

RAM

Attachment 1

Samples		Amount					PhysicalState	Sealed Sample	PurchaseDate	Provider	Provider Address
QTY	Name	Ref	Sample	(units)	MeanLife	(units)					
6	Strontium^38_80	Sr-80	0.1	microCuries	28.8	Years	Solid	Yes	Dec, 2017	Spectrum Techniques	Oak Ridge, Tennessee USA
6	Thallium^81_204	Tl-204	0.25	microCuries	3.78	Years	Solid	Yes	Sep, 2017	Spectrum Techniques	Oak Ridge, Tennessee USA
6	Cobalt^27_60	Co-60	1	microCuries	5.27	Years	Solid	Yes	Dec, 2017	Spectrum Techniques	Oak Ridge, Tennessee USA
4	Strontium^38_80	Sr-80	0.1	microCuries	28.8	Years	Solid	Yes	Apr, 2013	Spectrum Techniques	Oak Ridge, Tennessee USA
4	Thallium^81_204	Tl-204	1	microCuries	3.78	Years	Solid	Yes	Apr, 2013	Spectrum Techniques	Oak Ridge, Tennessee USA
4	Cobalt^27_60	Co-60	1	microCuries	5.27	Years	Solid	Yes	Apr, 2013	Spectrum Techniques	Oak Ridge, Tennessee USA
4	Cobalt^27_60	Co-60	1	microCuries	5.27	Years	Solid	Yes	Dec, 2004	Spectrum Techniques	Oak Ridge, Tennessee USA
1	Strontium^38_80	Sr-80	0.1	microCuries	28.6	Years	Solid	Yes	Dec, 1998	Spectrum Techniques	Oak Ridge, Tennessee USA
1	Cobalt^27_60	Co-60	1	microCuries	5.27	Years	Solid	Yes	Dec, 1998	Spectrum Techniques	Oak Ridge, Tennessee USA
1	Cesium^55_137	Cs-137	1	microCuries	30.2	Years	Solid	Yes	Nov, 1998	Spectrum Techniques	Oak Ridge, Tennessee USA

XRG

Attachment 2

X-ray Generator

Second-Year Physics Lab

Number of Units	Name	Manufacturer	Model	Normal Voltage (kV)	Normal Current (micro Amp)	Max Voltage (kV)	Normal Current (micro Amp)
4	Tel-X-Ometer	Teltron LTD	580M	20-30		50	30 80

ProviderData

<http://www.spectrumtechniques.com/products/sources/>

	Chemical Symbol	Atomic Number	Mass Number	U.S. NRC Exempt Quantity Limit (microCuries)	IAEA Exempt Quantity Limit (microCuries)	Half-Life (Years)	Decay Constant (1/Years)	Decay Mode
Strontium	Sr-90	38	90(52 neutrons)	0.1	0.27	28.79	0.024076	Beta
Thallium	Tl-204	81	204(123 neutrons)	10	0.27	3.783	0.183227	Beta
Cobalt	Co-60	27	60(33 neutrons)	1	2.7	5.27	0.131527	Beta