	5	15E-01	4	81E-01	4	49E-01	4	19E-01	3	91E-01							
TE131	9	08E+01	9	82E+01	3	22E+01	8	36E+00	2	03E+00	1	91E-01	9	45E-02	8	76E-02	8	17E-02	7	64E-02	7	13E-02							
I131	1	32E-02	4	57E-01	6	74E-01	7	38E-01	7	51E-01	7	58E-01	7	58E-01	7	51E-01	7	51E-01	7	45E-01	7	45E-01							
TE132	9	94E-01	2	42E+00	2	39E+00	2	38E+00	2	35E+00	2	31E+00	2	24E+00	2	19E+00	2	13E+00	2	07E+00	2	02E+00							
I132	2	44E+00	2	43E+00	2	43E+00	2	42E+00	2	40E+00	2	37E+00	2	32E+00	2	25E+00	2	19E+00	2	14E+00	2	09E+00							
TE133M	1	30E-01	4	48E+01	1	95E+01	8	49E+00	3	69E+00	7	02E-01	5	77E-02	4	76E-03	3	92E-04	3	23E-05	2	67E-06							
TE133	7	26E+02	4	12E+01	4	58E+00	1	51E+00	6	40E-01	1	22E-01	1	00E-02	8	24E-04	6	83E-05	5	62E-06	4	63E-07							
I133	1	13E+00	1	22E+01	1	31E+01	1	31E+01	1	28E+01	1	22E+01	1	11E+01	1	00E+01	9	05E+00	8	24E+00	7	44E+00							
TE134	2	30E+02	1	07E+02	3	98E+01	1	48E+01	5	49E+00	7	60E-01	3	89E-02	1	99E-03	1	02E-04	5	23E-06	2	69E-07							
I134	1	06E+02	1	41E+02	9	89E+01	5	80E+01	3	11E+01	7	90E+00	8	69E-01	8	86E-02	8	69E-03	8	32E-04	7	90E-05							
I135	1	77E+01	3	11E+01	2	80E+01	2	53E+01	2	28E+01	1	85E+01	1	36E+01	9	94E+00	7	31E+00	5	38E+00	3	93E+00							
CS136	4	42E-04	4	39E-04	4	39E-04	4	39E-04	4	37E-04	4	34E-04	4	32E-04	4	30E-04	4	27E-04	4	25E-04	4	20E-04							
CS137	8	92E-05	9	61E-04	9	61E-04	9	61E-04	9	61E-04	9	61E-04	9	61E-04	9	61E-04	9	61E-04	9	61E-04	9	61E-04							
BA137M	1	88E-07	8	97E-04	8	97E-04	8	97E-04	8	97E-04	8	97E-04	8	97E-04	8	97E-04	8	97E-04	8	97E-04	8	97E-04							
CS138	8	67E+01	1	46E+02	5	06E+01	1	48E+01	4	16E+00	3	17E-01	6	60E-03	1	37E-04	2	84E-06	5	92E-08	1	23E-09							
CS139	7	99E+02	2	55E+01	3	20E-01	4	01E-03	5	04E-05	7	92E-09	1	58E-14	3	12E-20	6	16E-26	1	22E-31	2	41E-37							
BA139	1	48E+01	1	65E+02	1	01E+02	6	16E+01	3	72E+01	1	37E+01	3	03E+00	6	74E-01	1	50E-01	3	32E-02	7	37E-03							
BA140	1	24E-01	7	76E-01	7	76E-01	7	69E-01	7	69E-01	7	63E-01	7	63E-01	7	57E-01	7	51E-01	7	46E-01	7	40E-01							
LA140	2	95E-07	1	32E-02	2	62E-02	3	90E-02	5	15E-02	7	57E-02	1	11E-01	1	43E-01	1	74E-01	2	03E-01	2	30E-01							
BA141	2	25E+02	6	78E+01	6	72E+00	6	68E-01	6	62E-02	6	57E-04	6	41E-07	6	25E-10	6	09E-13	5	98E-16	5	82E-19							
LA141	2	08E+00	4	39E+01	4	09E+01	3	47E+01	2	91E+01	2	04E+01	1	19E+01	7	00E+00	4	12E+00	2	42E+00	1	42E+00							
CE141	2	56E-07	2	85E-02	6	68E-02	1	00E-01	1	28E-01	1	72E-01	2	14E-01	2	38E-01	2	52E-01	2	60E-01	2	64E-01							
