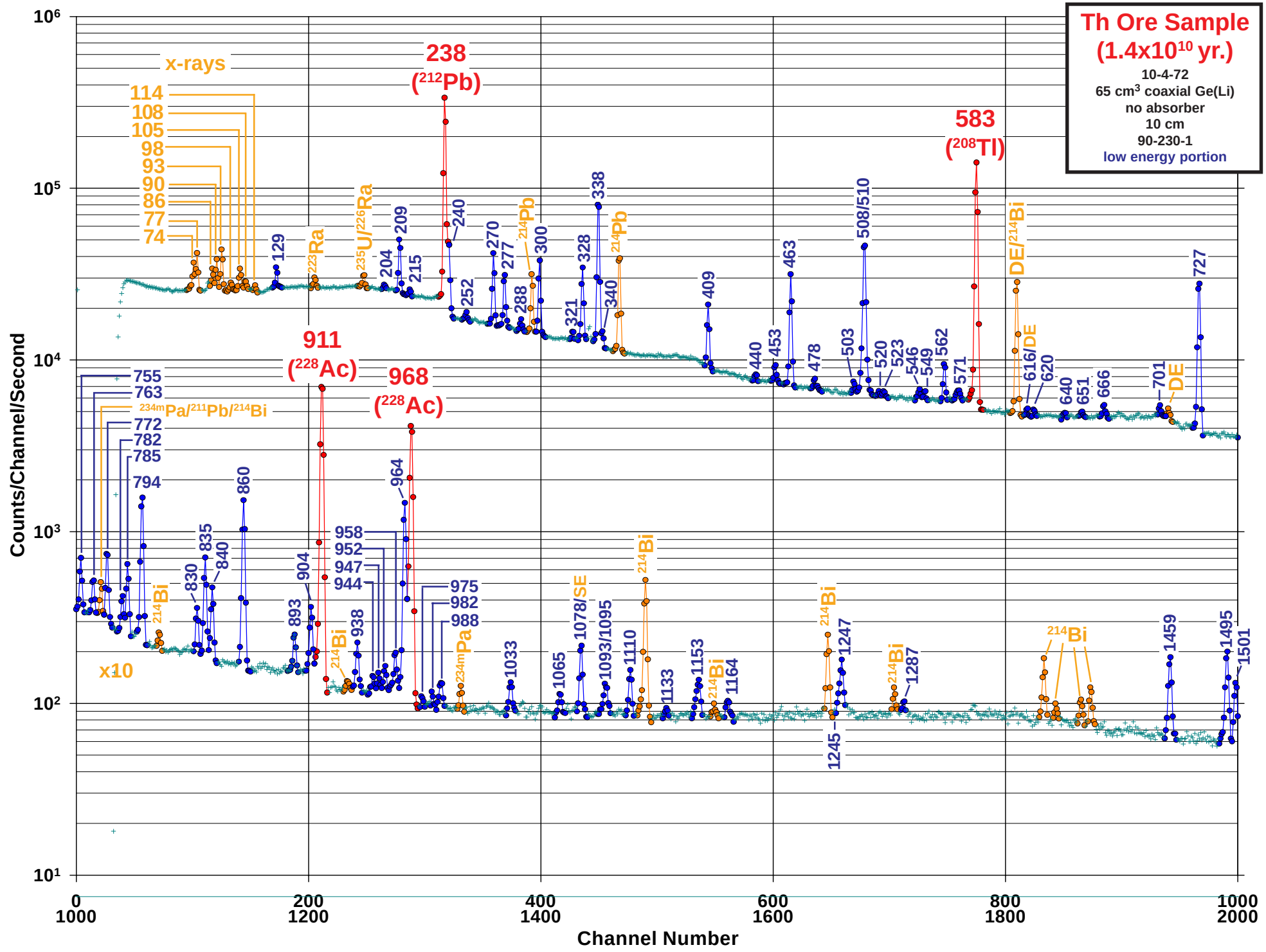


