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**Pacific Northwest Laboratory
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STATUS OF IRRADIATIONS PERFORMED BY FUEL & TARGET IRRADIATION TECHNOLOGY FOR BNW AS OF DECEMBER 31, 1969

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STATUS OF IRRADIATIONS PERFORMED BY
FUEL AND TARGET IRRADIATION TECHNOLOGY FOR BNW
AS OF DECEMBER 31, 1969

L. V. Barker

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This report itemizes the irradiations performed by Fuel & Target Irradiation Tech. 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 Fuel & Target Irradiation Technology 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
L. V. Barker, Supervisor
Irradiation Services

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IDENTIFICATION				OPERATING TIME (DAYS)	CMK ABSORBED	CHARGE		LOCATION			EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE
TBR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.			DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR		DATE	TIME	
THE FOLLOWING IRRADIATIONS ARE IN PROGRESS.														
177	BWK-177	GRAPH	0140	229.2677	01-25-69	0855	48TH-KE	0-4366	1.000	2.5+21				
177	BWK-177	GRAPH	0140	229.2677	01-25-69	0855	48TH-KE	0-4379	1.000	2.5+21				
177	BWK-177	GRAPH	0143	229.2677	01-25-69	0855	48TH-KE	0-4376	1.000	2.5+21				
177	BWK-177	GRAPH	0188	229.2677	01-25-69	0855	48TH-KE	0-4363	1.000	2.5+21				
177	BWK-177	GRAPH	0149	229.2677	01-25-69	0855	48TH-KE	0-4357	1.000	2.5+21				
177	BWK-177	GRAPH	0190	229.2677	01-25-69	0855	48TH-KE	0-4373	1.000	2.5+21				
177	BWK-177	GRAPH	0191	229.2677	01-25-69	0855	48TH-KE	0-4369	1.000	2.5+21				
177	BWK-177	GRAPH	0192	229.2677	01-25-69	0855	48TH-KE	0-4354	1.000	2.5+21				
177	BWK-177	GRAPH	0193	229.2677	01-25-69	0855	48TH-KE	0-4360	1.000	2.5+21				
236		SS	1V36	413.6272	06-11-66	1400	30TH-KW		1.000	4.6+21				
236		ZIRC	4-39	534.7660	01-14-66	2019	30TH-KW		1.000	6.2+21				
236	BWK-236	SS	4-40	61.5180	09-07-69	1740	30TH-KW		1.000	1.0+21				
236	BWK-236	SS	4-41	63.5000	11-26-69	1200	30TH-KW		1.000	2.8+20				
236	BWK-236	SS	4-42	63.5000	11-26-69	1200	30TH-KW		1.000	2.8+20				
243	BWK-243	SS	4-38	150.5332	05-29-69	2312	30TH-KW		1.000	1.7+21				
243	BWK-243	RE	0124	5.3956	12-26-69	0930	40TH-KW		1.000	5.9+19				
243	BWK-243	RE	0185	5.3958	12-26-69	0930	40TH-KW		1.000	5.9+19				
243	BWK-243	RE	0146	5.3956	12-26-69	0930	40TH-KW		1.000	5.9+19				
243	BWK-243	RE	0187	5.3956	12-26-69	0930	40TH-KW		1.000	5.9+19				
243	BWK-243	RE	0148	5.3956	12-26-69	0930	40TH-KW		1.000	5.9+19				
364	BWK-364	BORCAR	0055	170.6886	05-29-69	2312	30TH-KW		1.000	1.9+21				
364	BWK-364	BORCAR	0056	170.6886	05-29-69	2312	30TH-KW		1.000	1.9+21				
364	BWK-364	BORCAR	0057	173.4500	04-21-69	2113	30TH-KE		1.000	1.9+21				

