Core Design and Operating Data for Cycles 1 and 2 of Peach Bottom 2

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Research Project 1020-l

Topical Report, June 1978

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FOREWORD

This report is a compilation of reactor design and operating data for Cycles 1 and 2 of the Peach Bottom Unit 2 B WR. It has been prepared to provide reference quality data for use in the qualification of reactor core analysis methods.

More specifically, these data have been collected to facilitate analyses of the pressure transient and stability tests performed at Peach Bottom 2 in April 1977 just prior to the end of Cycle 2. A companion report, "Transient and Stability Tests at Peach Bottom Atomic Power Station Unit 2 at the End of Cycle 2," EPRI NP-564, contains the test data. The project has been aimed at measuring both the stability of a BWR core when subjected to small pressure oscillations and the response of the reactor to large pressure transients. The data from such tests are important not only to the technical base of the licensing of B WR plants, but also as reference data for the qualification of reactor stability and transient computer codes.

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ABSTRACT

This report contains the design and operating data needed to define the fuel characteristics, vessel internal components, nuclear steam supply system components, and reactor operation characteristics for Cycles 1 and 2 of the Peach Bottom 2 reactor. The purpose is to provide reference quality data for use in the qualification of reactor core analysis methods and to provide the basis for the assessment of the irradiation environment during Cycles 1 and 2.

The design data includes fuel assembly description, core component arrangements, control rod descriptions, core loading patterns, reactor internals description, and major piping arrangements. Hydraulic characteristics of the assemblies and the inlet orifices are also provided. Operating data is compiled for 24 steady-state points during Cycle 1 and 13 during Cycle 2. Each state point includes core average exposure, thermal power, pressure, flux, inlet subcooling, control configuration and axial in-core detector readings.

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SUMMARY

This report contains the design and operating data needed to define the fuel characteristics, vessel internal components, nuclear steam supply system components, and reactor operation characteristics for Cycles 1 and 2 of the Peach Bottom 2 reactor. The purpose is to provide reference quality data for use in the qualification of reactor core analysis methods and to provide the basis for the assessment of the irradiation environment during Cycles 1 and 2.

The design data includes fuel assembly description, core component arrangements, control rod descriptions, core loading patterns, reactor internals description, and major piping arrangements. Hydraulic characteristics of the assemblies and the inlet orifices are also provided. Operating data is compiled for 24 steady-state points during Cycle 1 and 13 during Cycle 2. Each state point includes core average exposure, thermal power, pressure, flux, inlet subcooling, control configuration and axial in-core detector readings.

I. INTRODUCTION

The design and operating data needed to define the fuel characteristics and reactor operating characteristics for Cycles 1 and 2 of the Peach Bottom 2 reactor are contained in this report. The program was a joint effort of the General Electric Company, the Philadelphia Electric Company, and the Electric Power Research Institute.

The fuel and core design data were extracted from appropriate reports and drawings. Almost all of the operating data provided were obtained directly from process computer output edits of the reactor operation through Cycles 1 and 2.

II. DATA

A. REACTOR DESIGN DATA FOR CYCLES 1 AND 2 OF PEACH BOTTOM 2

1. Fuel Assembly Descriptions

a. Bundle design data for Type 1 initial fuel, Type 2 initial fuel, Type 3 initial fuel, spatial Gd_2O_3 variation in initial fuel, 8x8 reload fuel, and lead test fuel assemblies are included as Figures 1 to 9.

b. Fuel assembly lattice drawings, including detailed dimensions, for initial fuel, reload fuel with 100 and 120 mil channels, and the lead test assemblies are included as Figures 10 through 13. The numbers 100 and 120 refer to the wall thickness of the channel.

c. Tables 1 and 2 summarize fuel rod arrays, fuel rod pitch, rod-to-channel spacing, gap thicknesses, control augmentation characteristics, U weights, channel characteristics, and water/UC, volume ratios for the initial 7x7 assemblies and the reload assemblies.

d. Table 3 provides core loading, assembly pitch, fuel pin pitch, spacer data, average fuel compositions, and fuel weights for all fuel assemblies during Cycles 1 and 2.

e. Tables 4 to 9 include pellet and stack densities, Gd_2O_3 and UO_2 weights, pellet lengths, pellet o.d., cladding o.d. cladding thickness, and gas plenum lengths for all fuel used during Cycles 1 and 2. All fuel rods were backfilled with helium at 0 to 10 psig at 70°F.

f. Table 10 includes spacer weights, end plug weights, upper and lower tie plate weights, fission gas plenum material weights, the alloy compositions recommended for nuclear analyses, and spacer placement identification.

g. Figures 14 to 17 are assembly detail drawings for initial 7x7 fuel, reload 8x8 fuel, and the lead test assembly (LTA) fuel.

h. A typical fuel rod is shown in Figure 18. A fueled spacer positioning rod for Type 3 initial fuel is shown in Figure 19. The purpose of the spacer positioning rod is to provide a locking tab which fixes the fuel rod spacers in their designed axial position. This is accomplished by an end plug connector that contains a fork design which catches a tab on the spacer. The fuel rod is thus segmented into eight segments for the seven spacers. Fission gas may travel from segment to segment by means of a hole in the center of the connector plugs. For the 8x8 assemblies, the water rod is also the spacer positioning rod. In this case, the positioning mechanism is simply welded to the tube, which is the same as the cladding for the fuel rods. Holes are provided at the bottom and top of the water rod to provide water flow and little or no boiling inside the tube.

i. Figures 20 and 21 are channel outline drawings for 80 and 100 mil channels. The 120 mil thick development channels are similar to those shown.

2. **Control Rod Descriptions**

a. Table 11 contains physical data for the control rods including shape, pitch, stroke, control material, etc.

b. Figure 22 is a schematic drawing of a cross section of a control blade.

3. **Core Descriptions**

a. Table 12 identifies the total number of fuel assemblies, number of fuel assembly types, heat transfer surface area, total weight of U in the core, etc., for Cycles 1 and 2.

b. Table 13 presents the bundle type and identification core loading array for Cycle 1.

c. Figure 23 is a core plan view showing the core orificing and TIP system arrangement.

d. Table 14 presents the bundle type and identification core loading array for Cycle 2.

4. **Vessel Internal Components, Elevation Drawings, etc.**

a. Figure 24 shows the elevation of the core instrumentation and control blade poison with respect to the active fuel.

b. An elevation view of the reactor internal components is presented in Figure 25. Figures 26 through 30 are outlines of the various internal components; core shroud, top guide, steam separator, steam dryer, and feedwater sparger.

c. Figure 31 is an outline of the orificed fuel support piece.

d. Figure 32 is an outline drawing of the jet pump.

5. **Nuclear Steam Supply System Components Outside The Vessel**

a. Figure 33 shows the recirculation loop piping.

b. Figures 34 to 38 show the primary steam piping and the steam bypass lines.

c. Portions of the feedwater lines appear on several drawings made by Bechtel, San Francisco, under Job Number 6280. These drawings are identified by Bechtel as M-xxx, where M designates mechanical and xxx is a particular drawing number, beginning with 1. These drawings are not included in this report, but may be obtained from Bechtel.

d. Other characteristics, such as Main Turbine Stop and Bypass Valve Flow-Pressure relationship for the downstream bypass pressure reducers and the transfer functions representing the speed-torque response of the Feedpump Turbine Drives, are necessary information for analysis of the transient experiments. These data are proprietary to the General Electric Company.

6. **Reference Design Data**

Table 15 provides reference design information. Figures 39 and 40 are compilations of various weights and volumes of the reactor primary system. Figures 41 and 42 are recirculation pump characteristics for various conditions.