BA142	6	06E+02	2	41E+01	5	49E-01	1	25E-02	2	86E-04	1	48E-07	1	76E-12	2	09E-17	2	48E-22	2	95E-27	3	49E-32							
LA142	1	39E+01	9	65E+01	6	37E+01	4	05E+01	2	58E+01	1	04E+01	2	69E+00	6	93E-01	1	79E-01	4	60E-02	1	18E-02							
LA143	2	17E+02	4	25E+01	2	17E+00	1	12E-01	5	75E-03	1	50E-05	2	03E-09	2	74E-13	3	68E-17	4	97E-21	6	71E-25							
CE143	8	69E-02	5	55E+00	5	75E+00	5	59E+00	5	50E+00	5	29E+00	4	96E+00	4	66E+00	4	37E+00	4	09E+00	3	85E+00							
PR143	2	54E-08	8	50E-03	2	05E-02	3	24E-02	4	41E-02	6	66E-02	9	82E-02	1	28E-01	1	56E-01	1	81E-01	2	05E-01							

MICROCURI/SQ METER
NUCLEAR RAMJET ENGINE TEST
MR/HR AT H+12 HOURS = 1 000
RELAXATION LENGTH = 0 16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME 1	00E+00	2 00E+00	3 00E+00	4 00E+00	6.00E+00	9 00E+00	1.20E+01	1 50E+01	1.80E+01	2 10E+01
CE144	3.52E-03	2 52E-02	2.52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02
PR144	9.64E-07	2.29E-02	2 50E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02	2 52E-02
PR145	1.46E-01	2.14E+01	1.90E+01	1 69E+01	1 51E+01	1 20E+01	8 44E+00	5 96E+00	4 23E+00	2 98E+00	2 11E+00	2 11E+00
CE146	3 38E+02	1 73E+01	8.86E-01	4 53E-02	2 33E-03	6 15E-06	8 28E-10	1 11E-13	1 50E-17	2 03E-21	2 73E-25	2 73E-25
PR146	6.98E+00	6 07E+01	1.38E+01	2 58E+00	4 65E-01	1 46E-02	8 08E-05	4 46E-07	2 46E-09	1 37E-11	7 45E-14	7 45E-14
PR147	4.94E+01	1.43E+01	4 46E-01	1 40E-02	4 36E-04	4 25E-07	1 30E-11	3 96E-16	1 21E-20	3 69E-25	1 13E-29	1 13E-29
ND147	1.76E-05	3 31E-01	3.41E-01	3 40E-01	3 40E-01	3 38E-01	3 36E-01	3 32E-01	3 30E-01	3 27E-01	3 25E-01	3 25E-01
ND149	2.54E+01	1.74E+01	1 17E+01	8 03E+00	5 43E+00	2 52E+00	7 93E-01	2 51E-01	7 89E-02	2 48E-02	7 84E-03	7 84E-03
PM149	3.54E-03	2.77E-01	4.60E-01	5 82E-01	6 59E-01	7 41E-01	7 70E-01	7 55E-01	7 35E-01	7 07E-01	6 83E-01	6 83E-01
PM150	2.65E-01	2 05E-01	1 58E-01	1 23E-01	9 44E-02	5 68E-02	2 63E-02	1 21E-02	5 63E-03	2 61E-03	1 20E-03	1 20E-03
ND151	1 03E+02	3 23E+00	1 01E-01	3 16E-03	9 90E-05	9 62E-08	2 94E-12	9 00E-17	2 74E-21	8 37E-26	2 56E-30	2 56E-30
PM151	6.56E-02	7 67E-01	7 74E-01	7 53E-01	7 32E-01	6 97E-01	6 46E-01	6 00E-01	5 59E-01	5 17E-01	4 80E-01	4 80E-01
PM152	1 17E+02	1 14E-01	1 11E-04	1 09E-07	1 06E-10	1 02E-16	9 46E-26	8 81E-35	8 20E-44	7 69E-53	7 13E-62	7 13E-62
SM153	1 66E-01	1 63E-01	1 61E-01	1 58E-01	1 56E-01	1 52E-01	1 45E-01	1 39E-01	1 33E-01	1 27E-01	1 21E-01	1 21E-01
