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**Pacific Northwest Laboratory
Operated for the U.S. Department of Energy
by Battelle Memorial Institute**

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STATUS OF IRRADIATIONS PERFORMED BY
TESTING AND IRRADIATION SERVICES FOR BNW
AS OF FEBRUARY 16, 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 FEBRUARY 16, 1969

L. V. Barker

February 28, 1969

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CG-NMP-1, 8-3-94

By J. E. Savely 9-20-94

Verified By Jerri Moley, 9-20-94

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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.

LV Barker
Supervisor
Irradiation Testing

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LV Barker/k

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		GRAPH	A0J3	441.9013		02-12-68	2150	8TH -C	0-2068	1.000	3.0+21			
177		GRAPH	A0J4	441.9013		02-12-68	2150	8TH -C	0-2055	1.000	3.0+21			
177		GRAPH	B0J6	108.8611		09-13-68	1100	8TH -C	0-2074	1.000	7.4+20			
177		GRAPH	B0J7	108.8611		09-13-68	1100	8TH -C	0-2077	1.000	7.4+20			
177		GRAPH	B0J8	108.8611		09-13-68	1100	8TH -C	0-2071	1.000	7.4+20			
177		GRAPH	B0K6	108.8611		09-13-68	1100	8TH -C	0-2080	1.000	7.4+20			
177		GRAPH	00J2	278.9654		02-12-68	2150	8TH -C	0-2059	1.000	1.9+21			
177		GRAPH	00K9	278.9654		02-12-68	2150	8TH -C	0-2062	1.000	1.9+21			
177		GRAPH	A0A6	412.3379		09-22-67	0608	3ATH-KE	0-2984	1.000	3.7+21			
177		GRAPH	A0D2	412.3379		09-22-67	0608	3ATH-KE	0-2977	1.000	3.7+21			
177		GRAPH	A0D3	412.3379		09-22-67	0608	3ATH-KE	0-2981	1.000	3.7+21			
177	BMW-177	GRAPH	0C-6	22.6278		01-25-69	0856	48TH-KE	0-4366	1.000	2.5+20			
177	BMW-177	GRAPH	0140	22.6278		01-25-69	0856	48TH-KE	0-4379	1.000	2.5+20			
177	BMW-177	GRAPH	0143	22.6278		01-25-69	0856	48TH-KE	0-4376	1.000	2.5+20			
177	BMW-177	GRAPH	0188	22.6278		01-25-69	0856	48TH-KE	0-4363	1.000	2.5+20			
177	BMW-177	GRAPH	0189	22.6278		01-25-69	0856	48TH-KE	0-4357	1.000	2.5+20			
177	BMW-177	GRAPH	0190	22.6278		01-25-69	0856	48TH-KE	0-4373	1.000	2.5+20			
177	BMW-177	GRAPH	0191	22.6278		01-25-69	0856	48TH-KE	0-4369	1.000	2.5+20			
177	BMW-177	GRAPH	0192	22.6278		01-25-69	0856	48TH-KE	0-4354	1.000	2.5+20			
177	BMW-177	GRAPH	0193	22.6278		01-25-69	0856	48TH-KE	0-4360	1.000	2.5+20			
222		U	P22	74.0451		11-28-68	0250	3674-KW		1.000	1.0+21			
222		U	P23	74.0451		11-28-68	0250	3674-KW		1.000	1.0+21			
236		ZR-WB	1V29	221.2027		04-01-68	0630	3ATH-KW		1.000	1.9+21			
236		ZR	4-28	444.5132		08-13-67	0615	3ATH-KE		1.000	4.0+21			
236		SS	1V36	168.8174		06-11-68	1400	3CTH-KW		1.000	2.0+21			
236		ZIRC	4-30	289.9560		01-14-68	2019	3CTH-KW		1.000	3.5+21			
236		ZIRC	4-25	289.9560		01-14-68	2019	3DTH-KW		1.000	2.6+21			
243		MOLY	00R3	84.9383		11-08-68	1535	2BTH-KE		1.000	9.3+20			
243		VRS	0172	109.6121		07-30-68	1455	4CTH-KW		1.000	1.3+21			
243		CARBON	0177	59.8028		10-24-68	1345	4CTH-KW		1.000	6.6+20			
243		CARBON	0178	59.8028		10-24-68	1345	4CTH-KW		1.000	6.6+20			
243	BMW-243	TENSIL	0181	3.4444		02-13-69	1320	4CTH-KW		1.000	3.8+19			
259		HASTLY	0A-G	1098.9760		12-25-64	2255	ETH -C	0-2177	1.000	4.3+21			
259		HASTLY	0A-H	1098.9760		12-25-64	2255	ETH -C	0-2175	1.000	4.3+21			
376		VRS	0001	411.7379		09-22-67	0608	2DTH-KE	6-2273	1.000	3.7+21			
376		VRS	0002	411.7379		09-22-67	0608	2DTH-KE	6-2272	1.000	3.7+21			
376		VRS	0003	411.7379		09-22-67	0608	2DTH-KE	6-2271	1.000	3.7+21			
376		VRS	0004	411.7379		09-22-67	0608	2DTH-KE	6-2270	1.000	3.7+21			