7. **Nuclear Instrumentation Data**

Peach Bottom 2 is equipped with a system of Travelling In-Core Probe (TIP) detectors and fixed Local Power Range Monitor (LPRM) detectors designed to provide an accurate representation of the spatial distribution of the neutron flux. The TIP detectors travel through a set of 43 vertical tubes which are distributed uniformly throughout the core with the planar density of one detector per four square feet, Figure 23 shows the core location and coordinate identification of the TIP strings. A cross section of a TIP/LPRM assembly is given in Figure 43.

The TIP measures the axial neutron flux distribution in the water gap by use of a l-in. long U-235 fission chamber attached to a cable and motor which allows the chamber to be positioned at any point along the axial length of up to 10 core positions for each TIP machine. There are five TIP machines in the Peach Bottom 2 reactor. The TIP values reported in the data sets for 6-in. intervals represent the weighted average value of seven measurements made at t-in. intervals (five interior measurements which are given twice the weighting as the two end points). A total of 145 measurements is made for each core position resulting in 24 values Of 6 in. each.

The TIP data are normalized to the common position. The common position normalization is determined experimentally by traveling the common position with each TIP machine. The normalization is determined so that all the TIP machines produce the same readings when operated in the common position. The axially averaged TIP reading for the common position is usually defined to be 100. The TIP data given in the data sets were obtained directly from the process computer. For editing purposes, all values of some data sets have been multiplied by a constant such that all values are less than 100.0. No other adjustments have been made.

8. **Thermal Hydraulics**

a. The hydraulic characteristics of 7x7 and 8x8 fuel assemblies are presented in Figures 44 to 47 as functions of active coolant flow, active coolant power and subcooling. These data may be applied over a pressure range of 1035±100 psia. Bundle pressure drop is somewhat insensitive to axial power distribution. The data are based on a distribution peaked at the middle with a peak-to-average value of 1.5. With a bundle flow of 130x 10^3 lb/hr, bottom-peaked axial (3/8 point of active fuel length) will yield a pressure drop about 0.66 psi larger. A top-peaked axial yields essentially the same pressure drop as the middle peaked axial.

b. The pressure drop characteristics of the central and peripheral region orifices are presented as functions of active coolant flow on Figures 48 through 53. The location of the orifice zones is given in Figure23. It should be noted that all the 8x8 reload fuel had holes drilled in the lower tie plate for bypass flow augmentation, whereas there are no holes in the 7x7 lower tie plates.

c. The total core bypass flow rates for Cycles 1 and 2 are presented in Figures 54 and 55, respectively. It should be noted that the original core design had holes drilled in the core support for bypass flow augmentation. At 8100 MWd/t core average exposure into Cycle 1 (November, 1975) these holes were plugged, reducing the bypass flow.

B. OPERATING DATA FOR CYCLES 1 AND 2 OF PEACH BOTTOM 2

1. **Rod Withdrawal Group Designation**

Figures 56 to 61 present the control rod group designations for Cycles 1 and 2.

2. **Benchmark Operating Data for Cycles 1 and 2**

Data Sets 01 to 24 contain the reactor data for 24 selected operating states during Cycle 1 and Data Sets 25 to 37 contain the reactor data for 13 selected operating states during Cycle 2. Most data sets contain the following data: date, core average exposure, core thermal power, dome pressure, core flow, inlet subcooling, control configuration, and complete axial TIP distribution data for all 43 LPRM string locations. The TIP data are the

commonly normalized TIP readings at 6-inch intervals up the length of the assembly. The TIP data read from the bottom to the top of core; i.e., the first entry is for the bottom 6-in. node. Exposure can be accumulated by using the calculated core power distribution for each of the data sets provided to advance to the next operating state. When a control rod sequence change is encountered between data sets, the exposure may be advanced to the sequence exchange date, and the data set after the exchange used to advance the exposure to the date of the data set immediately following the exchange date. Experience has shown that taking exposure steps finer than 700 MWd/t does not significantly add to the tracking accuracy (see Table 16).

All of these data were taken during steady-state operation. The reactor had been operating for at least 48 hours with essentially constant power, flow, and rod pattern before the data were accumulated.

Core thermal power, inlet subcooling, and recirculation flow rate are important to the reactor data evaluation. The values for these items were taken directly from process computer PI output. The PI output does not contain the detailed data used to calculate the output values and the detailed data are normally not available from the plant data (i.e., special edits must be requested or special readings taken). Therefore, the detailed data cannot be provided. However, the method used by the process computer to compute the values is given here.

a. Core Thermal Power

The core thermal power is obtained from the process computer which performs an energy balance on a system composed of the reactor vessel, recirculation loop piping, and cleanup demineralizer piping. Flows entering the system are the reactor feedwater flow, which is assumed to enter in three branches, and the control rod drive system flow. The only flow assumed to be leaving the system is the primary steam flow. Nonflow power inputs are the fission power (core thermal power) and recirculation pumping power; nonflow power losses are the radiative power loss and the net power transferred across the boundary of the cleanup demineralizer loop. Analytically, the energy balance is:

$$\text{Core Power, MWt} = \frac{W_{fw}(h_s - h_{fw}) + W_{cr}(h_s \quad h_{cr})}{C_1} + Q_{cu} + Q_r - Q_p$$

where:

W_{fw} = feedwater flow rate entering reactor at top of downcomer, Mlb/hr

h_s = enthalpy of steam leaving the reactor vessel, Btu/lb

h_{fw} = feedwater enthalpy, Btu/lb

W_{cr} = control rod drive system flow, Mlb/hr

h_{cr} = enthalpy of control rod drive system flow, Btu/lb

Q_p = power added to downcomer fluid by recirculation pumps, MW

Q_r = radiative power loss, MW

Q_{cu} = power removed from downcomer fluid by cleanup demineralizer system, MW

C_1 = conversion constant=3.413 MBtu/MWh

b. Core Inlet Subcooling

The core inlet subcooling is obtained from the process computer by performing an energy balance on the core downcomer (the volume between the core shroud and the vessel wall, and including the external recirculation and cleanup loops) yielding:

$$W_T h_o = W_{rl} h_f + W_{rs} h_g + W_{fw} h_{fw} + W_{cr} h_{cr} + (Q_p - Q_{cu})\, C_l$$

where:

W_T = flow rate entering core inlet plenum, Mlb/hr

h_o = core inlet enthalpy (enthalpy of W,), BTu/lb

W_{rl} = flow rate of saturated liquid entering downcomer, Mlb/hr

h_f = saturated liquid enthalpy, Btu/lb

W_{rs} = flow rate of saturated steam entering downcomer (i.e., "carryunder"), Mlb/hr

h_g = saturated steam enthalpy, Btu/lb

and other terms are defined as above.

The total flow entering the inlet plenum is:

$$W_T = W_{,,} + W_{rs} + W_{fw} + Wcr$$

c. **Recirculation Flow**

The reactor core flow rate is monitored by the process computer by direct measurement of differential pressure across the jet pump diffusers. For illustrative purposes, the 20 jet pumps can be divided into four groups of five each. A typical group is shown in Figure 62. In each group, one jet pump contains a diffuser with two static pressure taps. The remaining four units contain only one pressure tap. The "double tapped units" are calibrated by test prior to installation to determine the relationship between flow and differential pressure over the range of expected operating flow rates. This information is used to perform in-reactor calibration of the "top tap-to-lower plenum" pressure difference of all 20 jet pumps. After this calibration procedure has been completed, the total core flow is measured by electrically analyzing the signals from the single tap-to-lower plenum pressure transducers on all 20 jet pumps. The resulting total core flow rate output signal is displayed on the reactor control board. In addition, the 20 single tap and 4 double tap signals described above are available in the control room. ΔP

3. OPERATING DATA SUMMARY

Figures 63 to 100 present operating data summaries for each month during Cycles 1 and 2. The data presented include daily values of power level, flow, subcooling, and rod notch inventory (rod notches inserted).