SM155	5 61E+00	9 21E-01	1 51E-01	2 47E-02	4 06E-03	1 09E-04	4 82E-07	2 12E-09	9 34E-12	4 17E-14	1 02E-16	1 02E-16
EU155	4 12E-06	1 18E-04	1 36E-04	1 39E-04	1 40E-04	1 40E-04	1 40E-04	1 40E-04	1 40E-04	1 40E-04	1 40E-04	1 40E-04
SM156	7 65E-02	7 09E-02	6 59E-02	6 12E-02	5 68E-02	4 91E-02	3 94E-02	3 15E-02	2 53E-02	2 03E-02	1 63E-02	1 63E-02
EU156	2 24E-04	3 65E-04	4 95E-04	6 17E-04	7 29E-04	9 31E-04	1 18E-03	1 37E-03	1 53E-03	1 66E-03	1 74E-03	1 74E-03
EU157	8 82E-03	2 92E-02	2 79E-02	2 66E-02	2 54E-02	2 32E-02	2 02E-02	1 77E-02	1 54E-02	1 34E-02	1 17E-02	1 17E-02
EU158	2 11E-01	8 56E-02	3 46E-02	1 40E-02	5 65E-03	9 28E-04	6 20E-05	4 11E-06	2 73E-07	1 81E-08	1 20E-09	1 20E-09
EU159	2 30E-01	2 28E-02	2 26E-03	2 24E-04	2 22E-05	2 19E-07	2 14E-10	2 09E-13	2 04E-16	2 00E-19	1 95E-22	1 95E-22
GD159	9 83E-04	4 30E-03	4 48E-03	4 34E-03	4 18E-03	3 87E-03	3 45E-03	3 07E-03	2 73E-03	2 44E-03	2 17E-03	2 17E-03
TB161	3 55E-06	2 55E-05	2 54E-05	2 53E-05	2 53E-05	2 50E-05	2 48E-05	2 44E-05	2 41E-05	2 38E-05	2 35E-05	2 35E-05
TOTAL	9.79E+03	2.04E+03	8 15E+02	5 00E+02	3 62E+02	2.36E+02	1 58E+02	1 19E+02	9.39E+01	7 70E+01	6 48E+01	6 48E+01

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MICROCURI/SQ METER
NUCLEAR RAMJET ENGINE TEST
MR/HR AT H+12 HOURS = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
GE 77	1.37E-03	8.64E-04	1.98E-04	2.39E-06	1.52E-09	6.17E-16	2.48E-22	4.06E-35	0.	0.	0.
AS 77	1.42E-05	2.10E-03	1.52E-03	4.39E-04	5.15E-05	6.97E-07	9.47E-09	1.75E-12	8.10E-22	1.73E-40	3.73E-59
SE 77M	5.60E-10	6.32E-06	4.54E-06	1.32E-06	1.54E-07	2.09E-09	2.84E-11	5.23E-15	2.43E-24	5.19E-43	1.12E-61
AS 78	5.83E-03	5.18E-05	1.52E-09	1.29E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	2.61E-04	1.62E-04	1.01E-04	2.47E-05	2.34E-06	2.10E-08	1.88E-10	1.52E-14	8.87E-25	3.05E-45	1.04E-65
BR 83	2.25E-01	5.94E-03	5.98E-06	6.07E-15	6.20E-30	0.	0.	0.	0.	0.	0.
RB 88	6.55E+00	7.56E-02	2.00E-04	3.61E-12	4.52E-25	0.	0.	0.	0.	0.	0.
SR 89	2.62E-06	7.86E-02	7.74E-02	7.44E-02	6.97E-02	6.09E-02	5.32E-02	4.10E-02	2.09E-02	5.52E-03	1.45E-03
SR 90	5.93E-06	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.09E-04	6.03E-04	6.03E-04	5.98E-04
Y 90	8.78E-12	1.40E-04	2.47E-04	4.43E-04	5.65E-04	6.03E-04	6.09E-04	6.09E-04	6.03E-04	6.03E-04	5.98E-04
SR 91	8.05E-01	2.89E+00	5.16E-01	2.97E-03	5.42E-07	1.84E-14	6.23E-22	7.09E-37	0.	0.	0.
