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**Pacific Northwest Laboratory
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STATUS OF IRRADIATIONS PERFORMED BY
FUEL & TARGET IRRADIATION TECHNOLOGY FOR
BNW AS OF JUNE 30, 1970

L. V. Barker

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This report itemizes the irradiations performed by Fuel and Target Irradiation Technology for Battelle-Northwest. It lists the material being irradiated, awaiting disposition and material shipped during the report period. An explanation of the various columns in the report follows:

Identification

- a. TISR No. - This is the official number assigned by Testing and Irradiation Services to an experiment for purposes of identification.
- b. Request Number - Customer experiment identification number, if any.
- c. Material - The principle target material, if known, abbreviated or its chemical symbol in capital letters.
- d. Piece Number - Individual sample or assembly identification.

Operating Time (Days) - The number of full-power operating days the sample has been exposed.

CMK Absorbed - The total cmk absorbed by the sample. Does not include the facility.

Charge Date - Date and time sample charged into reactor or date and time reactor reached one-half equilibrium level if sample was charged during a reactor outage.

Location

- a. Facility - Test facility or process tube and reactor containing the experiment.
- b. Test Hole Position - Sample position in-reactor relative to a process tube.
- c. Position Factor - Location of sample in relation to front-to-rear cosine flux distribution. (This factor only applies to front-to-rear irradiations.)

NOTE: The actual shape may deviate from a cosine curve due to local perturbations. The actual shape will be provided upon request.

Exposure to Date - NVT - The total thermal neutron exposure per square centimeter received to date. This number is calculated from facility unperturbed flux and reactor operating time.

Discharge, Date and Time - Date and time samples were removed from the active portion of the reactor or date and time reactor was down to one-half equilibrium level if sample was discharged during a reactor outage.

Shipping Date - Date samples were shipped to the customer or otherwise disposed of.

L. V. Barker, Supervisor
Irradiation Services

LV Barker/ct

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IDENTIFICATION				OPERATING TIME (DAYS)	C M K ABSORBED	CHARGE		LOCATION			EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE
TISR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR		DATE	TIME	
THE FOLLOWING IRRADIATIONS ARE IN PROGRESS,														
177	BNW-177	GRAPH	0C-6	331.8369		01-25-69	0856	4BTH-KE	0-4366	1.000	3.6+21			
177	BNW-177	GRAPH	0140	331.8369		01-25-69	0856	4BTH-KE	0-4379	1.000	3.6+21			
177	BNW-177	GRAPH	0143	331.8369		01-25-69	0856	4BTH-KE	0-4376	1.000	3.6+21			
177	BNW-177	GRAPH	0188	331.8369		01-25-69	0856	4BTH-KE	0-4363	1.000	3.6+21			
177	BNW-177	GRAPH	0189	331.8369		01-25-69	0856	4BTH-KE	0-4357	1.000	3.6+21			
177	BNW-177	GRAPH	0190	331.8369		01-25-69	0856	4BTH-KE	0-4373	1.000	3.6+21			
177	BNW-177	GRAPH	0191	331.8369		01-25-69	0856	4BTH-KE	0-4369	1.000	3.6+21			
177	BNW-177	GRAPH	0192	331.8369		01-25-69	0856	4BTH-KE	0-4354	1.000	3.6+21			
177	BNW-177	GRAPH	0193	331.8369		01-25-69	0856	4BTH-KE	0-4360	1.000	3.6+21			
243	BNW-243	PLASTC	0184	74.8900		03-23-70	0025	3ATH-KE		1.000	6.3+20			
243	BNW-243	PLASTC	0185	74.8900		03-23-70	0025	3ATH-KE		1.000	6.3+20			