Table 1
INITIAL FUEL DESCRIPTION

	Type 1	Type 2	Type 3
Fuel Assembly			
Number of Fuel Assemblies per Batch..	168	263	333
Fuel Rod Array..	7 x 7	7 x 7	7 x 7
Fuel Rod Pitch, in..	0.738	0.738	0.738
Peripheral-Rod-to-Channel Spacing, in.	0.1435	0.1435	0.1435
1/2 Width of Wide Water Gap, in..	0.375	0.375	0.375
1/2 Width of Narrow Water Gap, in..	0.188	0.188	0.188
Cladding Length, in	160	160	160
Bundle Average Enrichment (wt % U-235 in Total U).	1.10	2.50	2.50
Control Augmentation			
Type	NONE	Fuel Rods Containing Gd_2O_3	Fuel Rods Containing Gd_2O_3
Number..		4	5
Control Length, in..		144(3), 60(1)	144(3), 108(1), 36(1)
Control Material..		3.0 wt % Gd_2O_3	3.0 wt % Gd_2O_3(3) 4.0 wt % Gd_2O_3(2)
Locations..		In Fuel Lattice	In Fuel Lattice
Weight of U per Fuel Assembly			
lb..	432.3	412.4	412.1
kg	196.1	187.1	186.9
Channel			
Outside Dimensions, in..	5.438 x 5.438	5.438 x 5.438	5.438 x 5.438
Thickness, in..	0.080	0.080	0.080
Inside Corner Radius, in..	0.38	0.38	0.38
Material..	Zr-4	Zr-4	Zr-4
Water-UO, Volume Ratio (cold).....	2.43	2.53	2.53

Table 2
RELOAD FUEL DESCRIPTION

Fuel Assembly	Type 4		Type 5	Type 6
Number of Fuel Assemblies per Batch..	60	8	116	4
Fuel Rod Array..	8 x 8	8 x 8	8 x 8	8 x 8
Fuel Rod Pitch, in..	0.640	0.640	0.640	0.640
Peripheral-Rod-to-Channel Spacing, in.	0.153	0.153	0.153	0.163
1/2 Width of Wide Water Gap, in..	0.355	0.335	0.355	0.355
1/2 Width of Narrow Water Gap, in..	0.167	0.147	0.167	0.167
Cladding Length, in..	160	160	160	160
Bundle Average Enrichment (wt % U-235 in total U).	2.74	2.74	2.74	2.60
Control Augmentation				
Type	Fuel Rods Containing Gd_2O_3			
Number..	5	5	5	5
Control Length, in..				
Control Material..	3.0% Gd_2O_3	3.0% Gd_2O_3	2.0% Gd_2O_3	2.0% Gd_2O_3
Locations..	In Fuel Lattice			
Weight of U per Fuel Assembly				
lb	403.8	403.8	404.2	402.6
kg	183.2	183.2	183.3	182.6
Channel				
Outside Dimensions, in..	5.478 x 5.478	5.518 x 5.518	5.478 x 5.478	5.478 x 5.478
Thickness, in..	0.100	0.120	0.100	0.100
Inside Corner Radius, in..	0.38	0.38	0.38	0.38
Material..	Zr-4	Zr-4	Zr-4	Zr-4
Water/UO_2 Volume Ratio (cold)	2.56	2.51	2.56	2.75

Table 3
FUEL ASSEMBLY DATA

	Initial Load			Reload	Reload	LTA Special
Assembly Type..	1	2	3	4	5	6
No. of Assemblies, Initial Core..	168	263	333	0	0	0
No. of Assemblies, Cycle 2..	0	261	315	68*	116	4
Geometry..	7 x 7	7 x 7	7 x 7	8 x 8	8 x 8	8 x 8
Assembly Pitch, in..	6.0	6.0	6.0	6.0	6.0	6.0
Fuel Rod Pitch..	0.738	0.738	0.738	0.640	0.640	0.640
Fuel Rods per Assembly..	49	49	49	63	63	62
Instrument Rods per Assembly..	0	0	0	0	0	0
Water Rods per Assembly..	0	0	0	0		2
Burnable Poison Positions..	0	4	5	5	5	5
No. of Spacer Grids	7		7	7	7	7
Inconel per Grid, lb..	0.102	0.102	0.102	0.102	0.102	0.102
Zr-4 per Grid, lb..	0.537	0.537	0.537	0.614	0.614	0.614
Spacer Width, in..	1.625	1.625	1.625	1.625	1.625	1.625
Assembly Average Fuel Composition						
Gd_2O_3, gm..	0	441	547	490	328	313
UO_2, kg	222.44	212.21	212.06	207.78	208.00	207.14
Total Fuel, kg..	222.44	212.65	212.61	208.27	208.33	207.45

*60 Assemblies channeled with 0.100 inch thick channels, 6 with 0.120 inch thick channels.

Table 4
ASSEMBLY TYPE 1 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 1

Rod Type	Number of Rods	Pellet Density UO_2 (gm/cc)	Pellet Density UO, + Gd_2O_3 (gm/cc)	Stack Density (gm/cc)	Gd_2O_3 (gm)	UO_2 (gm)	Stack Length (in.)
1	31	10.42	—	10.34	0	4548	144
2	17	10.42	—	10.34	0	4548	144
2s	1	10.42	—	10.34	0	4140	130

Pellet o.d. = 0.487 inch all rods
Cladding = Zircaloy-2, 0.563-inch o.d. x0.032-inch wall, all rods
Gas Plenum Length = 16.0 inches

Table 5
ASSEMBLY TYPE 2 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 2

Rod Type	Number of Rods	Pellet Density UO_2 (gm/cc)	Pellet Density UO_2 + Gd_2O_3 (gm/cc)	Stack Density (gm/cc)	Gd_2O_3 (gm)	UO_2 (gm)	Stack Length (in.)
1	25	10.42	—	10.32	0	4352	144
1s	1	10.42	—	10.32	0	3935	130
2	12	10.42	—	10.32	0	4352	144
3	6	10.42	—	10.32	0	4352	144
4	1	10.42	—	10.32	0	4352	144
5A	3	—	10.29	10.19	129	4171	144
6B*	1	10.42	10.29	10.27	54	4277	144

Pellet o.d. = 0.477 inch all rods
Cladding = Zircaloy-2, 0.563-inch o.d. x 0.037-inch wall, all rods
Gas Plenum Length = 15.8 inches

*Contains two pellet types, see Figures 2 and 3

Table 6
ASSEMBLY TYPE 3 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 3

Rod Type	Number of Rods	Pellet Density UO_2 (gm/cc)	Pellet Density $UO_2 + Gd_2O_3$ (gm/cc)	Stack Density (gm/cc)	Gd_2O_3 (gm)	UO_2 (gm)	Stack Length (in.)
1	26	10.42	—	10.32	0	4352	144
2	11	10.42	—	10.32	0	4352	144
3	6	10.42	—	10.32	0	4352	144
4	1	10.42	—	10.32	0	4352	144
5A	2	—	10.29	10.19	129	4171	144
6C	1	—	10.29	10.19	117	3771	130
7E*	1	10.42	10.25	10.28	43	4292	144
8D*	1	10.42	10.25	10.19	129	4172	144

Pellet o.d. = 0.477 inch all rods
Cladding = Zircaloy-2, 0.563-inch o.d. x 0.037-inch wall, all rods
Gas Plenum Length = 15.8 inches

*Contains two pellet types, see Figures 4 and 5.