Table of Contents

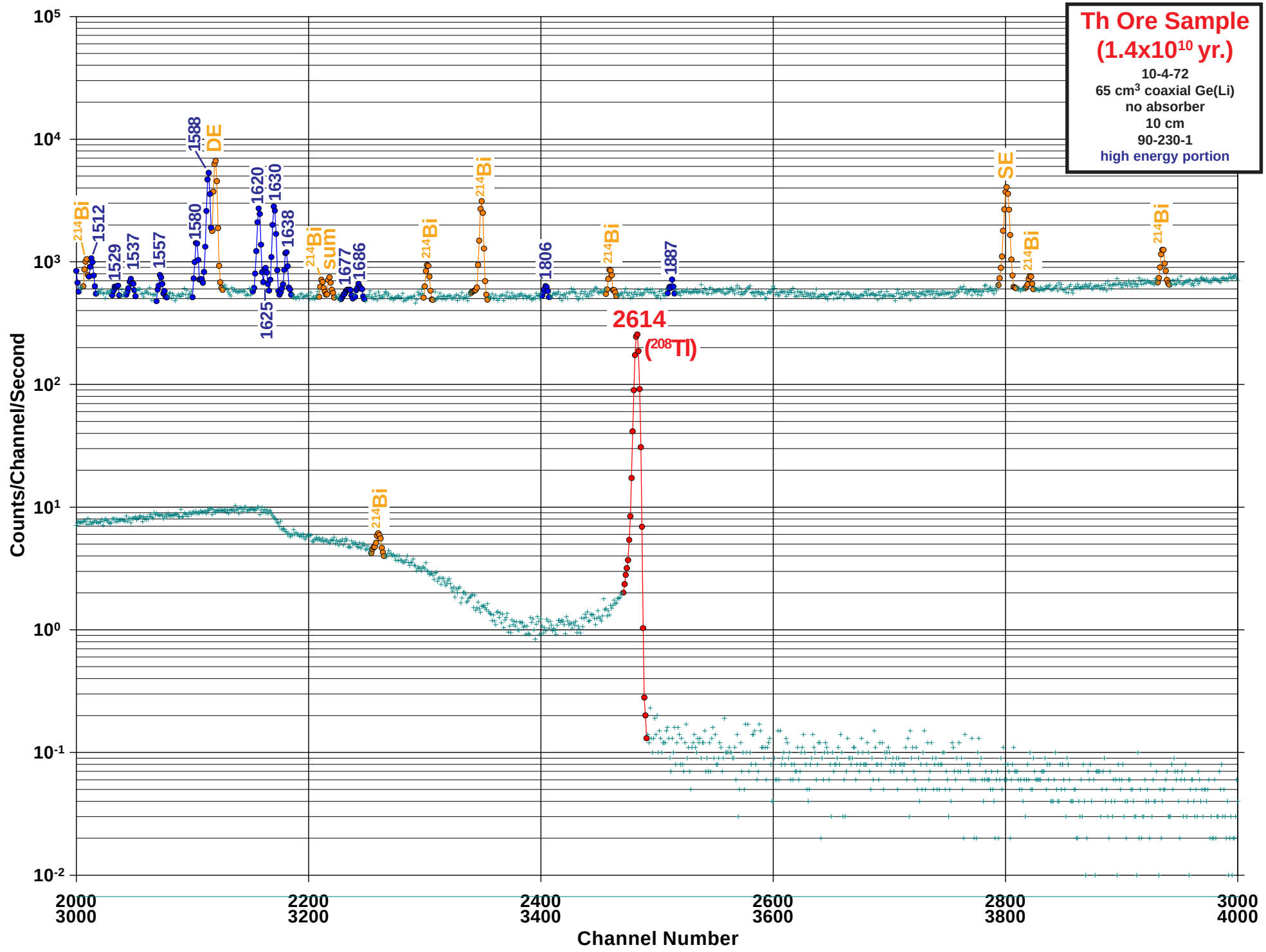