Y 91M	5.42E-05	1.87E+00	3.33E-01	1.91E-03	3.52E-07	1.19E-14	4.02E-22	4.58E-37	0.	0.	0.
Y 91	2.21E-08	8.86E-02	1.05E-01	1.05E-01	9.87E-02	8.76E-02	7.80E-02	6.19E-02	3.42E-02	1.05E-02	3.24E-03
SR 92	1.03E+01	1.28E-01	2.76E-04	2.78E-12	1.30E-25	0.	0.	0.	0.	0.	0.
Y 92	4.72E-01	1.34E+00	1.49E-02	1.14E-08	6.68E-19	2.28E-39	7.83E-60	0.	0.	0.	0.
Y 93	5.71E-01	3.86E+00	7.53E-01	5.65E-03	1.63E-06	1.35E-13	1.11E-20	7.58E-35	0.	0.	0.
ZR 95	1.03E-03	1.28E-01	1.27E-01	1.22E-01	1.17E-01	1.04E-01	9.41E-02	7.61E-02	4.46E-02	1.53E-02	5.27E-03
NB 95M	2.19E-11	4.34E-04	7.93E-04	1.51E-03	2.04E-03	2.15E-03	1.98E-03	1.61E-03	9.46E-04	3.25E-04	1.12E-04
NB 95	1.15E-10	2.48E-03	4.91E-03	1.18E-02	2.19E-02	3.76E-02	4.86E-02	6.03E-02	5.81E-02	2.79E-02	1.07E-02
ZR 97	2.49E+00	4.24E+00	1.60E+00	8.44E-02	6.35E-04	3.57E-08	2.00E-12	6.35E-21	3.58E-42	0.	0.
NB 97M	1.28E-02	4.07E+00	1.53E+00	8.15E-02	6.08E-04	3.43E-08	1.93E-12	6.08E-21	3.44E-42	0.	0.
NB 97	1.25E+00	4.25E+00	1.60E+00	8.48E-02	6.39E-04	3.85E-08	2.16E-12	6.86E-21	3.86E-42	0.	0.
MO 99	9.22E-03	3.00E+00	2.34E+00	1.11E+00	3.21E-01	2.68E-02	2.24E-03	1.56E-05	6.34E-11	1.04E-21	1.72E-32
TC 99M	8.57E-08	2.64E+00	2.22E+00	1.06E+00	3.06E-01	2.56E-02	2.14E-03	1.49E-05	6.04E-11	9.97E-22	1.65E-32
RU103	8.00E-05	1.83E-01	1.79E-01	1.70E-01	1.56E-01	1.31E-01	1.09E-01	7.73E-02	3.22E-02	5.59E-03	9.71E-04
RH103M	5.33E-09	1.83E-01	1.79E-01	1.70E-01	1.56E-01	1.31E-01	1.09E-01	7.73E-02	3.22E-02	5.59E-03	9.71E-04
RU105	3.41E-01	3.26E-01	7.67E-03	1.00E-07	7.36E-16	3.92E-32	2.10E-48	0.	0.	0.	0.
RH105M	2.24E-03	3.26E-01	7.67E-03	1.01E-07	7.39E-16	3.95E-32	2.11E-48	0.	0.	0.	0.
RH105	3.68E-09	1.17E+00	7.67E-01	1.91E-01	1.89E-02	1.83E-04	1.78E-06	1.68E-10	1.46E-20	1.10E-40	8.24E-61
RU106	1.61E-04	3.06E-03	3.04E-03	3.03E-03	3.00E-03	2.95E-03	2.88E-03	2.77E-03	2.53E-03	2.09E-03	1.73E-03
RH106	1.75E-06	3.06E-03	3.04E-03	3.03E-03	3.00E-03	2.95E-03	2.88E-03	2.77E-03	2.53E-03	2.09E-03	1.73E-03
PD109	6.04E-04	1.53E-02	4.48E-03	1.11E-04	2.34E-07	1.04E-12	4.63E-18	9.17E-29	0.	0.	0.
AG109M	3.47E-06	1.53E-02	4.48E-03	1.11E-04	2.35E-07	1.04E-12	4.63E-18	9.17E-29	0.	0.	0.