Table 7
ASSEMBLY TYPE 4 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 4

Rod Type	Number of Rods	Pellet Density UO_2 (gm/cc)	Pellet Density $UO_2 + Gd_2O_3$ (gm/cc)	Stack Density (gm/cc)	Gd_2O_3 (gm)	UO_2 (gm)	Stack Length (in.)
1	39	10.42	—	10.32	0	3309	144
2	14	10.42	—	10.32	0	3309	144
3	4	10.42	—	10.32	0	3309	144
4	1	10.42	—	10.32	0	3309	144
5	5	—	10.29	10.19	98	3172	144
ws	1	—	—	—	0	0	—

Pellet o.d. = 0.416 inch all rods
Cladding = Zircaloy-2, 0.493-inch o.d. x 0.034-inch wall, all rods
Gas Plenum Length = 16.0 inches except water rod
Gd_2O_3 in rod type 5 runs full 144 inches
Water rod has holes drilled top and bottom to provide water flow and little or no boiling
Water rod is also spacer positioning rod

Table 8
ASSEMBLY TYPE 5 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 5

Rod Type	Number of Rods	Pellet Density UO_2 (gm/cc)	Pellet Density UO, + Gd_2O_3 (gm/cc)	Stack Density (gm/cc)	Gd_2O_3 (gm)	UO_2 (gm)	Stack Length (in.)
1	39	10.42	—	10.32	0	3309	144
2	14	10.42	—	10.32	0	3309	144
3	4	10.42	—	10.32	0	3309	144
4	1	10.42	—	10.32	0	3309	144
5	5	—	10.33	10.23	66	3216	144
ws	1	—	—	—	0	0	—

Pellet o.d. = 0.416 inch all rods
Cladding = Zircaloy-2, 0.493-inch o.d. x 0.034-inch wall, all rods
Gas Plenum Length = 16.0 inches except water rod
Gd_2O_3 in rod type 5 runs full 144 inches
Water rod has holes drilled top and bottom to provide water flow and little or no boiling
Water rod is also spacer positioning rod

Table 9
ASSEMBLY TYPE 6 DENSITY, LENGTH, etc., DATA

ASSEMBLY TYPE 6*

Rod Type	Number of Rods	Pellet Density UO_2 (gm/cc)	Pellet Density UO, + Gd_2O_3 (gm/cc)	Stack Density (gm/cc)	Gd_2O_3 (gm)	UO_2 (gm)	Stack Length (in.)
	38	10.42	—	10.32	0	3125	140
2	14	10.42	—	10.32	0	3125	140
3	4	10.42	—	10.32	0	3125	140
4		10.42	—	10.32	0	3125	140
5	5	—	10.33	10.23	63	3037	140
WR, ws	2	—	—	—	0	0	—
ENDS	62	10.42	—	10.32	0	223	10

Pellet o.d. = 0.410 inch all rods
Cladding = Zircaloy-2, 0.483-inch o.d. x 0.032-inch wall, all fueled rods
Zircaloy-2, 0.591-inch o.d. x 0.030-inch wall, water rods
Gas Plenum Length = 9.48 inches
Gd_2O_3 in rod type 5 runs full 140 inches
Water rods have holes drilled top and bottom to provide water flow and little or no boiling
WS rod is also spacer positioning rod

*Each fuel rod contains three axial zones, see Figures 8 and 9.

Table **10**
FUEL ASSEMBLY HARDWARE WEIGHTS

	7 x 7 Initial Assemblies		8 x 8 **Reload Assemblies**		LTA **Reload Assemblies**	
Spacers	**Quantity**	**Pounds**	**Quantity**	**Pounds**	**Quantity**	**Pounds**
Zircaloy-4	**7**	3.757	7	4.299	7	4.299
Inconel	112	0.717	112	0.717	112	0.717
End Plugs						
Zircaloy-2	98	3.565	128	4.098	128	5.260
Lower Tie Plate						
Type-304 Stainless Steel	1	9.612	1	10.545	1	10.545
Inconel Finger Springs	**4**	0.106	4	0.106	4	0.106
Upper Tie Plate Assembly with Hardware						
Type-304 Stainless Steel	1	4.222	1	**4.409**	1	4.409
Fission Gas Plenum						
Spring, Type-302 Stainless Steel	49	4.073	63	4.151	62	2.425
Getter, Zirconium Alloy	49	0.972	63	1.360	62	1.338

Wt % Alloy Compositions for Nuclear Analyses

Metal	**Zircaloy-2**	**Zircaloy-4**	**Type-304 Stainless Steel**	**Inconel-X**
Zr	**98.30**	**98.24**		
Fe	0.14	0.21	67.34	**9.0**
Sn	1.40	1.45		
Ni	0.06		9.50	70.0
Cr	0.10	0.10	19.50	16.77
Ti				2.50
Mn			1.50	0.50
c			0.08	0.03
Si			2.00	0.30
S			0.04	
P			0.04	
Al				**0.90**

Spacer Placement

There are seven spacers in the initial and reload fuel assemblies. Their center positions above the bottom of the active fuel in inches are 18.9, 39.0, 59.2, 79.3, 99.5, 119.6, and 139.7. Each spacer is 1.625 inches long.

Table 11
CONTROL ROD DATA

Movable Control Rods

Shape..	Cruciform
Pitch, in	12.0
Stroke, in..	.144
Control Length, in	.143.0
Control Material..	B_4C granules in Type-304 stainless steel tubes and sheath
Material Density..	.70% of Theoretical
Number of Control Material Tubes per Rod..	.84
Tube Dimensions..	.0.188 in. o.d. by 0.025 in. wall
Control Blade Half Span, in.	.4.875
Control Blade Full Thickness, in..	.0.3120
Control Blade Tip Radius, in..	.0.156
Sheath Thickness, in..	.0.056
Central Structure Wing Length, in..	.0.7815
Blank Tubes per Wing.. (Adjacent to Central Structure)	None

Control Blade Position

Control blade insertion is calibrated in notches, where one notch equals 3 inches. Position of the control blade is described by the number of notches withdrawn. Thus, 0 notch implies full insertion and 48 notches implies full withdrawal. Total travel of the control blade is 144 inches, the same as the length of the active fuel. At full blade insertion (0 notch), the top of the control material is 1 inch below the top of the active fuel. At full blade withdrawal, the top of the control material is 1 inch below the bottom of the active fuel. Since the physical notches in the control rod drive are 6 inches apart, the control blade notch position is always even. For the control patterns shown, the numbers shown indicate notches withdrawn and no notch number implies a fully withdrawn blade or a notch position of 48 for power operating patterns and a fully inserted blade or a notch position of 00 for cold critical patterns.

Table 12
CORE DESCRIPTION

	Cycle 1	Cycle 2
Total Number of Fuel Assemblies..	764	764
Number of Fuel Assembly Types..	3	6
Number of Fuel Assemblies of Each Type..	See Table 3	See Table 3
Total Number of Control Elements..	185	185
Number of Control Element Types..		
Number of Control Elements of Each Type..	185	185
Total Number of In-core Flux Monitors..	43	43
Heat Transfer Surface Area, ft^2..	66,214	68,266
Average Linear Heat Rate, kw/ft..	7.037	6.574
Total Weight of U in Core, short tons..	159.2	156.7
Core		
Core Lattice Pitch, in..	12.0	12.0
Water/UO_2 Volume Ratio (cold).	2.51	2.54

Table 13
CYCLE 1 BUNDLE TYPES AND IDENTIFICATION

PH 001 to PH 168	7 x 7	UO_2	1.10 wt %	Type 1 Fuel Without Gd_2O_3
PH 169 to PH 431	7 x 7	UO_2	2.50 wt %	Type 2 With Gd_2O_3 in 4 Rods
PH 432 to PH 764	7 x 7	UO_2	2.50 wt %	Type 3 With Gd_2O_3 in 5 Rods