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IDENTIFICATION				OPERATING TIME (DAYS)	CMK ASSIGNED	LOCATION				EXPOSURE TO DATE NVT	DISCHARGE		SHIPPING DATE	
TBR 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	FW-172	ICE	2284	.0174		12-02-69	0919	48TH-KW		1.000	12-02-69	0944	12-03-69	
172	FW-172	ICE	2285	.0174		12-02-69	0945	48TH-KW		1.000	12-02-69	1010	12-03-69	
172	FW-172	ICE	2286	.0174		12-02-69	1011	48TH-KW		1.000	12-02-69	1036	12-03-69	
172	FW-172	SEASLT	2287	1.0000		12-03-69	1245	48TH-KW		1.000	12-04-69	1245	12-09-69	
172	FW-172	SEASLT	2288	1.0000		12-03-69	1245	48TH-KW		1.000	12-04-69	1245	12-09-69	
172	FW-172	FLASTIC	2289	.0208		12-09-69	0622	48TH-KW		1.000	12-09-69	0852	12-10-69	
172	FW-172	SALTS	2290	2.0000		12-10-69	1300	48TH-KW		1.000	12-12-69	1300	12-19-69	
172	FW-172	SALTS	2291	2.0000		12-10-69	1300	48TH-KW		1.000	12-12-69	1300	12-19-69	
172	FW-172	VAR	2292	1.0000		12-15-69	1305	48TH-KW		1.000	12-16-69	1305	12-22-69	
172	FW-172	VAR	2293	1.0000		12-15-69	1305	48TH-KW		1.000	12-16-69	1305	12-22-69	
172	FW-172	SEASLT	2294	2.0000		12-24-69	0930	48TH-KW		1.000	12-26-09	0930	12-29-69	
172	FW-172	SEASLT	2295	2.0000		12-24-69	0930	48TH-KW		1.000	12-26-09	0930	12-29-69	
177	FW-177	GRAPH	3P-2	.6923		07-24-69	0949	3DTH-KW		1.000	11-21-69	1850	11-27-69	
184	FW-184	VAR	3461	.9271		12-02-69	0630	2ATH-KW		1.000	12-03-69	0645	12-03-69	
184	FW-184	VAR	3482	.9271		12-02-69	0830	2ATH-KW		1.000	12-03-69	0645	12-03-69	
184	FW-184	VAR	3453	.9305		12-04-69	0830	2ATH-KW		1.000	12-05-69	0650	12-05-69	
184	FW-184	VAR	3424	.9097		12-07-69	0855	2ATH-KW		1.000	12-08-69	0845	12-08-69	
184	FW-184	VAR	3435	.9097		12-07-69	0855	2ATH-KW		1.000	12-08-69	0845	12-08-69	
184	FW-184	VAR	3436	.8264		12-09-69	1055	2ATH-KW		1.000	12-10-69	0645	12-10-69	
184	FW-184	VAR	3437	.8611		12-11-69	1005	2ATH-KW		1.000	12-12-69	0645	12-12-69	
184	FW-184	VAR	3488	.8854		12-14-69	0930	2ATH-KW		1.000	12-15-69	0645	12-15-69	
184	FW-184	VAR	3439	.8437		12-15-69	1030	2ATH-KW		1.000	12-16-69	0645	12-16-69	
184	FW-184	VAR	3490	.8437		12-15-69	1030	2ATH-KW		1.000	12-16-69	0645	12-16-69	
184	FW-184	VAR	3491	.9305		12-21-69	0830	2ATH-KW		1.000	12-22-69	0650	12-22-69	
184	FW-184	PLASTIC	6712	.0014		12-06-69	0911	48TH-KW		1.000	12-06-69	0913	12-06-69	
184	FW-184	PLASTIC	6713	.0014		12-14-69	0920	48TH-KW		1.000	12-14-69	0922	12-15-69	
184	FW-184	PLASTIC	6714	.0014		12-17-69	0910	48TH-KW		1.000	12-17-69	0912	12-18-69	
271	FW-271	VAR	6141	3.7604		11-29-69	1230	2ATH-KW		1.000	12-03-69	0645	12-03-69	
271	FW-271	SODIUM	8142	.0139		12-01-69	0640	2ATH-KW		1.000	12-01-69	0700	12-02-69	
271	FW-271	VAR	8143	2.9361		12-11-69	1005	2ATH-KW		1.000	12-14-69	0945	12-15-69	
271	FW-271	SODIUM	8144	.0417		12-16-69	0620	2ATH-KW		1.000	12-16-69	0920	12-18-69	
362	FW-362	CE-NA	0006	20.3542		12-01-69	1045	48TH-KW		1.000	12-27-69	1330	12-31-69	
400	FW-400	EIO	0020	.0208		12-06-69	0915	2ATH-KW		1.000	12-06-69	0945	12-08-69	
400	FW-400	EIO	0021	.0208		12-06-69	0915	2ATH-KW		1.000	12-06-69	0945	12-08-69	
400	FW-400	EIO	0022	.0208		12-06-69	0915	2ATH-KW		1.000	12-06-69	0945	12-08-69	
400	FW-400	EIO	0023	.0208		12-06-69	0915	2ATH-KW		1.000	12-06-69	0945	12-08-69	
400	FW-400	EIO	0024	.0208		12-06-69	0915	2ATH-KW		1.000	12-06-69	0945	12-08-69	
400	FW-400	EIO	0025	.0208		12-06-69	0915	2ATH-KW		1.000	12-06-69	0945	12-08-69	