PD111M	1.86E-01	9.04E-03	4.39E-04	5.03E-08	1.36E-14	9.91E-28	7.29E-41	0.	0.	0.	0.
PD111	6.62E-02	7.29E-03	3.53E-04	4.05E-08	1.10E-14	8.02E-28	5.85E-41	0.	0.	0.	0.
AG111M	5.26E-04	9.51E-03	4.63E-04	5.32E-08	1.44E-14	1.05E-27	7.71E-41	0.	0.	0.	0.
AG111	1.87E-10	5.17E-03	4.97E-03	3.78E-03	2.38E-03	9.44E-04	3.75E-04	5.91E-05	5.81E-07	5.63E-11	5.46E-15
PD112	5.75E-02	2.61E-02	1.18E-02	1.10E-03	2.09E-05	7.58E-09	2.76E-12	3.62E-19	2.29E-36	0.	0.
AG112	1.73E-06	3.03E-02	1.40E-02	1.29E-03	2.48E-05	8.95E-09	3.25E-12	4.28E-19	2.68E-36	0.	0.
AG113	6.28E-04	6.64E-03	2.88E-04	2.34E-08	3.58E-15	8.36E-29	1.95E-42	0.	0.	0.	0.

MICROCURIERS/SQ METER
 NUCLEAR RAMJET ENGINE TEST
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
CD115M	1.41E-09	4.08E-05	4.00E-05	3.81E-05	3.54E-05	2.99E-05	2.56E-05	1.85E-05	8.26E-06	1.64E-06	3.28E-07
CD115	5.44E-07	8.18E-03	6.00E-03	2.37E-03	4.99E-04	2.23E-05	9.93E-07	1.98E-09	3.50E-16	1.10E-29	3.44E-43
IN115M	6.78E-12	8.65E-03	6.55E-03	2.58E-03	5.44E-04	2.43E-05	1.08E-06	2.16E-09	3.83E-16	1.20E-29	3.75E-43
CD117	1.23E-02	2.69E-04	2.61E-07	2.43E-16	2.17E-31	0.	0.	0.	0.	0.	0.
IN117M	5.93E-07	1.12E-03	1.29E-06	1.24E-15	1.11E-30	0.	0.	0.	0.	0.	0.
IN117	2.39E-11	7.36E-04	8.71E-07	8.45E-16	7.48E-31	0.	0.	0.	0.	0.	0.
SN121	2.48E-04	1.42E-02	7.63E-03	1.20E-03	5.52E-05	1.17E-07	2.46E-10	1.09E-15	4.56E-29	0.	0.
SN123	1.33E-06	1.39E-04	1.38E-04	1.35E-04	1.32E-04	1.25E-04	1.18E-04	1.06E-04	8.02E-05	4.60E-05	2.65E-05
SN125	2.92E-03	2.71E-03	2.53E-03	2.02E-03	1.39E-03	6.67E-04	3.19E-04	7.29E-05	1.82E-06	1.15E-09	7.20E-13
SB125	1.75E-05	1.95E-05	2.12E-05	2.60E-05	3.17E-05	3.85E-05	4.15E-05	4.32E-05	4.23E-05	3.95E-05	3.70E-05
SB126	5.69E-04	5.38E-04	5.09E-04	4.30E-04	3.26E-04	1.87E-04	1.08E-04	3.55E-05	2.21E-06	1.08E-08	2.17E-09
SN127	9.25E-01	3.36E-04	1.22E-07	5.81E-18	3.66E-35	0.	0.	0.	0.	0.	0.
SB127	1.08E-02	4.43E-02	3.71E-02	2.17E-02	8.88E-03	1.48E-03	2.47E-04	6.92E-06	9.02E-10	1.54E-17	2.62E-25
TE127M	8.73E-11	6.77E-05	1.24E-04	2.40E-04	3.31E-04	3.66E-04	3.54E-04	3.14E-04	2.28E-04	1.21E-04	6.38E-05
TE127	6.11E-03	3.16E-02	3.12E-02	1.90E-02	8.04E-03	1.65E-03	5.64E-04	3.16E-04	2.25E-04	1.19E-04	6.31E-05
SB128	4.79E-01	8.19E-02	1.29E-02	5.06E-05	4.92E-09	4.61E-17	4.33E-25	3.81E-41	0.	0.	0.