Table 13
CYCLE 1 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION

I / J	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1									PH 367	PH 241	PH 362	PH 237	PH 358	PH 233	PH 354
2								PH 368	PH 423	PH 168	PH 156	PH 303	PH 410	PH 166	PH 158
3						PH 213	PH 337	PH 210	PH 334	PH 206	PH 331	PH 202	PH 328	PH 198	PH 325
4						PH 281	PH 165	PH 278	PH 385	PH 104	PH 064	PH 272	PH 381	PH 106	PH 068
5					PH 309	PH 151	PH 023	PH 173	PH 762	PH 141	PH 027	PH 502	PH 567	PH 145	PH 031
6			PH 429	PH 250	PH 416	PH 249	PH 399	PH 701	PH 755	PH 752	PH 669	PH 748	PH 665	PH 756	PH 652
7			PH 315	PH 179	PH 306	PH 171	PH 530	PH 576	PH 527	PH 549	PH 524	PH 541	PH 521	PH 499	PH 554
8		PH 284	PH 074	PH 255	PH 424	PH 120	PH 077	PH 729	PH 644	PH 081	PH 044	PH 723	PH 640	PH 083	PH 052
9	PH 344	PH 217	PH 034	PH 183	PH 556	PH 121	PH 014	PH 503	PH 486	PH 128	PH 020	PH 493	PH 480	PH 132	PH 003
10	PH 394	PH 285	PH 430	PH 258	PH 650	PH 734	PH 633	PH 709	PH 628	PH 705	PH 624	PH 702	PH 620	PH 699	PH 616
11	PH 348	PH 222	PH 320	PH 187	PH 559	PH 588	PH 513	PH 511	PH 472	PH 498	PH 448	PH 469	PH 445	PH 461	PH 681
12	PH 396	PH 289	PH 069	PH 261	PH 654	PH 099	PH 059	PH 712	PH 609	PH 094	PH 047	PH 687	PH 604	PH 095	PH 055
13	PH 351	PH 226	PH 030	PH 191	PH 562	PH 139	PH 019	PH 538	PH 475	PH 133	PH 013	PH 466	PH 438	PH 138	PH 017
14	PH 404	PH 293	PH 378	PH 264	PH 658	PH 740	PH 637	PH 715	PH 613	PH 694	PH 601	PH 679	PH 598	PH 677	PH 597
15	PH 355	PH 230	PH 326	PH 195	PH 565	PH 577	PH 519	PH 546	PH 478	PH 506	PH 443	PH 455	PH 433	PH 454	PH 432
16	PH 406	PH 297	PH 065	PH 267	PH 662	PH 116	PH 050	PH 718	PH 617	PH 092	PH 053	PH 682	PH 591	PH 088	PH 056
17	PH 359	PH 234	PH 026	PH 199	PH 568	PH 144	PH 006	PH 535	PH 481	PH 129	PH 009	PH 463	PH 434	PH 122	PH 033
18	PH 414	PH 300	PH 382	PH 270	PH 666	PH 746	PH 641	PH 721	PH 621	PH 700	PH 605	PH 685	PH 592	PH 672	PH 593
19	PH 363	PH 238	PH 332	PH 203	PH 571	PH 585	PH 525	PH 543	PH 484	PH 495	PH 449	PH 471	PH 440	PH 468	PH 444
20	PH 415	PH 304	PH 061	PH 273	PH 670	PH 114	PH 042	PH 724	PH 625	PH 090	PH 045	PH 688	PH 602	PH 098	PH 051
21	PH 369	PH 242	PH 022	PH 207	PH 763	PH 147	PH 002	PH 551	PH 487	PH 155	PH 005	PH 500	PH 476	PH 134	PH 001
22	PH 426	PH 256	PH 386	PH 276	PH 757	PH 754	PH 759	PH 727	PH 629	PH 706	PH 610	PH 691	PH 614	PH 695	PH 618
23		PH 243	PH 338	PH 211	PH 308	PH 547	PH 531	PH 578	PH 490	PH 505	PH 514	PH 532	PH 516	PH 540	PH 520
24			PH 388	PH 102	PH 403	PH 112	PH 078	PH 730	PH 634	PH 084	PH 079	PH 713	PH 638	PH 086	PH 048
25			PH 340	PH 214	PH 310	PH 153	PH 037	PH 582	PH 557	PH 143	PH 025	PH 590	PH 563	PH 148	PH 029
26					PH 417	PH 251	PH 397	PH 247	PH 651	PH 735	PH 655	PH 737	PH 659	PH 741	PH 663
27						PH 176	PH 038	PH 180	PH 317	PH 184	PH 321	PH 188	PH 323	PH 192	PH 327
28						PH 372	PH 422	PH 370	PH 431	PH 107	PH 070	PH 262	PH 379	PH 105	PH 066
29								PH 218	PH 345	PH 219	PH 349	PH 223	PH 352	PH 227	PH 356
30									PH 395	PH 286	PH 398	PH 290	PH 405	PH 294	PH 407

TYPE 1 AND 2 IN OUTER REGION

TYPE 1 AND 3 IN INNER REGION

SEE FIGURE 22 FOR TYPE 1 LOCATIONS

Table 13
CYCLE 1 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION

I / J	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	PH 229	PH 350	PH 225	PH 347	PH 221	PH 343	PH 216								
2	PH 296	PH 402	PH 292	PH 160	PH 288	PH 393	PH 283	PH 392							
3	PH 194	PH 322	PH 190	PH 319	PH 186	PH 316	PH 182	PH 314	PH 178	PH 375					
4	PH 266	PH 377	PH 108	PH 072	PH 260	PH 427	PH 110	PH 073	PH 254	PH 413					
5	PH 575	PH 561	PH 152	PH 035	PH 586	PH 555	PH 124	PH 039	PH 170	PH 040	PH 175				
6	PH 742	PH 657	PH 739	PH 653	PH 736	PH 649	PH 733	PH 647	PH 246	PH 411	PH 109	PH 389	PH 280		
7	PH 544	PH 515	PH 536	PH 512	PH 509	PH 489	PH 501	PH 529	PH 574	PH 307	PH 172	PH 336	PH 209		
8	PH 717	PH 636	PH 085	PH 060	PH 711	PH 632	PH 087	PH 080	PH 728	PH 760	PH 111	PH 167	PH 277	PH 420	
9	PH 504	PH 474	PH 136	PH 007	PH 496	PH 485	PH 127	PH 004	PH 583	PH 761	PH 142	PH 024	PH 205	PH 365	PH 240
10	PH 696	PH 612	PH 693	PH 608	PH 690	PH 627	PH 704	PH 643	PH 726	PH 753	PH 750	PH 384	PH 275	PH 419	PH 366
11	PH 453	PH 439	PH 464	PH 447	PH 467	PH 483	PH 510	PH 523	PH 539	PH 570	PH 581	PH 330	PH 201	PH 361	PH 236
12	PH 442	PH 600	PH 097	PH 049	PH 686	PH 623	PH 118	PH 058	PH 722	PH 668	PH 113	PH 063	PH 271	PH 157	PH 302
13	PH 460	PH 437	PH 137	PH 011	PH 459	PH 479	PH 150	PH 010	PH 550	PH 566	PH 146	PH 028	PH 197	PH 357	PH 232
14	PH 676	PH 596	PH 675	PH 603	PH 684	PH 619	PH 698	PH 639	PH 720	PH 664	PH 744	PH 380	PH 269	PH 408	PH 299
15	PH 452	PH 436	PH 458	PH 441	PH 470	PH 477	PH 589	PH 517	PH 542	PH 564	PH 573	PH 324	PH 193	PH 353	PH 228
16	PH 671	PH 595	PH 100	PH 057	PH 680	PH 615	PH 091	PH 054	PH 716	PH 660	PH 115	PH 067	PH 265	PH 159	PH 295
17	PH 456	PH 435	PH 140	PH 015	PH 462	PH 473	PH 135	PH 012	PH 534	PH 560	PH 154	PH 032	PH 189	PH 164	PH 224
18	PH 673	PH 594	PH 674	PH 599	PH 678	PH 611	PH 692	PH 635	PH 714	PH 656	PH 738	PH 376	PH 263	PH 400	PH 291
19	PH 457	PH 446	PH 465	PH 450	PH 492	PH 451	PH 494	PH 491	PH 507	PH 558	PH 584	PH 318	PH 185	PH 346	PH 220
20	PH 683	PH 606	PH 096	PH 043	PH 689	PH 607	PH 093	PH 041	PH 745	PH 661	PH 117	PH 071	PH 259	PH 161	PH 287
21	PH 508	PH 482	PH 130	PH 018	PH 497	PH 488	PH 126	PH 016	PH 533	PH 518	PH 123	PH 036	PH 181	PH 162	PH 215
22	PH 697	PH 622	PH 758	PH 626	PH 703	PH 630	PH 707	PH 631	PH 708	PH 648	PH 732	PH 425	PH 257	PH 391	PH 282
23	PH 548	PH 522	PH 537	PH 526	PH 545	PH 528	PH 572	PH 552	PH 580	PH 553	PH 169	PH 313	PH 177	PH 342	
24	PH 719	PH 642	PH 089	PH 046	PH 725	PH 646	PH 082	PH 075	PH 731	PH 401	PH 119	PH 076	PH 253		
25	PH 579	PH 569	PH 131	PH 008	PH 587	PH 764	PH 149	PH 021	PH 174	PH 311	PH 125	PH 312	PH 245		
26	PH 743	PH 667	PH 747	PH 751	PH 749	PH 645	PH 710	PH 409	PH 248	PH 421	PH 252				
27	PH 196	PH 329	PH 200	PH 333	PH 204	PH 335	PH 208	PH 339	PH 212	PH 341					
28	PH 268	PH 383	PH 103	PH 062	PH 274	PH 387	PH 101	PH 163	PH 279	PH 390					
29	PH 231	PH 360	PH 235	PH 364	PH 239	PH 371	PH 244	PH 373							
30	PH 298	PH 412	PH 301	PH 418	PH 305	PH 428	PH 374								

