Table 5
Health Physics Instruments
Final Facility Decommissioning
Teledyne Brown Engineering
Westwood, New Jersey

Instrument Manufacturer, Model, and Detector	Detector Model/ Type	Radiation Detected	Count Time	Typical Background Value	Typical Instrument Efficiency	Minimum Detectable Activity	Acceptance Criteria Value	MDA as % of Acceptance Criteria
Ludlum 2360/Ludlum 2224	43-68 100 cm^2 Gas proportional	Alpha Beta	1 min. 1 min.	3 (dpm/100 cm^2) 325 (dpm/100 cm^2)	12.2% 20.0%	24 (dpm/100 cm^2) 335 (dpm/100 cm^2)	100 (dpm/100 cm^2) 5,000 (dpm/100 cm^2)	24% 6.7%
Ludlum 3*	44-9 GM tube	Beta-gamma	8 sec (Time constant)	2,381 (dpm/100 cm^2)	11.2%	3,390 (dpm/100 cm^2)	5,000 (dpm/100 cm^2)	67.8%
Ludlum 2929	43-10 Scintillation	Alpha Beta	2 min. 2 min.	1 (dpm/100 cm^2) 512 (dpm/100 cm^2)	22.7% 12.1%	12 (dpm/100 cm^2) 225 (dpm/100 cm^2)	20 (dpm/100 cm^2) 1,000 (dpm/100 cm^2)	62% 22.5%
Ludlum 19	Internal NaI Scintillation	Gamma	N/A	10 microR/hr	N/A	N/A	5 microR/hr above background	N/A
Ludlum 2221*	43-5 50 cm^2 Scintillation	Alpha	1 min.	9 (dpm/100 cm^2)	10.9%	135 (dpm/100 cm^2)	100 (dpm/100 cm^2)	135%
Ludlum 2350-1	Various	Probe dependent	N/A	Probe dependent	Probe dependent	Probe dependent	N/A	N/A

The MDA for gamma exposure rate meters has not been calculated and is generally accepted to be equal to the measurable background rate.
*Instrument not used to perform final survey measurements.

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