SB129	3.60E+00	1.85E-01	3.85E-03	3.51E-08	1.40E-16	2.20E-33	3.47E-50	0.	0.	0.	0.
TE129M	6.79E-08	7.17E-03	7.17E-03	6.79E-03	6.12E-03	4.98E-03	4.05E-03	2.70E-03	9.70E-04	1.27E-04	1.65E-05
TE129	2.59E+00	2.16E-01	9.00E-03	4.33E-03	3.91E-03	3.19E-03	2.60E-03	1.73E-03	6.24E-04	8.12E-05	1.06E-05
I130	2.02E-02	5.28E-03	1.38E-03	2.47E-05	3.02E-08	4.50E-14	6.70E-20	1.49E-31	0.	0.	0.
TE131M	9.82E-05	3.45E-01	1.98E-01	3.75E-02	2.35E-03	9.15E-06	3.58E-08	5.46E-13	4.97E-25	0.	0.
TE131	9.08E+01	6.30E-02	3.61E-02	6.87E-03	4.28E-04	1.67E-06	6.53E-09	1.00E-13	9.08E-26	0.	0.
I131	1.32E-02	7.13E-01	6.74E-01	5.41E-01	3.56E-01	1.51E-01	6.36E-02	1.14E-02	1.53E-04	2.80E-08	5.10E-12
XE131M	3.58E-11	3.30E-04	6.27E-04	1.31E-03	1.87E-03	1.85E-03	1.38E-03	5.67E-04	3.78E-05	1.13E-07	3.19E-10
TE132	9.94E-01	1.97E+00	1.59E+00	8.38E-01	2.88E-01	3.42E-02	4.05E-03	5.70E-05	1.33E-09	7.29E-19	3.98E-28
I132	2.44E+00	2.03E+00	1.63E+00	8.61E-01	2.98E-01	3.53E-02	4.18E-03	5.87E-05	1.38E-09	7.48E-19	4.09E-28
I133	1.13E+00	6.27E+00	2.83E+00	2.63E-01	5.01E-03	1.81E-06	6.58E-10	8.68E-17	5.45E-34	0.	0.
I135	1.77E+01	2.88E+00	2.41E-01	1.40E-04	5.68E-10	9.39E-21	1.55E-31	4.19E-53	0.	0.	0.
CS136	4.42E-04	4.18E-04	3.97E-04	3.38E-04	2.60E-04	1.52E-04	8.95E-05	3.07E-05	2.13E-06	1.03E-08	4.98E-11
CS137	8.92E-05	9.61E-04	9.61E-04	9.61E-04	9.61E-04	9.61E-04	9.61E-04	9.61E-04	9.55E-04	9.50E-04	9.45E-04
BA137M	1.88E-07	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.92E-04	8.86E-04	8.80E-04
BA139	1.48E+01	1.58E-03	9.30E-09	1.92E-24	0.	0.	0.	0.	0.	0.	0.
BA140	1.24E-01	7.34E-01	6.98E-01	5.92E-01	4.52E-01	2.62E-01	1.53E-01	5.18E-02	3.45E-03	1.54E-05	6.81E-08
LA140	2.95E-07	2.56E-01	4.12E-01	5.68E-01	5.06E-01	3.03E-01	1.75E-01	5.98E-02	3.97E-03	1.76E-05	7.87E-08
LA141	2.08E+00	8.22E-01	1.16E-02	3.20E-08	1.75E-17	5.22E-36	1.55E-54	0.	0.	0.	0.
CE141	2.56E-07	2.85E-01	2.82E-01	2.65E-01	2.38E-01	1.93E-01	1.55E-01	1.01E-01	3.47E-02	4.08E-03	4.81E-04
LA142	1.39E+01	3.05E-03	5.90E-08	4.34E-22	0.	0.	0.	0.	0.	0.	0.
CE143	8.69E-02	3.58E+00	2.16E+00	4.77E-01	3.83E-02	2.47E-04	1.60E-06	6.71E-11	7.57E-22	0.	0.