TYPE 1 AND 2 IN OUTER REGION
TYPE 1 AND 3 IN INNER REGION
SEE FIGURE 22 FOR TYPE 1 LOCATIONS

Table 14
CYCLE 2 BUNDLE TYPES AND IDENTIFICATION

PH 169 to PH 431	7 x 7	UO_2	2.50 wt %	Type 2 With Gd_2O_3 in 4 Rods
PH 432 to PH 764	7 x 7	UO_2	2.50 wt %	Type 3 With Gd_2O_3 in 5 Rods
LJ3213 to LJ3280	8 x 8	UO_2	2.74 wt %	Type 4 With 3% Gd_2O_3 in 5 Rods
LJ3098 to LJ3212, LJ3454	8 x 8	UO_2	2.74 wt %	Type 5 With 2% Gd_2O_3 in 5 Rods
LJLTA1 to LJLTA4	8 x 8	UO_2	2.73 wt %	Type 6 With 2% Gd_2O_3 in 5 Rods
	8 x 8	UO_2	0.71 wt %	in center, and No Gd_2O_3 in ends

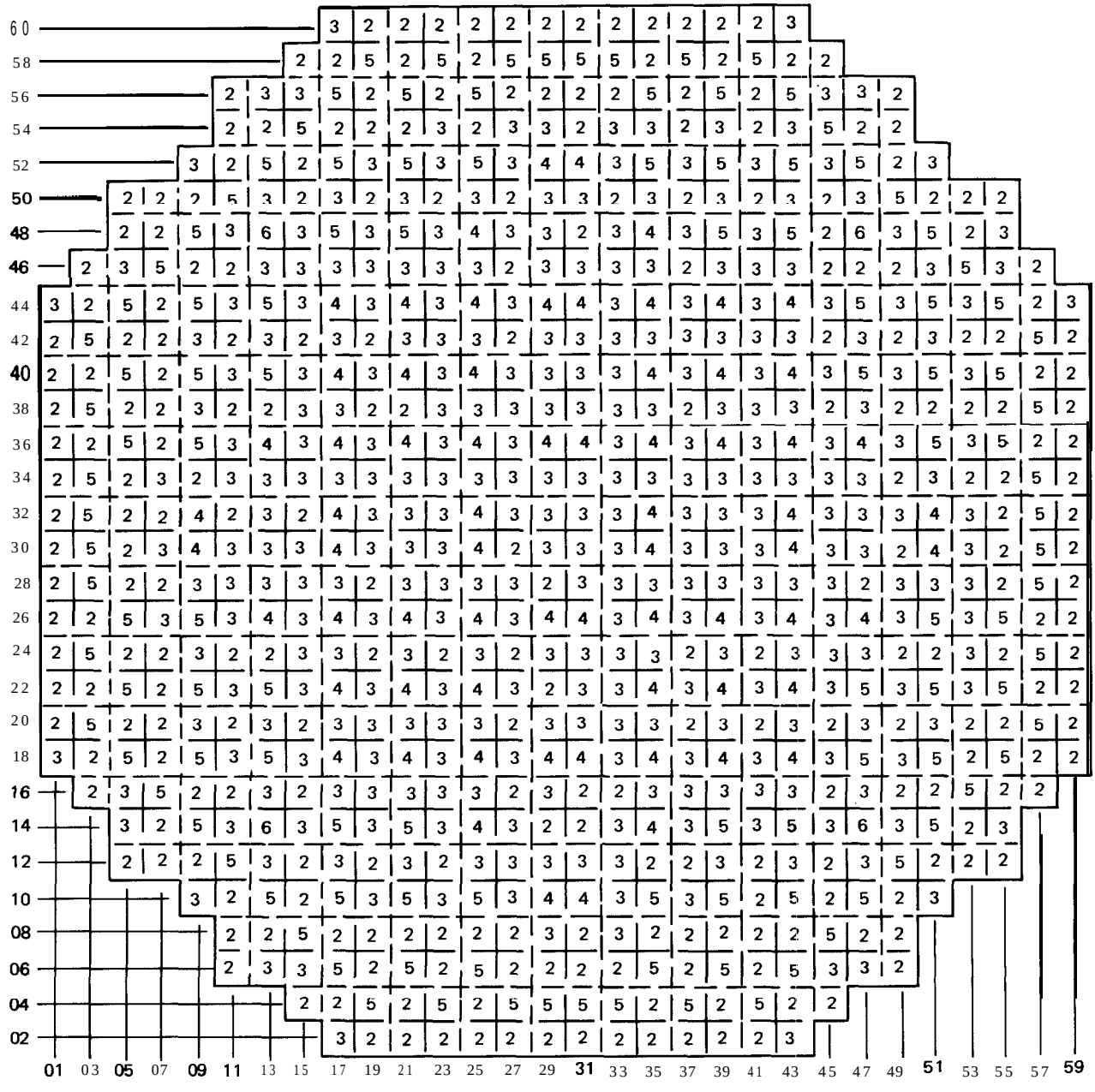


Table 14

CYCLE 2 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION

I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
J															
1									PH 527	PH 392	PH 350	PH 237	PH 358	PH 233	PH 354
2								PH 404	PH 368	LJ3098	PH 429	LJ3099	PH 367	LJ3100	LJ3101
3						PH 296	PH 752	PH 755	LJ3106	PH 206	LJ3107	PH 210	LJ3108	PH 303	PH 325
4						PH 396	PH 250	LJ3112	PH 385	PH 331	PH 306	PH 493	PH 381	PH 544	PH 512
5					PH 486	PH 202	LJ3114	PH 173	LJ3115	PH 524	LJ3116	PH 502	LJ3117	PH 442	LJ3213
6			PH 179	PH 351	PH 416	LJ3122	PH 738	PH 285	PH 530	PH 278	PH 681	PH 328	PH 665	PH 266	PH 756
7			PH 264	PH 406	LJ3124	PH 560	LJLTA2	PH 455	LJ3126	PH 549	LJ3127	PH 541	LJ3215	PH 669	PH 554
8		PH 423	PH 734	LJ3132	PH 424	PH 410	PH 633	PH 448	PH 644	PH 468	PH 576	PH 723	PH 640	PH 249	PH 536
9	PH 562	PH 284	LJ3134	PH 183	LJ3135	PH 577	LJ3136	PH 503	LJ3217	PH 762	LJ3218	PH 748	LJ3219	PH 556	LJ3220
10	PH 394	LJ3140	PH 222	PH 334	PH 513	PH 226	PH 482	PH 427	PH 709	PH 320	PH 499	PH 702	PH 701	PH 430	PH 616
11	PH 348	PH 344	LJ3142	PH 187	LJ3143	PH 588	LJ3144	PH 511	LJ3225	PH 498	LJ3226	PH 472	LJ3227	PH 705	PH 704
12	PH 337	LJ3148	PH 217	PH 261	PH 654	PH 293	PH 378	PH 712	PH 609	PH 255	PH 258	PH 624	PH 438	PH 735	PH 630
13	PH 309	PH 213	LJ3150	PH 191	LJ3151	PH 662	LJ3231	PH 457	LJ3232	PH 740	LJ3233	PH 694	LJ3234	PH 594	LJ3235
14	PH 281	LJ3154	PH 310	PH 538	PH 267	PH 687	PH 565	PH 715	PH 613	PH 637	PH 475	PH 677	PH 598	PH 546	PH 460
15	PH 315	LJ3156	PH 297	PH 195	LJ3241	PH 207	PH 519	PH 199	LJ3242	PH 506	PH 443	PH 591	LJ3243	PH 454	PH 601
16	PH 422	LJ3158	PH 234	PH 724	LJ3247	PH 670	PH 718	PH 585	LJ3248	PH 682	PH 469	PH 547	LJ3249	PH 174	PH 675
17	PH 243	LJ3160	PH 242	PH 332	PH 568	PH 517	PH 727	PH 535	PH 481	PH 326	PH 559	PH 605	PH 434	PH 520	PH 401
18	PH 225	PH 340	LJ3162	PH 525	LJ3163	PH 746	LJ3253	PH 495	LJ3254	PH 617	LJ3255	PH 505	LJ3256	PH 628	LJ3257
19	PH 388	LJ3166	PH 256	PH 203	PH 571	PH 300	PH 382	PH 543	PH 484	PH 211	PH 700	PH 180	PH 440	PH 248	PH 697
20	PH 415	PH 426	LJ3168	PH 273	LJ3169	PH 699	LJ3170	PH 551	LJ3263	PH 625	LJ3264	PH 602	LJ3265	PH 634	PH 324
21	PH 369	LJ3174	PH 289	PH 304	PH 439	PH 386	PH 759	PH 403	PH 487	PH 432	PH 582	PH 500	PH 476	PH 262	PH 610
22	PH 604	PH 241	LJ3176	PH 276	LJ3177	PH 754	LJ3178	PH 730	LJ3269	PH 666	LJ3270	PH 578	LJ3271	PH 695	LJ3272
23		PH 283	PH 757	LJ3182	PH 308	PH 338	PH 531	PH 397	PH 691	PH 688	PH 655	PH 471	PH 516	PH 327	PH 619
24			PH 478	PH 363	LJ3184	PH 641	LJLTA3	PH 514	LJ3186	PH 713	LJ3187	PH 532	LJ3277	PH 618	PH 268
25			PH 349	PH 214	PH 238	LJ3192	PH 706	PH 370	PH 557	PH 352	PH 444	PH 431	PH 563	PH 449	PH 590
26					PH 621	PH 223	LJ3194	PH 247	LJ3195	PH 659	LJ3196	PH 737	LJ3197	PH 741	LJ3279
