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INPUT AND DECAYED VALUES OF RADIOACTIVE LIQUID WASTES DISCHARGED TO THE GROUND IN THE 200 AREAS THROUGH 1971

J. L. Hanson, J. D. Anderson, G. R. Kiel,
B. J. McMurray, N. P. Nisick

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INPUT AND DECAYED VALUES OF RADIOACTIVE LIQUID WASTES DISCHARGED TO THE GROUND IN THE 200 AREAS THROUGH 1971

G. L. Hanson, J. D. Anderson, G. R. Kiel,
B. J. McMurray, N. P. Nisick

March 22, 1973

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TABLE OF CONTENTS

	Table	Page
INTRODUCTION	-	I
DISCUSSION	-	I
200-E Area Liquid Waste Disposal Sites (Input and Decayed Values)	1	1-20
216-A Sites	1	1-7
216-B Sites	1	7-18
216-C Sites	1	18-20
Totals - All 200-E Sites	1	20
200-W Area Liquid Waste Disposal Sites (Input and Decayed Values)	2	21-41
216-N Sites	2	21-22
216-S Sites	2	22-30
216-T Sites	2	31-38
216-U Sites	2	38-42
216-Z Sites	2	43-47
Totals - All 200-W Sites	2	47
REFERENCES	-	48-51
APPENDIX	-	52-61

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INPUT AND DECAYED VALUES OF RADIOACTIVE LIQUID WASTES DISCHARGED TO THE GROUND IN THE 200 AREAS THROUGH 1971

INTRODUCTION

Low and intermediate level liquid wastes from chemical separations processing of spent reactor fuel elements have been discharged to the ground in the 200-Areas since 1944. Large volumes of process cooling water, normally free of radioactive contaminants, are discharged to surface ditches or natural surface depressions (ponds). Lesser volumes of liquid wastes such as steam condensates, process condensates, scavenged process waste supernatants, and plutonium processing wastes have been, or are being discharged to subsurface disposal sites (cribs). Only input volumes and radioactivity discharged to each disposal site have been reported periodically. No corrections for radioactive decay were reported.

In July 1972, J. D. Anderson, G. L. Hanson, G. R. Kiel, B. J. McMurray, and N. P. Nisick were assigned the responsibility for a study to provide the decayed inventory of radioactivity discharged to each liquid waste disposal site. The results of this study are included as Tables 1 and 2 in this report.

DISCUSSION

In order to provide a basis for calculating radioactive decay of liquid waste discharges, the study team decided that annual inputs to each site, including volume of liquid discharged, grams of plutonium, kilograms of uranium, curies of total beta and of certain specific fission products should be provided. A comprehensive review of the reference documents, which report liquid waste discharges to the ground, was made by G. L. Hanson and J. D. Anderson. This review found that:

> Discharges to several sites had been omitted from previous reports, and several estimated discharges, previously reported (e.g., N-1, N-4, N-6 ponds), were unreasonably high, since site surveys showed essentially no residual radioactivity.
>
> Many of the streams discharged to the ground during the first 10 to 15 years of chemical separations processing were analyzed for total beta, plutonium and uranium content. Analyses for specific fission products were not made.

2 2 1 2 4 5 2 2 0 9

ARH-231, "Hanford Low-Level Waste Management Reevaluation Study", by R. J. Sloat, December 29, 1967, in some cases arbitrarily provided total curies of several specific fission products discharged to each site through CY 1966, based on total beta curies.

ARH-231 reported an increase in the total plutonium discharged to several sites (e.g., 216-Z-9) used prior to 1967, as indicated by the increased plutonium content of typical waste streams measured by improved plutonium analytical procedures.

Considerable time and effort were spent in gathering site discharge data from the referenced periodic reports of radioactive liquid waste to ground and in reconciliation of this data with data from ARH-231. In cases where reconciliation could not be made, the data from ARH-231 was accepted as the best available since it was generated by study and reevaluation of previously reported radioactive liquid waste discharge data.

For those sites where only total discharge data was available (e.g., total beta, plutonium, volume), annual inputs to the site were arithmetically ratioed over the period the site was used, except for trace quantities of specific fission products which show the total discharged during one year. For those sites which did not have reported specific fission product inputs but did have total beta inputs, it was assumed that the wastes discharged contained mixed fission products in the ratio present in irradiated uranium fuel elements one year after discharge from the reactor. Computer code DCAY1 was used to generate specific fission product inputs to these sites and is included in the Appendix.

Annual inputs of liquid volume in liters, grams of plutonium or uranium-233, kilograms of uranium, curies of total beta radioactivity, and curies of specific fission products (^{60}Co, ^{90}Sr, ^{106}Ru, ^{137}Cs), to each site, were tabulated and submitted for computerized radioactive decay using computer code DCAY1. Decay calculations were made only on the total beta activity and on the specific fission products. The annual inputs, total inputs and decayed inventory through December 31, 1971 for 200 East Area liquid waste disposal sites are presented in Table 1. Similar data for 200 West Area liquid waste disposal sites are presented in Table 2.

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The data presented in this document is based on the best available discharge data and supersedes all prior reports of liquid radioactive wastes discharged to ground, including ARH-231. Subsequent reports of radioactive liquid wastes discharged to ground in the 200 Areas will utilize data presented herein, and will provide updated input and decayed inventories for all sites.

J. D. Anderson, Specialist
Operations Analysis — Date: 4/18/73

G. L. Hanson, Senior Engineer
Waste Management Process Engineering — Date: 4/18/73

G. R. Kiel, Environmental Staff Engineer
Operations Support Engineering — Date: 4/19/73

B. J. McMurray, Manager
Radiation Monitoring — Date: 4/19/73

N. P. Nisick, Senior Engineer
Personnel Protection — Date: 4/18/73

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TABLE 1
200 EAST AREA
LIQUID WASTE DISPOSAL SITES

	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
5	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.154+03	
5	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.154+03	
5	<.100+00	.276-00	<.667-01	<.114-05	<.684-01	<.114-01	.154+03	
5	.540+02						.100+01	
5	.290+02	.227+03	.800-00	.580+02	.120+01	.400-00	.394+02	
5	.900+01	.230+02	.100+00	.600+01	.100+00		.320+01	
5	.130+02	.380+02	.100+00	.900+01	.200-00	.100+00	.304+02	
6	.250+02	.302+03	.100+01	.770+02	.150+01	.500-00	.410+01	
6	.130+03	.590+03	.200+01	.150+03	.300+01	.100+01	.781+02	
6	.130+03	.845+01	.146+01	.324-01	.223+01	.188-00	.781+02	
6		.668+03	.100+00	.265+03	<.100+00	<.100+00	.281+02	
5								
5		.360+01		.130+01			.368+03	
6		.151+02		.600+01			.426+03	
6		.859+02		.341+02			.159+03	
6		.913+02		.362+02			.229+03	
6	.200-00	.486+01		.230+01			.700+02	
6		.128+02		.510+01			.945+02	
6		.720-00					.187+03	
5							.102+03	
5							.159+02	
7	.200-00	.882+03	.100+00	.350+03	<.100+00	<.100+00	.168+04	
7	.200-00	.897-00	.683-01	.631-01	<.700-01	<.130-01	.168+04	
6							.850+02	
7	.820+02	.496+03	.570+01	.230+03	.860+01	.600-00	.228+03	
7	.270+02	.118+03	.140+01	.548+02	.210+01	.100+00	.260+02	
7	.310+02	.250+03	.290+01	.116+03	.430+01	.300-00	.600+02	
7	.140+03	.864+03	.100+02	.400+03	.150+02	.100+01	.399+03	
7	.140+03	.346+02	.696+01	.181-01	.107+02	.143-00	.399+03	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A5									
1955	.150+08	.100+01						.410+02	
1956	.246+09	.320+02	.734+03	.194+02	.323+02	.540+01	.237+02	.132+03	
1957	.128+09	.500+01	.129+03	.340+01	.570+01	.100+01	.420+01	.240+02	
1958	.261+09	.100+01	.419+03	.111+02	.185+02	.310+01	.135+02		
1959	.333+09	.300+01	.641+03	.169+02	.282+02	.470+01	.207+02	.370+01	
1960	.407+09	.150+02	.900+03	.238+02	.396+02	.660+01	.291+02	.250+02	
1961	.239+09	.700+01	.578+03	.153+02	.255+02	.420+01	.187+02	.360+02	
1966	.386+07	.100+01	.460+01	.100+00	.200-00		.100+00	.140+01	
SUM THRU 71	.163+10	.650+02	.340+04	.900+02	.150+03	.250+02	.110+03	.263+03	
DECAY THRU 71	.163+10	.650+02	.199+03	.659+02	.447-01	.187+02	.211+02	.263+03	
216-A6									
1955	.372+08								
1956	.306+09	.110+02	.171+04	.200+01	.500+01	.500+01	<.200-02	.926+02	
1957	.432+09	.250+01	.879+03	.100+01	.260+01	.260+01	<.100-02	.360+02	
1958	.785+09		.744+04	.870+01	.218+02	.218+02	<.110-01		
1959	.638+09	.440+01	.862+04	.101+02	.252+02	.252+02	<.130-01	.240+02	
1960	.582+09	.310+01	.482+05	.564+02	.141+03	.141+03	<.710-01	.620+01	
1961	.738+07		.152+04	.180+01	.440+01	.440+01	<.200-02		
1966	.152+09	.400-00	.821+03	.400-00	.462+01	.101+01	.230-00	.200-00	
1967	.185+09	.900+01	.348+04	.140+01	.636+01	.133+01	.370-00	.390+01	
1968	.148+09	<.420+01	.337+03	.280+01	.422+01	.126+01	.320-00	<.160+01	
1969	.122+09	.100+01	.293+04	.650+01	.679+01	.721+01	.830-00	.600-00	
1970	.294+07		.137+01		.670-00	<.300-02	<.600-02	.100-01	
SUM THRU 71	.340+10	<.356+02	.760+05	.911+02	.223+03	.211+03	.186+01	.165+03	
DECAY THRU 71	.340+10	<.356+02	.128+04	.699+02	.228+01	.162+03	.114+01	.165+03	
216-A7									
1955	.110+05							.600+01	
1956	.690+05	.400-00	.680+02	.100+01	.280+02	.470+01	.100+00	.800-00	
1966	.246+06	.600-00	.120+02		.200+01	.300-00			
SUM THRU 71	.326+06	.100+01	.800+02	.100+01	.300+02	.500+01	.100+00	.680+01	
DECAY THRU 71	.326+06	.100+01	.849+01	.683-00	.456-01	.355+01	.130-01	.680+01	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A8									
1955	.790+08								
1956	.506+09	.470+02	.132+04	.129+02	.116+03	.126+03	.210-00	.333+03	
1957	.233+09	.200+01	.746+04	.732+02	.654+03	.712+03	.116+01	.342+02	
1958	.112+09	.100+00	.125+04	.123+02	.110+03	.119+03	.200-00		
1966	.366+07		.820+01	.100+00	.700-00	.800-00			
1967	.962+08		.815+02	.800-00	.720+01	.780+01	.100-01		
1968	.267+08	<.720-00	.934+03	.920+01	.819+02	.892+02	.150-00	.140-00	
1969	.241+08	<.810-01	.268+03	.260+01	.235+02	.256+02	.400-01	<.120+00	
1970	.115+08		.310+01		.300-00	.300-00		<.600-01	
1971	.183+08		.220+01		.200-00	.200-00			
SUM THRU 71	.111+10	.499+02	.113+05	.111+03	.993+03	.108+04	.177+01	.368+03	
DECAY THRU 71	.111+10	.499+02	.180+04	.806+02	.121+02	.800+03	.361-00	.368+03	
216-A9									
1956	.701+09								
1957	.250+09		.175+03	.250+02	.500+02	.100+02	.100+00		
1958	.278+08		.990-00						
1966	.182+07	.450-00						.203-00	
1967	.189+06	.500-01	.132+02		.285-00		.400-01	.240-01	
SUM THRU 71	.981+09	.500-00	.189+03	.250+02	.503+02	.100+02	.140-00	.227-00	
DECAY THRU 71	.981+09	.500-00	.494+02	.175+02	.150-01	.716+01	.369-01	.227-00	
216-A10									
1956	.234+09								
1961	.161+08		.741+03		.190+01		.200-00	.500-00	
1962	.392+09	.712+02	.364+06	.493+02	.933+03	.171+02	.793+02	.555+02	
1963	.306+09	.170+02	.155+06	.800-00	.397+03	.300-00	.337+02	.130+02	
1964	.377+09	.130+02	.134+06	.550+01	.343+03	.150+01	.292+02	.380+02	
1965	.424+09	.450+02	.108+06	.150+01	.276+03	.380+01	.235+02	.340+02	
1966	.286+09	.270+02	.189+05	.590+01	.484+02	.233+02	.410+01	.270+02	
1967	.312+09	.135+02	.929+04	.290+01	.295+04	.650+01	.600-00	.120+02	
1968	.258+09	.155+02	.323+04	.440+01	.158+04	.460+01	.300+01	.121+02	
1969	.117+09	.605+01	.475+04	.404+02	.610+03	.449+02	.520+01	.420+01	
1970	.488+08	.267+02	.165+04	.300+01	.197+02	.400+01	<.200-00	.280+01	.277+03
1971	.668+08	.877+02	.741+04	.323+02	.893+02	.258+02	<.200-00	.473+01	.280-00
SUM THRU 71	.284+10	.323+03	.806+06	.146+03	.725+04	.132+03	.179+03	.204+03	.277+03
DECAY THRU 71	.284+10	.323+03	.152+05	.130+03	.461+03	.121+03	.628+02	.204+03	.277+03

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A18									
1955	.488+06	<.100+00	.100+02	<.100+00	<.100+00	<.100+00	<.100+00	.141+04	
SUM THRU 71	.488+06	<.100+00	.100+02	<.100+00	<.100+00	<.100+00	<.100+00	.141+04	
DECAY THRU 71	.488+06	<.100+00	.289-00	<.667-01	<.114-05	<.684-01	<.114-01	.141+04	
216-A19									
1955	.110+07	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.390+05	
SUM THRU 71	.110+07	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.390+05	
DECAY THRU 71	.110+07	<.100+00	.276-00	<.667-01	<.114-05	<.684-01	<.114-01	.390+05	
216-A20									
1955	.961+06	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.404+03	
SUM THRU 71	.961+06	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.404+03	
DECAY THRU 71	.961+06	<.100+00	.276-00	<.667-01	<.114-05	<.684-01	<.114-01	.404+03	
216-A21									
1957	.396+06		.200-00						
1958	.880+06	.300-00	.500+01		.400-00	.300-00		.700-00	
1959	.102+08	.100+01	.560+03	.300+01	.400+02	.300+02	.200+01	.180+01	
1960	.114+07	.130+02	.296+03	.160+01	.211+02	.158+02	.100+01	.130+02	
1961	.911+07	.770+01	.103+03	.600-00	.740+01	.560+01	.400-00	.173+02	
1962	.195+08	.500+01	.274+03	.150+01	.196+02	.147+02	.100+01	.520+02	
1963	.128+08	.150+02	.816+03	.440+01	.583+02	.437+02	.290+01	.318+02	
1964	.153+08	.400+02	.528+03	.280+01	.378+02	.283+02	.190+01	.541+02	
1965	.860+07	.680+02	.216+03	.110+01	.154+02	.116+02	.800-00	.243+02	
SUM THRU 71	.778+08	.150+03	.280+04	.150+02	.200+03	.150+03	.100+02	.195+03	
DECAY THRU 71	.778+08	.150+03	.279+03	.119+02	.601-00	.121+03	.298+01	.195+03	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A24									
1958	.303+09	.700-00	.222+04	.175+02	.182+03	.244+03	.310-00		
1959	.382+09	<.100+01	.199+04	.157+02	.163+03	.219+03	.280-00	.489+02	
1960	.219+08	.300-00	.190+03	.150+01	.156+02	.210+02	.300-01	.100+01	
1961	.167+08	<.100+01	.208+03	.170+01	.170+02	.229+02	.300-01		
1962	.190+08	<.100+01	.126+03	.100+01	.103+02	.139+02	.200-01		
1963	.202+08	<.100+01	.422+02	.300-00	.350+01	.460+01	.100-01		
1964	.116+08		.469+02	.400-00	.380+01	.520+01	.100-01		
1965	.142+08		.371+02	.300-00	.300+01	.410+01			
1966	.664+07		.390+02	.300-00	.320+01	.430+01			
1967	.253+08	.600-01	.903+02	.700-00	.740+01	.100+02	.100-01	.200-00	
SUM THRU 71	.820+09	<.506+01	.498+04	.394+02	.408+03	.549+03	.700-00	.501+02	
DECAY THRU 71	.820+09	<.506+01	.866+03	.291+02	.547-00	.413+03	.138-00	.501+02	
216-A25									
1957	.106+09	.600+01	.211+03	.400-00	.300-00	.300-00		.730+01	
1958	.556+10	.170+02	.845+03	.150+01	.100+01	.110+01		.200+02	
1959	.944+10	.360+02	.703+03	.120+01	.900-00	.900-00		.440+02	
1960	.893+10	.190+02	.211+03	.400-00	.300-00	.300-00		.230+02	
1961	.110+11	.570+02	.344+04	.610+01	.420+01	.440+01		.690+02	
1962	.135+11	.430+02	.357+04	.630+01	.440+01	.460+01		.326+02	
1963	.136+11	.570+02	.130+04	.230+01	.160+01	.170+01		.318+02	
1964	.120+11	.340+02	.211+06	.373+03	.262+03	.273+03		.314+02	
1965	.119+11	.620+02	.126+04	.220+01	.160+01	.160+01		.519+02	
1966	.100+11	.130+02	.114+04	.630+01	.224+03	.119+02		.336+02	
1967	.106+11	.170+02	.838+03	.450+02	<.580+02	.100+02	<.180+02	.433+02	
1968	.122+11	.174+02	.162+04	.348+02	.142+03	.356+02	.220+02	.324+02	
1969	.977+10	.260+01	<.264+02	<.400-00	<.150+01	<.900+01		<.675+01	
1970	.113+11	.150+02	<.744+02	<.800-00	<.300+02	<.440+01	.220+01	<.583+02	<.348+03
1971	.151+11	<.201+02	<.120+02	<.300-00	<.400+01	<.100+01	.600-00	<.848+02	<.111+03
SUM THRU 71	.155+12	.416+03	.226+06	.481+03	<.735+03	.360+03	<.428+02	<.570+03	<.459+03
DECAY THRU 71	.155+12	.416+03	.458+04	.406+03	<.356+02	.308+03	<.262+02	<.570+03	<.459+03

