Atlantic Richfield Hanford Company
Richland, Washington 99352

ARH-2761

**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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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.

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 DCAYL 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 DCAYL. 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.

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TABLE 1
200 EAST AREA
LIQUID WASTE DISPOSAL SITES

PAGE 1

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A1									
1955	.984+05	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.154+03	
SUM THRU 71	.984+05	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.154+03	
DECAY THRU 71	.984+05	<.100+00	.276-00	<.667-01	<.114-05	<.684-01	<.114-01	.154+03	
216-A2									
1956	.165+05	.540+02						.100+01	
1957	.445+05	.250+02	.227+03	.600-00	.580+02	.120+01	.400-00	.394+02	
1958	.180+05	.900+01	.230+02	.100+00	.600+01	.100+00		.320+01	
1959	.440+05	.130+02	.380+02	.100+00	.900+01	.200-00	.100+00	.304+02	
1960	.107+06	.250+02	.302+03	.100+01	.770+02	.150+01	.500-00	.410+01	
SUM THRU 71	.230+06	.130+03	.590+03	.200+01	.150+03	.300+01	.100+01	.781+02	
DECAY THRU 71	.230+06	.130+03	.845+01	.146+01	.324-01	.223+01	.188-00	.781+02	
216-A3									
1956	.170+06		.668+03	.100+00	.265+03	<.100+00	<.100+00	.281+02	
1957	.400+05								
1958	.400+05		.360+01		.130+01			.368+03	
1959	.650+06		.151+02		.600+01			.426+03	
1960	.510+06		.859+02		.341+02			.159+03	
1961	.300+06		.913+02		.362+02			.229+03	
1962	.200+06	.200-00	.486+01		.230+01			.700+02	
1963	.240+06		.128+02		.510+01			.945+02	
1964	.600+06		.720-00					.187+03	
1965	.400+05							.102+03	
1966	.100+05							.159+02	
SUM THRU 71	.280+07	.200-00	.882+03	.100+00	.350+03	<.100+00	<.100+00	.168+04	
DECAY THRU 71	.280+07	.200-00	.897-00	.663-01	.631-01	<.700-01	<.130-01	.168+04	
216-A4									
1955	.405+06							.850+02	
1956	.166+07	.820+02	.496+03	.570+01	.230+03	.660+01	.600-00	.228+03	
1957	.133+07	.270+02	.118+03	.140+01	.548+02	.210+01	.100+00	.260+02	
1958	.281+07	.310+02	.250+03	.290+01	.116+03	.430+01	.300-00	.600+02	
SUM THRU 71	.621+07	.140+03	.864+03	.100+02	.400+03	.150+02	.100+01	.399+03	
DECAY THRU 71	.621+07	.140+03	.346+02	.696+01	.181-01	.107+02	.143-00	.399+03	

TABLE 1 (CONTINUED)

PAGE 2

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (L)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-A5									
1955	.150+06	.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	

	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	.500-00			
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	.550+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 (CO. TIWUEL)

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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-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	.269-00	<.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	.160+01	
1960	.114+07	.130+02	.296+03	.100+01	.211+02	.156+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	.260+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)

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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-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

TABLE 1 (CONTINUED)

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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-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	.160+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	

TABLE 1 (CONTINUED)

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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-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+05	.150+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	.603+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	.901+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-U2-2E									
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-U2-2A									
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	

TABLE 1 (CONTINUED)

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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-bb									
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	.520+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-bb									
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 T RU 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			

TABLE 1 (CONTINUED)

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	VOLUME (L)	PU (GM)	BETA (CI)	SK-90 (CI)	PU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-07									
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	
216-08									
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	
216-09									
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	

TABLE 1 (CO. TI'UED)

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	VOLUME (L)	PU (GM)	BETA (CI)	SK-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-D10									
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	.713+01	.290+01	.613-05	.617-00	.631-02	.907+01	
216-D10E									
1959	.151+04	<.100-05	.550-03	<.240-03		<.200-04		.408-04	
1970	.757+04	<.190-04	.477-03	.828-04		<.675-04		<.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	<.510-03	<.120-05	<.102-03	<.421-06	<.602-03	
216-J11									
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	.310+01	.176-03	.328+02	.909-02	.136+02	
216-J12									
1952	.130+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	
1957	.578+07	.150+01	.887+03	<.174+02	.172+02	.108+02	<.140-00	.146+01	
1958	.145+08	.190+01	.692+04	.310+02	.243+02	.510+03	<.180-00	.140-00	
1959	.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 THRU 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)

