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TRANSMITTAL CONTROL NUMBER
HANFORD
51715

CG: 1. Hood Worthington NW-3-2719
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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-Cel 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 AM and was discontinued at 10:57 AM. 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-Cel.

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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MASTER

G. P. KIDDER
TECHNICAL DEPARTMENT

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Per P.A. Dahlem
P.A. Dahlem

CLASSIFICATION
CHANGED TO UNCLASSIFIED
BY AUTHORITY OF RLO-CG-4
S.E. Gydesen 5-1-90
BY J. Davis DATE 11-1-90

TABLE I
PDI SAMPLE ROOM DATA
PRESSURE DROP - REG. 1/2" DIA. TUBES

Power Level - KW	PDI Above Base			
	Before Purge	After Purge	Before Purge	After Purge
	June 20th	June 20th	June 23rd	June 23rd
2575	290	0	0	290
2475	21.3	0	0	4.9
2473	17.4	10.4	2.7	0.9
2375	19.5	12.4	6.0	2.3
Average	15.8	9.1	4.9	1.1
	18.5	10.6	4.2	2.5

* Omitted because its supply pressure could not be measured.

PDI SAMPLE ROOM DATA

Power Level - KW	PDI Above Base			
	Before Purge	After Purge	Before Purge	After Purge
	June 20th	June 20th	June 23rd	June 23rd
2483	290	0	0	290
2479	11.8	5.5	-1.0	-2.8
2469	10.4	3.1	-3.1	-5.2
2465	9.0	4.3	0.7	-3.2
Average	10.0	6.3	2.2	-2.0
	10.3	4.8	-0.2	-3.5

TABLE II
PANELLIT DATA
PRESSURE DROP - PDI ABOVE JAN. 2ND BASE

	Orifice Zones			
	0.240"	0.200"	0.175"	0.140"
Before Purge (June 30th)	27	25	30	39
After Purge (June 23rd)	4	5	12	18

TABLE III
PRESSURE DROP EFFECTIVENESS

	Percent Recovery
0.240" Orifice Zone	82
0.200" Orifice Zone	82
0.175" Orifice Zone	66
0.140" Orifice Zone	59
	66

12/21/04 Base Pressure Drop Test

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11/29/90