9 2 1 2 4 5 2 2 0 1 6

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A27									
1965	.660+07	.510+02	.256+03	.100+01	.260+01	.600-00	.300-01	.170+02	
1966	.812+07	.230+02	.430+03	.400+01	.224+02	.470+01		.180+02	.120+03
1967	.421+07	.600+01	.853+03	.490+01	.147+02	.730+01	.960-00	.880+01	
1968	.188+07	<.600+01	.340+02	.400+01	.116+02	.100+01	.100+00	.138+02	
1969	.129+07	<.200+01	.144+02	.200-00	.410+01	.300-00	.200-01	.664+01	
1970	.105+07	.850+01	.109+04	.272+02	.780+01	.387+02	<.156+01	.380+01	.483+02
SUM THRU 71	.232+08	.965+02	.268+04	.413+02	.632+02	.526+02	<.267+01	.680+02	.168+03
DECAY THRU 71	.232+08	.965+02	.468+03	.388+02	.573+01	.498+02	<.190+01	.680+02	.168+03
216-A28									
1960	.300+05		.310+02					.632+03	
SUM THRU 71	.300+05		.310+02					.632+03	
DECAY THRU 71	.300+05		.143-00					.632+03	
216-A30									
1961	.318+09	.200+01	.303+04	.792+02	.914+02	.131+03	.950+01	.230+01	
1962	.489+09	.400+02	.772+03	.201+02	.232+02	.333+02	.240+01	.100+02	
1963	.391+09	.200+01	.224+03	.590+01	.680+01	.970+01	.700-00	.180+01	
1964	.458+09	.200+01	.209+03	.540+01	.630+01	.900+01	.700-00	.180+01	
1965	.482+09	.300+01	.332+03	.870+01	.100+02	.143+02	.100+01	.730+01	
1966	.259+09	.100+01	.803+02	.600-00	.770+01	.170+01	.400-00	.200-00	
1967	.185+09	.900+01	.204+03	.140+01	.640+01	.130+01	.400-00	.385+01	
1968	.148+09	<.440+01	.197+02	.280+01	.420+01	.130+01	.300-00	.159+01	
1969	.122+09	.100+01	.171+03	.650+01	.680+01	.720+01	.800-00	.645-00	
1970	.181+09	<.100+01	.831+02	.340+01	.910+01	.420+01	.200-00	<.163+01	<.690+01
1971	.263+09	<.285+01	.117+03	.360+01	.180+01	.180+01	.100+00	<.704+01	<.583-00
SUM THRU 71	.330+10	<.682+02	.525+04	.138+03	.174+03	.215+03	.165+02	<.382+02	<.748+01
DECAY THRU 71	.330+10	<.682+02	.699+03	.111+03	.682+01	.174+03	.541+01	<.382+02	<.748+01
216-A31									
1964	.400+04		.199+06	.200+01	.949+05	.150+03	.100+00	.540-01	
1966	.600+04	.900+01	.115+03		.550+02	.100+00		.204+02	
SUM THRU 71	.100+05	.900+01	.200+06	.200+01	.950+05	.150+03	.100+00	.205+02	
DECAY THRU 71	.100+05	.900+01	.145+04	.166+01	.539+03	.126+03	.372-01	.205+02	

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A36A									
1965	.488+06	.120+02	.845+05	.103+04	.172+04	.862+03	.580+01	.237+02	
1966	.580+06	.680+02	.626+05	.766+03	.128+04	.638+03	.420+01	.121+03	
SUM THRU 71	.107+07	.800+02	.147+06	.180+04	.300+04	.150+04	.100+02	.145+03	
DECAY THRU 71	.107+07	.800+02	.869+04	.155+04	.482+02	.130+04	.450+01	.145+03	
216-A36B									
1966	.419+07	.700+02	.672+04	.600+02	.200+03	.500+02	.500+01	.500+02	.100+02
1967	.494+07	.139+02	.799+04	.250+02	.700+02	.150+02	.700+01	.103+02	
1968	.126+08	.194+02	.148+04	.140+02	.161+03	.148+02	.800-00	.183+02	
1969	.178+08	.720+01	.287+04	.991+02	.454+03	.110+03	.660+01	.100+02	
1970	.980+07	.350+01	.181+05	.229+03	.167+04	.131+03	.630+01	.262+02	.156+02
1971	.227+08	<.149+02	.701+04	<.211+02	.320+04	<.700+02	<.710+01	.209+01	
SUM THRU 71	.720+08	<.129+03	.442+05	.448+03	.576+04	<.391+03	<.328+02	.117+03	.256+02
DECAY THRU 71	.720+08	<.129+03	.120+05	.422+03	.297+04	<.371+03	<.234+02	.117+03	.256+02
216-A39									
1966	.200+02		.500+02			.250+02			
SUM THRU 71	.200+02		.500+02			.250+02			
DECAY THRU 71	.200+02		.423+02			.220+02			
216-A40									
1968	.946+06								
SUM THRU 71	.946+06								
DECAY THRU 71	.946+06								
216-B2-2E									
1970			.146+04	.710+03		.500-00			
SUM THRU 71			.146+04	.710+03		.500-00			
DECAY THRU 71			.138+04	.684+03		.483-00			
216-B2-2W									
1970	.497+08	<.420-01	.494+03	.242+03		.500-00		<.472-01	
SUM THRU 71	.497+08	<.420-01	.494+03	.242+03		.500-00		<.472-01	
DECAY THRU 71	.497+08	<.420-01	.470+03	.233+03		.483-00		<.472-01	

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-U3									
1945	.103+10	.100+00	.900+01		.100+01			.100+00	
1946	.137+10	.100+00	.105+02		.100+01			.100+00	
1947	.137+10	.100+00	.105+02		.100+01			.100+00	
1948	.137+10	.100+00	.105+02		.100+01			.100+00	
1949	.137+10	.100+00	.120+02	.100+00	.100+01	.100+00		.100+00	
1950	.344+10	.500-00	.555+02	.200-00	.500+01	.200-00		.600-00	
1951	.344+10	.500-00	.555+02	.200-00	.500+01	.200-00		.600-00	
1952	.169+10	.500-00	.555+02	.200-00	.500+01	.200-00		.600-00	
1953	.111+10	.200-00	.255+02	.100+00	.300+01	.100+00		.300-00	
1954	.728+09	.100+00	.150+01					.100+00	
1955	.143+10	.300-00	.360+02	.100+00	.400+01	.200-00		.400-00	
1956	.553+10	.300-00	.285+02	.100+00	.300+01	.100+00		.300-00	
1957	.118+11	.100+01	.885+02	.300-00	.900+01	.400-00		.100+01	
1958	.651+10	.270+01	.317+03	.110+01	.310+02	.130+01		.350+01	
1959	.432+10	.110+01	.131+03	.500-00	.130+02	.500-00		.140+01	
1960	.332+10	.200-00	.180+02	.100+00	.200+01	.100+00		.200-00	
1961	.343+10	.211+02	.589+03	.210+01	.580+02	.240+01		.250+02	
1962	.189+10	.370+01	.393+03	.140+01	.380+02	.160+01		.740+01	
1963	.283+10	.178+02	.205+04	.730+01	.201+03	.820+01		.210+02	
1964	.266+10	.117+03	.184+05	.656+02	.180+04	.738+02		.120+03	
1965	.885+09	.270+02	.840+02	.300-00	.800+01	.300-00		.320+02	
1966	.798+09	.800-00	.765+02	.300-00	.700+01	.300-00		.106+02	
1967	.427+10	<.120+02	.137+03	<.107+02	.160+02	.250+02	<.103+02	.214+02	
1968	.517+10	<.129+02	.236+03	.870+01	.818+02	.112+02	<.763+01	.956+01	
1969	.396+10	<.740+01	.435+02	<.140+01	.156+02	<.410+01	<.150+01	<.132+02	
1970	.364+10	<.240+01	.255+03	.512+02	<.360+01	.147+02	<.250-00	<.885+01	<.250+02
1971	.427+10	<.672+01	.450+01	<.500-01	<.400-00	<.110+00	<.580-01	<.185+02	<.501+01
SUM THRU 71	.836+11	<.237+03	.232+05	.152+03	.232+04	.145+03	<.198+02	<.297+03	<.300+02
DECAY THRU 71	.836+11	<.237+03	.828+03	.134+03	.235+02	.126+03	<.118+02	<.297+03	<.300+02
216-B5									
1945	.918+07	.128+04	.114+04	.227+02	.488+02	.242+02			
1946	.122+08	.171+04	.152+04	.302+02	.651+02	.323+02			
1947	.918+07	.128+04	.114+04	.227+02	.488+02	.242+02			
SUM THRU 71	.306+08	.428+04	.380+04	.756+02	.163+03	.807+02			
DECAY THRU 71	.306+08	.428+04	.168+03	.404+02	.428+05	.449+02			

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B7									
1946	.174+07	.230+02	.128+03	.292+02	.320+01	.500-00	.100-01	.100+01	
1947	.696+07	.660+02	.370+03	.846+02	.930+01	.140+01	.200-01	.300+01	
1948	.696+07	.660+02	.370+03	.846+02	.920+01	.130+01	.100-01	.300+01	
1949	.696+07	.660+02	.370+03	.846+02	.930+01	.140+01	.200-01	.300+01	
1950	.696+07	.660+02	.370+03	.846+02	.920+01	.130+01	.100-01	.300+01	
1951	.696+07	.660+02	.370+03	.846+02	.930+01	.140+01	.200-01	.300+01	
1952	.407+07	.327+04	.183+05	.418+04	.456+03	.679+02	.760-00	.136+03	
1953	.166+06	.490+03	.272+04	.622+03	.680+02	.101+02	.110+00	.210+02	
1954	.234+06								
1955	.147+07	.187+03	.105+04	.239+03	.261+02	.390+01	.400-01	.800+01	
1966	.930+06		.245+03	.110+03		.108+02		.570-00	
1967	.200+06		.672+01					.320-00	
SUM THRU 71	.436+08	.430+04	.242+05	.560+04	.600+03	.100+03	.100+01	.182+03	
DECAY THRU 71	.436+08	.430+04	.713+04	.350+04	.116-02	.665+02	.768-01	.182+03	
216-B8									
1948	.511+07	.500+01	.146+03	.310+01	.103+02	.103+02	.210-00	.760+01	
1949	.511+07	.500+01	.146+03	.310+01	.103+02	.103+02	.200-00	.760+01	
1950	.511+07	.500+01	.146+03	.310+01	.103+02	.103+02	.210-00	.760+01	
1951	.511+07	.500+01	.146+03	.310+01	.103+02	.103+02	.200-00	.760+01	
1952	.513+07	.600+01	.960+02	.200+01	.680+01	.680+01	.140-00	.760+01	
1953	.160+07	.400+01	.300+02	.600-00	.200+01	.200+01	.400-01	.736+01	
SUM THRU 71	.272+08	.300+02	.710+03	.150+02	.500+02	.500+02	.100+01	.454+02	
DECAY THRU 71	.272+08	.300+02	.765+02	.884+01	.295-04	.305+02	.597-01	.454+02	
216-B9									
1948	.500+07	.240+02	.108+04	.210+01	.139+02	.140+01	.100-01	.636+01	
1949	.120+08	.580+02	.260+04	.500+01	.333+02	.330+01	.300-01	.150+02	
1950	.120+08	.580+02	.260+04	.500+01	.333+02	.330+01	.400-01	.150+02	
1951	.700+07	.340+02	.152+04	.290+01	.195+02	.200+01	.200-01	.900+01	
SUM THRU 71	.360+08	.174+03	.780+04	.150+02	.100+03	.100+02	.100+00	.454+02	
DECAY THRU 71	.360+08	.174+03	.330+02	.875+01	.334-04	.604+01	.568-02	.454+02	

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B10									
1949	.384+06	.100+01	.200+01	.200-00	.400-00	.100+00	.100-01	.900-00	
1950	.461+07	.420+01	.220+02	.220+01	.440+01	.400-00	.400-01	.380+01	
1951	.461+07	.420+01	.210+02	.210+01	.420+01	.400-00	.400-01	.400+01	
1952	.384+06	.400-00	.500+01	.500-00	.100+01	.100+00	.100-01	.370-00	
SUM THRU 71	.999+07	.980+01	.500+02	.500+01	.100+02	.100+01	.100+00	.907+01	
DECAY THRU 71	.999+07	.980+01	.718+01	.299+01	.613-05	.617-00	.631-02	.907+01	
216-B10B									
1969	.151+04	<.100-05	.550-03	<.240-03		<.200-04		.408-04	
1970	.757+04	<.190-04	.477-03	.828-04		<.673-04		<.503-03	
1971	.530+04	<.175-04	.147-03	.432-05	<.169-05	.183-04	<.450-06	<.585-04	
SUM THRU 71	.144+05	<.375-04	.117-02	<.327-03	<.169-05	<.106-03	<.450-06	<.602-03	
DECAY THRU 71	.144+05	<.375-04	.923-03	<.310-03	<.120-05	<.102-03	<.421-06	<.602-03	
216-B11									
1952	.143+08	.700-00	.146+02	.400-00	.350+01	.350+01		.221+01	
1953	.801+07	.130+01	.140+03	.330+01	.333+02	.333+02	.700-01	.440+01	
1954	.731+07	.200+01	.556+02	.130+01	.132+02	.132+02	.300-01	.700+01	
SUM THRU 71	.296+08	.400+01	.211+03	.500+01	.500+02	.500+02	.100+00	.136+02	
DECAY THRU 71	.296+08	.400+01	.694+02	.319+01	.176-03	.328+02	.909-02	.136+02	
216-B12									
1952	.138+08	.120+02	.138+02	.400-00	.130+01	.300-00		.135+02	
1953	.946+08	.109+03	.404+02	.110+01	.390+01	.900-00		.303+04	
1954	.103+09	.290+02	.115+03	.310+01	.111+02	.270+01		.703+04	
1955	.789+08	.183+03	.402+03	.108+02	.386+02	.930+01		.195+04	
1956	.788+08	.360+02	.196+04	.529+02	.189+03	.453+02	<.100+00	.743+04	
1957	.223+07	.100+01	.650+02	.170+01	.630+01	.150+01		.143+04	
1967	.578+07	.150+01	.887+03	<.174+02	.172+02	.108+02	<.140-00	.146+01	
1968	.145+08	.190+01	.692+04	.310+02	.243+02	.910+03	<.180-00	.140-00	
1969	.211+08	.200-00	.540+03	.128+02	.680+01	.164+03	<.120+00	<.150-00	
1970	.225+08	.400-00	.410+02	.230+01	<.180+01	.142+02	<.530-00	<.640-00	
1971	.329+08		.140+02	.900-00	<.900-00	.370+01	<.100-01	<.110+00	
SUM T RU 71	.468+09	.374+03	.110+05	<.134+03	.301+03	.116+04	<.108+01	.209+05	
DECAY THRU 71	.468+09	.374+03	.267+04	<.107+03	<.544+01	.106+04	<.734-00	.209+05	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-b14									
1956	.871+07	.250+02	.140+06	.400+03	.590+05	.250+03	.500+01	.218+03	
SUM THRU 71	.871+07	.250+02	.140+06	.400+03	.590+05	.250+03	.500+01	.218+03	
DECAY THRU 71	.871+07	.250+02	.922+03	.273+03	.134+01	.175+03	.648-00	.218+03	
216-b15									
1956	.448+07	.390+01	.550+05	.956+02	.176+05	.645+02	.290+01	.104+03	
1957	.184+07	.110+01	.140+05	.104+03	.444+04	.135+03	.210+01	.330-00	
SUM THRU 71	.632+07	.500+01	.690+05	.200+03	.220+05	.200+03	.500+01	.104+03	
DECAY THRU 71	.632+07	.500+01	.596+03	.138+03	.600-00	.142+03	.686-00	.104+03	
216-b16									
1956	.560+07	.100+02	.540+05	.700+03	.130+05	.650+03	.500+01	.322+03	
SUM THRU 71	.560+07	.100+02	.540+05	.700+03	.130+05	.650+03	.500+01	.322+03	
DECAY THRU 71	.560+07	.100+02	.188+04	.478+03	.295-00	.455+03	.648-00	.322+03	
216-b17									
1956	.341+07	.100+02	.200+04	.160+03	.250+03	.220+03	.100+01	.354+03	
SUM THRU 71	.341+07	.100+02	.200+04	.160+03	.250+03	.220+03	.100+01	.354+03	
DECAY THRU 71	.341+07	.100+02	.516+03	.109+03	.568-02	.154+03	.130-00	.354+03	
216-b18									
1956	.852+07	.100+02	.510+05	.190+03	.190+05	.250+03	.500+01	.236+03	
SUM THRU 71	.852+07	.100+02	.510+05	.190+03	.190+05	.250+03	.500+01	.236+03	
DECAY THRU 71	.852+07	.100+02	.618+03	.130+03	.431-00	.175+03	.648-00	.236+03	
216-b19									
1957	.640+07	.100+02	.112+05	.200+03	.510+04	.270+03	.500+01	.181+03	
SUM THRU 71	.640+07	.100+02	.112+05	.200+03	.510+04	.270+03	.500+01	.181+03	
DECAY THRU 71	.640+07	.100+02	.653+03	.140+03	.231-00	.193+03	.739-00	.181+03	
216-b20									
1956	.468+07	.130+01	.315+05	.790+03	.998+04	.150+04	.440+01	.352+03	
SUM THRU 71	.468+07	.130+01	.315+05	.790+03	.998+04	.150+04	.440+01	.352+03	
DECAY THRU 71	.468+07	.130+01	.312+04	.540+03	.227-00	.105+04	.570-00	.352+03	