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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-D14									
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-D15									
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	.666-00	.104+03	
216-D16									
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-D17									
1956	.341+07	.100+02	.200+04	.161+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-D18									
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-D19									
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-D20									
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	

TABLE 1 (CONTINUED)

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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-D21									
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-D22									
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-D23									
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-D24									
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-D25									
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-D26									
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-D27									
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)

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	VOLUME (L)	PU (GM)	BETA (CI)	SK-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	

TABLE 1 (CONTINUED)

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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-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)

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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-D42									
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-D43									
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-D44									
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	.150+04	.578-01	.475+03	.537-00	.227+01	
216-D45									
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-D46									
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-D47									
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-D48									
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	.306+03	.114+00	.227+01	

TABLE 1 (CONTINUED)

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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-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	.566-00	.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	

TABLE 1 (CONTINUED)

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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-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	.642-01	.374-01	.907+01	
216-L55									
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			

TABLE 1 (CONTINUED)

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	VOLUME (L)	PU (G)	BETA (CI)	SR-90 (CI)	PU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-060									
1967	.189+05	.800-01	.155+04			.300+01		.717+03	
SUM THRU 71	.189+05	.800-01	.155+04			.00+01		.717+03	
DECAY THRU 71	.189+05	.800-01	.766+02			.721+01		.717+03	
216-063									
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	
216-01									
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	
216-03									
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	
216-04									
1955	.200+05	.100+01	.101+03	.232+02	.125+02	<.500-01	<.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)

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	VOLUME (L)	PU (GM)	BETA (CI)	BR-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	

TABLE 1 (CONTINUED)

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	VOLUME (L)	PU (GM)	DETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-C9									
1953	.551+08	<.100-C1	.420+01	.300-00	.300-00				
1954	.942+08	<.100-C1	.560+01	.400-00	.400-00				
1955	.942+08	<.100-C1	.840+01	.600-00	.600-00				
1956	.942+08	<.100-C1	.840+01	.600-00	.600-00				
1957	.942+08	<.100-C1	.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-C1	.560+01	.400-00	.400-00				
1963	.942+08	<.100-C1	.700+01	.500-00	.500-00				
1964	.942+08	<.100-C1	.560+01	.400-00	.400-00				
1965	.942+08	<.100-C1	.560+01	.400-00	.400-00				
1966	.942+08	<.100-C1	.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-C1	.616+01	.400-01	.200-00	<.100+00	<.840-01	<.328-00	
1969	.103+08	<.620-C1	.420-00				<.100-02	<.430-01	
SUM T. RU 71	.103+10	<.338-C0	.794+02	.514+01	.520+01	<.120+01	<.385-00	<.916-00	
DECAY THRU 71	.103+10	<.338-C0	.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-C1	.550+02	.250+02	.400-00	<.400-01	<.400-01	<.290-01	
1966	.504+06	<.700-C1	.484+02	.220+02	.400-00	<.400-01	<.400-01	<.150-01	
1967	.980+05	<.500-C1	.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

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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-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	

TABLE 2 (CONTINUED)

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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-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	

TABLE 2 (CONTINUED)

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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-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)

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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-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)

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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-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	

TABLE 2 (CONTINUED)

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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-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			.183+01	
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			<.100+01	
1963	.160+05	.200-01	.130+01		.200-00			.248+01	
1964	.970+06	.196+01	.273+03	.100-01	.430+02	.220+01	<.500-01	.467+02	
1965	.440+06	.110+00	.258+03	.200-01	.410+02	.240+01	<.500-01	.348+02	
1966	.110+06	.700-01	.740+02		.120+02	.400-00		.425+01	
SUM THRU 71	.500+07	.800+01	.630+03	.400-01	.100+03	.500+01	<.100+00	.910+02	
DECAY THRU 71	.500+07	.800+01	.174+02	.324-01	.978-00	.427+01	<.398-01	.910+02	
216-S14									
1952	.681+05	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.454-00	
SUM THRU 71	.681+05	<.100+00	.100+01	<.100+00	<.100+00	<.100+00	<.100+00	.454-00	
DECAY THRU 71	.681+05	<.100+00	.254-00	<.619-01	<.144-06	<.638-01	<.764-02	.454-00	

TABLE 2 (CONTINUED)

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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-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)

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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-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	

TABLE 2 (CONTINUED)