27						PH 176	PH 405	LJ3202	PH 317	PH 357	PH 321	PH 188	PH 323	PH 192	PH 671
28						PH 371	PH 651	PH 667	LJ3204	PH 364	LJ3205	PH 345	LJ3206	PH 251	PH 227
29								PH 414	PH 342	LJ3210	PH 395	LJ3211	PH 372	LJ3212	LJ3125
30									PH 522	PH 286	PH 398	PH 232	PH 417	PH 218	PH 290

Table 14

CYCLE 2 BUNDLE TYPES AND IDENTIFICATION (Continued)

BUNDLE IDENTIFICATION

I / J	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	PH 229	PH 389	PH 178	PH 347	PH 221	PH 343	PH 445								
2	LJ3102	LJ3103	PH 375	LJ3104	PH 216	LJ3105	PH 420	PH 355							
3	PH 194	PH 254	LJ3109	PH 314	LJ3110	PH 182	LJ3111	PH 620	PH 657	PH 292					
4	PH 377	PH 763	PH 711	PH 260	PH 690	PH 402	PH 496	LJ3113	PH 359	PH 413					
5	LJ3214	PH 561	LJ3118	PH 586	LJ3119	PH 555	LJ3120	PH 574	LJ3121	PH 170	PH 649				
6	PH 567	PH 270	PH 739	PH 186	PH 509	PH 319	PH 733	PH 288	PH 529	LJ3123	PH 198	PH 407	PH 353		
7	PH 316	PH 515	LJ3216	PH 653	LJ3128	PH 489	LJ3129	PH 246	LJLTA4	PH 728	LJ3131	PH 294	PH 477		
8	PH 636	PH 717	PH 453	PH 272	PH 504	PH 447	PH 627	PH 411	PH 307	PH 393	PH 583	LJ3133	PH 753	PH 365	
9	LJ3221	PH 474	LJ3222	PH 736	LJ3223	PH 485	LJ3224	PH 647	LJ3137	PH 761	LJ3138	PH 523	LJ3139	PH 362	PH 674
10	PH 696	PH 722	PH 693	PH 608	PH 510	PH 550	PH 629	PH 275	PH 726	PH 172	PH 750	PH 205	PH 408	LJ3141	PH 366
11	PH 467	PH 521	LJ3228	PH 464	LJ3229	PH 483	LJ3230	PH 760	LJ3145	PH 570	LJ3146	PH 539	LJ3147	PH 240	PH 236
12	PH 501	PH 603	PH 600	PH 269	PH 433	PH 459	PH 623	PH 197	PH 581	PH 271	PH 384	PH 330	PH 277	LJ3149	PH 302
13	LJ3236	PH 437	LJ3237	PH 490	LJ3238	PH 632	LJ3239	PH 668	LJ3240	PH 566	LJ3152	PH 643	LJ3153	PH 260	PH 209
14	PH 672	PH 441	PH 650	PH 720	PH 645	PH 573	PH 698	PH 764	PH 673	PH 201	PH 744	PH 380	PH 419	LJ3155	PH 175
15	PH 452	PH 436	LJ3244	PH 479	PH 534	PH 470	LJ3245	PH 589	PH 542	PH 664	LJ3246	PH 564	PH 193	LJ3157	PH 228
16	PH 597	PH 595	LJ3250	PH 458	PH 680	PH 615	LJ3251	PH 692	PH 716	PH 399	LJ3252	PH 461	PH 265	LJ3159	PH 295
17	PH 456	PH 465	PH 435	PH 599	PH 596	PH 660	PH 553	PH 635	PH 171	PH 686	PH 676	PH 745	PH 346	LJ3161	PH 224
18	LJ3258	PH 592	LJ3259	PH 488	LJ3260	PH 611	LJ3261	PH 558	LJ3262	PH 656	LJ3164	PH 507	LJ3165	PH 245	PH 291
19	PH 518	PH 497	PH 658	PH 318	PH 710	PH 425	PH 494	PH 491	PH 584	PH 189	PH 376	PH 707	PH 244	LJ3167	PH 220
20	PH 492	PH 612	LJ3266	PH 528	LJ3267	PH 451	LJ3268	PH 661	LJ3171	PH 683	LJ3172	PH 731	LJ3173	PH 374	PH 299
21	PH 508	PH 719	PH 638	PH 339	PH 607	PH 311	PH 580	PH 230	PH 708	PH 185	PH 533	PH 259	PH 181	LJ3175	PH 287
22	LJ3273	PH 540	LJ3274	PH 587	LJ3275	PH 732	LJ3276	PH 552	LJ3179	PH 648	LJ3180	PH 387	LJ3181	PH 215	PH 184
23	PH 329	PH 274	PH 537	PH 526	PH 545	PH 450	PH 572	PH 313	PH 631	PH 219	PH 169	LJ3183	PH 335	PH 391	
24	PH 263	PH 642	LJ3278	PH 751	LJ3188	PH 646	LJ3189	PH 758	LJLTA1	PH 593	LJ3191	PH 341	PH 622		
25	PH 749	PH 689	PH 196	PH 360	PH 725	PH 231	PH 626	PH 400	PH 685	LJ3193	PH 235	PH 301	PH 257		
26	LJ3280	PH 480	LJ3198	PH 548	LJ3199	PH 383	LJ3200	PH 409	LJ3201	PH 421	PH 614				
27	PH 379	PH 606	PH 200	PH 333	PH 204	PH 212	PH 208	LJ3203	PH 298	PH 279					
28	PH 356	PH 336	LJ3207	PH 177	LJ3208	PH 239	LJ3209	PH 446	PH 569	PH 361					
29	LJ3185	LJ3190	PH 282	LJ3130	PH 390	LJ3454	PH 373	PH 412							
30	PH 418	PH 312	PH 252	PH 253	PH 305	PH 428	PH 747								