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TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B21									
1956	.467+07	.103+02	.465+05	.739+03	.147+05	.372+03	.650+01	.675+03	
SUM THRU 71	.467+07	.103+02	.465+05	.739+03	.147+05	.372+03	.650+01	.675+03	
DECAY THRU 71	.467+07	.103+02	.154+04	.505+03	.334-00	.260+03	.842-00	.675+03	
216-B22									
1956	.474+07	.260+01	.952+05	.408+03	.301+05	.450+02	.134+02	.418+03	
SUM THRU 71	.474+07	.260+01	.952+05	.408+03	.301+05	.450+02	.134+02	.418+03	
DECAY THRU 71	.474+07	.260+01	.681+03	.279+03	.684-00	.315+02	.174+01	.418+03	
216-B23									
1956	.452+07	.180+01	.473+05	.145+03	.150+05	.112+03	.670+01	.156+03	
SUM THRU 71	.452+07	.180+01	.473+05	.145+03	.150+05	.112+03	.670+01	.156+03	
DECAY THRU 71	.452+07	.180+01	.380+03	.991+02	.340-00	.784+02	.868-00	.156+03	
216-B24									
1956	.470+07	.770+01	.730+05	.181+03	.231+05	.129+03	.103+02	.246+03	
SUM THRU 71	.470+07	.770+01	.730+05	.181+03	.231+05	.129+03	.103+02	.246+03	
DECAY THRU 71	.470+07	.770+01	.469+03	.124+03	.525-00	.903+02	.133+01	.246+03	
216-B25									
1956	.376+07	.200+01	.492+05	.205+03	.156+05	.560+02	.690+01	.153+03	
SUM THRU 71	.376+07	.200+01	.492+05	.205+03	.156+05	.560+02	.690+01	.153+03	
DECAY THRU 71	.376+07	.200+01	.388+03	.140+03	.354-00	.392+02	.894-00	.153+03	
216-B26									
1956	.318+07	.140+01	.415+05	.478+03	.132+05	.390+03	.580+01	.267+03	
1957	.270+07	.110+01	.353+05	.609+03	.112+05	.560+03	.490+01	.321+03	
SUM THRU 71	.588+07	.250+01	.768+05	.109+04	.243+05	.950+03	.107+02	.588+03	
DECAY THRU 71	.588+07	.250+01	.285+04	.753+03	.804-00	.674+03	.148+01	.588+03	
216-B27									
1957	.442+07	.700-00	.551+05	.595+03	.174+05	.340+02	.760+01	.343+03	
SUM THRU 71	.442+07	.700-00	.551+05	.595+03	.174+05	.340+02	.760+01	.343+03	
DECAY THRU 71	.442+07	.700-00	.925+03	.417+03	.789-00	.244+02	.112+01	.343+03	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B28									
1957	.505+07	.560+01	.165+05	.112+03	.522+04	.230+02	.230+01	.300+03	
SUM THRU 71	.505+07	.560+01	.165+05	.112+03	.522+04	.230+02	.230+01	.300+03	
DECAY THRU 71	.505+07	.560+01	.202+03	.784+02	.236-00	.165+02	.340-00	.300+03	
216-B29									
1957	.484+07	.110+01	.510+05	.192+03	.161+05	.590+02	.710+01	.344+03	
SUM THRU 71	.484+07	.110+01	.510+05	.192+03	.161+05	.590+02	.710+01	.344+03	
DECAY THRU 71	.484+07	.110+01	.393+03	.134+03	.731-00	.423+02	.105+01	.344+03	
216-B30									
1957	.478+07	.210+01	.160+05	.600+03	.389+04	.337+04	.170+01	.880+02	
SUM THRU 71	.478+07	.210+01	.160+05	.600+03	.389+04	.337+04	.170+01	.880+02	
DECAY THRU 71	.478+07	.210+01	.548+04	.420+03	.176-00	.241+04	.251-00	.880+02	
216-B31									
1957	.474+07	.520+01	.192+05	.209+03	.609+04	.280+02	.270+01	.122+03	
SUM THRU 71	.474+07	.520+01	.192+05	.209+03	.609+04	.280+02	.270+01	.122+03	
DECAY THRU 71	.474+07	.520+01	.347+03	.146+03	.276-00	.201+02	.399-00	.122+03	
216-B32									
1957	.477+07	.260+01	.120+05	.255+03	.379+04	.126+03	.170+01	.110+02	
SUM THRU 71	.477+07	.260+01	.120+05	.255+03	.379+04	.126+03	.170+01	.110+02	
DECAY THRU 71	.477+07	.260+01	.539+03	.179+03	.172-00	.902+02	.251-00	.110+02	
216-B33									
1957	.474+07	.118+02	.102+05	.410+02	.324+04	.273+03	.140+01	.200+02	
SUM THRU 71	.474+07	.118+02	.102+05	.410+02	.324+04	.273+03	.140+01	.200+02	
DECAY THRU 71	.474+07	.118+02	.440+03	.287+02	.147-00	.196+03	.207-00	.200+02	
216-B34									
1957	.487+07	.570+01	.436+04	.410+02	.138+04	.170+02	.600-00	.850+02	
SUM THRU 71	.487+07	.570+01	.436+04	.410+02	.138+04	.170+02	.600-00	.850+02	
DECAY THRU 71	.487+07	.570+01	.843+02	.287+02	.625-01	.122+02	.887-01	.850+02	

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TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B35									
1954	.106+07	.120+01	.178+04	.235+03	.229+03	.427+03	.300-01	.167+02	
SUM THRU 71	.106+07	.120+01	.178+04	.235+03	.229+03	.427+03	.300-01	.167+02	
DECAY THRU 71	.106+07	.120+01	.854+03	.153+03	.131-02	.285+03	.299-02	.167+02	
216-B36									
1954	.194+07	.800-00	.350+04	.485+03	.471+03	.773+03	.700-01	.159+02	
SUM THRU 71	.194+07	.800-00	.350+04	.485+03	.471+03	.773+03	.700-01	.159+02	
DECAY THRU 71	.194+07	.800-00	.162+04	.315+03	.269-02	.517+03	.697-02	.159+02	
216-B37									
1954	.432+07	.200+01	.704+04	.160+02	.500+03	.310+04	.100+01	.363+01	
SUM THRU 71	.432+07	.200+01	.704+04	.160+02	.500+03	.310+04	.100+01	.363+01	
DECAY THRU 71	.432+07	.200+01	.400+04	.104+02	.286-02	.207+04	.995-01	.363+01	
216-B38									
1954	.143+07	.120+01	.582+04	.185+04	.560+03	.508+03	<.600-01	.424+02	
SUM THRU 71	.143+07	.120+01	.582+04	.185+04	.560+03	.508+03	<.600-01	.424+02	
DECAY THRU 71	.143+07	.120+01	.306+04	.120+04	.320-02	.340+03	<.597-02	.424+02	
216-B39									
1954	.147+07	.150+01	.105+04	.230+02	.650+02	.450+03	<.100-01	.580+01	
SUM THRU 71	.147+07	.150+01	.105+04	.230+02	.650+02	.450+03	<.100-01	.580+01	
DECAY THRU 71	.147+07	.150+01	.607+03	.150+02	.371-03	.301+03	<.995-03	.580+01	
216-B40									
1954	.164+07	.100+01	.178+04	.280+03	.244+03	.352+03	<.200-01	.350+02	
SUM THRU 71	.164+07	.100+01	.178+04	.280+03	.244+03	.352+03	<.200-01	.350+02	
DECAY THRU 71	.164+07	.100+01	.816+03	.182+03	.139-02	.235+03	<.199-02	.350+02	
216-B41									
1954	.144+07	.300-00	.210+04	.470+02	.131+03	.890+03	<.100-01	.750+01	
SUM THRU 71	.144+07	.300-00	.210+04	.470+02	.131+03	.890+03	<.100-01	.750+01	
DECAY THRU 71	.144+07	.300-00	.120+04	.306+02	.749-03	.595+03	<.995-03	.750+01	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B42									
1955	.150+07	.100+02	.576+04	.110+04	.150+04	.960+02	.100+02	.680+03	
SUM THRU 71	.150+07	.100+02	.576+04	.110+04	.150+04	.960+02	.100+02	.680+03	
DECAY THRU 71	.150+07	.100+02	.159+04	.733+03	.171-01	.657+02	.114+01	.680+03	
216-B43									
1954	.212+07	.500-00	.352+04	.140+04	.500+02	.300+03	.100+01	.136+02	
SUM THRU 71	.212+07	.500-00	.352+04	.140+04	.500+02	.300+03	.100+01	.136+02	
DECAY THRU 71	.212+07	.500-00	.221+04	.911+03	.286-03	.201+03	.995-01	.136+02	
216-B44									
1954	.308+07	.800-00	.964+04	.221+04	.862+03	.221+03	.220+01	.196+01	
1955	.252+07	.142+02	.124+05	.691+03	.464+04	.479+03	.280+01	.308-00	
SUM THRU 71	.560+07	.150+02	.220+05	.290+04	.550+04	.700+03	.500+01	.227+01	
DECAY THRU 71	.560+07	.150+02	.471+04	.190+04	.578-01	.475+03	.537-00	.227+01	
216-B45									
1955	.492+07	.100+02	.530+05	.280+04	.170+05	.150+04	.500+01	.680+01	
SUM THRU 71	.492+07	.100+02	.530+05	.280+04	.170+05	.150+04	.500+01	.680+01	
DECAY THRU 71	.492+07	.100+02	.572+04	.187+04	.194-00	.103+04	.568-00	.680+01	
216-B46									
1955	.670+07	.200+02	.120+06	.150+04	.280+05	.200+03	.500+01	.190+03	
SUM THRU 71	.670+07	.200+02	.120+06	.150+04	.280+05	.200+03	.500+01	.190+03	
DECAY THRU 71	.670+07	.200+02	.235+04	.100+04	.319-00	.137+03	.568-00	.190+03	
216-B47									
1955	.371+07	.500+01	.450+05	.620+03	.190+05	.150+03	.100+01	.680+01	
SUM THRU 71	.371+07	.500+01	.450+05	.620+03	.190+05	.150+03	.100+01	.680+01	
DECAY THRU 71	.371+07	.500+01	.103+04	.413+03	.216-00	.103+03	.114+00	.680+01	
216-B48									
1955	.409+07	.500+01	.610+05	.130+04	.680+04	.450+03	.100+01	.227+01	
SUM THRU 71	.409+07	.500+01	.610+05	.130+04	.680+04	.450+03	.100+01	.227+01	
DECAY THRU 71	.409+07	.500+01	.239+04	.867+03	.775-01	.308+03	.114+00	.227+01	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-b49									
1955	.670+07	.150+02	.110+06	.270+04	.240+05	.410+03	.500+01	.318+03	
SUM THRU 71	.670+07	.150+02	.110+06	.270+04	.240+05	.410+03	.500+01	.318+03	
DECAY THRU 71	.670+07	.150+02	.422+04	.180+04	.273-00	.280+03	.568-00	.318+03	
216-b50									
1965	.560+07	<.500-01	.714+01			.360+01		<.200-01	
1966	.530+07	<.500-01	.148+03	<.100+00	.100+02	.534+02	<.100+00	<.250-01	
1967	.900+07	.400-01	.381+02	<.580+01		.131+02	<.200-00	<.140-01	
1968	.720+07	<.600-01	.680+01	<.500-01	.180-00	.240+01	<.200-01	<.860-01	
1969	.900+07	<.350-01	.364+02	.100-01	.840-00	.132+02	<.100-01	<.410-01	
1970	.850+07	<.200-02	.102+01	.100-01	.200-01	.300-00		<.403-01	
1971	.610+07	<.870-03	.238+01	.200-01	<.300-01	.900-00		<.344-01	
SUM THRU 71	.507+08	<.238-00	.239+03	<.599+01	.111+02	.869+02	<.330-00	<.261-00	
DECAY THRU 71	.507+08	<.238-00	.164+03	<.536+01	.419-00	.778+02	<.179-00	<.261-00	
216-b52									
1957	.423+07	.100+02	.892+04	.540+01	.426+04	.168+03	.220+01	.151+02	
1958	.431+07	.900+01	.908+04	.560+01	.434+04	.172+03	.230+01	.148+02	
SUM THRU 71	.853+07	.190+02	.180+05	.110+02	.860+04	.340+03	.450+01	.299+02	
DECAY THRU 71	.853+07	.190+02	.491+03	.780+01	.584-00	.246+03	.713-00	.299+02	
216-b53A									
1965	.549+06	.100+03	.500+02	<.100+00	.500+01	<.100+00	.500-00	.227+02	
SUM THRU 71	.549+06	.100+03	.500+02	<.100+00	.500+01	<.100+00	.500-00	.227+02	
DECAY THRU 71	.549+06	.100+03	.139+01	<.852-01	.564-01	<.861-01	.212-00	.227+02	
216-b53B									
1962	.757+04	.250+01	.203+02	.500+01	.200+01	.300+01	.500-00	.450+01	
1963	.757+04	.250+01	.232+02	.500+01	.200+01	.400+01	.500-00	.457+01	
SUM THRU 71	.151+05	.500+01	.435+02	.100+02	.400+01	.700+01	.100+01	.907+01	
DECAY THRU 71	.151+05	.500+01	.273+02	.802+01	.853-02	.570+01	.306-00	.907+01	

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TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B54									
1963	.312+06	.150+01	.750+03	.300-01	.300+01	.300-01	.300-01	.283+01	
1964	.375+06	.190+01	.900+03	.400-01	.400+01	.400-01	.400-01	.341+01	
1965	.312+06	.160+01	.750+03	.300-01	.300+01	.300-01	.300-01	.283+01	
SUM THRU 71	.999+06	.500+01	.240+04	.100+00	.100+02	.100+00	.100+00	.907+01	
DECAY THRU 71	.999+06	.500+01	.343+02	.832-01	.650-01	.842-01	.374-01	.907+01	
216-B55									
1967	.110+08	<.180-01	.680+01	<.500-00	<.100+00	.300-00	<.800-01	.220-01	
1968	.287+08	<.193-00	.262+02	<.240+01	<.800-00	.660+01	<.180-00	.305-00	
1969	.870+08	<.163-00	.571+02	.200-00	<.100+00	.460+01	<.100-01	<.452-00	
1970	.883+08	<.220-01	.918+01	.100+00	<.500-01	.120+01		<.473-00	
1971	.153+09	<.669-02	.109+02	.110+01	<.500-01	.300-00	<.100-01	<.127+01	
SUM THRU 71	.368+09	<.403-00	.110+03	<.430+01	<.110+01	.130+02	<.280-00	<.252+01	
DECAY THRU 71	.368+09	<.403-00	.445+02	<.402+01	<.147-00	.122+02	<.174-00	<.252+01	
216-B57									
1968	.125+08	<.800-01	.652+03	.300+01	.500+01	.283+03	<.100+00	.473-00	
1969	.200+08	<.960-01	.381+02	.200-01	.200+01	.165+02	<.100-01	<.118+00	
1970	.193+08	<.300-02	.681+02	.900-01	.100+01	.322+02	<.200-01	<.103+00	
1971	.130+08	<.222-02	.194+02	.200-01	<.200-00	.980+01		<.828-01	
SUM THRU 71	.648+08	<.181-00	.777+03	.313+01	.820+01	.341+03	<.130-00	<.777-00	
DECAY THRU 71	.648+08	<.181-00	.625+03	.288+01	<.130+01	.317+03	<.866-01	<.777-00	
216-B58									
1966	.726+05	.500+01	.460+02	.100+02	.500+01	.700+01	.100+01	.907+01	
1967	.340+06	.170+01	.133+02	.100+00	.200+01	.700-00	.140+01	.474-01	
SUM THRU 71	.413+06	.670+01	.593+02	.101+02	.700+01	.770+01	.240+01	.912+01	
DECAY THRU 71	.413+06	.670+01	.327+02	.883+01	.202-00	.680+01	.126+01	.912+01	
216-B59									
1968	.477+06		.500+01	.500-01		.200-01			
SUM THRU 71	.477+06		.500+01	.500-01		.200-01			
DECAY THRU 71	.477+06		.456-00	.459-01		.185-01			

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	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-B60									
1967	.189+05	.800-01	.155+04			.800+01		.717+03	
SUM THRU 71	.189+05	.800-01	.155+04			.800+01		.717+03	
DECAY THRU 71	.189+05	.800-01	.766+02			.721+01		.717+03	
216-B63									
1970	.244+09	<.470-01	<.377+01	.144+01	<.800-01	<.360-00	<.400-02	<.703-00	
1971	.160+09	<.131-01	.261+01	.150-00	<.100-01	.130-00	<.200-02	<.903-00	
SUM THRU 71	.405+09	<.601-01	<.638+01	.159+01	<.900-01	<.490-00	<.600-02	<.161+01	
DECAY THRU 71	.405+09	<.601-01	<.522+01	.154+01	<.355-01	<.476-00	<.515-02	<.161+01	
216-C1									
1952	.732+06								
1953	.888+07	.600-00	.157+03	.300+01	.600+01			.950+01	
1954	.439+07	.700-00	.157+03	.300+01	.600+01			.950+01	
1955	.548+07	.370+01	.255+04	.460+02	.920+02			.273+03	
1956	.392+07	.300+01	.813+04	.148+03	.296+03	<.100+00	<.100+00	.280+01	
1957	.129+05		.100+01						
SUM THRU 71	.234+08	.800+01	.110+05	.200+03	.400+03	<.100+00	<.100+00	.295+03	
DECAY THRU 71	.234+08	.800+01	.288+03	.136+03	.782-02	<.700-01	<.130-01	.295+03	
216-C3									
1953	.400+07	.800-00	.160+03	.160+02	.800+01	<.100+00	<.100+00	.363+02	
1954	.100+07	.200-00	.400+02	.400+01	.200+01			.906+01	
SUM THRU 71	.500+07	.100+01	.200+03	.200+02	.100+02	<.100+00	<.100+00	.454+02	
DECAY THRU 71	.500+07	.100+01	.258+02	.128+02	.344-04	<.653-01	<.872-02	.454+02	
216-C4									
1955	.200+05	.100+01	.101+03	.232+02	.125+02	<.800-01	<.800-01	.304+01	
1956	.200+05		.120+02	.280+01	.150+01	<.100-01	<.100-01	.342-00	
1957	.130+05		.700+01	.200+01	.100+01	<.700-02	<.700-02	.200-01	
1962	.500+05								
1963	.370+05								
1964	.300+05								
SUM THRU 71	.170+06	.100+01	.120+03	.280+02	.150+02	<.970-01	<.970-01	.340+01	
DECAY THRU 71	.170+06	.100+01	.377+02	.188+02	.222-03	<.667-01	<.114-01	.340+01	