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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-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	

TABLE 2 (CONTINUED)

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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-S21									
1954	.140+06	.100-01	.630+01	.200-00		.000-00			
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)

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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-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)

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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)
216-14									
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	<.220+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								<.500-00	
1970	.503+09	<.930-01						<.560-00	
1971	.482+09	<.440-02	<.320-00					<.136+01	
SUM THRU 71	.411+11	<.366+01	.500+03	<.617+01	.106+03	.109+02	<.338+01	.685+03	
DECAY THRU 71	.411+11	<.366+01	.337+02	<.533+01	<.359-00	.960+01	<.196+01	.685+03	
216-15									
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 (CONTINUED)

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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-T6									
1946	.170+08	.195+03	.300+04	.600+02	.100+03	.500+02	.100+01	.650+01	
1947	.280+08	.195+03	.150+05	.300+03	.500+03	.250+03	.400+01	.162+02	
SUM THRU 71	.450+08	.390+03	.180+05	.360+03	.600+03	.300+03	.500+01	.227+02	
DECAY THRU 71	.450+08	.390+03	.725+03	.196+03	.251-04	.170+03	.193-00	.227+02	
216-T7									
1948	.570+07	.700+01	.820+02	.200+01	.300+01	.100+01		.500-00	
1949	.750+07	.100+02	.165+03	.300+01	.500+01	.300+01		.600-00	
1950	.750+07	.100+02	.165+03	.300+01	.500+01	.300+01	.100+00	.600-00	
1951	.750+07	.100+02	.165+03	.300+01	.500+01	.300+01	.100+00	.600-00	
1952	.850+07	.120+02	.418+03	.800+01	.140+02	.700+01	.100+00	.700-00	
1953	.152+08	.260+02	.324+03	.600+01	.110+02	.500+01	.100+00	.130+01	
1954	.255+08	.350+02	.156+04	.310+02	.500+02	.250+02	.500-00	.210+01	
1955	.326+08	.200+02	.223+03	.400+01	.700+01	.300+01	.100+00	.270+01	
SUM T RU 71	.110+09	.130+03	.310+04	.600+02	.100+03	.500+02	.100+01	.910+01	
DECAY THRU 71	.110+09	.130+03	.141+03	.380+02	.424-03	.326+02	.900-01	.910+01	
216-18									
1950	.240+06	.240+01	.470+02	.500-00	.240+01	.500-00	<.500-01	.210+01	
1951	.260+06	.260+01	.530+02	.500-00	.260+01	.500-00	<.500-01	.240+01	
SUM THRU 71	.500+06	.500+01	.100+03	.100+01	.500+01	.100+01	<.100+00	.450+01	
DECAY THRU 71	.500+06	.500+01	.243+01	.597-00	.274-05	.617-00	<.629-02	.450+01	
216-19									
1951	.600+05	<.300-01	.196+02	.140+01	.600+01	.140+01		<.140-01	
1952	.600+05	<.300-01	.224+02	.160+01	.600+01	.160+01		<.160-01	
1953	.600+05	<.300-01	.224+02	.160+01	.600+01	.160+01	<.100+00	<.160-01	
1954	.200+05	<.100-01	.560+01	.400-00	.200+01	.400-00		<.400-02	
SUM T RU 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	.311+01	.416-04	.321+01	<.872-02	<.500-01	

TABLE 2 (CONTINUED)

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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)
216-710									
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	
216-711									
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	
216-712									
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	
216-713									
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		<.500-02	
1960	.980+04	<.100-01	.840+01	.100-01	.400+01	.100-01	<.100+00	<.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			<.500-02	
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)

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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-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)