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IDENTIFICATION				CHARGE		LOCATION			DISCHARGE		SHIPPING DATE		
TSR NO.	REQUEST NUMBER	MATERIAL	PIECE NO.	OPERATING TIME (DAYS)	CMK ABSORBED	DATE	TIME	FACILITY	TEST HOLE POSITION	POSITION FACTOR	EXPOSURE TO DATE NVT	DATE	TIME
THE FOLLOWING IRRADIATIONS WERE SHIPPED DURING THE MONTH													
400	EW-400	E10	0026	.0273		12-06-69	1058	2ATH-KW		1.000	2, 4+17	12-06-69	1138
400	EW-400	E10	0027	.0273		12-06-69	1058	2ATH-KW		1.000	2, 4+17	12-06-69	1138
400	EW-400	E10	0028	.0278		12-06-69	1058	2ATH-KW		1.000	2, 4+17	12-06-69	1138
400	EW-400	E10	0029	.0275		12-06-69	1058	2ATH-KW		1.000	2, 4+17	12-06-69	1138
400	EW-400	E10	0030	.0273		12-06-69	1058	2ATH-KW		1.000	2, 4+17	12-06-69	1138
400	EW-400	E10	0031	.0278		12-06-69	1058	2ATH-KW		1.000	2, 4+17	12-06-69	1138
400	EW-400	E10	0032	.0208		12-11-69	0901	2ATH-KW		1.000	1, 8+17	12-11-69	0931
400	EW-400	E10	0033	.0203		12-11-69	0901	2ATH-KW		1.000	1, 8+17	12-11-69	0931
400	EW-400	E10	0034	.0203		12-11-69	0901	2ATH-KW		1.000	1, 8+17	12-11-69	0931
400	EW-400	E10	0035	.0203		12-11-69	0901	2ATH-KW		1.000	1, 8+17	12-11-69	0931
400	EW-400	E10	0036	.0203		12-11-69	0901	2ATH-KW		1.000	1, 8+17	12-11-69	0931
400	EW-400	E10	0037	.0203		12-11-69	0901	2ATH-KW		1.000	1, 8+17	12-11-69	0931
400	EW-400	E10	0038	.0007		12-11-69	0951	2ATH-KW		1.000	5, 9+15	12-11-69	0952
400	EW-400	E10	0039	.2500		12-19-69	0830	48TH-KW		1.000	1, 9+17	12-19-69	1430
400	EW-400	E10	0040	.2500		12-19-69	0830	48TH-KW		1.000	2, 7+17	12-19-69	1430

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