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HANFORD ATOMIC PRODUCT OPERATION - RICHLAND, WASHINGTON

DATE

February 27, 1961

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TITLE

IRRADIATION TEST DATA FOR PRODUCTION TEST
E-149-D; IRRADIATION SERVICE REQUEST
HAPO-215, THE IRRADIATION OF URANIUM DIOXIDE.

AUTHOR

Re K. Marshall

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2 pages.

IRRADIATION TEST DATA FOR PRODUCTION TEST IP-149-D
IRRADIATION SERVICE REPORT RPO-215
THE IRRADIATION OF URANIUM DIOXIDE

NK Marshall

February 27, 1961

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By Chris Miley, 4-20-94.

Verified By NK Hanson, 4-20-94

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W-60667

**IRRADIATION TEST DATA FOR PRODUCTION TEST IP-149-B; IRRADIATION SERVICE
RESISTANT WFO-813, THE IRRADIATION OF URANIUM DIOXIDE**

All irradiations were performed in the top row process tubes at DR Reactor. The specimens were located in the low neutron flux zone immediately upstream of the standard non-fueled column.

Thermal neutron flux

<u>Piece No.</u>	<u>Charge Date</u>	<u>Discharge Date</u>	<u>MWD/AT</u>	<u>NVT x 10¹⁹</u>	
A	5-5-58	7-31-58	37	1.0	
B	5-5-58	7-31-58	42	1.0	
C	5-5-58	1-23-59	123	3.3	
D	5-5-58	1-23-59	126	3.4	
E	5-5-58	4-24-59	181	4.8	
F	5-5-58	4-24-59	178	4.7	
G	5-5-58	5-1-60	443	11.8	
H	5-5-58	Currently under irradiation			
J	11-10-58	12-19-58	17	0.5	Lost
K	11-10-58	12-19-58	40	1.1	
L	* 3-17-59	5-13-59	42	1.1	*Recharged
	11-10-58	1-23-59	41	1.1	

The thermal neutron flux reported is the volume average flux in the nearest adjacent uranium. The ratio of the volume average thermal neutron flux in the UO₂ specimens to that of the nearest adjacent uranium is estimated to be 2. This factor does not include neutron flux depressions due to the specimens.

RK Marshall

Irradiation Testing

R. K. Marshall/rah

DATE

FILMED

10 / 17 / 94

END