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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-T19									
1951	.665+07	.280-00	.660-00					.900-01	
1952	.119+08	.500-00	.660-00					.160-00	
1953	.693+07	.180+01	.528+01		.100+01	.400-00		.580-00	
1954	.527+07	.360-00	.220+01		.100+01			.120+00	
1955	.663+07	.140+01	.440+01		.100+01	.300-00		.450-00	
1956	.846+07	.980+01	.439+04	.590+02	.983+03	.332+03	.100+01	.316+01	
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	<.400-01	
1968	.647+08	.980-01	.176+02	<.840-00	<.130+01	.450+01	<.100-01	.260-00	
1969	.678+08		.176+02	.200-01	.200-00	.330+01		.287+01	
1970	.305+08	<.200-02	.660+01	.400-01		.160+01		<.710-01	
1971	.466+08	<.200-02	.770+01	.236-00		.206+01	<.180-02	<.902-01	
SUM THRU 71	.366+09	.143+02	.453+04	.614+02	.100+04	.365+03	.105+01	.789+01	
DECAY THRU 71	.366+09	.143+02	.597+03	.425+02	<.557-00	.262+03	<.160-00	.789+01	
216-T20									
1952	.189+05		.500+02	.994-00	.214+01	.106+01		.500+01	
SUM THRU 71	.189+05		.500+02	.994-00	.214+01	.106+01		.500+01	
DECAY THRU 71	.189+05		.256+01	.616-00	.308-05	.678-00		.500+01	
216-T21									
1954	.460+06	.100+01	.821+04	.800+01	.620+02	.400+03	.200+01	.100+01	
SUM THRU 71	.460+06	.100+01	.821+04	.800+01	.620+02	.400+03	.200+01	.100+01	
DECAY THRU 71	.460+06	.100+01	.532+03	.520+01	.354-03	.267+03	.199-00	.100+01	
216-T22									
1954	.153+07	.200+01	.394+04	.510+02	.300+02	.185+04	.100+01	.200+01	
SUM THRU 71	.153+07	.200+01	.394+04	.510+02	.300+02	.185+04	.100+01	.200+01	
DECAY THRU 71	.153+07	.200+01	.244+04	.332+02	.171-03	.124+04	.995-01	.200+01	
216-T23									
1954	.148+07	.100+01	.350+04	.410+02	.260+02	.133+04	.100+01	.100+01	
SUM THRU 71	.148+07	.100+01	.350+04	.410+02	.260+02	.133+04	.100+01	.100+01	
DECAY THRU 71	.148+07	.100+01	.176+04	.267+02	.149-03	.889+03	.995-01	.100+01	

TABLE 2 (CONTINUED)

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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-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	

TABLE 2 (CONTINUED)

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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-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	

TABLE 2 (CONTINUED)

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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-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 T, RU 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	<.511-01	.284-00			

TABLE 2 (CONTINUED)

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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-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 T. RU 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)

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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-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 (CONTINUED)

PAGE 42

	VOLUME (L)	PU (GM)	BETA (CI)	Sr-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-U12									
1960	.900+07	.100+00	.440+01					.176+03	
1961	.144+08	.100+00	.563+02					.437+03	
1962	.141+08	.100+00	.500+01					.417+03	
1963	.142+08	.100+00	.111+02					.129+03	
1964	.174+08	.100+00	.300+01					.254+03	
1965	.140+08	.100+00	.773+03	.104+03	.800+02	<.100+00	<.100+00	.209+03	
1966	.107+08	.100+00	.100+00					.103+03	
1967	.100+08	.100+00	.400-01					.690+02	
1968	.890+07	.100+00	.200-01					.760+01	
1969	.720+07	.100+00	.300-01					.600+01	
1970	.310+07		.100-01					.140+01	
1971	.600+07		.600-01					.220+01	
SUM THRU 71	.129+09	.100+01	.853+03	.104+03	.800+02	<.100+00	<.100+00	.181+04	
DECAY THRU 71	.129+09	.100+01	.187+03	.886+02	.903-00	<.861-01	<.424-01	.181+04	
216-U13									
1952	.237+04	<.200-01	.100+02		.200+01			.945-01	
1953	.284+04	<.250-01	.130+02		.300+01			.113+00	
1954	.284+04	<.250-01	.120+02		.200+01			.113+00	
1955	.284+04	<.250-01	.130+02	<.100+00	.300+01	<.100+00	<.100+00	.113+00	
1956	.473+03	<.500-02	.200+01					.189-01	
SUM THRU 71	.114+05	<.100+00	.500+02	<.100+00	.100+02	<.100+00	<.100+00	.454-00	
DECAY THRU 71	.114+05	<.100+00	.309-00	<.667-01	.571-04	<.684-01	<.114-01	.454-00	
216-U15									
1957	.681+05	<.100+00	.700+01	.100+00	.100+01	.100+00	<.100+00	.227+01	
SUM THRU 71	.681+05	<.100+00	.700+01	.100+00	.100+01	.100+00	<.100+00	.227+01	
DECAY THRU 71	.681+05	<.100+00	.302-00	.700-01	.453-04	.716-01	<.148-01	.227+01	

TABLE 2 (CONTINUED)

