

Development Department, Mound Laboratory

June 18, 1965

Inter-site Analyses of Deuterium-Tritium Mixture - Letter of May 24, 1965 - MLM-CF-65-6-50

65-6-452

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The following analytical data was obtained by LASL and SRP on the DT gas mixture packaged at SRP in May 1964 and scheduled for analyses during February 1965 are given below. The values are in mol per cent and have been adjusted for decay to May 26, 1964 with a DT equilibrium constant of 3.80. Reference for this letter is MLM-CF-65-6-50.

<u>Component (Mass)</u>		<u>LASL PC #377</u>	<u>SRP PC #399</u>
H ₂	(2)	0.03%	0.02%
He	(3)	0.44%	0.44%
HD	(3)	0.33%	0.39%
HT	(4)	0.23%	0.26%
D ₂	(4)	30.73%	30.69%
DT	(5)	48.28%	48.24%
T ₂	(6)	19.96%	19.93%
Total Hydrogen		0.31%	0.34%
Total Deuterium		55.04%	55.00%
Total Tritium		44.21%	44.18%
Deuterium-Tritium Ratio		1.245	1.245

Deuterium-Tritium Ratio (9/64)

1.242 1.247

RESTRICTED DATA

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-2-

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The next analysis should be made in August 1965.

Original signed by
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TBR:vsf

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