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**Pacific Northwest Laboratory
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STATUS OF IRRADIATIONS PERFORMED BY FUEL
AND TARGET IRRADIATION TECHNOLOGY FOR BNW
AS OF NOVEMBER 30, 1969

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AUTHOR

L. V. Barker

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STATUS OF IRRADIATIONS PERFORMED BY
TESTING AND IRRADIATION SERVICES FOR BNW
AS OF November 30, 1969

L. V. Barker

This report itemizes the irradiations performed by Testing and Irradiation Services 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.

Le Barker
Supervisor
Irradiation Testing

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IDENTIFICATION				OPERATING TIME (DAYS)	C M K ABSORBED	CHARGE		LOCATION			EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE	
TIR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR		DATE	TIME		
THE FOLLOWING IRRADIATIONS ARE IN PROGRESS:															
177	BNN-177	GRAPH	GP-2	97,6028		07-24-69	0940	30TH-KW	0-4346	1,000	07-24-69	0940			
177	BNN-177	GRAPH	GP-6	207,3094		01-25-69	0856	48TH-KE	0-4379	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0140	207,3094		01-25-69	0856	48TH-KE	0-4376	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0143	207,3094		01-25-69	0856	48TH-KE	0-4363	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0188	207,3094		01-25-69	0856	48TH-KE	0-4357	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0189	207,3094		01-25-69	0856	48TH-KE	0-4373	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0190	207,3094		01-25-69	0856	48TH-KE	0-4369	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0191	207,3094		01-25-69	0856	48TH-KE	0-4354	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0192	207,3094		01-25-69	0856	48TH-KE	0-4360	1,000	01-25-69	0856			
177	BNN-177	GRAPH	0193	207,3094		01-25-69	0856	48TH-KE	0-4360	1,000	01-25-69	0856			
236	BNN-236	SS	1V36	392,6272		05-11-68	1400	30TH-KW		1,000	05-11-68	1400			
236	BNN-236	ZIRC	4-30	503,7666		01-14-68	2012	30TH-KW		1,000	01-14-68	2012			
236	BNN-236	SS	4-40	60,5180		09-07-69	1740	20TH-KW		1,000	09-07-69	1740			
236	BNN-236	SS	4-41	2,5000		11-28-69	1200	30TH-KW		1,000	11-28-69	1200			
236	BNN-236	SS	4-42	2,5000		11-28-69	1200	30TH-KW		1,000	11-28-69	1200			
236	BNN-236-A	SS	4-38	119,5332		05-29-69	2312	30TH-KW		1,000	05-29-69	2312			
384	BNN-384	BORCAR	0005	139,6888		05-29-69	2312	30TH-KW		1,000	05-29-69	2312			
384	BNN-384	BORCAR	0006	139,6888		05-29-69	2312	30TH-KW		1,000	05-29-69	2312			
384	BNN-384	BORCAR	0003	151,4926		04-24-69	2113	30TH-KE		1,000	04-24-69	2113			

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IDENTIFICATION				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	TIME	
THE FOLLOWING IRRADIATIONS ARE AWAITING DISPOSITION:													
177		GRAPH	A0A6	508,4286	09-22-67	0608	3ATH-KE	0-2934	1,000	4,5-21	07-03-69	1353	
177		GRAPH	A002	508,4286	09-22-67	0608	3ATH-KE	0-2977	1,000	4,5-21	07-03-69	1353	
177		GRAPH	A003	508,4286	09-22-67	0608	3ATH-KE	0-2991	1,000	4,5-21	07-03-69	1353	
243		CARBON	0176	205,4133	10-24-68	1345	4CTH-KW		1,000	2,3-21	10-03-69	1020	