PAGE 43

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-21&2									
1949	.555+07	.902+03	.800+01		.200+01			.120-01	
1950	.112+08	.180+04	.170+02	<.100+00	.300+01	<.100+00	<.100+00	.230-01	
1951	.112+08	.180+04	.160+02		.300+01			.230-01	
1952	.555+07	.902+03	.900+01		.200+01			.120-01	
1966	.100+06	.101+03							
1967	.400+04	.500+02							
1968	.380+05	.990+03						.805+02	
1969	.600+05	.476+03						.307-00	
SUM T RU 71	.337+08	.703+04	.500+02	<.100+00	.100+02	<.100+00	<.100+00	.809+02	
DECAY THRU 71	.337+08	.703+04	.258-00	<.590-01	.649-05	<.610-01	<.587-02	.809+02	
216-21A									
1949	.100+06	.500+01						<.500-02	
1950	.100+06	.500+01						<.500-02	
1951	.100+06	.500+01						<.500-02	
1952	.100+06	.500+01						<.500-02	
1953	.100+06	.500+01						<.500-02	
1954	.100+06	.500+01						<.500-02	
1955	.100+06	.500+01	.280+01		.100+01			<.500-02	
1956	.100+06	.500+01	.420+01		.200+01			<.500-02	
1957	.100+06	.500+01	.840+01		.300+01			<.500-02	
1958	.100+06	.500+01	.112+02	<.100+00	.400+01	<.100+00	<.100+00	<.500-02	
1959			.140+01						
SUM THRU 71	.100+07	.500+02	.280+02	<.100+00	.100+02	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	.100+07	.500+02	.322-00	<.718-01	.554-03	<.733-01	<.169-01	<.500-01	
216-21AA									
1964	.440+06	.143+05	.101+03	<.100+00	.480+02	<.100+00	<.100+00	<.200-01	
1965	.920+06	.110+05	.770+02		.370+02			<.200-01	
1966	.540+06	.464+04	.322+02		.150+02			<.100-01	
SUM THRU 71	.190+07	.300+05	.210+03	<.100+00	.100+03	<.100+00	<.100+00	<.500-01	
DECAY THRU 71	.190+07	.300+05	.259+01	<.832-01	.103+01	<.841-01	<.372-01	<.500-01	

TABLE 2 (CONTINUED)

PAGE 44

	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	<.081-01	<.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)

PAGE 45

	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							

TABLE 2 (CONTINUED)

PAGE 46

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-49									
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	
216-410									
1945	.100+07	.500+02							
SUM THRU 71	.100+07	.500+02							
DECAY THRU 71	.100+07	.500+02							
216-412									
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	

TABLE 2 (CONTINUED)

PAGE 47

	VOLUME (L)	PU (GM)	BETA (CI)	SR-90 (CI)	RU-106 (CI)	CS-137 (CI)	CO-60 (CI)	U (KGM)	U-233 (GM)
216-416									
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 T RU 71	.747+08	<.159+02	<.587-00						
DECAY THRU 71	.747+08	<.159+02	<.144-00						
216-417									
1967	.307+08	.492+02	.800-00						
1968	.610+07	.100+01	.240-00						
SUM T RU 71	.368+08	.502+02	.104+01						
DECAY THRU 71	.368+08	.502+02	.489-01						
216-418									
1969	.572+06	.427+04							
1970	.799+06	.500+04							
1971	.884+06	.553+04							
SUM T RU 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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QWHM FK5,* 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	001025

EXTERNAL REFERENCES (BLOCK, NAME)

0003	WRS.0
0004	NRD01
0005	NI010
0006	NI020
0007	AL00
0010	NWD01
0011	EXP
0012	INST00

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	660L	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	002275	ALX	0000 R	026437	BF	0000 R	107305	CONC	0000 R	107314	DCIM	0000 R	107277	DECS
0000 R	004417	DESUM	0000 R	057677	DPS70	0000 R	025273	F	0000 R	107300	FACT	0000 R	107276	FACTT
0000 R	107301	FA	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	IEA	0000 I	107320	IG	0000 I	027341	IGNSIT
0000 I	020747	INDAL	0000 I	107237	INDA	0002 I	000000	IPGBUF	0000 I	107303	ISITE	0000 I	107317	ISK
0000 I	107304	ISD	0000 I	107270	ISWIT	0000 I	027005	IW	0000 I	107312	IYEAR	0000 I	107265	IS

