

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL:50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251
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 RECIP.NAME RECIPIENT AFFILIATION
 Office of Nuclear Reactor Regulation
 VARGA,S.A. Operating Reactors Branch 1

SUBJECT: Forwards info supplementing respose to NRC 790828 ltr re
 containment purge valves.Provisions are adequate to preclude
 failure of valves to close due to entrained debris in fluid
 stream.

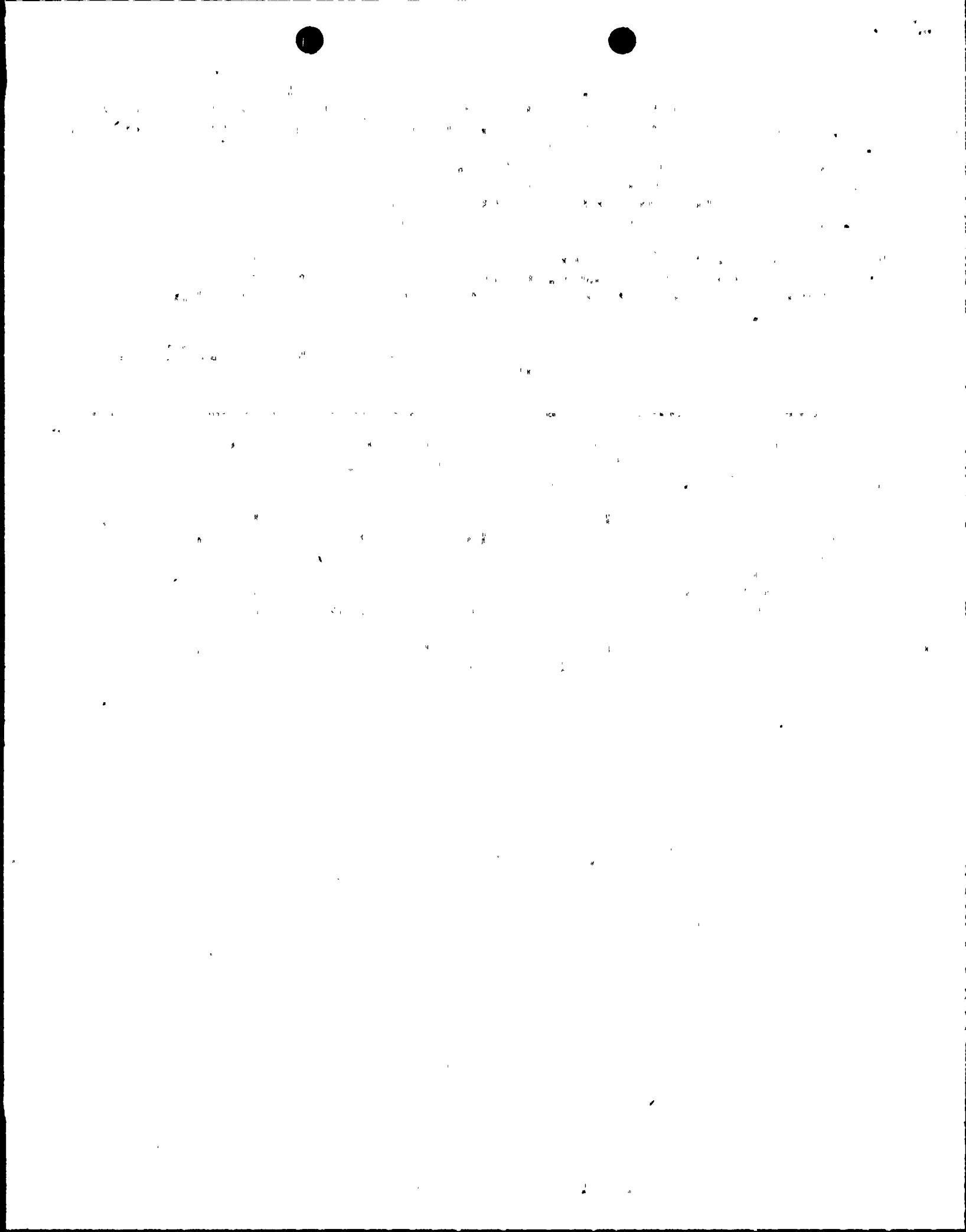
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 TITLE: Containment Purging