TABLE 1 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-C5									
1955	.378+05	.100+01	.940+02	.100+02	.500+01	<.100+00	<.100+00	.544+02	
SUM THRU 71	.378+05	.100+01	.940+02	.100+02	.500+01	<.100+00	<.100+00	.544+02	
DECAY THRU 71	.378+05	.100+01	.136+02	.667+01	.570-04	<.684-01	<.114-01	.544+02	
216-C6									
1955	.130+04	<.100-01	.582+03	.189+02	.730+01	<.300-01	<.300-01		
1956	.490+04	.400-01	.974+03	.317+02	.122+02	<.500-01	<.500-01	.200-01	
1957	.130+04		.240+02	.800-00	.300-00			.400-03	
1962	.550+05		.310+03	.101+02	.390+01	<.200-01	<.200-01		
1963	.348+06	<.400-01	.570+02	.180+01	.700-00			.200-01	
1964	.120+06	<.100-01	.530+02	.170+01	.600-00			.500-02	
SUM THRU 71	.530+06	<.100+00	.200+04	.650+02	.250+02	<.100+00	<.100+00	.454-01	
DECAY THRU 71	.530+06	<.100+00	.973+02	.457+02	.113-01	<.716-01	<.156-01	.454-01	
216-C7									
1961	.800+04	<.200-00	.400+01	<.200-01	.200-00	<.200-01	<.200-01	<.200-01	
1962	.800+04	<.200-00	.400+01	<.200-01	.200-00	<.200-01	<.200-01	<.200-01	
1963	.800+04	<.200-00	.400+01	<.200-01	.200-00	<.200-01	<.200-01	<.200-01	
1964	.800+04	<.200-00	.400+01	<.200-01	.200-00	<.200-01	<.200-01	<.200-01	
1965	.800+04	<.200-00	.400+01	<.200-01	.200-00	<.200-01	<.200-01	<.200-01	
1966	.825+03								
1967	.100+04								
1968	.265+04		.190-01						
1969	.375+04								
1970	.984+03								
1971	.435+03								
SUM THRU 71	.496+05	<.100+01	.200+02	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	
DECAY THRU 71	.496+05	<.100+01	.561-00	<.812-01	.439-02	<.823-01	<.332-01	<.100+00	

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-C9									
1953	.551+08	<.100-01	.420+01	.300-00	.300-00				
1954	.942+08	<.100-01	.560+01	.400-00	.400-00				
1955	.942+08	<.100-01	.840+01	.600-00	.600-00				
1956	.942+08	<.100-01	.840+01	.600-00	.600-00				
1957	.942+08	<.100-01	.840+01	.600-00	.600-00				
1958	.200+08		.140+01	.100+00	.100+00				
1959	.200+08		.140+01	.100+00	.100+00				
1960	.200+08		.140+01	.100+00	.100+00				
1961	.200+08		.140+01	.100+00	.100+00				
1962	.942+08	<.100-01	.560+01	.400-00	.400-00				
1963	.942+08	<.100-01	.700+01	.500-00	.500-00				
1964	.942+08	<.100-01	.560+01	.400-00	.400-00				
1965	.942+08	<.100-01	.560+01	.400-00	.400-00				
1966	.942+08	<.100-01	.560+01	.400-00	.400-00	<.100+00		<.454-01	
1967	.203+08	<.100+00	.280+01	<.100+00		.100+01	<.300-00	<.500-00	
1968	.160+08	.760-01	.616+01	.400-01	.200-00	<.100+00	<.840-01	<.328-00	
1969	.103+08	<.620-01	.420-00				<.100-02	<.430-01	
SUM T,RU 71	.103+10	<.338-00	.794+02	.514+01	.520+01	<.120+01	<.385-00	<.916-00	
DECAY THRU 71	.103+10	<.338-00	.109+02	.385+01	.358-01	<.108+01	<.219-00	<.916-00	
216-C10									
1964	.240+05		.242+02		.200-00	<.200-01	<.200-01	<.136-02	
1965	.271+06	<.300-01	.550+02	.250+02	.400-00	<.400-01	<.400-01	<.290-01	
1966	.504+06	<.700-01	.484+02	.220+02	.400-00	<.400-01	<.400-01	<.150-01	
1967	.980+05	<.500-01	.330+02	.158+02	.500-00	<.500-01	<.500-01		
SUM T RU 71	.897+06	<.150-00	.161+03	.628+02	.150+01	<.150-00	<.150-00	<.454-01	
DECAY THRU 71	.897+06	<.150-00	.110+03	.547+02	.371-01	<.132-00	<.714-01	<.454-01	
200-E TOTAL	.256+12	.115+05	.302+07	.355+05	.540+06	.265+05	<.589+03	.753+05	<.967+03
200-E DECAY TOTAL	.256+12	.115+05	.122+06	.245+05	.412+04	.193+05	<.185+03	.753+05	<.967+03

TABLE 2
200 WEST AREA
LIQUID WASTE DISPOSAL SITES

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-N1									
1944	.140+07		.100+00	.199-02	.428-02	.212-02		.700-02	
1945	.993+08	.100+00	.100+01	.199-01	.428-01	.212-01		.476-00	
1946	.135+09	.140-00	.140+01	.278-01	.600-01	.297-01		.647-00	
1947	.102+09	.110+00	.110+01	.219-01	.471-01	.234-01		.487-00	
1948	.123+09	.130-00	.130+01	.259-01	.557-01	.276-01		.588-00	
1949	.117+09	.120+00	.120+01	.239-01	.514-01	.255-01		.561-00	
1950	.138+09	.150-00	.150+01	.298-01	.642-01	.319-01		.662-00	
1951	.167+09	.180-00	.170+01	.338-01	.728-01	.361-01		.799-00	
1952	.645+08	.700-01	.700-00	.139-01	.300-01	.149-01		.309-00	
SUM THRU 71	.946+09	.100+01	.100+02	.199-00	.428-00	.212-00		.454+01	
DECAY THRU 71	.946+09	.100+01	.470-00	.113+00	.137-06	.125-00		.454+01	
216-N2									
1947	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
SUM THRU 71	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
DECAY THRU 71	.757+07		<.453-00	<.109+00	<.196-07	<.121+00			
216-N3									
1952	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
SUM THRU 71	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
DECAY THRU 71	.757+07		<.513-00	<.123+00	<.616-06	<.136-00			
216-N4									
1944	.140+07		.100+00	.199-02	.428-02	.212-02		.700-02	
1945	.993+08	.100+00	.100+01	.199-01	.428-01	.212-01		.476-00	
1946	.135+09	.140-00	.140+01	.278-01	.600-01	.297-01		.647-00	
1947	.102+09	.110+00	.110+01	.219-01	.471-01	.234-01		.487-00	
1948	.123+09	.130-00	.130+01	.259-01	.557-01	.276-01		.588-00	
1949	.117+09	.120+00	.120+01	.239-01	.514-01	.255-01		.561-00	
1950	.138+09	.150-00	.150+01	.298-01	.642-01	.319-01		.662-00	
1951	.167+09	.180-00	.170+01	.338-01	.728-01	.361-01		.799-00	
1952	.645+08	.700-01	.700-00	.139-01	.300-01	.149-01		.309-00	
SUM T RU 71	.946+09	.100+01	.100+02	.199-00	.428-00	.212-00		.454+01	
DECAY THRU 71	.946+09	.100+01	.470-00	.113+00	.137-06	.125-00		.454+01	

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-N5									
1952	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
SUM THRU 71	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
DECAY THRU 71	.757+07		<.513-00	<.123+00	<.616-06	<.136-00			
216-N6									
1944	.140+07		.100+00	.199-02	.428-02	.212-02		.700-02	
1945	.993+08	.100+00	.100+01	.199-01	.428-01	.212-01		.476-00	
1946	.135+09	.140-00	.140+01	.278-01	.600-01	.297-01		.647-00	
1947	.102+09	.110+00	.110+01	.219-01	.471-01	.234-01		.487-00	
1948	.123+09	.130-00	.130+01	.259-01	.557-01	.276-01		.588-00	
1949	.117+09	.120+00	.120+01	.239-01	.514-01	.255-01		.561-00	
1950	.138+09	.150-00	.150+01	.298-01	.642-01	.319-01		.662-00	
1951	.167+09	.180-00	.170+01	.338-01	.728-01	.361-01		.799-00	
1952	.645+08	.700-01	.700-00	.139-01	.300-01	.149-01		.309-00	
SUM THRU 71	.946+09	.100+01	.100+02	.199-00	.428-00	.212-00		.454+01	
DECAY THRU 71	.946+09	.100+01	.470-00	.113+00	.137-06	.125-00		.454+01	
216-N7									
1952	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
SUM THRU 71	.757+07		<.100+02	<.199-00	<.428-00	<.212-00			
DECAY THRU 71	.757+07		<.513-00	<.123+00	<.616-06	<.136-00			
216-S1&2									
1952	.143+08	.800+01	.556+03	.200+01	.200+01	.200+01		.150+02	
1953	.469+08	.490+02	.453+05	.181+03	.181+03	.151+03	.600-00	.930+02	
1954	.492+08	.444+03	.308+06	.123+04	.123+04	.103+04	.410+01	.839+03	
1955	.496+08	.697+03	.396+06	.158+04	.158+04	.132+04	.530+01	.132+04	
1956	.260+05	.200+01	.116+03	.100+01	.100+01			.400+01	
SUM THRU 71	.160+09	.120+04	.750+06	.300+04	.300+04	.250+04	.100+02	.227+04	
DECAY THRU 71	.160+09	.120+04	.811+04	.197+04	.256-01	.169+04	.106+01	.227+04	

9 2 1 2 4 6 2 2 0 3 3

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S3									
1953	.125+07	.130-00	.400+01					.990-01	
1954	.242+07	.221-00	.187+03	.700-00	.350+02	.350+02	.700-00	.168-00	
1955	.420+06	.107+00	.410+02	.200-00	.800+01	.800+01	.200-00	.820-01	
1956	.110+06	.420-01	.380+02	.100+00	.700+01	.700+01	.100+00	.320-01	
SUM THRU 71	.420+07	.500-00	.270+03	.100+01	.500+02	.500+02	.100+01	.381-00	
DECAY THRU 71	.420+07	.500-00	.663+02	.657-00	.450-03	.338+02	.105+00	.381-00	
216-S5									
1954	.233+10	.214+03	.561+03	.760+02	.175+02	.351+02	<.100+00	.155+03	
1955	.874+09	.164+03	.248+03	.336+02	.780+01	.155+02		.580+02	
1956	.866+09	.201+03	.150+03	.203+02	.470+01	.940+01		.575+02	
1957	.320+08	.100+01	.100+01	.100+00				.216+01	
SUM THRU 71	.410+10	.580+03	.960+03	.130+03	.300+02	.600+02	<.100+00	.272+03	
DECAY THRU 71	.410+10	.580+03	.250+03	.858+02	.296-03	.406+02	<.995-02	.272+03	
216-S6									
1954	.264+09	.440+02	.226+03		.500+01			.342+01	
1955	.872+09	.165+03	.425+03		.900+01			.113+02	
1956	.864+09	.203+03	.258+03		.500+01			.112+02	
1957	.237+09	.147+02	.714+02		.100+01			.307+01	
1958	.179+09	.228+02	.643+03	.176+03	.130+02	.350+02		.219+02	
1959	.236+09	.600-00	.748+02	.200+01	.100+01	.300+01		.177+01	
1960	.158+09	.400-00	.221+03		.500+01	.400+01		.125+02	
1961	.188+09	.600-00	.280+03		.600+01			.327+02	
1962	.193+09	.101+01	.376+03	.130+02	.800+01	.800+01		.153+02	
1963	.215+09	.713+01	.617+03	.110+03	.130+02	.240+02	<.100+00	.180+02	
1964	.236+09	.530+01	.357+03	.220+02	.800+01	.160+02		.446+02	
1965	.221+09	.800-00	.228+03	.190+02	.500+01	.920+02		.147+02	
1966	.236+09	.430+01	.983+03	.510+02	.210+02	.100+02		.683+02	
1967	.470+08	.264+01	.415+03	.800+01	.294+02	.800+01	<.260+01	.845+01	
1968	.332+08	.557-00	.739+02	<.109+02	.350+01	.120+02	.200-00	.241+01	
1969	.175+08	<.140-01	.510-00					.109+01	
1970	.122+09	<.151-00	.204+01	.100+00	.100+00			<.670-00	
1971	.995+08	<.480-01	.187+01	.120+00	.140-00	.220-00	<.330-01	<.258-00	
SUM THRU 71	.442+10	.473+03	.525+04	.412+03	.133+03	.212+03	<.293+01	.272+03	
DECAY THRU 71	.442+10	.473+03	.105+04	.324+03	.240+01	.177+03	<.163+01	.272+03	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S									
1956	.558+08	.156+03	.793+05	.105+04	.423+03	.447+03	.700+01	.193+04	
1957	.495+08	.827+02	.670+05	.108+04	.357+03	.462+03	.600+01	.905+02	
1958	.462+08	.568+02	.113+06	.688+03	.606+03	.294+03	.100+02	.113+03	
1959	.348+08	.330+01	.427+04	.300+01	.230+02	.180+02	.400-00	.790+01	
1960	.323+08	.101+03	.200+04		.110+02	.900+01	.200-00	.170+03	
1961	.334+08	.990+01	.217+04		.110+02		.200-00	.875+02	
1962	.340+08	.132+02	.143+04	.560+02	.800+01	.160+02	.100+00	.119+03	
1963	.410+08	.122+02	.274+04	.103+03	.150+02	.360+02	.200-00	.238+02	
1964	.454+08	.350+01	.431+04	.160+02	.230+02	.860+02	.500-00	.304+02	
1965	.175+08	.200+01	.430+04	.102+03	.230+02	.102+03	.400-00	.167+02	
SUM THRU 71	.390+09	.440+03	.281+06	.310+04	.150+04	.147+04	.250+02	.259+04	
DECAY THRU 71	.390+09	.440+03	.726+04	.220+04	.540-00	.108+04	.410+01	.259+04	
216-S8									
1951	.500+07	.100+01	.750+03	.500-00	.250+02	.600+01	<.500-01	.970+02	
1952	.500+07	.100+01	.750+03	.500-00	.250+02	.600+01	<.500-01	.980+02	
SUM THRU 71	.100+08	.200+01	.150+04	.100+01	.500+02	.120+02	<.100+00	.195+03	
DECAY THRU 71	.100+08	.200+01	.167+02	.612-00	.540-04	.757+01	<.717-02	.195+03	
216-S9									
1965	.102+08	.190+01	.181+04	.460+02	.250+02	.860+02	.100+01	.315+01	
1966	.188+08	.720+01	.913+04	.940+02	.125+03	.364+03	.400+01	.230+02	
1967	.920+07	.450+02	.495+04	<.330+02	.237+04	.520+02	<.201+02	.373+01	
1968	.121+08	.109+02	.296+03	.200+01	.103+03	.500+01	.400-00	.400+01	
1969	.900+05		.600+01					.200-02	
SUM THRU 71	.503+08	.650+02	.162+05	<.175+03	.263+04	.507+03	<.255+02	.339+02	
DECAY THRU 71	.503+08	.650+02	.166+04	<.153+03	.119+03	.446+03	<.137+02	.339+02	
216-S10									
1954	.201+06	<.100+00	.240+02	.100+01	.100+02	.100+01		.227+01	
SUM THRU 71	.201+06	<.100+00	.240+02	.100+01	.100+02	.100+01		.227+01	
DECAY THRU 71	.201+06	<.100+00	.258+01	.650-00	.571-04	.668-00		.227+01	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S11									
1954	.127+09		.400+01	.400-01	.400-00	.400-01		.134+01	
1955	.191+09		.800+01	.800-01	.800-00	.800-01		.170+01	
1956	.191+09		.800+01	.800-01	.800-00	.800-01		.180+01	
1957	.192+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.170+01	
1958	.191+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.180+01	
1959	.191+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.170+01	
1960	.192+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.180+01	
1961	.191+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.170+01	
1962	.191+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.180+01	
1963	.192+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.170+01	
1964	.191+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.180+01	
1965	.191+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.170+01	
1966	.192+09	<.100-01	.800+01	.800-01	.800-00	.800-01		.180+01	
1967	.482+08	.760-01	.800-00	<.110+00	<.100+00	<.110+00	<.132-00	.562-00	
1968	.948+08	<.800-02	<.200-02				<.100-02	<.600-02	
1969	.977+08	<.200-02						<.500-02	
1970	.463+08	<.320-01						<.443-00	
1971	.115+09	<.427-02	<.180-01					<.433-00	
SUM THRU 71	.282+10	<.222-00	.101+03	.111+01	.101+02	.111+01	<.133-00	.238+02	
DECAY THRU 71	.282+10	<.222-00	.417+01	<.860-00	<.406-01	<.874-00	<.736-01	.238+02	
216-S12									
1954	.681+05	.100+01	.650+01	.100+01	.100+01	.100+01	<.100+00	.499+01	
SUM THRU 71	.681+05	.100+01	.650+01	.100+01	.100+01	.100+01	<.100+00	.499+01	
DECAY THRU 71	.681+05	.100+01	.259+01	.650-00	.571-05	.668-00	<.995-02	.499+01	

9 2 1 2 4 6 2 2 0 3 6

TABLE 2 (CONTINUED)

PA

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KG
216-S13								
1951	.634+06	.330-00	.180+01		.300-00			
1952	.704+06	.400-00	.180+01		.300-00			
1953	.704+06	.400-00	.180+01		.300-00			
1954	.704+06	.400-00	.180+01		.300-00			
1955	.530+06	.370-00	.190+01		.300-00			
1956	.300+05	.500-01	.800-00		.100+00			
1957	.460+05	.372+01	.220+01	.100-01	.300-00			.18
1958	.200+05	.100-01	.120+01		.200-00			
1959	.200+05	.200-01	.400-00		.100+00			
1960	.300+05	.200-01	.200-00					
1961	.200+05	.110+00	.730+01		.120+01			
1962	.220+05	<.100-01	.220+01		.400-00			<.10
1963	.160+05	.200-01	.130+01		.200-00			.24
1964	.970+06	.196+01	.273+03	.100-01	.430+02	.220+01	<.500-01	.46
1965	.440+06	.110+00	.258+03	.200-01	.410+02	.240+01	<.500-01	.34
1966	.110+06	.700-01	.740+02		.120+02	.400-00		.42
SUM THRU 71	.500+07	.800+01	.630+03	.400-01	.100+03	.500+01	<.100+00	.91
DECAY THRU 71	.500+07	.800+01	.174+02	.324-01	.978-00	.427+01	<.398-01	.91
216-S14								
1952	.681+05	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.45
SUM THRU 71	.681+05	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.45
DECAY THRU 71	.681+05	<.100+00	.254-00	<.619-01	<.144-06	<.638-01	<.764-02	.45

