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TRANSMITTAL CONTROL NUMBER
HANFORD
51715

HW--3-2719

DE91 002388

TO: HOOD WORTHINGTON

THIS DOCUMENT CONSISTS OF 2 PAGES

100-D UNIT PURGE
JUNE 20, 1945

INTRODUCTION

The 100-D unit was purged with 100 ppm. Super-Gel for one hour on June 20, 1945.

CONCLUSIONS

1. Considerable plugging of the 50-mesh header screens was again experienced. No tar was found on any of the screens inspected.
2. Normal pressure drop recovery was realized for a purge of this duration.

DETAILS

The solids feed was started to the process water at 9:57 PM and was discontinued at 10:57 PM. Riser flow rates indicated that some of the four-inch header screens off of B riser started to plug within fifteen minutes after the start of the purge and some of the screens off of C riser started to plug about thirty minutes after the start of the purge. Following the purge, a total of twenty header screens were replaced. The screens inspected showed no evidence of tar or any abnormal quantity of foreign material other than Super-Gel.

Pressure Drop

The pressure drop data for Sample Room B and Panellit tubes are given in Tables I and II. Table I shows the pressure drop above base before and after the purge on the basis of 0 and 200 MW power. The 200 MW data after the purge, June 23rd data, were the lowest pressure drops reached after the purge. The pressure drop recoveries, given in Table III, are higher than those realized during the June 4th purge when the amount of film present before the purge was considerably more than that present prior to this purge.

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BY AUTHORITY OF **RLO-CG-4**
S.E. Gydesen 5-1-90
BY **J. Davis** DATE **11-1-90**

Per **P.A. Dahlen**
P. A. Dahlen

**TABLE I
B SAMPLE ROOM DATA
PRESSURE DROP - REG. PIST BANK TUBES**

PSI Above Base
Before Purge After Purge
June 20th June 23rd

Power Level - MW	280	0	0	280
2575	21.3	*	*	4.9
2475	17.4	10.4	2.7	0.9
2473	19.5	12.4	6.0	2.3
2375	15.8	9.1	4.0	1.7
Average	18.5	10.6	4.2	2.5

* Omitted because its supply pressure could not be measured.

PRESSURE DROP - APRIL 1ST BANK TUBES

PSI Above Base
Before Purge After Purge
June 20th June 20th June 20th June 23rd

Power Level - MW	280	0	0	280
2483	11.8	5.5	-1.0	-2.8
2479	10.4	3.1	-3.1	-5.2
2469	9.0	4.3	0.7	-3.2
2465	10.0	6.3	2.5	-3.0
Average	10.3	4.8	-0.2	-3.5

**TABLE II
PANELLET DATA
PRESSURE DROP - PSI ABOVE JAN. 3RD BANKS**

Orifice Zones

	0.240"	0.200"	0.175"	0.140"
Before Purge (June 30th)	27	25	30	30
After Purge (June 23rd)	4	4	12	18

**TABLE III
PRESSURE DROP RECOVERY**

Percent Recovery

0.240" Orifice Zone	85
0.200" Orifice Zone	84
0.175" Orifice Zone	60
0.140" Orifice Zone	59
12/21/44 Base Pressure Drop Tubes	86

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