PR143	2.54E-08	2.29E-01	3.56E-01	4.60E-01	3.94E-01	2.40E-01	1.45E-01	5.23E-02	4.19E-03	2.66E-05	1.69E-07
CE144	3.52E-03	2.52E-02	2.50E-02	2.49E-02	2.46E-02	2.40E-02	2.35E-02	2.23E-02	1.97E-02	1.55E-02	1.21E-02

MICROCURIES/SQ METER
 NUCLEAR RAMJET ENGINE TEST
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PR144	9.64E-07	2.52E-02	2.50E-02	2.49E-02	2.46E-02	2.40E-02	2.35E-02	2.23E-02	1.97E-02	1.55E-02	1.21E-02	
PR145	1.46E-01	1.48E+00	9.22E-02	2.19E-05	1.99E-11	1.65E-23	1.36E-35	0.	0.	0.	0.	0.
ND147	1.76E-05	2.97E-01	2.78E-01	2.31E-01	1.69E-01	9.07E-02	4.84E-02	1.40E-02	6.09E-04	1.19E-06	2.31E-09	
PM147	4.89E-14	2.22E-04	4.29E-04	9.80E-04	1.70E-03	2.59E-03	3.05E-03	3.40E-03	3.43E-03	3.20E-03	2.98E-03	
ND149	2.54E+01	2.46E-03	2.38E-07	2.17E-19	1.86E-39	0.	0.	0.	0.	0.	0.	0.
PM149	3.54E-03	6.54E-01	4.79E-01	1.87E-01	3.91E-02	1.70E-03	7.41E-05	1.41E-07	2.22E-14	5.48E-28	1.37E-41	
PM150	2.65E-01	5.59E-04	1.18E-06	1.10E-14	4.62E-28	0.	0.	0.	0.	0.	0.	0.
PM151	6.56E-02	4.47E-01	2.47E-01	4.15E-02	2.13E-03	5.59E-06	1.47E-08	1.02E-13	1.28E-26	0.	0.	0.
SM153	1.66E-01	1.16E-01	8.17E-02	2.82E-02	4.81E-03	1.40E-04	4.05E-06	3.40E-09	7.00E-17	2.99E-32	1.27E-47	
SM156	7.65E-02	1.30E-02	2.23E-03	1.09E-05	1.58E-09	3.24E-17	6.69E-25	2.85E-40	0.	0.	0.	0.
EU155	4.12E-06	1.40E-04	1.39E-04	1.39E-04	1.39E-04	1.39E-04	1.38E-04	1.37E-04	1.34E-04	1.29E-04	1.24E-04	
EU156	2.24E-04	1.81E-03	2.01E-03	1.81E-03	1.44E-03	9.02E-04	5.68E-04	2.26E-04	2.24E-05	2.20E-07	2.17E-09	
EU157	8.82E-03	1.02E-02	3.43E-03	1.28E-04	5.40E-07	9.52E-12	1.68E-16	5.24E-26	0.	0.	0.	0.
GD159	9.83E-04	1.94E-03	7.69E-04	4.80E-05	4.73E-07	4.58E-11	4.44E-15	4.16E-23	3.55E-43	0.	0.	0.
