NOTICE

**CERTAIN DATA
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DOCUMENT MAY BE
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HW--30959

DE93 003173

HW-30959

**DEVELOPMENT TEST NO. 105-518-SI - IRRADIATION SERVICE
REQUEST NO. 132 LOW ENERGY NEUTRON FLUX SPECTRUM
IN PROCESS TUBES**

RK MARSHALL

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MASTER

REPRODUCTION IS RESTRICTED TO OR - 2P

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Classification Canceled (Change to
DECLASSIFIED)

By Authority of Doc

may 1973

By PM Eick 10-27-92
J. W. Beale 10-27-92

RECORD CENTER FILE

HW-30959

SPECIAL RE-REVIEW

FINAL DETERMINATION

DECLASSIFICATION CONFIRMED

BY J. J. Jordan DATE 6-11-81
BY J. P. Denauin DATE 6-15-81

1. APC--HCO
2. J. A. Berberet, W. H. Clark
3. P. G. Clough
4. J. B. Czirr
5. O. H. Greager, W. K. Woods
6. T. W. Hauff
7. H. E. Heineman
8. P. C. Jerman
9. J. E. Maider
10. R. K. Marshall
11. M. M. McDonald
12. R. E. McGrath
13. R. O. Mehnann, S. L. Nelson
14. E. T. O'Sullivan
15. W. J. Ozeroff
16. P. H. Reinker, H. L. Henry
17. R. B. Richards
18. H. D. Schilling
19. O. C. Schroeder
20. H. G. Spencer
21. J. I. Thomas
22. J. H. Warren
23. 300 Files
24. 700 Files
25. Yellow File
26. Extra
27. Extra

This document consists of
4 pages. No. 25 of 27
copies. Series 1

COPY 1 OF 1, SERIES 1

March 5, 1954

DEVELOPMENT OF THE LOW ENERGY NEUTRON TUBE
IMPROVEMENT PROGRAM NO. 132
LOW ENERGY NEUTRON TUBE IMPROVEMENT PROGRAM TUBES

Cost Codes

XXXX-5903-132

Originator:

H. E. Heineman
Applied Research
Experimental Physics Sub-Unit

RECEIVED

JUL 2 1956

300 AREA
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Purpose of Irradiation:

To determine the low energy neutron flux spectrum in process tubes.

Reactions Involved:

Material:

Gold, cadmium, indium, rhodium, iridium, manganese, magnesium, silver

Amount in Cans:

A few grams or less of each of the above materials in the form of foils.

No. of Cans:

Six cans to be individually irradiated over a period of a year from the date of this test

Can Identification:

The can will be identified by a circumferential mark of "Cato" ink placed at the center of the can.

Type of Container:

Eight-inch Hanford slug can weighted with lead so it will sink

Facility:

Poison column control facility not near the fringe of the loaded zone.
No pile shutdown time required.

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Requested Exposure:

Six seconds to two minutes per can at full power and equilibrium

ih Absorbed:

Negligible

Heat Generated:

Negligible

Cooling Time:

Actual time unknown. Sufficient time will be allowed to ship cans in available containers.

Shielding Estimate:

Less than two inches of lead

Exposure History Requested:

MWD/AT nvt

Special Hazards:

None

Probable Area:

100 B

Responsibility:

The Reactor Section, Operations Unit, will be responsible for all scheduling and for the operational safety and production continuity of the pile. J. A. Berheret and R. K. Marshall, Pile Technology Sub-Section, will be responsible for the Technical Section's interests in co-operation with R. E. Heineman, Experimental Physics Sub-Unit, Applied Research Sub-Section. The final reports will be issued by the Applied Research Sub-Unit, who request that this information be obtained.

Robert K. Marshall

Chemist
Special Irradiations Sub-Unit
Pile Technology Sub-Section
ENGINEERING DEPARTMENT

RK Marshall:pg

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APPROVALS:

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END

**DATE
FILMED**

2 / 5 / 93