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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.														
376		VRS	0005	411.7377		69-22-67	0608	20TH-KF	6-2269	1.000	3.7+21			
376		VRS	0006	411.7379		69-22-67	0608	20TH-KF	6-2268	1.000	3.7+21			
376		VRS	0007	411.7379		69-22-67	0608	20TH-KF	6-2267	1.000	3.7+21			
376		VRS	0008	411.7377		69-22-67	0608	20TH-KF	6-2266	1.000	3.7+21			
376		VRS	0009	411.7377		69-22-67	0608	20TH-KF	6-2265	1.000	3.7+21			
376		VRS	0010	411.7377		69-22-67	0608	20TH-KF	6-2264	1.000	3.7+21			
376		VRS	0011	411.7377		69-22-67	0608	20TH-KF	6-2263	1.000	3.7+21			
376		VRS	0012	411.7377		69-22-67	0608	20TH-KF	6-2262	1.000	3.7+21			
376		VRS	0013	411.7377		69-22-67	0608	20TH-KF	6-2261	1.000	3.7+21			
376		VRS	0014	411.7377		69-22-67	0608	20TH-KF	6-2260	1.000	3.7+21			
376		VRS	0015	411.7377		69-22-67	0608	20TH-KF	6-2259	1.000	3.7+21			
376		VRS	0016	411.7377		69-22-67	0608	20TH-KF	6-2258	1.000	3.7+21			

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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 AWAITING DISPOSITION.														
243		19481L	0001	49.2580			12-15-68	0610	501H-KE			1.000	5.4+20	02-17-69	1000	

