

~~SECURITY INFORMATION~~
DATE 12/13/53 INT PLU

MOUND LABORATORY MONSANTO
C-53-2-123

Mr. E. A. Waldfole

February 23, 1953

Radium Irradiation

Following is the composite tabulation of radium which was irradiated at Hanford and which will ultimately come to Mound Laboratory.

<u>Can No.</u>	<u>Actual Weight, mg.</u>	
	<u>Bromide</u>	<u>Radium</u>
1		4670 -
2		4890
3		4970 -
4		4960
5		4890
6		4990
7		630 -
8	8926.9	5229.4
9	8750.0	5125.7
10	8697.0	5094.7
11	8897.8	5212.6 -
12	8913.4	5221.5
13	8791.7	5150.2

Note 1: The radium in each of the first six (6) samples was in the form of radium bromide, the seventh sample is radium carbonate, the rest, the bromide.

2: The first seven sample values are based on an assumption of thirty (30) grams total of radium in the entire batch and were made up at Argonne.

3: The weights on cans 8 through 13 are actual weights in the slug after combining smaller quantities of radium bromide and calcining the crucible and were made at El Dorado.

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MOUND DECLASSIFICATION REVIEW	
1ST REVIEW DATE <u>11/29/97</u>	DETERMINATION (CIRCLE NUMBER):
AUTHORITY <input type="checkbox"/> AOC <input checked="" type="checkbox"/> BADC <input type="checkbox"/> DADD	1. CLASSIFICATION RETAINED
NAME <u>T. M. FRANZ</u>	2. CLASSIFICATION CHANGED TO _____
2ND REVIEW DATE <u>11/29/98</u>	3. CONTAINS NO DOE CLASSIFIED INFO
AUTHORITY <u>AS Ratan</u>	4. COORDINATE WITH _____
NAME _____	5. CLASSIFICATION CANCELLED
	6. CLASSIFIED INFO BRACKETED
	7. OTHER COMMENTS _____

~~SECRET~~

GROUP 1
Excluded from automatic
downgrading and
declassification
Restricted Data
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in the Atomic Energy Act of 1946. Its transmittal
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SECRET

All of the above radium samples were canned at Argonne and shipped to Hanford.

Can #7 and four of the first six cans were received at Mound in November, 1951. The remaining cans of the first six and two of the remaining six cans were received in September, 1952. The numbers on the aluminum jackets were obliterated by corrosion of the aluminum so that it was impossible to identify the individual cans. Can #7 was identified by gamma measurement.

One can (~~3~~²-B-1) containing 4.0 gr. of radium as the carbonate was shipped to the MTR the last of October, 1952, and was returned to Mound in January, 1953.

Another can (~~1~~²-B-1) containing 4.7 gr. of radium as the carbonate was shipped to the MTR in December, 1952, and was returned to Mound in February, 1953.

Four cans still remain at Hanford and are expected at Mound in March.

The cans which have been shipped to the MTR have been assayed by calorimetry.

F. C. Mead, Jr.

FCM:jb

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