NOTES:-----

	RECIPIENT ID CODE/NAME	COPIES		RECIPIENT ID CODE/NAME	COPIES	
		LTR	ENCL		LTR	ENCL
ACTION:	05 BC <u>ORB #1</u>	7	7			
INTERNAL:	01 <u>REG FILE</u>	1	1	02 NRC PDR	1	1
	12 <u>I&E</u>	2	2	15 CORE PERF BR	1	1
	17 ENGR BR	1	1	18 REAC SFTY BR	1	1
	19 PLANT SYS BR	1	1	20 EEB	1	1
	21 EFLT TRT SYS	1	1	23 D SHUM	1	1
	24 E REEVES	1	1	STS GROUP LEADR	1	1
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	25 ACRS	16	16			

JUN 9 1980







June 3, 1980
L-80-168

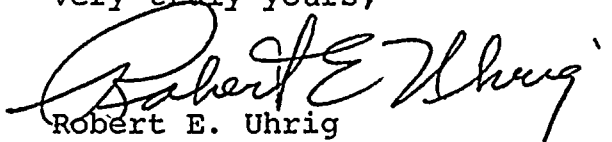
Office of Nuclear Reactor Regulation
Attention: Mr. S. A. Varga, Chief
Operating Projects Branch #1
Division of Project Management
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Varga:

Re: TURKEY POINT UNITS 3 & 4
DOCKET NOS. 50-250 & 50-251
CONTAINMENT PURGE VALVES

The attached information supplements our response to USNRC letter dated August 28, 1979 concerning containment purge valves.

Very truly yours,


Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/MAS/pa

cc: J. P. O'Reilly, Region II
Harold F. Reis, Esquire

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S
1/1

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RESPONSE TO NRC QUESTION 1a RELATING TO PURGE VALVES

Failure of the containment purge system to isolate the containment due to entrained debris in the exhaust fluid is highly unlikely. There are two potential types of material which can be postulated to prevent the closure of the purge system isolation valves: low density material and high density material.

Protection against low density materials is provided by expanded metal face plates or grilles and dampers which cover openings in ductwork. The ductwork is non-seismic. However, occurrence of a seismic event concurrent with the need for purge isolation is not a credible event. Therefore, the ductwork and its associated opening covers will remain intact during the postulated accident. These covers will effectively prevent any large pieces of low density material from entering the duct and damaging the containment purge system isolation valves. Any small pieces of low density material which could get through the covers, would not be large enough to damage the isolation valves.

The case of high density materials (missiles) penetrating the ductwork and damaging the valves is also highly unlikely. The isolation valves are located high in the containment and are both inside and outside of containment. In order for a missile to prevent the isolation of the system, a missile would have to travel in a straight path from the opposite side of the containment and penetrate the duct and damage both valves which are in series. A missile traveling in this path and having sufficient energy to do the postulated damage is not considered credible.

In conclusion, there are adequate provisions to preclude the failure of the containment purge isolation valves to close due to entrained debris in the fluid stream.