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IDENTIFICATION				OPERATING TIME (DAYS)	CM K ABSORBED	CHARGE		LOCATION			EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE
TISR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR		DATE	TIME	
THE FOLLOWING IRRADIATIONS ARE AWAITING DISPOSITION.														
177		GRAPH	A0A6	508,4286		09-22-67	0608	3ATH-KE	0-2984	1,000	4,5+21	07-03-69	1353	
177		GRAPH	A0D2	508,4286		09-22-67	0608	3ATH-KE	0-2977	1,000	4,5+21	07-03-69	1353	
177		GRAPH	A0D3	508,4286		09-22-67	0608	3ATH-KE	0-2981	1,000	4,5+21	07-03-69	1353	
243	BNW-243	PLASTC	0186	40,1074		03-23-70	0025	3ATH-KE		1,000	3,4+20	05-09-70	1550	
243	BNW-243	PLASTC	0190	40,1074		03-23-70	0025	3ATH-KE		1,000	3,4+20	05-09-70	1550	
381	BNW-381	U	00U7	74,8900		03-23-70	0025	0065-KE		,175	1,3+19	06-24-70	0530	
381	BNW-381	U	00U8	74,8900		03-23-70	0025	0065-KE		,179	1,4+19	06-24-70	0530	
389	BNW-389	ZIRC	0004	28,6041		04-11-70	0120	3DTH-KE		1.000	2,4+20	05-09-70	1550	
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IDENTIFICATION				OPERATING TIME (DAYS)	C M K ABSORBED	CHARGE		LOCATION			EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE
TISR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR		DATE	TIME	
THE FOLLOWING IRRADIATIONS WERE SHIPPED DURING THE MONTH														
172	BNW-172	SALTS	2415	0417		06-06-70	0913	2DTH-KE		1,000	7,1+16	06-06-70	1013	06-09-70
172	BNW-172	SALTS	2416	0417		06-06-70	0913	2DTH-KE		1,000	2,8+16	06-06-70	1013	06-09-70
172	BNW-172	SALTS	2417	0417		06-08-70	0952	3ATH-KE		1,000	5,6+16	06-08-70	1052	06-10-70
172	BNW-172	SALTS	2418	2083		06-09-70	0950	3ATH-KE		1,000	2,3+17	06-09-70	1450	06-15-70
172	BNW-172	SALTS	2419	2083		06-09-70	0950	3ATH-KE		1,000	2,8+17	06-09-70	1450	06-15-70
172	BNW-172	SALTS	2420	1,0000		06-16-70	1455	3ATH-KE		1,000	1,4+18	06-17-70	1455	06-22-70
184	BNW-184	VAR	3560	8437		06-01-70	1030	2DTH-KE		1,000	1,4+18	06-02-70	0645	06-02-70
184	BNW-184	VAR	3561	8437		06-01-70	1030	2DTH-KE		1,000	1,4+18	06-02-70	0645	06-02-70
184	BNW-184	VAR	3562	9028		06-07-70	0905	2DTH-KE		1,000	7,6+18	06-08-70	0645	06-08-70
184	BNW-184	VAR	3563	9028		06-07-70	0905	2DTH-KE		1,000	7,6+18	06-08-70	0645	06-08-70
184	BNW-184	VAR	3564	8729		06-08-70	0948	2DTH-KE		1,000	7,4+18	06-09-70	0645	06-09-45
184	BNW-184	VAR	3565	8729		06-08-70	0948	2DTH-KE		1,000	7,4+18	06-09-70	0645	06-09-45
184	BNW-184	VAR	3566	8646		06-09-70	1000	2DTH-KE		1,000	7,3+18	06-10-70	0645	06-10-70
184	BNW-184	VAR	3567	8646		06-09-70	1000	2DTH-KE		1,000	7,3+18	06-10-70	0645	06-10-70
184	BNW-184	VAR	3568	8646		06-10-70	1000	2DTH-KE		1,000	7,3+18	06-11-70	0645	06-11-70
184	BNW-184	VAR	3569	8646		06-10-70	1000	2DTH-KE		1,000	7,3+18	06-11-70	0645	06-11-70
184	BNW-184	VAR	3570	9375		06-14-70	0815	2DTH-KE		1,000	7,9+18	06-15-70	0645	06-15-70
184	BNW-184	VAR	3571	9375		06-14-70	0815	2DTH-KE		1,000	7,9+18	06-15-70	0645	06-15-70
184	BNW-184	VAR	3572	8715		06-15-70	0950	2DTH-KE		1,000	7,4+18	06-16-70	0645	06-16-70
184	BNW-184	VAR	3573	8715		06-15-70	0950	2DTH-KE		1,000	7,4+18	06-16-70	0645	06-16-70
184	BNW-184	VAR	3574	8750		06-16-70	0945	2DTH-KE		1,000	7,4+18	06-17-70	0645	06-17-70
184	BNW-184	VAR	3575	8750		06-16-70	0945	2DTH-KE		1,000	7,4+18	06-17-70	0645	06-17-70
184	BNW-184	VAR	3576	8646		06-17-70	1000	2DTH-KE		1,000	7,3+18	06-18-70	0645	06-18-70
184	BNW-184	VAR	3577	8646		06-17-70	1000	2DTH-KE		1,000	7,3+18	06-18-70	0645	06-18-70
184	BNW-184	VAR	3578	8715		06-21-70	0950	2DTH-KE		1,000	7,4+18	06-22-70	0645	06-22-70
184	BNW-184	VAR	3579	8715		06-21-70	0950	2DTH-KE		1,000	7,4+18	06-22-70	0645	06-22-70
184	BNW-184	VAR	3580	8646		06-22-70	1000	2DTH-KE		1,000	7,3+18	06-23-70	0645	06-23-70
184	BNW-184	VAR	3581	8646		06-22-70	1000	2DTH-KE		1,000	7,3+18	06-23-70	0645	06-23-70
184	BNW-184	PLASTC	6744	0007		06-06-70	0901	3ATH-KE		1,000	1,1+15	06-06-70	0902	06-07-70
184	BNW-184	PLASTC	6745	0007		06-09-70	0925	3ATH-KE		1,000	1,1+15	06-09-70	0926	06-09-70
184	BNW-184	PLASTC	6746	0007		06-20-70	0946	3ATH-KE		1,000	1,1+15	06-20-70	0947	06-22-70
184	BNW-184	PLASTC	6747	0007		06-23-70	1446	3ATH-KE		1,000	9,5+14	06-23-70	1447	06-24-70
271	BNW-271	DEP-U	0156	3,0708		06-08-70	0948	2DTH-KE		1,000	2,6+19	06-11-70	1130	06-15-70
402	BNW-402	UO2	0001	2,9340		06-19-70	1515	2BTH-KE		1,000	3,2+19	06-22-70	1340	06-25-70

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IDENTIFICATION				OPERATING TIME (DAYS)	C M K ABSORBED	CHARGE		LOCATION		EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE
TSR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION		POSITION FACTOR	DATE	

THE FOLLOWING IRRADIATIONS WERE SHIPPED DURING THE MON TH

236 BNW-236	SS	IV43	34.7826	05-17-70	0654	2ATH-KE	1,000	2,9+20	06-24-70	0530	06-29-70
389 BNW-389	ZR	0005	34.7826	05-17-70	0654	3DTH-KE	1,000	2,9+20	06-24-70	0530	06-26-70

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