0000 I 107322 J	0000 I 107327 JA	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 LT5IGN	0000 I 107315 LTS2	0000 I 107325 MCOMP1
0000 I 107326 MCOMP2	0000 I 107266 MLATE	0000 I 025436 N	0000 I 107313 NEW	0002 I 001606 NP6
0002 I 001605 NTL	0000 I 107324 NUMBER	0002 R 000702 PGJUF	0000 R 017500 RISO	0000 R 107323 RUL10
0000 R 107321 RUL	0000 R 107271 SPSI	0000 R 020060 SU4LT	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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00101 1*      INCLUDE COMA,LIST
00101 2*      C *****
00101 3*      C ***** THE FOLLOWING CALCULATES THE DECAY OF THE ISOTOPES
00101 4*      C *****
00103 4*      COMMON IPGBUF(10,45),PGBUF(10,45),LKT,NTB,NPG
00104 4*      COMMON KSITC(7),KSITC1(7)
00105 4*      E
00106 5*      DIMENSION THRDT(40,200),RISO(40),LTSV(200),SUMLT(13,200)
00107 6*      DIMENSION F(99),F(99),N(99),JS(200)
00110 7*      DIMENSION LDISC(14)
00111 8*      DIMENSION IBSIT(200),BF(200)
00112 9*      DIMENSION INDAD(30),IN(10)
00113 10*     DIMENSION TOTDP(2,30),TOTDC(2,30)
00114 11*     DIMENSION IGNSIT(10)
00115 12*     DIMENSION ICSIT(3,100),JSHD(200)
00116 13*     DIMENSION SUPLT(30,200),DPSUM(30,200)
00117 14*     DIMENSION EPS70(30,200),SUP70(30,200)
00120 15*     DIMENSION INDW(22)
00121 16*     DATA INDW/0,4,5,6,3*0,7,4*0,8,3*0,9,2,3*0,10/
00123 17*     DATA IPGBUF/ 450 * ' ' /
00125 18*     DATA INDAD/4*0,3*29,0,8*29,3*0,29,2*30,2*17,0,3*30,2*0/
00127 19*     DATA IGNSIT/'N1 ','N2 ','N3 ','N4 ','N5 ','
00127 20*     *'N6 ','N7 ','T3 ','B5 ','T20 ' /
00131 21*     DATA MDATE/1972/
00133 22*     DATA LTSV/200*6H /
00135 23*     DATA SUMLT/2600*0.0/,LTSIGN/' ' /
00140 24*     DATA KSITC /'SUMA25','SUME3 ','SUMB63','SUMU10','C4CT4 ' ,
00140 25*     * 'B22E ','B22W ' /
00142 26*     DATA KSITC1 /'A25 ','B3 ','Bb3 ','U10 ','T4 ' ,
00142 27*     * 'B2-2L ','B2-2W ' /
00144 28*     ISWIT = 0
00145 29*     INI = 1
00146 30*     LKT = 1
00147 31*     SSM = 0.0
00150 32*     DO 9010 K=1,100
00153 33*     READ (5,9000) (ICSIT(I,K),I=1,3)
00161 34*     9000 FORMAT (3A6)
00162 35*     IF (ICSIT(1,K).EQ.'999 ' ) GO TO 9020

