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FOLDER Report H CF-48-7-165 712391

ORNL NATIONAL LABORATORY
CENTRAL FILES NUMBER
48-7-165

July 14, 1948

TO: J. H. Roberson
FROM: M. E. Ramsey
SUBJ: AHRUU Program - Tantalum Sources

[REDACTED]

Four 2-S aluminum cans each containing two-hundred and eighty-six pieces of tantalum wire (170 mils in diameter and about 170 mils long) were placed in the center of the pile in Metal Channel 1866 on July 13, 1948.

The pellets are contained in an annular space formed by placing a 3/4" O. D. 2-S aluminum tube inside of the 1.1" I. D. aluminum can.

The pellets range from 1.00 grams to 1.09 grams in weight, the average pellet weight being 1.063 grams.

The tantalum pellets will reach a strength of approximately 210 millicuries, based on a flux of 86% (flux at location of pellets ranges from 85% to 87% of maximum), power of 3500 KW, and half-life of 117 days, upon completion of twenty-one days exposure. The millicurie strength will average a small amount less than 210 millicuries due to shadowing effects on some of the pellets.

M. E. Ramsey
M. E. Ramsey

MER/lr

Distribution:

- 1. J. H. Roberson
- 2. L. B. Emlet
- 3. C. D. Cagle
- 4. M. E. Ramsey

CLASSIFICATION CANCELLED

DATE 12-8-67

For The Atomic Energy Commission

H. F. Carroll
Chief, Declassification Branch

A-00149

Human Subjects Project

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[REDACTED]