35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

PRE SIGNAL FLUID

114" FULLY OPEN 2.7

7.7 FULLY CLOSED VALVE

FLOW RATE LbG/SEC

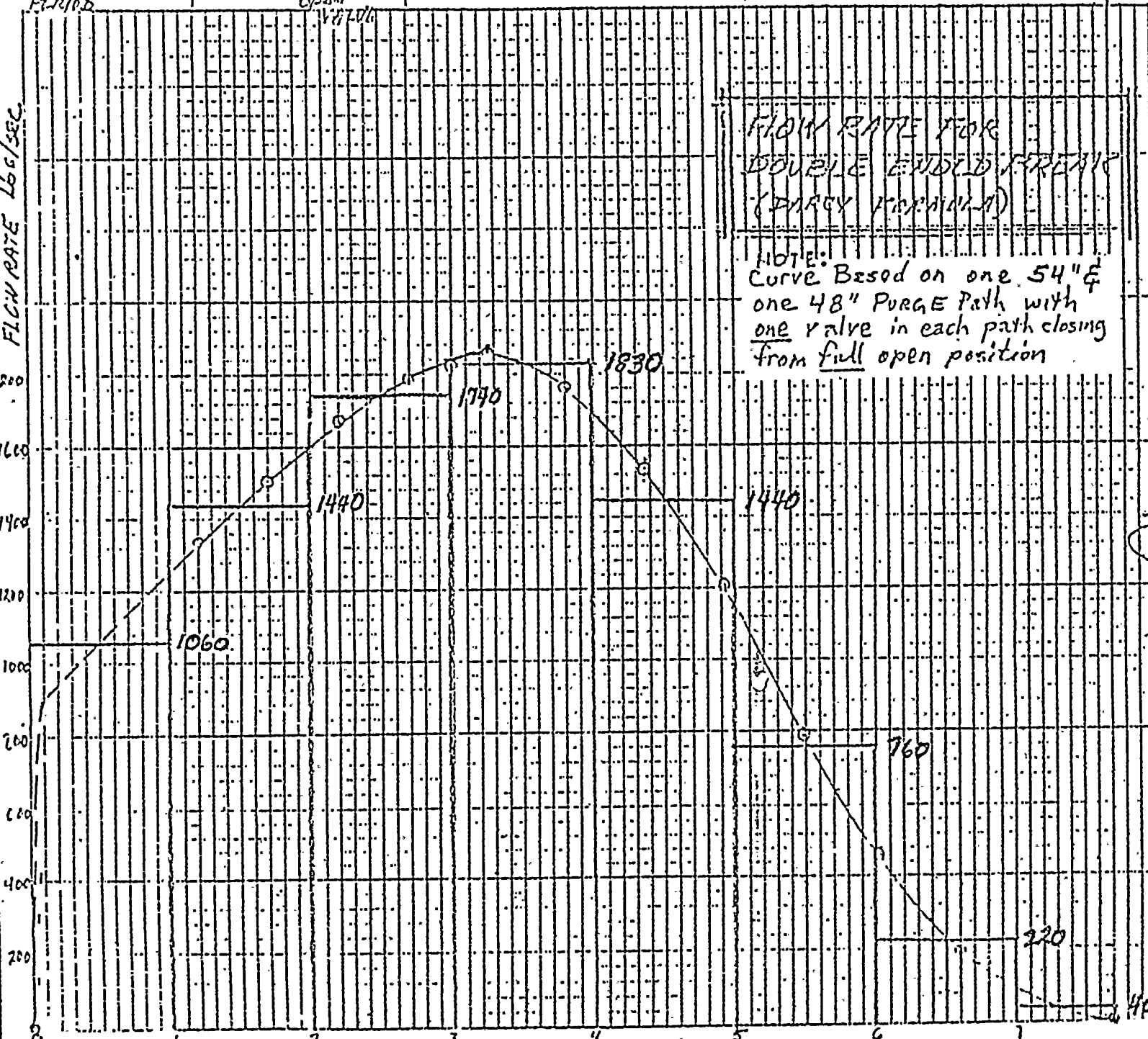
FLOW RATE FOR DOUBLE ENDED FRACTION (PURE MAXIMUM)

NOTE: Curve Based on one 54" & one 48" Purge Path with one valve in each path closing from full open position