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TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S16									
1957	.223+10	.121+03	.136+03	.630+01	.170+02	.420+01		.122+04	
1958	.186+10	.157+03	.964+03	.443+02	.118+03	.295+02		.158+04	
1959	.334+10	.360+01	.391+02	.180+01	.480+01	.120+01		.360+02	
1960	.375+10	.150+01	.680+01	.300-00	.800-00	.200-00		.150+02	
1961	.402+10	.188+01	.510+01	.200-00	.600-00	.200-00		.190+02	
1962	.406+10	.500-00	.255+02	.120+01	.310+01	.800-00		.110+03	
1963	.501+10	.640+02	.116+03	.530+01	.142+02	.350+01		.860+02	
1964	.632+10	.600+01	.680+02	.310+01	.830+01	.210+01		.320+02	
1965	.396+10	.180+01	.425+02	.200+01	.520+01	.130+01		.125+02	
1966	.162+10	.460+01	.229+03	.105+02	.280+02	.700+01		.384+02	
1967	.228+09	.420-00	.527+02	<.930+01	.130+02	<.170+01	<.410+01	.420+01	
1968	.580+09	.700-00	.680+02	.690+01	.470+01	.620+01	.170+01	.290+01	
1969	.134+10	<.468+01	.442+01	.300-00	<.300-00	.400-00	<.100+00	.350+01	
1970	.840+09	<.320-00	.680-00			.100+00		.100+01	
1971	.961+09	<.200-01	.170-00					.290+01	
SUM THRU 71	.401+11	.368+03	.176+04	<.915+02	.218+03	.584+02	<.590+01	.316+04	
DECAY THRU 71	.401+11	.368+03	.249+03	<.716+02	.185+01	.461+02	<.341+01	.316+04	
216-S17									
1951	.435+08								
1952	.250+10	.140+01	.344+03	.130+02	.160+02	.900+01		.635+02	
1953	.323+10	.140+01	.693+03	.250+02	.310+02	.190+02		.635+02	
1954	.663+09	.200-00	.630+02	.200+01	.300+01	.200+01		.908+01	
SUM THRU 71	.643+10	.300+01	.110+04	.400+02	.500+02	.300+02		.136+03	
DECAY THRU 71	.643+10	.300+01	.886+02	.252+02	.129-03	.195+02		.136+03	
216-S18									
1954	<.984+05	<.100+00	<.700-00	<.100+00	<.100+00	<.100+00	<.100+00	<.450-01	
SUM THRU 71	<.984+05	<.100+00	<.700-00	<.100+00	<.100+00	<.100+00	<.100+00	<.450-01	
DECAY THRU 71	<.984+05	<.100+00	<.268-00	<.650-01	<.571-06	<.668-01	<.995-02	<.450-01	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S19									
1952	.314+08	.440+01	.432+02	.100+00	.700-00	.100+00		.173+02	
1953	.602+08	.580+01	.445+02	.200-00	.800-00	.200-00		.228+02	
1954	.797+08	.400+01	.540+02	.200-00	.900-00	.200-00		.157+02	
1955	.170+07	.400+01	.135+01					.157+02	
1956	.203+08	.120+00						.430-00	
1957	.204+08	.400-01	.135+01					.160-00	
1958	.210+08	.800-01						.310-00	
1959	.262+08	.700-01	.405+01		.100+00			.280-00	
1960	.272+08	.200-01						.800-01	
1961	.272+08	<.100-01						.400-01	
1962	.315+08	.300-01	.540+01		.100+00			.400+01	
1963	.346+08	.800-00	.148+02		.300-00			.930+01	
1964	.344+08	.120+00	.135+01					.105+02	
1965	.350+08	.400-00	.486+02	.200-00	.800-00	.200-00		.290+01	
1966	.345+08	.100+00	.783+02	.300-00	.130+01	.300-00	<.492-00	.470+01	
1967	.353+08	.100+00	.634+01	<.140+01	<.146+01	<.270-00	.700-01	.150+01	
1968	.344+08	.180-00	.405+01	.500-01	.900-01	.500-01	<.100-02	.840-00	
1969	.344+08	.190-00	.162+02	<.100-01	<.270-00	.940-00		.350-00	
1970	.345+08	<.400-01	.405-00			.100-01		<.160-00	
1971	.345+08	<.800-02	<.945-00					<.210-00	
SUM THRU 71	.658+09	.205+02	.325+03	<.246+01	<.682+01	<.227+01	<.563-00	.107+03	
DECAY THRU 71	.658+09	.205+02	.143+02	<.206+01	<.161-00	<.195+01	<.278-00	.107+03	

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TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S20									
1952	.155+08	.114+02	.600+01					.600-00	
1953	.156+08	.114+02	.600+01					.600-00	
1954	.155+08	.114+02	.940+02		.100+01	.100+01		.600-00	
1955	.156+08	.115+02	.177+03		.200+01	.100+01		.610-00	
1956	.530+07	.452+02	.151+03		.200+01	.100+01		.238+01	
1957	.550+07	.245+02	.203+03		.300+01	.200+01		.129+01	
1958	.554+07	.145+02	.792+03	.600-00	.100+02	.600+01	.200-00	.760-00	
1959	.738+07	.216+02	.853+03		.110+02	.700+01	.200-00	.290-00	
1960	.779+07	.420+01	.665+03		.900+01	.500+01	.100+00	.220-00	
1961	.115+08	.689+01	.213+04	.550+01	.280+02	.170+02	.400-00	.360-00	
1962	.127+08	.500+01	.106+04	.190+02	.140+02	.510+02	.200-00	.218+02	
1963	.109+08	.215+01	.148+04	.200+02	.200+02	.190+02	.300-00	.440+01	
1964	.430+06	.420-00	.400-00					.586-00	
1965	.290+06	.200-00	.500-00					.720-01	
1966	.240+06	.100+00	.500-00					.330-00	
1967	.110+06	.480-00	.400-00				<.100-01	.280-00	
1968	.500+05	.500-01	.100+00					.238+01	
1969	.100+05	.100-01	.100+00					.500-01	
SUM THRU 71	.130+09	.171+03	.762+04	.451+02	.100+03	.110+03	.141+01	.376+02	
DECAY THRU 71	.130+09	.171+03	.282+03	.360+02	.103+00	.869+02	.355-00	.376+02	

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TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-S21									
1954	.140+06	.100-01	.630+01	.200-00		.600-00			
1955	.457+07	.110+00	.130+03	.430+01	.500+01	.114+02		.350-01	
1956	.379+07	.570-00	.252+02	.800-00	.100+01	.210+01		.302-00	
1957	.716+07	.730-00	.101+03	.117+02	.400+01	.360+02		.111+01	
1958	.793+07	.380-00	.399+02	.600-00	.100+01	.170+01	.400-01	.134+01	
1959	.502+07	.100-01	.840+01			.700-00		.200-01	
1960	.537+07		.840+01			.700-00		.384-00	
1961	.461+07		.840+01			.270+01		.140-00	
1962	.416+07		.273+02	.400-00	.100+01	.106+02		.160-00	
1963	.516+07	.700-01	.861+02	.600-00	.300+01	.390+01		.130-00	
1964	.649+07	.300-01	.273+02	.400-00	.100+01	.500+01		.750-01	
1965	.121+08	.400-01	.365+03	.160+01	.130+02	.424+02		.330-00	
1966	.135+08	.500-01	.300+03	.540+01	.110+02	.319+02		.670-01	
1967	.632+07	.700-01	.124+03	<.169+02	.370+01	.118+02	<.370-00	.900-01	
1968	.100+05		.630+01			.200-00			
1969	.705+06	.100-01	.210+01			.300-00		.400-02	
SUM T RU 71	.871+08	.208+01	.127+04	<.429+02	.437+02	.162+03	<.410-00	.419+01	
DECAY THRU 71	.871+08	.208+01	.338+03	<.345+02	.576-00	.132+03	<.211-00	.419+01	
216-S22									
1957	.109+05	<.110-01	.300+01	.200-00	.100+01	.200-00		<.500-02	
1958	.437+05	<.450-01	.600+01	.400-00	.200+01	.400-00		<.202-01	
1959	.437+05	<.450-01	.600+01	.400-00	.200+01	.400-00	<.100+00	<.202-01	
SUM T RU 71	.984+05	<.101+00	.150+02	.100+01	.500+01	.100+01	<.100+00	<.454-01	
DECAY THRU 71	.984+05	<.101+00	.288+01	.721-00	.586-03	.736-00	<.192-01	<.454-01	
216-S23									
1969	.127+08	<.411-00	.122+03	.497-00	.415+02	.733-00	<.121+00	<.916-01	
1970	.882+07	.287-00	.429+02	.683-00	.103+02	.477-00	<.530-01	<.821-01	
1971	.717+07	.354-01	.766+01	.336-00	.261+01	<.140-00	.124+01	<.150-00	
SUM THRU 71	.287+08	<.733-00	.173+03	.152+01	.544+02	<.135+01	<.141+01	<.324-00	
DECAY THRU 71	.287+08	<.733-00	.421+02	.146+01	.129+02	<.129+01	<.129+01	<.324-00	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-T1									
1945	.394+06								
1946	.394+06								
1947	.394+06								
1948	.394+06								
1949	.394+06	<.100+00	.500+01	<.100+00	.100+01	<.100+00		.450+01	
1950	.394+06								
1951	.394+06								
1952	.394+06								
1953	.394+06								
1954	.394+06								
1955	.394+06								
1956	.206+06								
1964	.247+08								
1965	.247+08								
1966	.247+08								
1967	.247+08								
1968	.247+08								
1969	.247+08								
1970	.247+08								
SUM THRU 71	.178+09	<.100+00	.500+01	<.100+00	.100+01	<.100+00		.450+01	
DECAY THRU 71	.178+09	<.100+00	.231-00	<.575-01	.182-06	<.596-01		.450+01	
216-T3									
1945	.480+07	.144+04	.120+04	.239+02	.514+02	.255+02			
1946	.650+07	.192+04	.160+04	.318+02	.685+02	.340+02			
SUM THRU 71	.113+08	.335+04	.280+04	.557+02	.120+03	.595+02			
DECAY THRU 71	.113+08	.335+04	.122+03	.294+02	.216-05	.327+02			

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-T4									
1944	.172+09							.310+01	
1945	.207+10	<.100-01						.371+02	
1946	.207+10	<.100-01						.371+02	
1947	.207+10	<.100-01						.371+02	
1948	.207+10	<.100-01						.371+02	
1949	.207+10	<.100-01						.371+02	
1950	.346+10	<.100-01	.400+01					.621+02	
1951	.346+10	<.100-01	.400+01					.621+02	
1952	.207+10	<.100-01	.800+01					.371+02	
1953	.247+10	<.100-01	.100+03	.300-00	.240+02	.400-00		.444+02	
1954	.326+10	<.100-01	.116+03	.300-00	.280+02	.400-00		.585+02	
1955	.385+10		.152+03	.400-00	.360+02	.500-00		.692+02	
1956	.200+10		.560+02		.130+02	.200-00		.360+02	
1957	.108+08							.200-00	
1960	.965+09							.173+02	
1961	.966+09							.173+02	
1962	.966+09							.173+02	
1963	.966+09							.174+02	
1964	.966+09							.174+02	
1965	.966+09							.174+02	
1966	.966+09							.174+02	
1967	.772+09	<.117+01	.204+02	<.280+01	.200+01	.420+01	<.220+01	.160+01	
1968	.770+09	.172+01	.365+02	<.233+01	<.300+01	.500+01	<.116+01	.167+01	
1969	.715+09	<.574-00	.228+01	.400-01		.200-00	<.200-01		
1970			.880-00						
1969									
1970	.503+09	<.930-01						<.500-00	
1971	.482+09	<.440-02	<.320-00					<.560-00	
SUM THRU 71	.411+11	<.366+01	.500+03	<.617+01	.106+03	.109+02	<.338+01	<.136+01	
DECAY THRU 71	.411+11	<.366+01	.337+02	<.533+01	<.359-00	.960+01	<.196+01	.685+03	
216-T5									
1955	.260+07	.180+03	.208+03	.100+01	.300+02	.700+02	.500+01	.454+01	
SUM THRU 71	.260+07	.180+03	.208+03	.100+01	.300+02	.700+02	.500+01	.454+01	
DECAY THRU 71	.260+07	.180+03	.938+02	.667-00	.342-03	.479+02	.568-00	.454+01	

TABLE 2 (

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)
216-T6				
1946	.170+08	.195+03	.300+04	.600+0
1947	.280+08	.195+03	.150+05	.300+0
SUM THRU 71	.450+08	.390+03	.180+05	.360+0
DECAY THRU 71	.450+08	.390+03	.725+03	.196+0
216-T7				
1948	.570+07	.700+01	.820+02	.200+0
1949	.750+07	.100+02	.165+03	.300+0
1950	.750+07	.100+02	.165+03	.300+0
1951	.750+07	.100+02	.165+03	.300+0
1952	.850+07	.120+02	.418+03	.800+0
1953	.152+08	.260+02	.324+03	.600+0
1954	.255+08	.350+02	.156+04	.310+0
1955	.326+08	.200+02	.223+03	.400+0
SUM T RU 71	.110+09	.130+03	.310+04	.600+0
DECAY THRU 71	.110+09	.130+03	.141+03	.380+0
216-T8				
1950	.240+06	.240+01	.470+02	.500-0
1951	.260+06	.260+01	.530+02	.500-0
SUM THRU 71	.500+06	.500+01	.100+03	.100+0
DECAY THRU 71	.500+06	.500+01	.243+01	.597-0
216-T9				
1951	.600+05	<.300-01	.196+02	.140+0
1952	.600+05	<.300-01	.224+02	.160+0
1953	.600+05	<.300-01	.224+02	.160+0
1954	.200+05	<.100-01	.560+01	.400-0
SUM T RU 71	.200+06	<.100+00	.700+02	.500+0
DECAY THRU 71	.200+06	<.100+00	.124+02	.311+0

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TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-T10									
1951	.400+05	<.200-01	.140+02	.100+01	.400+01	.100+01		<.100-01	
1952	.700+05	<.350-01	.252+02	.180+01	.700+01	.180+01		<.180-01	
1953	.700+05	<.350-01	.252+02	.180+01	.700+01	.180+01	<.100+00	<.180-01	
1954	.200+05	<.100-01	.560+01	.400-00	.200+01	.400-00		<.400-02	
SUM THRU 71	.200+06	<.100+00	.700+02	.500+01	.200+02	.500+01	<.100+00	<.500-01	
DECAY THRU 71	.200+06	<.100+00	.124+02	.312+01	.445-04	.322+01	<.872-02	<.500-01	
216-T11									
1951	.400+05	<.200-01	.150+02	.100+01	.400+01	.100+01		<.100-01	
1952	.700+05	<.350-01	.270+02	.180+01	.700+01	.180+01	<.100+00	<.180-01	
1953	.700+05	<.350-01	.270+02	.180+01	.700+01	.180+01		<.180-01	
1954	.200+05	<.100-01	.600+01	.400-00	.200+01	.400-00		<.400-02	
SUM THRU 71	.200+06	<.100+00	.750+02	.500+01	.200+02	.500+01	<.100+00	<.500-01	
DECAY THRU 71	.200+06	<.100+00	.124+02	.312+01	.445-04	.322+01	<.764-02	<.500-01	
216-T12									
1954	.500+07	.100+01	.550+02	.500+01	.100+02	.100+02	.200+01	.454+02	
SUM THRU 71	.500+07	.100+01	.550+02	.500+01	.100+02	.100+02	.200+01	.454+02	
DECAY THRU 71	.500+07	.100+01	.195+02	.325+01	.571-04	.668+01	.199-00	.454+02	
216-T13									
1954	.490+04	<.100-01	.420+01	.100-01	.200+01	.100-01		<.500-02	
1955	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1956	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1957	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1958	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1959	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01	<.100+00	<.500-02	
1960	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1961	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1962	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1963	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01		<.500-02	
1964	.490+04		.420+01		.200+01				
SUM T RU 71	.980+05	<.100+00	.840+02	.100+00	.400+02	.100+00	<.100+00	<.500-01	
DECAY THRU 71	.980+05	<.100+00	.393-00	.728-01	.341-01	.743-01	<.192-01	<.500-01	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-T14									
1954	.100+07	.880-00	.985+03	.600+01	.150+02	.469+03	.150+01	.303+02	
SUM THRU 71	.100+07	.880-00	.985+03	.600+01	.150+02	.469+03	.150+01	.303+02	
DECAY THRU 71	.100+07	.880-00	.610+03	.390+01	.857-04	.314+03	.149-00	.303+02	
216-T15									
1954	.100+07	.940-00	.207+04	.210+02	.120+02	.104+04	.120+01	.272+02	
SUM THRU 71	.100+07	.940-00	.207+04	.210+02	.120+02	.104+04	.120+01	.272+02	
DECAY THRU 71	.100+07	.940-00	.136+04	.137+02	.686-04	.693+03	.119+00	.272+02	
216-T16									
1954	.100+07	.650-00	.105+04	.800+01	.130+02	.522+03	.130+01	.222+02	
SUM THRU 71	.100+07	.650-00	.105+04	.800+01	.130+02	.522+03	.130+01	.222+02	
DECAY THRU 71	.100+07	.650-00	.680+03	.520+01	.743-04	.349+03	.129-00	.222+02	
216-T17									
1954	.785+06	.530-00	.774+03	.300+01	.100+02	.373+03	.100+01	.203+02	
SUM THRU 71	.785+06	.530-00	.774+03	.300+01	.100+02	.373+03	.100+01	.203+02	
DECAY THRU 71	.785+06	.530-00	.483+03	.195+01	.571-04	.249+03	.995-01	.203+02	
216-T18									
1953	.100+07	.180+04	.840+03	.700+01	.200+03	.570+02	.100+02	.272+02	
SUM THRU 71	.100+07	.180+04	.840+03	.700+01	.200+03	.570+02	.100+02	.272+02	
DECAY THRU 71	.100+07	.180+04	.815+02	.444+01	.573-03	.372+02	.872-00	.272+02	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (K
216-T19								
1951	.665+07	.280-00	.660-00					.9
1952	.119+08	.500-00	.660-00					.1
1953	.693+07	.180+01	.528+01		.100+01	.400-00		.5
1954	.527+07	.360-00	.220+01		.100+01			.1
1955	.663+07	.140+01	.440+01		.100+01	.300-00		.4
1956	.846+07	.980+01	.439+04	.590+02	.983+03	.332+03	.100+01	.3
1966	.379+08		.638+02	.100+01	.140+02	.176+02		
1967	.731+08	<.600-01	.132+02	<.300-00	<.150+01	.330+01	<.400-01	<.4
1968	.647+08	.980-01	.176+02	<.840-00	<.130+01	.450+01	<.100-01	.2
1969	.678+08		.176+02	.200-01	.200-00	.330+01		.2
1970	.305+08	<.200-02	.660+01	.400-01		.160+01		<.7
1971	.466+08	<.200-02	.770+01	.236-00		.206+01	<.180-02	<.9
SUM THRU 71	.366+09	.143+02	.453+04	.614+02	.100+04	.365+03	.105+01	.7
DECAY THRU 71	.366+09	.143+02	.597+03	.425+02	<.557-00	.262+03	<.160-00	.7
216-T20								
1952	.189+05		.500+02	.994-00	.214+01	.106+01		.5
SUM THRU 71	.189+05		.500+02	.994-00	.214+01	.106+01		.5
DECAY THRU 71	.189+05		.256+01	.616-00	.308-05	.678-00		.5
216-T21								
1954	.460+06	.100+01	.821+04	.800+01	.620+02	.400+03	.200+01	.1
SUM THRU 71	.460+06	.100+01	.821+04	.800+01	.620+02	.400+03	.200+01	.1
DECAY THRU 71	.460+06	.100+01	.532+03	.520+01	.354-03	.267+03	.199-00	.1
216-T22								
1954	.153+07	.200+01	.394+04	.510+02	.300+02	.185+04	.100+01	.2
SUM THRU 71	.153+07	.200+01	.394+04	.510+02	.300+02	.185+04	.100+01	.2
DECAY THRU 71	.153+07	.200+01	.244+04	.332+02	.171-03	.124+04	.995-01	.2
216-T23								
1954	.148+07	.100+01	.350+04	.410+02	.260+02	.133+04	.100+01	.1
SUM THRU 71	.148+07	.100+01	.350+04	.410+02	.260+02	.133+04	.100+01	.1
DECAY THRU 71	.148+07	.100+01	.176+04	.267+02	.149-03	.889+03	.995-01	.1