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COMA  *INCLUDED*
COMA  *INCLUDED*
COMA  *INCLUDED*

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00164 6* 9010 CONTINUE.
00166 37* 9020 CONTINUE
00167 38*      IC = 25
00170 39*      IF (ISWIT.EQ.0) IC = 22
00172 40*      I=0
00173 41*      380 I=I+1
00174 42*      READ (5,440) IBSIT(I),EF(I)
00200 43*      440 FORMAT(A6,F4.0)
00201 44*      IF (BF(I).NE.999.) GO TO 380
00203 45*      ALX=-ALOG(2)
00204 46*      WRITE (6,300) ALX
00207 47*      300 FORMAT(5X,'-ALOG(2) = ',E12.5,/)
00210 48*      FACTT=0.0
00211 49*      DECS=0.0
00212 50*      WRITE (6,210)
00214 51*      210 FORMAT(1X,'ISO. #',8X,'FACTOR',7X,'HALFLIFE',8X,'ISOTOPE')
00214 52* C *****
00214 53* C ***** READ DATA FOR DECAY OF ISOTOPES
00214 54* C ***** I=ISOTOPE NUMBER
00214 55* C ***** F(I)=FACTOR OF ISOTOPE I
00214 56* C ***** H(I)=HALFLIFE (DAYS) OF ISOTOPE I
00214 57* C ***** N(I)=NAME OF ISOTOPE I
00214 58* C *****
00215 59*      20 READ (5,10) I,F(I),H(I),N(I)
00223 60*      10 FORMAT (I2,5X,E9.3,5X,E8.2,21X,A6)
00224 61*      IF (I.EQ.99) GO TO 25
00226 62*      WRITE (6,200) I,F(I),H(I),N(I)
00234 63*      200 FORMAT (1X,I2,10X,E9.4,5X,E8.3,10X,A6)
00235 64*      FACTT=FACTT+F(I)
00236 65*      GO TO 20
00237 66*      25 FACT=FACTT-F(3)-F(4)-F(5)-F(6)-F(7)-F(10)
00240 67*      WRITE (6,600) FACT
00243 68*      600 FORMAT ('0',5X,'FACTOR TOTAL = ',E12.5)
00243 69* C ***** FM=FACTOR MULTIPLIER OF INDIVIDUAL ISOTOPE FACTORS *****
00244 70*      FM=1.0/FACT
00245 71*      WRITE (6,220) FM
00250 72*      220 FORMAT('0',5X,'FACTOR MULTIPLIER = ',E12.5)
00251 73*      JSIT=1
00251 74* C *****
00251 75* C ***** ISITE=SITE OF THE ISOTOPE
00251 76* C ***** ISO=ISOTOPE NUMBER
00251 77* C ***** LTSIGN=BLANK OR <
00251 78* C ***** CONC=AMOUNT OF THE ISOTOPE DEPOSITED IN ISITE
00251 79* C ***** YEAR=YEAR THAT CONC WAS DEPOSITED IN ISITE
00251 80* C *****
00252 81*      IF (ISWIT.EQ.0) READ (5,30) ISITE,ISO,LTSIGN,CONC,YEAR
00262 82*      IF (ISWIT.EQ.1) READ (5,35) ISITE,IEW,ISO,LTSIGN,CONC,YEAR
00273 83*      30 FORMAT (2X,A6,16X,I2,A1,E10.0,F4.0)
00274 84*      35 FORMAT (2X,A6,9X,A1,6X,I2,A1,E10.0,F4.0)

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00275      IPGBUF(1,1) = ISITE
00276      LKT = LKT + 1
00277      IF (ISO.EQ.19) ISO = 2
00301      KSITE = ISITE
00302      40 SYEAR = YEAR
00303      IYEAR = SYEAR
00304      IF (ISWIT.EQ.1) NEW = IEW
00306      DCTIM=(MDATE-SYEAR-.5)*365.256
00307      GO TO 50
00310      60 CONTINUE
00311      IF (ISWIT.EQ.0) READ (5,30) ISITE,ISO,LTSIGN,CONC,YEAR
00321      IF (ISWIT.EQ.1) READ (5,35) ISITE,IEW,ISO,LTSIGN,CONC,YEAR
00332      IF (ISO.EQ.18) ISO=28
00334      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 DELTA *****
00336      101* IF (YEAR.NE.SYEAR.OR.ISITE.NE.PSITE) 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* PGIBUF(ISK,LKT) = CONC
00413      128* IPGBUF(ISK,LKT) = LTSIGN
00414      129* 244 CONTINUE
00415      130* IF (ISO.LE.2.OR.ISO.GT.18.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 4*
00426 135*
00427 136*
00430 137*
00431 138*
00432 139*
00433 140*
00435 141*
00435 142*
00436 143*
00437 144*
00440 145*
00441 146*
00442 147*
00443 148*
00444 149*
00446 150*
00447 151*
00450 152*
00451 153*
00452 154*
00453 155*
00454 156*
00456 157*
00457 158*
00457 159*
00460 160*
00461 161*
00462 162*
00463 163*
00465 164*
00470 165*
00472 166*
00474 167*
00475 168*
00476 169*
00477 170*
00500 171*
00501 172*
00502 173*
00503 174*
00506 175*
00507 176*
00510 177*
00511 178*
00512 179*
00514 180*
00515 181*
00516 182*