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IDENTIFICATION				OPERATING TIME (DAYS)	CMK 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	BIO	1741	.0208		02-08-69	0935	2DTH-KE		1.000	1,8+17	02-08-69	1005	02-09-69
172	BNW-172	SEASLT	1742	2.0208		02-11-69	1010	2DTH-KE		1.000	1,7+19	02-13-69	1040	02-20-69
172	BNW-172	SEASLT	1743	2.0208		02-11-69	1010	2DTH-KE		1.000	1,7+19	02-13-69	1040	02-20-69
172	BNW-172	SEASLT	1744	2.0208		02-11-69	1010	2DTH-KE		1.000	1,7+19	02-13-69	1040	02-20-69
172	BNW-172	SEASLT	1745	2.0208		02-11-69	1010	2DTH-KE		1.000	1,7+19	02-13-69	1040	02-20-69
172	BNW-172	SEASLT	1746	2.0208		02-11-69	1010	2DTH-KE		1.000	1,7+19	02-13-69	1040	02-20-69
172	BNW-172	SEASLT	1747	2.0208		02-11-69	1010	2DTH-KE		1.000	1,7+19	02-13-69	1040	02-20-69
172	BNW-172	BIO	1765	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1766	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1767	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1768	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1769	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1770	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1771	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
172	BNW-172	BIO	1772	.0208		02-15-69	1035	2DTH-KE		1.000	1,8+17	02-15-69	1105	02-18-69
184	BNW-184	PLASTC	6472	.0007		02-01-69	1500	ATH -C		1.000	1,1+15	02-01-69	1501	02-03-69
184	BNW-184	PLASTC	6473	.0007		02-01-69	1502	ATH -C		1.000	1,1+15	02-01-69	1503	02-03-69
184	BNW-184	PLASTC	6474	.0007		02-01-69	1504	ATH -C		1.000	1,1+15	02-01-69	1505	02-03-69
184	BNW-184	PLASTC	6475	.0007		02-01-69	1506	ATH -C		1.000	1,1+15	02-01-69	1507	02-03-69
184	BNW-184	PLASTC	6476	.0007		02-01-69	1508	ATH -C		1.000	1,1+15	02-01-69	1509	02-03-69
184	BNW-184	VAR	6477	.0007		02-12-69	1140	ATH -C		1.000	1,1+15	02-12-69	1141	02-13-69
184	BNW-184	VAR	3253	.9271		01-19-69	0830	2ATH-KW		1.000	7,8+18	01-20-69	0645	01-20-69
184	BNW-184	VAR	3254	.9271		01-19-69	0830	2ATH-KW		1.000	7,8+18	01-20-69	0645	01-20-69
184	BNW-184	VAR	3255	.8437		01-20-69	1030	2ATH-KW		1.000	7,1+18	01-21-69	0645	01-21-69
184	BNW-184	VAR	3256	.8437		01-20-69	1030	2ATH-KW		1.000	7,1+18	01-21-69	0645	01-21-69
184	BNW-184	VAR	3257	.9201		01-22-69	0840	2ATH-KW		1.000	7,8+18	01-23-69	0645	01-23-69
184	BNW-184	VAR	3258	.9201		01-22-69	0840	2ATH-KW		1.000	7,8+18	01-23-69	0645	01-23-69
184	BNW-184	VAR	3259	.9062		01-26-69	0900	2ATH-KW		1.000	7,7+18	01-27-69	0645	01-27-69
184	BNW-184	VAR	3260	.9062		01-26-69	0900	2ATH-KW		1.000	7,7+18	01-27-69	0645	01-27-69
184	BNW-184	VAR	3261	.8542		01-27-69	1015	2ATH-KW		1.000	7,2+18	01-28-69	0645	01-28-69
184	BNW-184	VAR	3262	.8542		01-27-69	1015	2ATH-KW		1.000	7,2+18	01-28-69	0645	01-28-69
184	BNW-184	VAR	3263	.8681		01-29-69	0955	2ATH-KW		1.000	7,3+18	01-30-69	0645	01-30-69
184	BNW-184	VAR	3264	.8889		02-02-69	0925	2ATH-KW		1.000	7,5+18	02-03-69	0645	02-03-69
184	BNW-184	VAR	3265	.8889		02-02-69	0925	2ATH-KW		1.000	7,5+18	02-03-69	0645	02-03-69
184	BNW-184	VAR	3271	.0007		02-11-69	0715	2ATH-KW		1.000	1,2+15	02-11-69	0716	02-11-69
184	BNW-184	VAR	3272	.9062		02-12-69	0900	2ATH-KW		1.000	7,7+18	02-13-69	0645	02-13-69
184	BNW-184	VAR	3273	.9062		02-12-69	0900	2ATH-KW		1.000	7,7+18	02-13-69	0645	02-13-69
184	BNW-184	VAR	3266	.8681		02-03-69	1005	2DTH-KE		1.000	7,3+18	02-04-69	0655	02-04-69

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IDENTIFICATION				CHARGE		LOCATION			EXPOSURE		DISCHARGE		SHIPPING	
TSR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.	OPERATING TIME (DAYS)	CMK ABSORBED	DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR	TO DATE NVT	DATE	TIME	DATE
THE FOLLOWING IRRADIATIONS WERE SHIPPED DURING THE MONTH														
184	BNW-184	VAR	3267	.8682		02-03-69	1005	2DTH-KE		1.000	7.3+13	02-04-69	0655	02-04-69
184	BNW-184	STD	3268	.0007		02-06-69	0705	2DTH-KE		1.000	4.1+14	02-06-69	0706	02-06-69
184	BNW-184	VAR	3269	.9271		02-09-69	0830	2DTH-KE		1.000	7.8+13	02-10-69	0645	02-10-69
184	BNW-184	VAR	3270	.9271		02-09-69	0839	2DTH-KE		1.000	7.8+13	02-10-69	0645	02-10-69
222		L	P21	03.7270		08-24-68	2324	3DTH-KE		1.000	1.1+21	12-08-68	2145	01-21-69
266		ZIRCON	1V34	00.0111		10-15-68	0658	3DTH-KW		1.000	6.8+20	12-18-68		12-23-68
271		EAST	01-3	265.5396		02-12-68	2150	ETH -C		1.000	1.0+21	01-30-69	1100	02-17-69
271	BNW-271	DEP-U	0116	3.0000		01-30-69	1100	2DTH-KE		1.000	2.5+19	02-02-69	1100	02-03-69
271	BNW-271	DEP-U	0117	3.0000		01-30-69	1100	2DTH-KE		1.000	2.5+19	02-02-69	1100	02-03-69
271	BNW-271	ARSNIC	0118	.5937		02-06-69	0845	2DTH-KE		1.000	5.0+18	02-06-69	2300	02-07-69

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