9 2 1 2 4 6 2 2 0 4 7

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-T24									
1954	.153+07	.200+01	.435+04	.400+02	.320+02	.142+04	.100+01	.830+01	
SUM THRU 71	.153+07	.200+01	.435+04	.400+02	.320+02	.142+04	.100+01	.830+01	
DECAY THRU 71	.153+07	.200+01	.188+04	.260+02	.183-03	.949+03	.995-01	.830+01	
216-T25									
1954	.300+07	.100+01	.180+05	.400+01	.100+03	.890+04	<.100+00	.910-00	
SUM THRU 71	.300+07	.100+01	.180+05	.400+01	.100+03	.890+04	<.100+00	.910-00	
DECAY THRU 71	.300+07	.100+01	.114+05	.260+01	.571-03	.595+04	<.995-02	.910-00	
216-T26									
1955	.800+07	.460+02	.224+05	.653+03	.229+04	.160+03	.600-00	.134+03	
1956	.400+07	.130+02	.661+04	.170+02	.315+03	.100+02	.400-00	.160+02	
SUM THRU 71	.120+08	.590+02	.290+05	.670+03	.260+04	.170+03	.100+01	.150+03	
DECAY THRU 71	.120+08	.590+02	.115+04	.447+03	.332-01	.116+03	.120+00	.150+03	
216-T27									
1965	.719+07	.130+02	.360+04	.140+03	.150+04	.100+03	.100+01	.726+01	
SUM THRU 71	.719+07	.130+02	.360+04	.140+03	.150+04	.100+03	.100+01	.726+01	
DECAY THRU 71	.719+07	.130+02	.441+03	.119+03	.169+02	.861+02	.424-00	.726+01	
216-T28									
1960	.895+06	.400+01	.440+02		.100+01			.160+02	
1961	.219+07	.500+01	.203+03		.300+01	.100+01		.290+02	
1962	.265+07	.100+02	.219+04	.800+01	.380+02	.130+02		.410+02	
1963	.620+07	.300+01	.693+04	.240+02	.118+03	.420+02		.170+02	
1964	.165+08	.170+02	.187+05	.640+02	.320+03	.112+03	.200+01	.250+03	
1965	.132+08	.300+02	.303+05	.104+03	.518+03	.181+03	.300+01	.300+02	
1966	.630+06	.100+01	.155+03		.200+01	.100+01		.800+01	
SUM THRU 71	.423+08	.700+02	.585+05	.200+03	.100+04	.350+03	.500+01	.391+03	
DECAY THRU 71	.423+08	.700+02	.179+04	.168+03	.810+01	.297+03	.202+01	.391+03	
216-T30									
1953	.190+05	.100+01	.500+03	.400+02	.500+02	.400+02	.100+01	.454+01	
SUM THRU 71	.190+05	.100+01	.500+03	.400+02	.500+02	.400+02	.100+01	.454+01	
DECAY THRU 71	.190+05	.100+01	.101+03	.254+02	.143-03	.261+02	.872-01	.454+01	

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TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-T32									
1946	.600+06	.700+02	.400+02	.100+01	.100+01	.100+01		.500-00	
1947	.400+07	.435+03	.270+03	.500+01	.900+01	.400+01	.200-00	.300+01	
1948	.500+07	.555+03	.270+03	.600+01	.900+01	.500+01	.200-00	.400+01	
1949	.510+07	.560+03	.270+03	.500+01	.900+01	.400+01	.200-00	.400+01	
1950	.550+07	.605+03	.270+03	.600+01	.900+01	.500+01	.200-00	.400+01	
1951	.720+07	.800+03	.270+03	.500+01	.900+01	.400+01	.200-00	.600+01	
1952	.160+07	.175+03	.110+03	.200+01	.400+01	.200+01		.120+01	
SUM THRU 71	.290+08	.320+04	.150+04	.300+02	.500+02	.250+02	.100+01	.227+02	
DECAY THRU 71	.290+08	.320+04	.640+02	.173+02	.184-04	.149+02	.524-01	.227+02	
216-T33									
1963	.190+07	.500+01	.500+02	.500-00	.100+02	.500-00	.100+01	.454+01	
SUM THRU 71	.190+07	.500+01	.500+02	.500-00	.100+02	.500-00	.100+01	.454+01	
DECAY THRU 71	.190+07	.500+01	.226+01	.406-00	.284-01	.411-00	.326-00	.454+01	
216-T34									
1966	.140+08	.105+03	.250+05	.320+03	.100+03	.270+03	.500+01	.318+01	
1967	.330+07	.200+01	.124+04	.300+01	.500+01	.500+01	.233+01	.940-00	
SUM THRU 71	.173+08	.107+03	.262+05	.323+03	.105+03	.275+03	.733+01	.412+01	
DECAY THRU 71	.173+08	.107+03	.172+04	.282+03	.247+01	.242+03	.371+01	.412+01	
216-T35									
1967	.560+07	.659+02	.846+03	.105+02	.129+03	.195+02	.338+01	.489+02	
1968	.114+06	.300-00	.830+02	<.950+01	.200+01	.400-00	.300-01	.600-02	
SUM THRU 71	.571+07	.662+02	.929+03	<.200+02	.131+03	.199+02	.341+01	.489+02	
DECAY THRU 71	.571+07	.662+02	.110+03	<.181+02	.597+01	.180+02	.189+01	.489+02	
216-T36									
1967	.371+06	.245+01	.701+03	.761+01	.442+02	.442+01	.200-00	.689-00	
1968	.101+06	.300-01	.760+01	.100+00	.170+01	.190+01	<.314-00	.363-00	
1969	.507+05		.228+01		.200-00	.100+00		.127-00	
SUM THRU 71	.522+06	.248+01	.711+03	.771+01	.461+02	.642+01	<.514-00	.118+01	
DECAY THRU 71	.522+06	.248+01	.539+02	.690+01	.217+01	.583+01	<.308-00	.118+01	

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TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-U1&2									
1951	.140+06							.122+03	
1952	.235+07	.250+01	.130+02		.500+01			.881+03	
1953	.500+07	.268+02	.560+03	.200+01	.228+03	.600+01		.157+04	
1954	.421+07	.570+01	.230+03	.100+01	.960+02	.200+01	<.100+00	.483+03	
1955	.630+06	.300+01	.159+03	.100+01	.660+02	.100+01		.517+03	
1956	.600+04							.590+02	
1958	.727+06	.140+01	.470+02		.200+02			.159+03	
1959	.121+07	.140+01	.640+02		.270+02			.223+02	
1960	.443+06	.120+01	.127+03	.100+01	.530+02	.100+01		.193+02	
1966	.530+05							.182+03	
1967	.113+07	.600-00	.170+02		.500+01			.286+02	
SUM THRU 71	.159+08	.426+02	.122+04	.500+01	.500+03	.100+02	<.100+00	.404+04	
DECAY THRU 71	.159+08	.426+02	.206+02	.334+01	.252-00	.671+01	<.995-02	.404+04	
216-U3									
1954	.648+06	<.500-01	.450+01	<.100+00	.100+01	.100+01	<.100+00	.181+02	
1955	.143+06	<.500-01	.500-00					.220-01	
SUM THRU 71	.791+06	<.100+00	.500+01	<.100+00	.100+01	.100+01	<.100+00	.181+02	
DECAY THRU 71	.791+06	<.100+00	.142+01	<.650-01	.571-05	.668-00	<.995-02	.181+02	
216-U4A									
1955			.340-00						
1956	.400+02		.340-00						
1957			.340-00						
1958	.140+03		.340-00	<.100-01	<.300-01	<.400-02			
1959	.330+03		<.340-01	.100-02		.400-02			
1960	.610+03		.170+01	.170-01	<.470-00	.350-00			
1961	.880+03								
1965	.730+05								
1966	.730+05								
1967	.730+05	<.800-02	.340-00	<.300-02		.100-01			
1968	.127+06	<.100-02	.180+01	<.100-02	<.530-00	<.100-02			
1969	.129+06		.680-01	<.100-02	.200-01				
1970	.680+05								
SUM THRU 71	.545+06	<.900-02	.530+01	<.330-01	<.105+01	.369-00			
DECAY THRU 71	.545+06	<.900-02	.768-00	<.253-01	<.511-016	.284-00			

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-U4B									
1960	.500+04	.100-01	.275-00						
1961	.500+04	.100-01	.275-00						
1962			.275-00						
1963			.275-00						
1964			.275-00						
1965	.500+04	.100-01	.275-00						
1966	.500+04	.100-01	.275-00	.300-02		.133-00			
1967	.900+04	.140-01	.250-02			.100-02			
1968	.400+04		.500-00			.200-00			
SUM THRU 71	.330+05	.540-01	.243+01	.300-02		.334-00			
DECAY THRU 71	.330+05	.540-01	.611-00	.262-02		.303-00			
216-U5									
1952	.225+07	<.500-01	.500-00	<.500-01	<.500-01	<.500-01	<.500-01	.363+03	
SUM THRU 71	.225+07	<.500-01	.500-00	<.500-01	<.500-01	<.500-01	<.500-01	.363+03	
DECAY THRU 71	.225+07	<.500-01	.127-00	<.310-01	<.719-07	<.319-01	<.382-02	.363+03	
216-U6									
1952	.225+07	<.500-01	.500-00	<.500-01	<.500-01	<.500-01	<.500-01	.363+03	
SUM THRU 71	.225+07	<.500-01	.500-00	<.500-01	<.500-01	<.500-01	<.500-01	.363+03	
DECAY THRU 71	.225+07	<.500-01	.127-00	<.310-01	<.719-07	<.319-01	<.382-02	.363+03	
216-U8									
1952	.240+08	.150+02	.190+02					.270+04	
1953	.850+08	.154+03	.300+02					.107+05	
1954	.720+08	.210+02	.700+02					.132+04	
1955	.735+08	.142+03	.560+03		.560+02			.592+04	
1956	.820+08	.360+02	.181+04	<.100+00	.164+03	<.100+00	<.100+00	.302+04	
1957	.200+08	.200+01	.210+03		.100+02			.700+02	
1958	.900+07							.110+02	
1959	.100+08		.600+01					.152+03	
1960	.300+07							.160+03	
SUM T RU 71	.378+09	.370+03	.270+04	<.100+00	.230+03	<.100+00	<.100+00	.240+05	
DECAY THRU 71	.378+09	.370+03	.407+01	<.683-01	.482-02	<.700-01	<.130-01	.240+05	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-U_{10}									
1944	.162+09								
1945	.967+09	.100+00	.430-01					.800+01	
1946	.967+09	.100+00	.430-01					.800+01	
1947	.967+09	.100+00	.430-01					.800+01	
1948	.967+09	.100+00	.430-01					.800+01	
1949	.124+10	.300-00	.215-00					.100+02	
1950	.152+10	.300-00	.215-00					.120+02	
1951	.152+10	.300-00	.215-00					.130+02	
1952	.404+10	.300-00	.172-00					.330+02	
1953	.115+11	.390+01	.181+02		.100+01			.950+02	
1954	.113+11	.660+01	.808+03	.500+01	.830+02	.300+01		.930+02	
1955	.117+11	.850+01	.985+03	.600+01	.101+03	.400+01		.970+02	
1956	.119+11	.160+02	.688+03	.400+01	.710+02	.300+01		.980+02	
1957	.112+11	.412+02	.645+02		.700+01			.920+02	
1958	.107+11	.235+02	.267+02		.300+01			.880+02	
1959	.198+10	.372+02	.172+02		.200+01			.160+02	
1960	.358+10	.660+01	.271+01					.290+02	
1961	.261+10		.838+02		.900+01			.220+02	
1962	.224+10		.357+02		.400+01			.194+03	
1963	.272+10		.774+02		.800+01			.148+03	
1964	.250+10		.228+02		.200+01			.148+03	
1965	.272+10		.490+02		.500+01			.380+02	
1966	.241+10		.451+02		.400+01			.590+02	
1967	.399+10	.786+04	.434+02	<.710+01	<.800+01	<.450+01	<.400+01	.478+02	
1968	.329+10	.204+02	.314+02	<.350-00	<.100+01	.700-00	<.350-00	.160+02	
1969	.298+10	<.970+01	.263+02	<.150-00		<.500-00		.240+02	
1970	.252+10	<.380+01	.946-00					.100+02	
1971	.271+10	<.349+02	<.227+02					.134+02	
SUM T RU 71	.117+12	.807+04	.305+04	<.226+02	.309+03	<.157+02	<.435+01	.143+04	
DECAY THRU 71	.117+12	.807+04	.845+02	<.168+02	<.645-00	<.120+02	<.243+01	.143+04	

TABLE 2

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)
216-U_{12}				
1960	.900+07	.100+00	.440+01	
1961	.144+08	.100+00	.563+02	
1962	.141+08	.100+00	.500+01	
1963	.142+08	.100+00	.111+02	
1964	.174+08	.100+00	.300+01	
1965	.140+08	.100+00	.773+03	.104+
1966	.107+08	.100+00	.100+00	
1967	.100+08	.100+00	.400-01	
1968	.890+07	.100+00	.200-01	
1969	.720+07	.100+00	.300-01	
1970	.310+07		.100-01	
1971	.600+07		.600-01	
SUM THRU 71	.129+09	.100+01	.853+03	.104+
DECAY THRU 71	.129+09	.100+01	.187+03	.886+
216-U13				
1952	.237+04	<.200-01	.100+02	
1953	.284+04	<.250-01	.130+02	
1954	.284+04	<.250-01	.120+02	
1955	.284+04	<.250-01	.130+02	<.100+
1956	.473+03	<.500-02	.200+01	
SUM THRU 71	.114+05	<.100+00	.500+02	<.100+
DECAY THRU 71	.114+05	<.100+00	.309-00	<.667-
216-U15				
1957	.681+05	<.100+00	.700+01	.100+
SUM THRU 71	.681+05	<.100+00	.700+01	.100+
DECAY THRU 71	.681+05	<.100+00	.302-00	.700-

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)
216-Z1&2								
1949	.555+07	.902+03	.800+01		.200+01			.120-
1950	.112+08	.180+04	.170+02	<.100+00	.300+01	<.100+00	<.100+00	.230-
1951	.112+08	.180+04	.160+02		.300+01			.230-
1952	.555+07	.902+03	.900+01		.200+01			.120-
1966	.100+06	.101+03						
1967	.400+04	.500+02						
1968	.380+05	.990+03						.805+
1969	.600+05	.476+03						.307-
SUM T RU 71	.337+08	.703+04	.500+02	<.100+00	.100+02	<.100+00	<.100+00	.809+
DECAY THRU 71	.337+08	.703+04	.258-00	<.590-01	.649-05	<.610-01	<.587-02	.809+
216-Z1A								
1949	.100+06	.500+01						<.500-
1950	.100+06	.500+01						<.500-
1951	.100+06	.500+01						<.500-
1952	.100+06	.500+01						<.500-
1953	.100+06	.500+01						<.500-
1954	.100+06	.500+01						<.500-
1955	.100+06	.500+01	.280+01		.100+01			<.500-
1956	.100+06	.500+01	.420+01		.200+01			<.500-
1957	.100+06	.500+01	.840+01		.300+01			<.500-
1958	.100+06	.500+01	.112+02	<.100+00	.400+01	<.100+00	<.100+00	<.500-
1959			.140+01					
SUM THRU 71	.100+07	.500+02	.280+02	<.100+00	.100+02	<.100+00	<.100+00	<.500-
DECAY THRU 71	.100+07	.500+02	.322-00	<.718-01	.554-03	<.733-01	<.169-01	<.500-
216-Z1AA								
1964	.440+06	.143+05	.101+03	<.100+00	.480+02	<.100+00	<.100+00	<.200-
1965	.920+06	.110+05	.770+02		.370+02			<.200-
1966	.540+06	.464+04	.322+02		.150+02			<.100-
SUM THRU 71	.190+07	.300+05	.210+03	<.100+00	.100+03	<.100+00	<.100+00	<.500-
DECAY THRU 71	.190+07	.300+05	.259+01	<.832-01	.103+01	<.841-01	<.372-01	<.500-