7X40=28

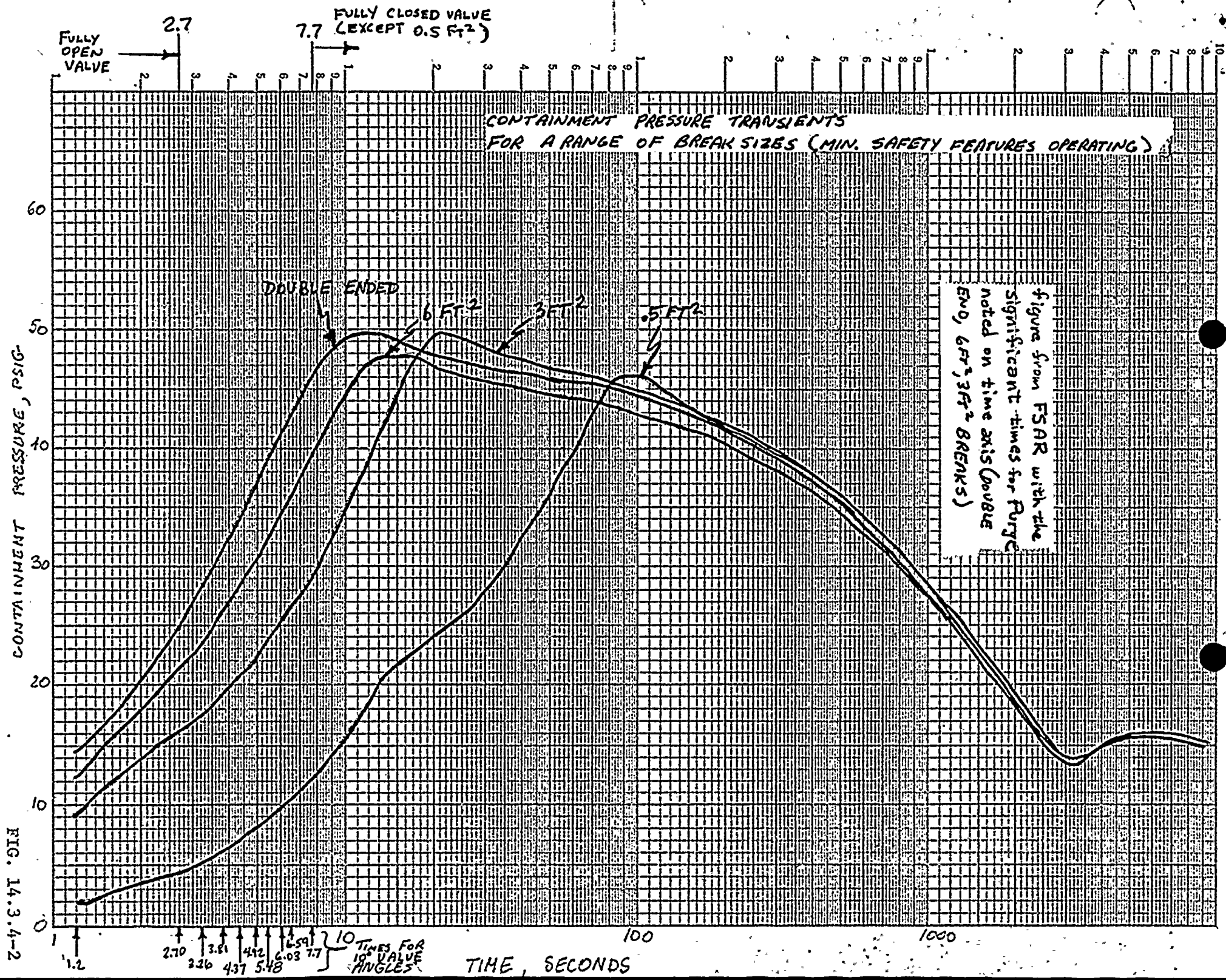
28
220
760
1440
1830
1740
1440
1060

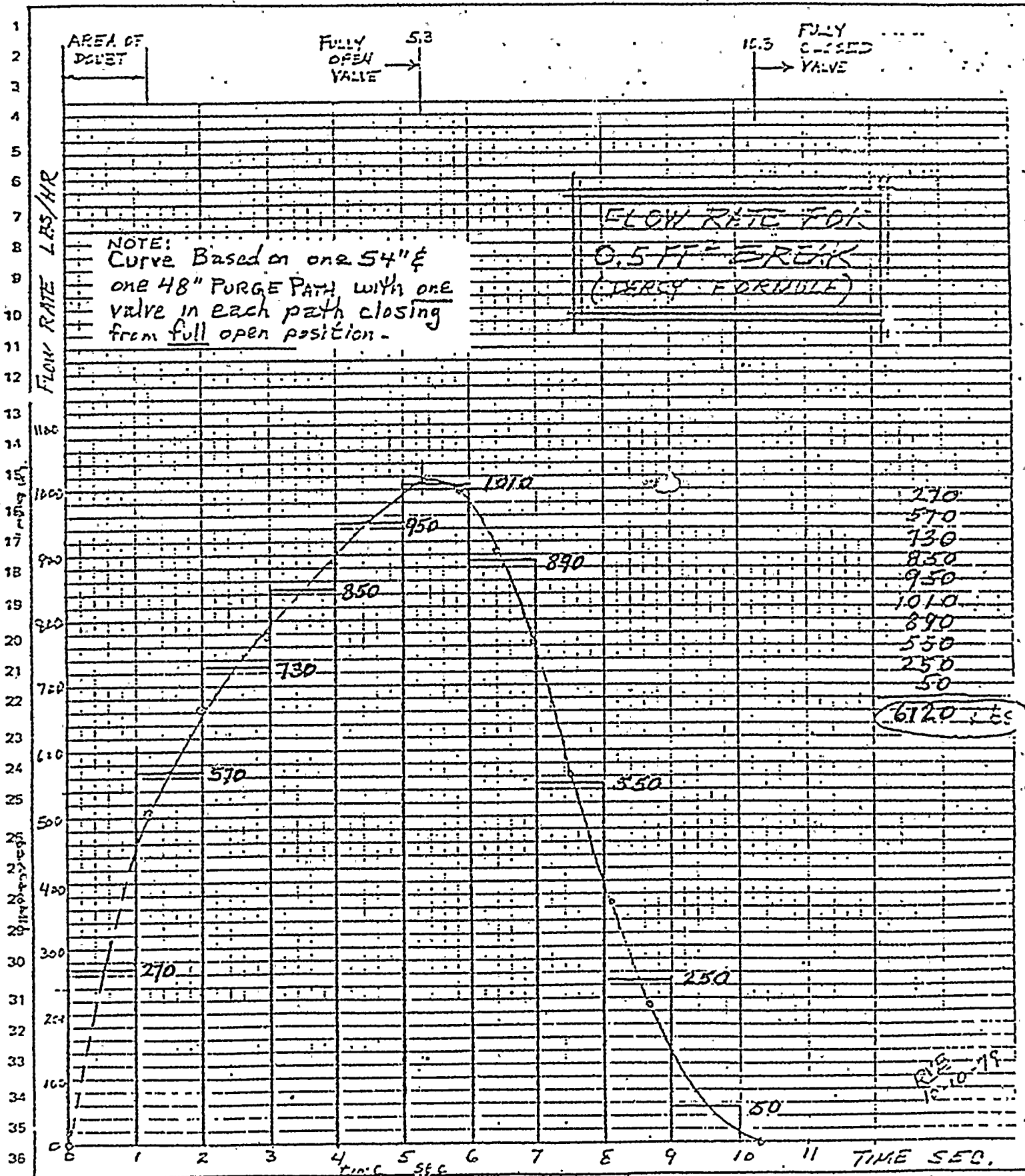
8516 Lbs



TIME SECONDS

P.B.
10-9-79





FULLY OPEN VALVE
0.5 FT² BREAK

FULLY CLOSED VALVE
0.5 FT² BREAK

CONTAINMENT PRESSURE TRANSIENTS FOR A RANGE OF BREAK SIZES (MIN. SAFETY FEATURES OPERATING)

CONTAINMENT PRESSURE, PSIG

FIG. 14.3.4-2

DOUBLE ENDED

6 FT²

3 FT²

0.5 FT²

figure from FSAR with the
significant times for Purge
noted on time axis
(0.5 FT² BREAK)

530
546
6.41
6.97
7.52
8.09
8.63
9.19
10.3

TIMES FOR
10° VALVE ANGLES

TIME, SECONDS

100

1000