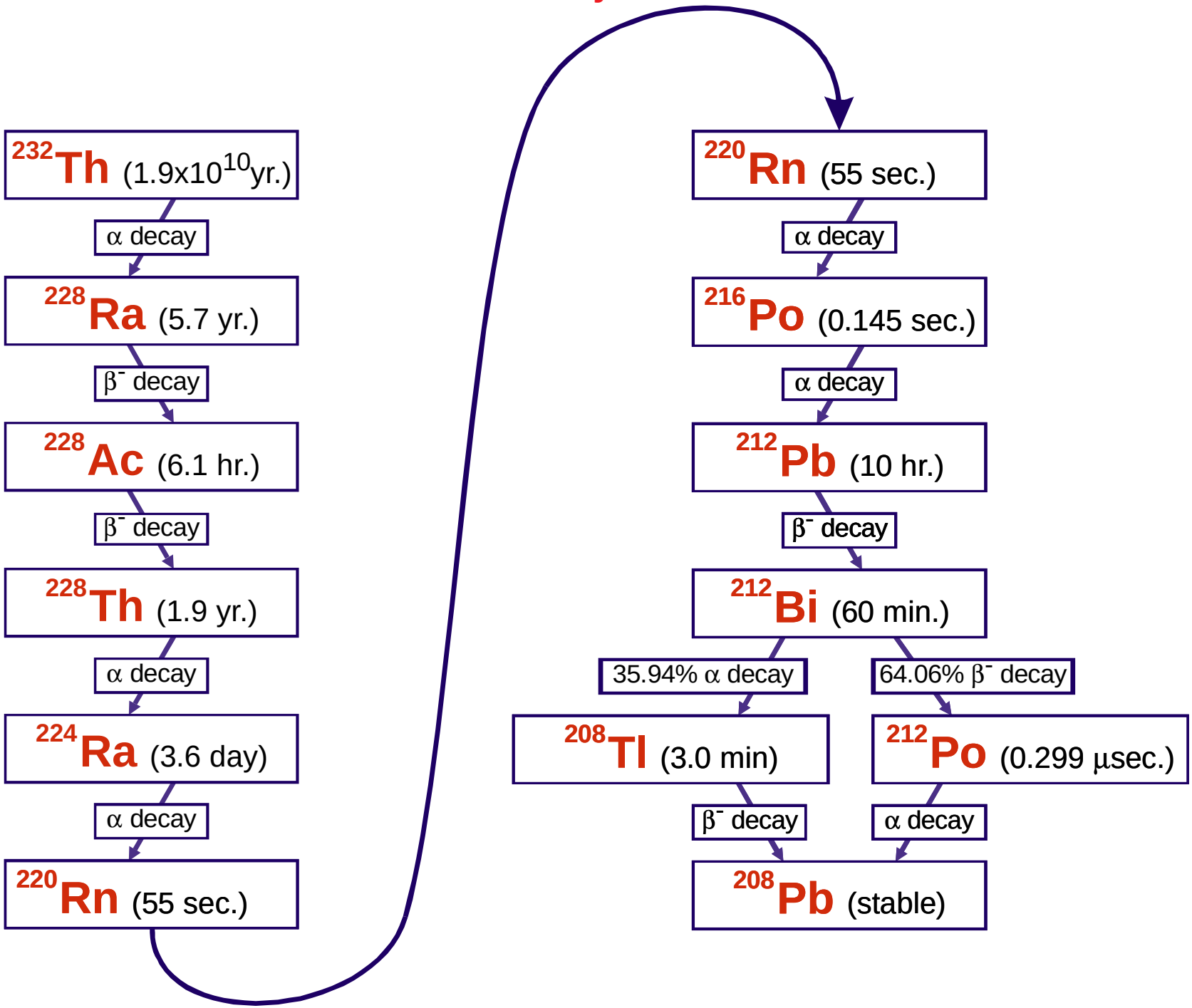