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-21AB									
1966	.960+06	.120+05	.105+03	<.100+00	.500+02	<.100+00	<.100+00	<.300-01	
1967	.940+06	.460+04						<.200-01	
SUM THRU 71	.190+07	.166+05	.105+03	<.100+00	.500+02	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	.190+07	.166+05	.276+01	<.874-01	.113+01	<.881-01	<.484-01	.500-01	
216-21AC									
1967	.253+06	.239+04							
1968	.100+07	.760+04							
1969	.155+06	.816+03							
SUM THRU 71	.141+07	.108+05							
DECAY THRU 71	.141+07	.108+05							
216-23									
1952	.990+07	.460+02						<.500-02	
1953	.141+08	.980+02	.210+01		.100+01			<.500-02	
1954	.144+08	.100+03	.210+01		.100+01			<.500-02	
1955	.332+08	.440+03	.840+01		.300+01			<.500-02	
1956	.291+08	.740+03	.126+02		.500+01			<.500-02	
1957	.340+08	.177+04	.336+02		.120+02			<.100-01	
1958	.350+08	.227+04	.420+02	<.100+00	.160+02	<.100+00	<.100+00	<.100-01	
1959	.870+07	.239+03	.420+01		.200+01			<.500-02	
SUM THRU 71	.178+09	.570+04	.105+03	<.100+00	.400+02	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	.178+09	.570+04	.363-00	<.718-01	.250-02	<.733-01	<.169-01	<.500-01	
216-24									
1945	<.110+05	.200+01	.260+01	<.100+00	.100+01	<.100+00	<.100+00	<.500-01	
SUM THRU 71	<.110+05	.200+01	.260+01	<.100+00	.100+01	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	<.110+05	.200+01	.212-00	<.521-01	.115-07	<.543-01	<.304-02	<.500-01	
216-25									
1945	.103+08	.113+03	.820+02	.200+01	.330+02	.300+01	.200-00	<.200-01	
1946	.177+08	.195+03	.141+03	.300+01	.570+02	.600+01	.300-00	<.200-01	
1947	.300+07	.320+02	.270+02		.100+02	.100+01		<.100-01	
SUM THRU 71	.310+08	.340+03	.250+03	.500+01	.100+03	.100+02	.500-00	<.500-01	
DECAY THRU 71	.310+08	.340+03	.159+02	.265+01	.214-05	.554+01	.165-01	<.500-01	

TABLE 2 (CONTINUED)

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-26									
1945	<.980+05	.500+01	.260+01	<.100+00	.100+01	<.100+00	<.100+00	<.500-01	
SUM THRU 71	<.980+05	.500+01	.260+01	<.100+00	.100+01	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	<.980+05	.500+01	.212-00	<.521-01	.115-07	<.543-01	<.304-02	<.500-01	
216-27									
1947	.120+08	.213+03						.200-00	
1948	.130+08	.229+03						.200-00	
1949	.130+08	.229+03						.200-00	
1950	.130+08	.229+03						.200-00	
1951	.130+08	.230+03						.200-00	
1952	.720+07	.167+03						.200-00	
1953	.900+06	.294+03						.200-00	
1954	.300+06	.150+02						.200-00	
1955	.530+06	.373+03						.200-00	
1956	.630+06	.156+02						.200-00	
1957	.400+05	.180+01						.200-00	
1965	.190+07	.200-00	.278+03	.410+02	.110+02	.400+02		.200-00	
1966	.440+07	.340+01	.222+04	.329+03	.890+02	.320+03	.100+01	.210+01	
SUM THRU 71	.799+08	.200+04	.250+04	.370+03	.100+03	.360+03	.100+01	.450+01	
DECAY THRU 71	.799+08	.200+04	.128+04	.322+03	.213+01	.316+03	.484-00	.450+01	
216-28									
1957	.960+03	.410+01							
1958	.383+04	.205+02							
1959	.180+04	.810+01							
1960	.220+04	.122+02							
1961	.800+03	.350+01							
SUM THRU 71	.959+04	.484+02							
DECAY THRU 71	.959+04	.484+02							

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	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-Z9									
1955	.260+06	.261+04							
1956	.460+06	.884+04	.320+01		.100+01				
1957	.540+06	.203+05	.640+01		.300+01			<.100-01	
1958	.700+06	.275+05	.960+01		.400+01			<.100-01	
1959	.560+06	.209+05	.640+01		.300+01			<.100-01	
1960	.620+06	.222+05	.640+01		.300+01			<.100-01	
1961	.770+06	.343+05	.112+02	<.100+00	.400+01	<.100+00	<.100+00	<.100-01	
1962	.180+06	.134+05	.480+01		.200+01				
SUM THRU 71	.409+07	.150+06	.480+02	<.100+00	.200+02	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	.409+07	.150+06	.379-00	<.773-01	.784-02	<.785-01	<.250-01	<.500-01	
216-Z10									
1945	.100+07	.500+02							
SUM THRU 71	.100+07	.500+02							
DECAY THRU 71	.100+07	.500+02							
216-Z12									
1959	.424+08	.128+04	.150+02		.600+01			<.100-01	
1960	.448+08	.251+04	.285+02		.130+02			<.100-01	
1961	.423+08	.359+04	.405+02		.180+02			<.100-01	
1962	.255+08	.286+04	.315+02		.140+02			<.100-01	
1963	.231+08	.384+04	.435+02	<.100+00	.190+02	<.100+00	<.100+00	<.100-01	
1964	.192+08	.320+04	.360+02		.160+02				
1965	.175+08	.186+04	.210+02		.100+02				
1966	.153+08	.766+03	.900+01		.400+01				
1967	.119+08	.104+04							
1968	.587+07	.680+03							
1969	.643+07	.517+03							
1970	.345+07	.650+03							
1971	.819+07	.107+04							
SUM THRU 71	.266+09	.239+05	.225+03	<.100+00	.100+03	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	.266+09	.239+05	.135+01	<.811-01	.386-00	<.822-01	<.326-01	<.500-01	

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	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-Z16									
1968			.201-00						
1969			.143-00						
1970			<.780-01						
1971			.165-00						
1968	.154+08	.120+01							
1969	.214+08	.518+01							
1970	.193+08	<.310+01							
1971	.187+08	.638+01							
SUM THRU 71	.747+08	<.159+02	<.587-00						
DECAY THRU 71	.747+08	<.159+02	<.144-00						
216-Z17									
1967	.307+08	.492+02	.800-00						
1968	.610+07	.100+01	.240-00						
SUM THRU 71	.368+08	.502+02	.104+01						
DECAY THRU 71	.368+08	.502+02	.489-01						
216-Z18									
1969	.572+06	.427+04							
1970	.799+06	.500+04							
1971	.884+06	.553+04							
SUM THRU 71	.225+07	.148+05							
DECAY THRU 71	.225+07	.148+05							
200-W TOTAL	.222+12	.283+06	.127+07	.974+04	.177+05	.238+05	<.142+03	.429+05	
200-W DECAY TOTAL	.222+12	.283+06	.495+05	.688+04	.182+03	.164+05	<.436+02	.429+05	

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* FR5,* LCAY1,DCAY1
COMPILED BY LEVEL 23.8  CSCX FORTRAN V ON 09 APR 73 AT 10:36

MAIN PROGRAM

STORAGE USED (BLOCK, NAME, LENGTH)

      0001   *CODE   002400
      0000   *DATA   107546
      0002   *BLANK  001625


EXTERNAL REFERENCES (BLOCK, NAME)

      0003   WRSUB
      0004   NRDUS
      0005   NIO1$
      0006   NIO2$
      0007   ALOG
      0010   NWDUS
      0011   EXP
      0012   NSTOP$


STORAGE ASSIGNMENT FOR VARIABLES (BLOCK, TYPE, RELATIVE LOCATION, NAME)

 0000    107352 10F        0001    002155 1012G      0001    002220 1037G      0001    002251 1060G      0001    002260 1064G
 0001    002345 1115G      0001    002363 1127G      0001    000011 151G       0001    000017 155G       0001    000104 20L
 0000    107357 200F       0000    107340 210F       0000    107373 220F       0001    000442 241L       0001    000513 242L
 0001    000431 243L       0001    000527 244L       0001    000434 245L       0001    000142 25L        0000    107402 30F
 0000    107333 300F       0001    001765 33L        0001    002005 34L        0000    107407 35F        0001    000416 360G
 0001    000041 380L       0001    002211 389L       0001    002216 390L       0001    000243 40L        0001    002014 401L
 0000    107331 440F       0001    001000 466G       0001    000362 50L        0000    107415 500F       0001    001455 501L
 0001    001057 504G       0000    107435 5050F      0000    107445 5060F      0001    002327 5065L      0001    002352 5070L
 0000    107450 5090F      0000    107463 5095F      0000    107472 5098F      0001    001145 522G       0001    000271 60L
 0000    107365 600F       0001    001433 605G       0001    000634 610L       0001    000661 615L       0001    000670 620L
 0001    000713 666L       0001    000751 668L       0001    001711 673G       0001    001102 700L       0001    002371 7000L
 0001    002367 7010L      0001    001741 706G       0001    001214 709L       0001    001317 710L       0001    001327 720L
 0001    002076 765G       0001    000752 80L        0000    107330 9000F      0001    000032 9020L      0001    002171 9040L
 0000    107426 9050F      0001    002200 9060L      0001    002211 9070L      0001    002101 9090L      0000    107476 9999F
 0000 R  107275 ALX        0000 R  026437 BF         0000 R  107305 CONC       0000 R  107314 DCTIM      0000 R  107277 DECS
 0000 R  044117 DFSUM      0000 R  057677 DPS70      0000 R  025273 F          0000 R  107300 FACT       0000 R  107276 FACTT
 0000 R  107301 FN         0000 R  025130 H          0000 I  107273 I          0000 I  107316 IB         0000 I  026127 IBSIT
 0000 I  107274 IC         0000 I  027353 ICSIT      0000 I  107307 IEW        0000 I  107320 IG         0000 I  027341 IGNSIT
 0000 I  026747 INDAD      0000 I  107237 INDW       0002 I  000000 IPGBUF     0000 I  107303 ISITE      0000 I  107317 ISK
 0000 I  107304 ISO        0000 I  107270 ISWIT      0000 I  027005 IW         0000 I  107312 IYEAR      0000 I  107265 IS
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0000 I 107322 J          0000 I 107327 JF         0000 I 025601 JS         0000 I 030027 JSHD       0000 I 107302 JSIT
0000 I 107272 K          0002 I 001607 KSITC      0002 I 001616 KSITC1     0000 I 107310 KSITE      0000 I 026111 LDISC
0002 I 001604 LKT        0000 I 017550 LTSAV      0000 I 107267 LTSIGN     0000 I 107315 LTS2       0000 I 107325 MCOMP1
0000 I 107326 MCOMP2     0000 I 107266 MDATE      0000 I 025436 N          0000 I 107313 NEW        0002 I 001606 NPG
0002 I 001605 NTB        0000 I 107324 NUMBER     0002 R 000702 PGBUF      0000 R 017500 RISO       0000 R 107323 RUL10
0000 R 107321 RUN        0000 R 107271 SBSM       0000 R 020060 SUMLT      0000 R 030337 SUPLT      0000 R 073457 SUP70
0000 R 107311 SYEAR      0000 R 000000 THRDT      0000 R 027245 TOTDC      0000 R 027151 TOTDP      0000 R 107306 YEAR
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      INCLUDE COMA,LIST
C ***********************************************************
C **** THE FOLLOWING CALCULATES THE DECAY OF THE ISOTOPES
C ***********************************************************
      COMMON IPGBUF(10,45),PGBUF(10,45),LKT,NTB,NPG                    COMA    *INCLUDED*
      COMMON KSITC(7),KSITC1(7)                                        COMA    *INCLUDED*
      END                                                              COMA    *INCLUDED*
      DIMENSION THRDT(40,200),RISO(40),LTSAV(200),SUMLT(13,200)
      DIMENSION H(99),F(99),N(99),JS(200)
      DIMENSION LDISC(14)
      DIMENSION IBSIT(200),BF(200)
      DIMENSION INDAD(30),IW(100)
      DIMENSION TOTDP(2,30),TOTDC(2,30)
      DIMENSION IGNSIT(10)
      DIMENSION ICSIT(3,100),JSHD(200)
      DIMENSION SUPLT(30,200),DPSUM(30,200)
      DIMENSION DPS70(30,200),SUP70(30,200)
      DIMENSION INDW(22)
      DATA INDW/3,4,5,6,3*0,7,4*0,8,3*0,9,2,3*0,10/
      DATA IPGBUF/ 450 * '      '/
      DATA INDAD/4*0,3*29,0,8*29,3*0,29,2*30,2*17,0,3*30,2*0/
      DATA IGNSIT/'N1    ','N2    ','N3    ','N4    ','N5    ',
     *'N6    ','N7    ','T3    ','B5    ','T20   '/
      DATA MDATE/1972/
      DATA LTSAV/200*6H      /
      DATA SUMLT/2600*0.0/,LTSIGN/' '/
      DATA KSITC /'SUMA25','SUMB3 ','SUMB63','SUMU10','C4CT4 ',
     * 'B22E  ','B22W  '/
      DATA KSITC1 /'A25   ','B3    ','B63   ','U10   ','T4    ',
     * 'B2-2L ','B2-2W '/
      ISWIT = 0
      NTB = 1
      LKT = 1
      SBSM = 0.0
      DO 9010 K=1,100
      READ (5,9000) (ICSIT(I,K),I=1,3)
 9000 FORMAT (3A6)
      IF (ICSIT(1,K).EQ.'999   ') GO TO 9020
```

```
C = 22

T(I),BF(I)

) GO TO 380

2) = ',E12.5,//)


',8X,'FACTOR',7X,'HALFLIFE',8X,'ISOTOPE')
**********************************
ECAY OF ISOTOPES
BER
F ISOTOPE I
 (DAYS) OF ISOTOPE I
ISOTOPE I
**********************************
),H(I),N(I)
3,5X,E8.2,21X,A6)
O 25
(I),H(I),N(I)
,E9.4,5X,E8.3,10X,A6)


(4)-F(5)-F(6)-F(8)-F(10)
T
ACTOR TOTAL = ',E12.5)
PLIER OF INDIVIDUAL ISOTOPE FACTORS  **********


ACTOR MULTIPLIER = ',E12.5)