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IDENTIFICATION				OPERATING TIME (DAYS)	CMK ASSURED	CHARGE		LOCATION		EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE
TGR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION		POSITION FACTOR	DATE	
THE FOLLOWING IRRADIATIONS WERE SHIPPED DURING THE MONTH													
172	BNW-172	WATER	2280	0417		11-13-69	1025	2ATH-KW		5,6+16	11-13-69	1125	11-14-
172	BNW-172	WATER	2281	0417		11-13-69	1025	2ATH-KW		6,4+16	11-13-69	1125	11-14-
172	BNW-172	SEASLT	2278	1,0000		11-04-69	0845	48TH-KW		7,8+17	11-05-69	0845	11-12-
172	BNW-172	SEASLT	2279	1,0000		11-04-69	0845	48TH-KW		1,1+18	11-05-69	0845	11-12-
172	BNW-172	SEASLT	2282	9965		11-20-69	1035	48TH-KW		7,8+17	11-21-69	1030	11-28-
172	BNW-172	SEASLT	2283	9965		11-20-69	1035	48TH-KW		1,1+18	11-21-69	1030	11-28-
177	BNW-177	GRAPH	GP-1	50,5543		07-23-69	1450	3ATH-KW		4,3+20	09-25-69	1015	11-03-
184	BNW-184	VARIOS	3475	9201		11-10-69	0840	2ATH-KW		1,6+18	11-11-69	0645	11-11-
184	BNW-184	VARIOS	3476	9271		11-12-69	0830	2ATH-KW		1,6+18	11-13-69	0645	11-13-
184	BNW-184	VARIOS	3477	8750		11-18-69	0945	2ATH-KW		7,4+18	11-19-69	0645	11-19-
184	BNW-184	VARIOS	3478	8750		11-18-69	0945	2ATH-KW		7,4+18	11-19-69	0645	11-19-
184	BNW-184	VARIOS	3479	8681		11-19-69	0955	2ATH-KW		1,5+18	11-20-69	0645	11-20-
184	BNW-184	VARIOS	3480	8299		11-30-69	1010	2ATH-KW		1,4+18	12-01-69	0605	12-01-
184	BNW-184	PLASTC	6706	0014		11-01-69	0938	48TH-KW		1,1+15	11-01-69	0940	11-02-
184	BNW-184	PLASTC	6707	0014		11-01-69	0925	48TH-KW		1,1+15	11-01-69	0927	11-02-
184	BNW-184	PLASTC	6708	0014		11-06-69	0930	48TH-KW		1,1+15	11-06-69	0932	11-07-
184	BNW-184	PLASTC	6709	0014		11-10-69	1402	48TH-KW		1,1+15	11-10-69	1404	11-11-
184	BNW-184	PLASTC	6710	0014		11-11-69	1005	48TH-KW		1,1+15	11-11-69	1007	11-12-
184	BNW-184	PLASTC	6711	0014		11-29-69	0945	48TH-KW		1,1+15	11-29-69	0947	11-30-
271	BNW-271	DEP-U	0139	3,0729		11-13-69	1315	2ATH-KW		2,6+19	11-16-69	1500	11-18-
271	BNW-271	AS	0140	7083		11-17-69	1430	2ATH-KW	6-2273	6,0+18	11-18-69	0730	11-20-
271	BNW-271	STR	0132	87,0527		07-29-69	1348	2DTH-KE		7,4+20	11-16-69	1550	11-20-
384	BNW-384	BORCAR	0004	115,4597		05-29-69	2312	38TH-KW		1,3+21	10-19-69	2145	11-04-
384	BNW-384	BORCAR	0002	149,9544		04-21-69	2113	30TH-KE		1,6+21	11-16-69	1550	11-30-
391	BNW-391	FU-U	0005	1,6979		11-05-69	1045	28TH-KW		1,9+19	11-07-69	0300	11-10-
391	BNW-391	FU-U	0006	1,4167		11-11-69	1025	28TH-KW		4,6+18	11-11-69	2025	11-14-
400	BNW-400	BIC	0001	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0002	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0003	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0004	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0005	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0006	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0007	0208		11-15-69	1005	2ATH-KW		1,8+17	11-15-69	1035	11-16-
400	BNW-400	BIC	0008	0208		11-15-69	1100	2ATH-KW		1,8+17	11-15-69	1130	11-16-
400	BNW-400	BIC	0009	0208		11-15-69	1100	2ATH-KW		1,8+17	11-15-69	1130	11-16-
400	BNW-400	BIC	0010	0208		11-15-69	1100	2ATH-KW		1,8+17	11-15-69	1130	11-16-
400	BNW-400	BIC	0011	0208		11-15-69	1100	2ATH-KW		1,8+17	11-15-69	1130	11-16-
400	BNW-400	BIC	0012	0208		11-15-69	1100	2ATH-KW		1,8+17	11-15-69	1130	11-16-

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IDENTIFICATION				OPERATING TIME (DAYS)	C M K ABSORBED	CHARGE		LOCATION			EXPOSURE TO DATE N V T	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														
400	BW-400	BIO	0013	.0208		11-15-69	1100	2ATH-KW		1,000	1,8+17	11-15-69	1130	11-16-
400	BW-400	BIO	0014	.0208		11-29-69	0940	2ATH-KW		1,000	1,8+17	11-29-69	1010	11-30-
400	BW-400	BIO	0015	.0208		11-29-69	0940	2ATH-KW		1,000	1,8+17	11-29-69	1010	11-30-
400	BW-400	BIO	0016	.0208		11-29-69	0940	2ATH-KW		1,000	1,8+17	11-29-69	1010	11-30-
400	BW-400	BIO	0017	.0208		11-29-69	0940	2ATH-KW		1,000	1,8+17	11-29-69	1010	11-30-
400	BW-400	BIO	0018	.0208		11-29-69	0940	2ATH-KW		1,000	1,8+17	11-29-69	1010	11-30-
400	BW-400	BIO	0019	.0208		11-29-69	0940	2ATH-KW		1,000	1,8+17	11-29-69	1010	11-30-

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