Table of Contents

Th Ore Decay Chain



GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: Thorium Ore (^{232}Th)

E_γ, σE_γ - 1998 ENSDF Data

Half Life: 7.538(39) x 10^4 yr.

Detector: 65 cm^3 coaxial Ge (Li)

Method of Production: Natural Radioactivity

Isotope	E_γ (keV)	σE_γ	S
^{212}Pb	114.8	0.3	4
^{228}Ac	129.065	0.001	4
	204.2	0.3	4
^{228}Ac	209.253	0.006	3
^{228}Th	215.983	0.005	4
^{212}Pb	238.632	0.002	1
^{224}Ra	240.986	0.006	4
^{208}Tl	252.61	0.10	4
^{228}Ac	270.245	0.002	3
^{208}Tl	277.358	0.010	4
^{212}Bi	288.20	0.04	4
^{212}Bi	295.19	0.05	4
^{214}Pb	295.19	0.05	
^{212}Pb	300.087	0.010	3
^{228}Ac	321.646	0.008	4
^{212}Bi	328.03	0.04	3
^{228}Ac	328.000	0.006	
^{228}Ac	338.320	0.003	2
^{228}Ac	340.96	0.05	4
^{228}Ac	409.462	0.006	3
^{228}Ac	440.44	0.05	4
^{212}Bi	452.98	0.05	4
^{228}Ac	463.004	0.006	3
^{228}Ac	478.33	0.05	4
^{228}Ac	503.823	0.013	4
^{228}Ac	508.959	0.017	2
^{208}Tl	510.77	0.10	
^{228}Ac	520.151	0.016	4
^{228}Ac	523.131	0.016	4
^{228}Ac	546.47	0.05	4
^{214}Pb	549.73	0.05	4
^{220}Rn	549.73	0.05	
^{228}Ac	562.500	0.004	4
^{228}Ac	570.91	0.10	
^{228}Ac	572.14	0.08	

Isotope	E_γ (keV)	σE_γ	S
^{208}Tl	583.191	0.002	1
^{214}Bi	609.321	0.018	2
^{212}Bi	616.02	0.12	4
^{228}Ac	616.22	0.03	
^{228}Ac	620.38	0.05	4
	640.34	0.30	4
^{214}Bi	651.41	0.30	4
^{228}Ac	651.51	0.03	
^{214}Bi	665.76	0.14	4
^{228}Ac	666.45	0.10	
^{228}Ac	701.747	0.014	4
^{212}Bi	727.330	0.009	2
^{228}Ac	755.315	0.004	4
^{208}Tl	763.13	0.08	4
^{214}Bi	768.36	0.20	4
^{234m}Pa	768.36	0.20	
^{228}Ac	772.291	0.005	4
^{228}Ac	782.142	0.005	4
^{212}Bi	782.2	0.3	
^{212}Bi	785.37	0.08	4
^{228}Ac	794.974	0.005	2
^{228}Ac	830.486	0.008	4
^{228}Ac	835.710	0.006	3
^{228}Ac	840.377	0.007	3
^{208}Tl	860.564	0.005	2
^{212}Bi	893.408	0.005	4
^{228}Ac	904.20	0.04	4
^{228}Ac	911.204	0.004	1
	927.9	0.3	4
^{228}Ac	944.196	0.014	4
^{228}Ac	947.982	0.011	4
^{212}Bi	952.120	0.011	4
^{228}Ac	958.61	0.04	4
^{228}Ac	964.766	0.010	2
^{228}Ac	968.971	0.017	1

Isotope	E_γ (keV)	σE_γ	S
	975	2	4
^{208}Tl	982.70	0.20	4
	988.19	0.20	4
^{228}Ac	1033.248	0.009	4
^{228}Ac	1065.18	0.04	4
^{212}Bi	1078.62	0.10	3
^{208}Tl	1093.70	0.20	4
^{228}Ac	1095.679	0.020	
^{228}Ac	1110.610	0.010	
	1133	2	4
^{228}Ac	1153.52	0.04	4
^{228}Ac	1164.50	0.08	4
^{228}Ac	1245.05	0.20	4
^{228}Ac	1247.08	0.04	3
	1287.1	0.3	4
^{228}Ac	1459.138	0.015	
^{40}K	1460.		3
^{228}Ac	1495.91	0.02	3
^{228}Ac	1501.57	0.05	4
^{212}Bi	1512.7	0.3	4
^{228}Ac	1529.05	0.10	4
^{228}Ac	1537.89	0.10	
^{228}Ac	1557.11	0.04	4
^{228}Ac	1580.53	0.03	3
^{228}Ac	1588.20	0.03	2
	1599	2	4
^{212}Bi	1620.50	0.10	2
^{228}Ac	1625.06	0.05	4
^{228}Ac	1630.63	0.01	2
^{228}Ac	1638.281	0.010	3
^{228}Ac	1677.67	0.03	4
^{228}Ac	1686.09	0.07	4
^{212}Bi	1806.0	0.5	3
^{228}Ac	1887.10	0.05	4
^{208}Tl	2614.533	0.013	1

Table of Contents