**********************************
 THE ISOTOPE
UMBER
OR <
F THE ISOTOPE DEPOSITED IN ISITE
T CONC WAS DEPOSITED IN ISITE
**********************************
EAD (5,30) ISITE,ISO,LTSIGN,CONC,YEAR
EAD (5,35) ISITE,IEW,ISO,LTSIGN,CONC,YEAR
,I2,A1,E10.0,F4.0)
A1,6X,I2,A1,E10.0,F4.0)
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00275    85*          IPGBUF(J,1) = ISITE
00276    86*          LKT = LKT + 1
00277    87*          IF (ISO.EQ.19) ISO = 2
00301    88*          KSITE = ISITE
00302    89*       40 SYEAR = YEAR
00303    90*          IYEAR = SYEAR
00304    91*          IF (ISWIT.EQ.1) NEW = IEW
00306    92*          DCTIM=(MDATE-SYEAR-.5)*365.256
00307    93*          GO TO 50
00310    94*       60 CONTINUE
00311    95*          IF (ISWIT.EQ.0) READ (5,30) ISITE,ISO,LTSIGN,CONC,YEAR
00321    96*          IF (ISWIT.EQ.1) READ (5,35) ISITE,IEW,ISO,LTSIGN,CONC,YEAR
00332    97*          IF (ISO.EQ.18) ISO=28
00334    98*          IF (ISO.EQ.19) ISO = 2
00334    99*    C ***** IF ALL THE ISOTOPE CONC'S HAVE BEEN READ IN FOR THAT YEAR
00334   100*    C        FINISH DECAY TO FIND BETA  ******************
00336   101*          IF (YEAR.NE.SYEAR.OR.ISITE.NE.KSITE) GO TO 80
00340   102*          IF  (ISWIT.EQ.0) GO TO 50
00342   103*          IF (NEW.NE.IEW) GO TO 80
00344   104*       50 IF (ISO.EQ.0) ISO = 18
00346   105*          IF (ISO.EQ.17) CONC = CONC/1000.0
00350   106*          IF (ISO.EQ.2) LTS2=LTSIGN
00352   107*          IF (ISWIT.EQ.1) GO TO 241
00354   108*          IF (ISO.NE.2) GO TO 241
00356   109*          IB=0
00357   110*          DO 240 IB = 1,200
00362   111*          IF (IBSIT(IB).EQ.'999   ') GO TO 243
00364   112*          IF (ISITE.EQ.IBSIT(IB)) GO TO 245
00366   113*      240 CONTINUE
00370   114*      243 BF(IB) = 1.0
00371   115*      245 CONC=CONC*BF(IB)
00372   116*          RISO(ISO)=CONC
00373   117*      241 CONTINUE
00374   118*          IF (ISWIT.EQ.1) RISO(ISO) = CONC
00376   119*          DPSUM(ISO,JSIT)=DPSUM(ISO,JSIT)+CONC
00377   120*          IF (LTSIGN.EQ.'<') SUPLT(ISO,JSIT)=SUPLT(ISO,JSIT)+CONC
00401   121*          IF (YEAR.LT.1970.) GO TO 242
00403   122*          DPS70(ISO,JSIT) = DPS70(ISO,JSIT) + CONC
00404   123*          IF (LTSIGN.EQ.'<     ') SUP70(ISO,JSIT) = SUP70(ISO,JSIT) + CONC
00406   124*      242 CONTINUE
00407   125*          ISK = INDW(ISO)
00410   126*          IF (ISK.EQ.0) GO TO 244
00412   127*          PGBUF(ISK,LKT) = CONC
00413   128*          IPGBUF(ISK,LKT) = LTSIGN
00414   129*      244 CONTINUE
00415   130*          IF (ISO.LE.2.OR.ISO.GT.16.AND.ISO.NE.20) GO TO 60
00417   131*          IF (ISWIT.EQ.0) RISO (ISO) = CONC
00421   132*          IF (ISO.EQ.20) GO TO 666
00423   133*          CONC=CONC*(EXP(ALX*DCTIM/H(ISO)))
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00424   134*          IF (ISO.NE.3.AND.ISO.NE.4) GO TO 610
00426   135*          THRDT(ISO+2,JSIT)=THRDT(ISO+2,JSIT)+CONC
00427   136*          DECS=DECS+2.0*CONC
00430   137*          SBSM=SBSM+RISO(ISO)*2.0
00431   138*          GO TO 620
00432   139*      610 CONTINUE
00433   140*          IF (ISO.NE.8) GO TO 615
00433   141*    C ***** CALCULATE CONC. OF BA-137M  ******************
00435   142*          THRDT(ISO+2,JSIT)=THRDT(ISO+2,JSIT)+.919861*CONC
00436   143*          DECS=DECS+1.919861*CONC
00437   144*          SBSM=SBSM+RISO(ISO)*1.919861
00440   145*          GO TO 620
00441   146*      615 SBSM=SBSM+RISO(ISO)
00442   147*          DECS=DECS+CONC
00443   148*      620 CONTINUE
00444   149*          IF (LTSIGN.EQ.'<') SUMLT(ISO,JSIT)=SUMLT(ISO,JSIT)+CONC
00446   150*          THRDT(ISO,JSIT)=THRDT(ISO,JSIT)+CONC
00447   151*          GO TO 668
00450   152*      666 CONC=CONC*(EXP(ALX*DCTIM/H(41)))
00451   153*          THRDT(1,JSIT)=THRDT(1,JSIT)+CONC
00452   154*          DECS=DECS+CONC
00453   155*          SBSM=SBSM+RISO(20)
00454   156*          IF (LTSIGN.EQ.'<      ') SUMLT(1,JSIT)=SUMLT(1,JSIT)+CONC
00456   157*      668 CONTINUE
00457   158*          GO TO 60
00457   159*    C ***** FIND INDIVIDUAL AMTS OF ISOTOPES THEN DECAY EACH **************
00460   160*       80 CONTINUE
00461   161*          PGBUF(1,LKT) = SYEAR
00462   162*          IPGBUF(1,LKT) = IYEAR
00463   163*          IF (ISWIT.EQ.1) GO TO 700
00465   164*          DO 100 IG = 1,10
00470   165*          IF (KSITE.EQ.IGNSIT(IG)) GO TO 700
00472   166*      100 CONTINUE
00474   167*          RISO(2)=RISO(2)-SBSM
00475   168*          SBSM = 0.0
00476   169*          RISO(7)=(RISO(2)*FM*F(7))*(EXP(ALX*DCTIM/H(7)))
00477   170*          RISO(9)=(RISO(2)*FM*F(9))*(EXP(ALX*DCTIM/H(9)))
00500   171*          THRDT(7,JSIT)=THRDT(7,JSIT)+RISO(7)
00501   172*          THRDT(9,JSIT)=THRDT(9,JSIT)+RISO(9)
00502   173*          RUN=RISO(7)+RISO(9)
00503   174*          DO 90 J=11,40
00506   175*          RISO(J)=RISO(2)*FM*F(J)
00507   176*          RISO(J)=RISO(J)*(EXP(ALX*DCTIM/H(J)))
00510   177*          THRDT(J,JSIT)=THRDT(J,JSIT)+RISO(J)
00511   178*          RUN=RUN+RISO(J)
00512   179*       90 CONTINUE
00514   180*          GO TO 720
00515   181*      700 FM=1.0/FACTT
00516   182*          RUN=0.0
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00517   183*        RISO(2)=RISO(2)-SBSM
00520   184*        SBSM = 0.0
00521   185*        DO 710 J=3,40
00524   186*        RISO(J)=RISO(2)*FM*F(J)
00525   187*        IF (J.NE.3.AND.J.NE.4.AND.J.NE.8) GO TO 709
00527   188*        IF (LTS2.EQ.'<      ') SUPLT(J,JSIT) = SUPLT(J,JSIT) + RISO(J)
00531   189*        DPSUM(J,JSIT) = DPSUM(J,JSIT) + RISO(J)
00532   190*        IF (SYEAR.GE.1970.) DPS70(J,JSIT) = DPS70(J,JSIT) + RISO(J)
00534   191*    709 CONTINUE
00535   192*        IF (J.EQ.3) IPGBUF(5,LKT) = LTS2
00537   193*        IF (J.EQ.4) IPGBUF(6,LKT) = LTS2
00541   194*        IF (J.EQ.8) IPGBUF(7,LKT) = LTS2
00543   195*        IF (J.EQ.3) PGBUF(5,LKT) = RISO(3)
00545   196*        IF (J.EQ.4) PGBUF(6,LKT) = RISO(4)
00547   197*        IF (J.EQ.8) PGBUF(7,LKT) = RISO(8)
00551   198*        RISO(J)=RISO(J)*(EXP(ALX*DCTIM/H(J)))
00552   199*        THRDT(J,JSIT)=THRDT(J,JSIT)+RISO(J)
00553   200*        RUN=RUN+RISO(J)
00554   201*        IF (LTS2.EQ.'       ') GO TO 710
00556   202*        IF (J.EQ.3.OR.J.EQ.4.OR.J.EQ.8) SUMLT(J,JSIT)=SUMLT(J,JSIT)+
00556   203*       * RISO(J)
00560   204*    710 CONTINUE
00562   205*        FM=1.0/FACT
00563   206*    720 IF (RUN.LT.0.0) WRITE (6,500) KSITE,SYEAR
00570   207*    500 FORMAT (T70,'** BETA < 0 FOR ',A6,' IN ',F6.0,' **')
00571   208*        LKT = LKT +1
00572   209*        IF (LKT.GE.45) CALL WRSUB
00574   210*        RISO(2)=RUN+DECS
00575   211*        DECS=0.0
00576   212*        THRDT(2,JSIT)=THRDT(2,JSIT)+RISO(2)
00577   213*        IF (ISITE.EQ.KSITE) GO TO 390
00601   214*        LKT = LKT +1
00602   215*        IF (LKT.GE.45) CALL WRSUB
00604   216*        DO 501 I=1,22
00607   217*        ISK = INDW(I)
00610   218*        IF (ISK.EQ.0) GO TO 501
00612   219*        PGBUF(ISK,LKT) = DPSUM(I,JSIT)
00613   220*        IF ((SUPLT(I,JSIT)/DPSUM(I,JSIT)).GE..10) IPGBUF(ISK,LKT)='<'
00615   221*    501 CONTINUE
00617   222*        IPGBUF(1,LKT) = ' SUM  '
00620   223*        LKT = LKT +1
00621   224*        IF (LKT.GE.45) CALL WRSUB
00623   225*        IPGBUF(1,LKT) = ' DECAY'
00624   226*        PGBUF(4,LKT) = THRDT(2,JSIT)
00625   227*        PGBUF(5,LKT) = THRDT(3,JSIT)
00626   228*        PGBUF(6,LKT) = THRDT(4,JSIT)
00627   229*        PGBUF(7,LKT) = THRDT(8,JSIT)
00630   230*        PGBUF(8,LKT) = THRDT(13,JSIT)
00631   231*        PGBUF(9,LKT) = DPSUM(17,JSIT)
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00632   232*        PGBUF(10,LKT) =DPSUM(22,JSIT)
00633   233*        PGBUF(2,LKT) = DPSUM(18,JSIT)
00634   234*        PGBUF(3,LKT) = DPSUM(1,JSIT)
00635   235*        IPGBUF(2,LKT) = IPGBUF(2,LKT-1)
00636   236*        IPGBUF(3,LKT) = IPGBUF(3,LKT-1)
00637   237*        IPGBUF(9,LKT) = IPGBUF(9,LKT-1)
00640   238*        IPGBUF(10,LKT) = IPGBUF(10,LKT-1)
00641   239*        RUL10=SUPLT(2,JSIT)/DPSUM(2,JSIT)
00642   240*        IF (RUL10.GE..10) FLD(6,6,LTSAV(JSIT))=FLD(0,6,'<')
00644   241*        IF (RUL10.GE..10) IPGBUF(4,LKT)='<     '
00646   242*        RUL10=SUMLT(3,JSIT)/THRDT(3,JSIT)
00647   243*        IF (RUL10.GE..10) FLD(12,6,LTSAV(JSIT))=FLD(0,6,'<')
00651   244*        IF (RUL10.GE..10) IPGBUF(5,LKT)='<     '
00653   245*        RUL10=SUMLT(4,JSIT)/THRDT(4,JSIT)
00654   246*        IF (RUL10.GE..10) FLD(18,6,LTSAV(JSIT))=FLD(0,6,'<')
00656   247*        IF (RUL10.GE..10) IPGBUF(6,LKT)='<     '
00660   248*        RUL10=SUMLT(8,JSIT)/THRDT(8,JSIT)
00661   249*        IF (RUL10.GE..10) FLD(24,6,LTSAV(JSIT))=FLD(0,6,'<')
00663   250*        IF (RUL10.GE..10) IPGBUF(7,LKT)='<     '
00665   251*        RUL10=SUMLT(13,JSIT)/THRDT(13,JSIT)
00666   252*        IF (RUL10.GE..10) FLD(30,6,LTSAV(JSIT))=FLD(0,6,'<')
00670   253*        IF (RUL10.GE..10) IPGBUF(8,LKT)='<     '
00672   254*        DO 6010 K = 1,4
00675   255*        TOTDP(1,K) = TOTDP(1,K) + DPSUM(K,JSIT)
00676   256*   6010 CONTINUE
00700   257*        TOTDP(1,8) = TOTDP(1,8) + DPSUM(8,JSIT)
00701   258*        TOTDP(1,13) = TOTDP(1,13) + DPSUM(13,JSIT)
00702   259*        TOTDP(1,17) = TOTDP(1,17) + DPSUM(17,JSIT)
00703   260*        TOTDP(1,18) = TOTDP(1,18) + DPSUM(18,JSIT)
00704   261*        TOTDP(1,22) = TOTDP(1,22) + DPSUM(22,JSIT)
00705   262*        DO 6030 K = 2,4
00710   263*        TOTDC(1,K) = TOTDC(1,K) + THRDT(K,JSIT)
00711   264*   6030 CONTINUE
00713   265*        TOTDC(1,8) = TOTDC(1,8) + THRDT(8,JSIT)
00714   266*        TOTDC(1,13) = TOTDC(1,13) + THRDT(13,JSIT)
00715   267*        IF (ISITE.EQ.'N1    ') GO TO 33
00717   268*        IF (ISO.EQ.99) GO TO 34
00721   269*        GO TO 9090
00722   270*     33 CONTINUE
00723   271*        LKT = LKT + 1
00724   272*        IF (LKT.GE.45) CALL WRSUB
00726   273*        IPGBUF(1,LKT) = 'TOTALE'
00727   274*        IPGBUF(1,LKT+1) = 'TOTALE'
00730   275*        GO TO 401
00731   276*     34 LKT = LKT + 1
00732   277*        IPGBUF(1,LKT) = 'TOTALW'
00733   278*        IPGBUF(1,LKT+1) = 'TOTALW'
00734   279*    401 CONTINUE
00735   280*        PGBUF(2,LKT) = TOTDP(1,18)
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00736   281*        PGBUF(3,LKT) = TOTDP(1,1)
00737   282*        PGBUF(4,LKT) = TOTDP(1,2)
00740   283*        PGBUF(5,LKT) = TOTDP(1,3)
00741   284*        PGBUF(6,LKT) = TOTDP(1,4)
00742   285*        PGBUF(7,LKT) = TOTDP(1,8)
00743   286*        PGBUF(8,LKT) = TOTDP(1,13)
00744   287*        PGBUF(9,LKT) = TOTDP(1,17)
00745   288*        PGBUF(10,LKT) = TOTDP(1,22)
00746   289*        LKT = LKT + 1
00747   290*        TOTDC(1,1) = TOTDP(1,1)
00750   291*        TOTDC(1,17) = TOTDP(1,17)
00751   292*        TOTDC(1,18) = TOTDP(1,18)
00752   293*        TOTDC(1,22) = TOTDP(1,22)
00753   294*        PGBUF(2,LKT) =  TOTDC(1,16)
00754   295*        PGBUF(3,LKT) =  TOTDC(1,1)
00755   296*        PGBUF(4,LKT) =  TOTDC(1,2)
00756   297*        PGBUF(5,LKT) =  TOTDC(1,3)
00757   298*        PGBUF(6,LKT) =  TOTDC(1,4)
00760   299*        PGBUF(7,LKT) =  TOTDC(1,8)
00761   300*        PGBUF(8,LKT) =  TOTDC(1,13)
00762   301*        PGBUF(9,LKT) =  TOTDC(1,17)
00763   302*        PGBUF(10,LKT) = TOTDC(1,22)
00764   303*        DO 6020 K=1,30
00767   304*        TOTDP(1,K) = 0.0
00770   305*        TOTDC(1,K) = 0.0
00771   306*   6020 CONTINUE
00773   307*   9090 CONTINUE
00774   308*        LKT = LKT +1
00775   309*        IF (LKT.GE.45) CALL WRSUB
00777   310*        LKT = LKT + 1
01000   311*        IF (LKT.GE.45) CALL WRSUB
01002   312*        IPGBUF(1,LKT) = ISITE
01003   313*        LKT = LKT + 1
01004   314*        IF (LKT.GE.45) CALL WRSUB
01006   315*        JS(JSIT) = KSITE
01007   316*        IF (ISWIT.EQ.0) GO TO 389
01011   317*        DO 9030 K=1,100
01014   318*        IF (ICSIT(1,K).EQ.'999   ') GO TO 9040
01016   319*        IF (ICSIT(1,K).EQ.KSITE) GO TO 9060
01020   320*   9030 CONTINUE
01022   321*   9040 WRITE (6,9050) KSITE
01025   322*   9050 FORMAT (' ',A6,' DOES NOT HAVE A MATCH')
01026   323*        GO TO 9070
01027   324*   9060 JS(JSIT) = ICSIT(2,K)
01030   325*        JSHD(JSIT) = ICSIT(3,K)
01031   326*        IW(JSIT) = NEW
01032   327*   9070 CONTINUE
01033   328*    389 JSIT = JSIT + 1
01034   329*        KSITE=ISITE
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01035   330*      390 CONTINUE
01036   331*          DO 410 J = 1,40
01041   332*      41- RISO(J) = 0.0
01043   333*          IF (ISO.NE.99) GO TO 40
01045   334*          CALL WRSUB
01046   335*          LKT = 16
01047   336*          NUMBER = 0
01050   337*          NPG = NPG + 1
01051   338*          WRITE(6,5050) NPG
01054   339*     5050 FORMAT ('1',//,T42,'APPENDIX  1',T91,'PAGE ',I2 / )
01055   340*          MCOMP1 = '      '
01056   341*          MCOMP2 = '      '
01057   342*          DO 7010 I = 1,100
01062   343*          READ (5,5060) (LDISC(JA),JA=1,14)
01070   344*     5060 FORMAT(A6,A3,11A6,A5)
01071   345*          IF (LDISC(1).EQ.'999   ') GO TO 7000
01073   346*          IF (LDISC(1).EQ.MCOMP1.AND.LDISC(2).EQ.MCOMP2) GO TO 5070
01075   347*          LKT = LKT + 1
01076   348*          IF (LKT.LT.45) GO TO 5065
01100   349*          NPG = NPG + 1
01101   350*          WRITE(6,5090) NPG
01104   351*     5090 FORMAT ('1',//,T42,'APPENDIX  1  (CONTINUED)',T91,'PAGE ',I2 /)
01105   352*          LKT = 1o
01106   353*     5065 CONTINUE
01107   354*          NUMBER = NUMBER + 1
01110   355*          MCOMP1 = LDISC(1)
01111   356*          MCOMP2 = LDISC(2)
01112   357*          WRITE(6,5095) NUMBER,(LDISC(JA),JA=1,14)
01121   358*     5095 FORMAT ('0',T11,I2,2H. ,A6,A3,'- ',11A6,A5)
01122   359*          GO TO 7010
01123   360*     5070 CONTINUE
01124   361*          LKT = LKT + 1
01125   362*          WRITE (6,5098) (LDISC(JA),JA=3,14)
01133   363*     5098 FORMAT(' ',T26,11A6,A5)
01134   364*     7010 CONTINUE
01136   365*     7000 CONTINUE
01137   366*          WRITE(6,9999)
01141   367*     9999 FORMAT ('1',' ')
01142   368*          END
END COMPILATION **    0 MESSAGES **
    DCAY1            SYMBOLIC                    03 APR 73  13:15:31   0  00437760    14   368 (DELETED)
    DCAY1    CODE    RELOCATABLE                 03 APR 73  13:15:31   1  00452020    24     1 (DELETED)
                                                                       0  00452050    14   449
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-ALOG(2) = -.69315-00

ISO. #	FACTOR	HALFLIFE	ISOTOPE
3	.1881-01	.103+05	SR90
4	.4051-01	.367+03	RU106
5	.1881-01	.103+05	Y90
6	.4051-01	.367+03	RH106
7	.6455-06	.548+09	ZR93
8	.2009-01	.110+05	CS137
9	.4990-07	.237+08	SE79
10	.1848-01	.110+05	BA137M
11	.4988-01	.650+02	ZR95
12	.1059-02	.650+02	NB95M
13	.0000	.192+04	CO60
14	.1053+00	.650+02	NB95
15	.2867-05	.774+08	TC99
16	.8455-08	.256+10	PD107
17	.2507-05	.253+03	AG110M
18	.5015-07	.253+03	AG110
19	.4514-09	.511+04	CD113M
20	.4372-04	.250+03	SN119M
21	.3943-05	.913+04	SN121M
22	.1847-04	.125+03	SN123M
23	.1105-06	.365+08	SN126
24	.7985-03	.986+03	SB125
25	.1105-06	.365+08	SB126M
26	.1094-06	.365+08	SB126
27	.2178-03	.986+03	TE125M
28	.1369-02	.109+03	TE127M
29	.1354-02	.109+03	TE127
30	.5557-03	.749+03	CS134
31	.5746-07	.110+10	CS135
32	.2784-00	.284+03	CE144
33	.2784-00	.284+03	PR144
34	.7022-01	.957+03	PM147
35	.1938-03	.319+05	SM151
36	.3000-06	.438+04	EU152
37	.3038-04	.584+04	EU154
38	.7353-03	.661+03	EU155
39	.9860-05	.365+03	GD162
40	.9862-05	.365+03	TB162
41	.0000	.451+04	H3

FACTOR TOTAL = .78861-00

FACTOR MULTIPLIER = .12681+01