IF (ISO.NE.3.AND.ISO.NE.1) GO TO 610
THRDT(ISO+2,JSIT)=THRDT(ISO+2,JSIT)+COIC
DECS=DECS+2.0*CONC
SBSM=SBSM+RISO(ISO)*2.0
GO TO 620
610 CONTINUE
IF (ISO.NE.8) GO TO 615
C ***** CALCULATE CONC. OF H-137m *****
THRDT(ISO+2,JSIT)=THRDT(ISO+2,JSIT)+.112661*COIC
DECS=DECS+1.919861*CONC
SBSM=SBSM+RISO(ISO)*1.919861
GO TO 620
615 SBSM=SBSM+RISO(ISO)
DECS=DECS+CONC
620 CONTINUE
IF (LTSIGN.EQ.'<') SUMLT(ISO,JSIT)=SUMLT(ISO,JSIT)+COIC
THRDT(ISO,JSIT)=THRDT(ISO,JSIT)+CONC
GO TO 668
666 CONC=CONC*(EXP(ALX*DCTIM/(4.)))
THRDT(1,JSIT)=THRDT(1,JSIT)+CONC
DECS=DECS+CONC
SBSM=SBSM+RISO(20)
IF (LTSIGN.EQ.'<') SUMLT(1,JSIT)=SUMLT(1,JSIT)+CONC
668 CONTINUE
GO TO 60
C ***** FIND INDIVIDUAL AMIS CF ISOTOPES THRU DECFY CAC *****
80 CONTINUE
PGBUF(1,LKT) = SYEAR
IPGBUF(1,LKT) = IYEAR
IF (ISWIT.EQ.1) GO TO 700
DJ 100 IG = 1,10
IF (KSITE.EQ.IGNSIT(IG)) GO TO 700
100 CONTINUE
RISO(2)=RISO(2)-SBSM
SBSM = 0.0
RISO(7)=(RISO(2)*FM*F(7))*(EXP(ALX*DCTIM/H(7)))
RISO(9)=(RISO(2)*FM*F(9))*(EXP(ALX*DCTIM/H(9)))
THRDT(7,JSIT)=THRDT(7,JSIT)+RISO(7)
THRDT(9,JSIT)=THRDT(9,JSIT)+RISO(9)
RUN=RISO(7)+RISO(9)
DO 90 J=1,40
RISO(J)=RISO(2)*FM*F(J)
RISO(J)=RISO(J)*(EXP(ALX*DCTIM/H(J)))
THRDT(J,JSIT)=THRDT(J,JSIT)+RISO(J)
RUN=RUN+RISO(J)
90 CONTINUE
GO TO 720
700 FM=1.0/FACTT
RUN=0.0

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00517 13*      RISO(2)=RISO(2)-SBSM
00520 164*     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*OCTIM/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,' I.J ',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 2*      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,LTSAB(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,LTSAB(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,LTSAB(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,LTSAB(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,LTSAB(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	1*	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(1,1)
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 WRSUR
00777	310*	LKT = LKT + 1
01000	311*	IF (LKT.GE.45) CALL WRSUR
01002	312*	IPGBUF(1,LKT) = ISITE
01003	313*	LKT = LKT + 1
01004	314*	IF (LKT.GE.45) CALL WRSUR
01006	315*	JS(JSIT) = KSITE
01007	316*	IF (ISIT.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 AATCH')
01026	323*	GO TO 9070
01027	324*	9060 JS(JSIT) = ICSIT(2,K)
01030	325*	JSMD(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* 397 CONTINUE
01036 331* DO 410 J = 1,4)
01041 332* 41 RISO(J) = 0.0
01043 333* IF (ISC.HL.99) GO TO 40
01045 334* CALL W SUB
01046 335* LKT = 10
01047 336* NUMBER = 0
01050 337* NPG = NPG + 1
01051 338* WRITE(6,5050) NPG
01054 339* 505 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 = 10
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

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END COM ILATION **      0 MESSAGES **
DCAY1 SYMOLIC
DCAY1 CODE RELOCATABLE

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03 APR 73	13:15:31	0	00437760	14	368 (DELETED)
03 APR 73	13:15:31	1	00452020	24	1 (DELETED)
		0	00452050	14	449

ISO. #	FACTOR	HALFLIFE	ISOTOPE
3	.1881-01	.103+05	S. 90
4	.4051-01	.367+03	RU106
5	.1881-01	.103+05	Y90
6	.4051-01	.367+03	Ru106
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	SB126
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	GP162
40	.9862-05	.365+03	TG162
41	.0000	.451+04	H3

FACTOR TOTAL = .78861-00

FACTOR MULTIPLIER = .12681+01