TB161	3.55E-06	2.32E-05	2.10E-05	1.56E-05	9.38E-06	3.43E-06	1.26E-06	1.68E-07	1.11E-09	4.82E-14	2.10E-18	
TOTAL		5.49E+01	2.49E+01	8.81E+00	4.16E+00	1.99E+00	1.32E+00	7.49E-01	3.23E-01	1.17E-01	5.73E-02	

MICROCURI/SQ METER
 NUCLEAR RAMJET ENGINE TEST
 MR/HR AT H+12 HOURS = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM

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DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1	00E+00	1	50E+00	2	00E+00	3	50E+00	5	00E+00	7	00E+00	1	00E+01	2	00E+01	3	50E+01	5	00E+01
SR 89	2	62E-06	6	13E-04	5	37E-05	4	71E-06	3	17E-09	2	15E-12	1	27E-16	5	75E-23	4	18E-44	0		0	
SR 90	5	93E-06	5	93E-04	5	86E-04	5	81E-04	5	60E-04	5	39E-04	5	12E-04	4	76E-04	3	72E-04	2	57E-04	1	78E-04
Y 90	8	78E-12	5	93E-04	5	86E-04	5	81E-04	5	60E-04	5	39E-04	5	12E-04	4	76E-04	3	72E-04	2	57E-04	1	78E-04
Y 91	2	21E-08	1	50E-03	1	75E-04	2	03E-05	3	18E-08	4	98E-11	9	12E-15	2	24E-20	4	53E-39	0		0	
ZR 95	1	03E-03	2	64E-03	3	76E-04	5	36E-05	1	56E-07	4	55E-10	1	88E-13	1	59E-18	1	95E-35	0		0	
NB 95M	2	19E-11	5	58E-05	7	97E-06	1	13E-06	3	31E-09	9	64E-12	3	99E-15	3	37E-20	4	13E-37	0		0	
NB 95	1	15E-10	5	67E-03	8	15E-04	1	16E-04	3	37E-07	9	77E-10	4	08E-13	3	45E-18	4	22E-35	0		0	
RU103	8	00E-05	3	10E-04	1	27E-05	5	23E-07	3	57E-11	2	45E-15	6	84E-21	3	23E-29	0		0		0	
RH103M	5	33E-09	3	11E-04	1	27E-05	5	23E-07	3	57E-11	2	45E-15	6	84E-21	3	23E-29	0		0		0	
RU106	1	61E-04	1	54E-03	1	09E-03	7	70E-04	2	74E-04	9	72E-05	2	44E-05	3	09E-06	3	12E-09	1	00E-13	3	23E-18
RH106	1	75E-06	1	54E-03	1	09E-03	7	70E-04	2	74E-04	9	72E-05	2	44E-05	3	09E-06	3	12E-09	1	00E-13	3	23E-18
SN123	1	33E-06	1	84E-05	6	69E-06	2	43E-06	1	17E-07	5	59E-09	9	75E-11	2	24E-13	3	61E-22	2	32E-35	1	49E-48
SB125	1	75E-05	3	53E-05	3	09E-05	2	72E-05	1	86E-05	1	26E-05	7	55E-06	3	50E-06	2	68E-07	5	71E-09	1	22E-10
TE125M	4	71E-13	1	44E-05	1	28E-05	1	13E-05	7	69E-06	5	22E-06	3	13E-06	1	44E-06	1	11E-07	2	37E-09	5	04E-11
TE127M	8	73E-11	4	18E-05	1	31E-05	4	10E-06	1	26E-07	3	88E-09	3	73E-11	3	51E-14	2	87E-24	2	15E-39	1	60E-54
TE127	6	11E-03	4	13E-05	1	29E-05	4	05E-06	1	24E-07	3	83E-09	3	68E-11	3	46E-14	2	84E-24	2	12E-39	1	59E-54
CS137	8	92E-05	9	39E-04	9	29E-04	9	18E-04	8	86E-04	8	54E-04	8	17E-04	7	63E-04	6	03E-04	4	28E-04	3	03E-04
BA137M	1	88E-07	8	80E-04	8	70E-04	8	60E-04	8	27E-04	8	00E-04	7	63E-04	7	15E-04	5	66E-04	4	00E-04	2	83E-04
CE141	2	56E-07	1	11E-04	2	22E-06	4	47E-08	3	64E-13	2	96E-18	4	85E-25	3	22E-35	0		0		0	
CE144	3	52E-03	1	03E-02	6	65E-03	4	24E-03	1	11E-03	2	93E-04	4	91E-05	3	40E-06	4	57E-10	7	17E-16	1	12E-21
PR144	9	64E-07	1	03E-02	6	65E-03	4	24E-03	1	11E-03	2	93E-04	4	91E-05	3	40E-06	4	57E-10	7	17E-16	1	12E-21
PM147	4	89E-14	2	84E-03	2	49E-03	2	18E-03	1	46E-03	9	85E-04	5	79E-04	2	63E-04	1	86E-05	3	53E-07	6	67E-09
EU155	4	12E-06	1	21E-04	1	12E-04	1	05E-04	8	40E-05	6	74E-05	5	04E-05	3	25E-05	7	59E-06	8	55E-07	9	62E-08
TOTAL	4	11E-02	2	26E-02	1	55E-02	7	18E-03	4	58E-03	3	39E-03	2	74E-03	1	94E-03	1	34E-03	9	42E-04		

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