

The Files

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TELEPHONE CALL FROM KARL HAFF, ORNL, REGARDING TESTING OF U. S.
RADIUM CORPORATION HYDROGEN 3 FOILS

Karl informed me that he had tested several samples of the U. S. Radium Corporation tritium foil for loss of activity at various temperatures. The foil is the standard USRC titanium tritide foil with an activity of one curie per square inch. The samples used contained 0.250 curies of tritium.

The samples were placed in a glass ampoule and heated for one hour. Karl stated the technique provides measurements of tritium loss accurate within $\pm 50\%$.

The following table summarizes results of the tests.

Temperature (C°)	H ³ loss (uc)	% loss
100	0.00145	5.0×10^{-7}
150	0.0022	8.8×10^{-7}
200	0.006	2.4×10^{-6}
250	0.0046	1.8×10^{-6}
300	0.0158	6.3×10^{-6}
350	0.0098	3.9×10^{-6}
400	0.0077	3.1×10^{-6}

The above is a preliminary report to be followed by a detailed written report within a few days.

✓ cc: Don Smith, Div. of Safety Standards

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