Table 15
REFERENCE DESIGN INFORMATION

Rated Core Thermal Power, MW	**3293**
Rated Core Total Flow Rate, Mlb/hr	102.5
Bypass Flow Rate, Fraction of Total Core Flow	Figures 54 to 55
Fraction of Core Thermal Power Passing Through Fuel Cladding	0.96
Approximate Bypass Coolant Total Power Fraction	0.02
Approximate Active Coolant Total Power Fraction	0.02
Approximate Channel Wall Direct Heating Fraction	0.0075
Design Minimum Critical Power Ratio for 7x7 Assemblies (Cycle 2)	≥1.28
Design Minimum Critical Power Ratio for 8x8 Assemblies (Cycle 2)	≥1.31
Design Overpower for Turbine-Generator System	105% Rated Steam Flow
Turbine Inlet Pressure, psia	965
Rated Reactor Dome Pressure, psia	1020
Rated Steam Flow Rate, Mlb/hr	13.381
Steam Moisture Content, Fraction	0.001
Rated Steam Dryer and Separator Pressure Drop, psi	15
Rated Core Pressure, psia	1035
Core Pressure Drop at Rated Conditions, psi	22
Approximate Core Inlet Pressure, psia	1050
Core Inlet Enthalpy, Btu/lb	521.3
Enthalpy Rise Across Core, Btu/lb (Average)	109.6
Core Support Plate Pressure Drop, psi	18
Core Orifice and Lower Tie Plate Pressure Drop	Figures 48 to 53
Fuel Bundle Pressure Drop	Figures 44 to 47
Reactor Average Exit Quality At Rated Conditions	0.129
Design Hot Channel Active Coolant Exit Quality	0.25
Design Bypass Coolant Exit Quality	0.0
Total Feedwater Flow Rate, Mlb/hr	13.331
Feedwater Temperature, °F	376.1
Control Rod Drive Flow Rate, lb/hr	50000
Control Rod Drive Flow Temperature, °F	80
Cleanup Demineralizer Flow Rate, lb/hr	133300
Cleanup Demineralizer Inlet Temperature, °F	528
Cleanup Demineralizer Outlet Temperature, °F	431
Location of Demineralized Water Return	Feedwater Line
Jet Pump Design M Ratio	1.96
Jet Pump Design N Ratio	0.16
Number of Recirculation Loops	2
Recirculation Pump Type	Centrifugal
Recirculation Pump Rated Flow, Mlb/Hr	17.1
Total Developed Pump Head, ft	710
Recirculation Pump Efficiency, Percent	87
Head Loss From Vessel Recirculation Outlet to Vessel Inlet, ft	59
Head Loss From Vessel Recirculation Inlet to Jet Pump 180° Bend Entrance, ft	11

Table 16
BURN STEP INFORMATION

Exposure Interval (MWd/t)	Control Rod Sequence Cycle 1	Reactor Data From Data Set Number
0 to 230	A	
230 to 390	A	2
390 to 439	A	2
439 to 648	B	3
648 to 741	A	4
741 to 1010	A	5
1010 to 1251	A	5
1251 to 1585	A	6
1585 to 2080	B	7
2080 to 2555	B	8
2555 to 2630	B	8
2630 to 2920	A	9
2920 to 3120	A	9
3120 to 3542	A	10
3542 to 3724	A	10
3724 to 4364	B	11
4364 to 4525	B	11
4525 to 4697	A	12
4697 to 4880	A	12
4880 to 5262	A	13
5262 to 5352	A	13
5352 to 5640	B	14
5640 to 6106	B	15
6106 to 6470	B	16
6470 to 6530	B	16
6530 to 7000	A	17
7000 to 7300	A	18
7300 to 7712	A	19
7712 to 8100	B	20
8100 to 8430	B	21
8430 to 8766	B	22
8766 to 9190	B	22
9190 to 9295	A	23
9295 to 9520	A	23
9520 to 10100	A	24
	Cycle 2	
7974 to 8025	A	25
8025 to 8042	A	25
8042 to 8264	B	26
8264 to 8706	B	26
8706 to 9035	A	27
9035 to 9500	A	27
9500 to 9730	A	28
9730 to 10050	B	29
10050 to 10395	B	29

Table 16

BURN **STEP INFORMATION (Continued)**

10395 to 10730	A	30
10730 to 11030	A	30
11030 to 11092	A	31
11092 to 11260	B	32
11260 to 11420	B	32
11420 to 11570	B	33
11570 to 11630	B	34
11630 to 11910	B	35
11910 to 12070	B	35
12070 to 12190	A	36
12190 to 12530	A	37
12530 to 12800	A	37

1 .10 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

2	1	T 1	1	T 1	1	1
1	1	1	2	1	1	1
T 1	1	2	2	2	2	T 1
1	2	2	S 2	2	2	1
T 1	1	2	2	2	2	T 1
1	1	2	2	2	1	1
1	1	T 1	1	T 1	1	1

ROD TYPE	U-235 (wt%)	Gd_2O_3 (wt%)	NO. OF RODS
1	1.33	0	31
2	0.71	0	18

S = SPACER POSITIONING ROD
T= TIE ROD

Figure 1. Bundle Design for Type I Initial Fuel

2.50 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

4	3	T 3	2	T 2	2	3
3	2	1	1	1	1	2
T 3	1	5 A	1	1	5 A	T 1
2	1	1	S 1	1	1	1
T 2	1	1	1	6B	1	T 1
2	1	5 A	1	1	1	2
3	2	T 1	1	T 1	2	2

ROD TYPE	U-235 (wt%)	Gd_2O_3 (wt%)	NO. OF RODS
1	2.93	0	26
2	1.94	0	12
3	1.69	0	6
4	1.33	0	1
5 A	2.93	3.0	3
6 B	2.93	3.0	1

S = SPACER POSITIONING ROD
T = TIE ROD

Figure 2. Bundle Design for Type 2 initial Fuel

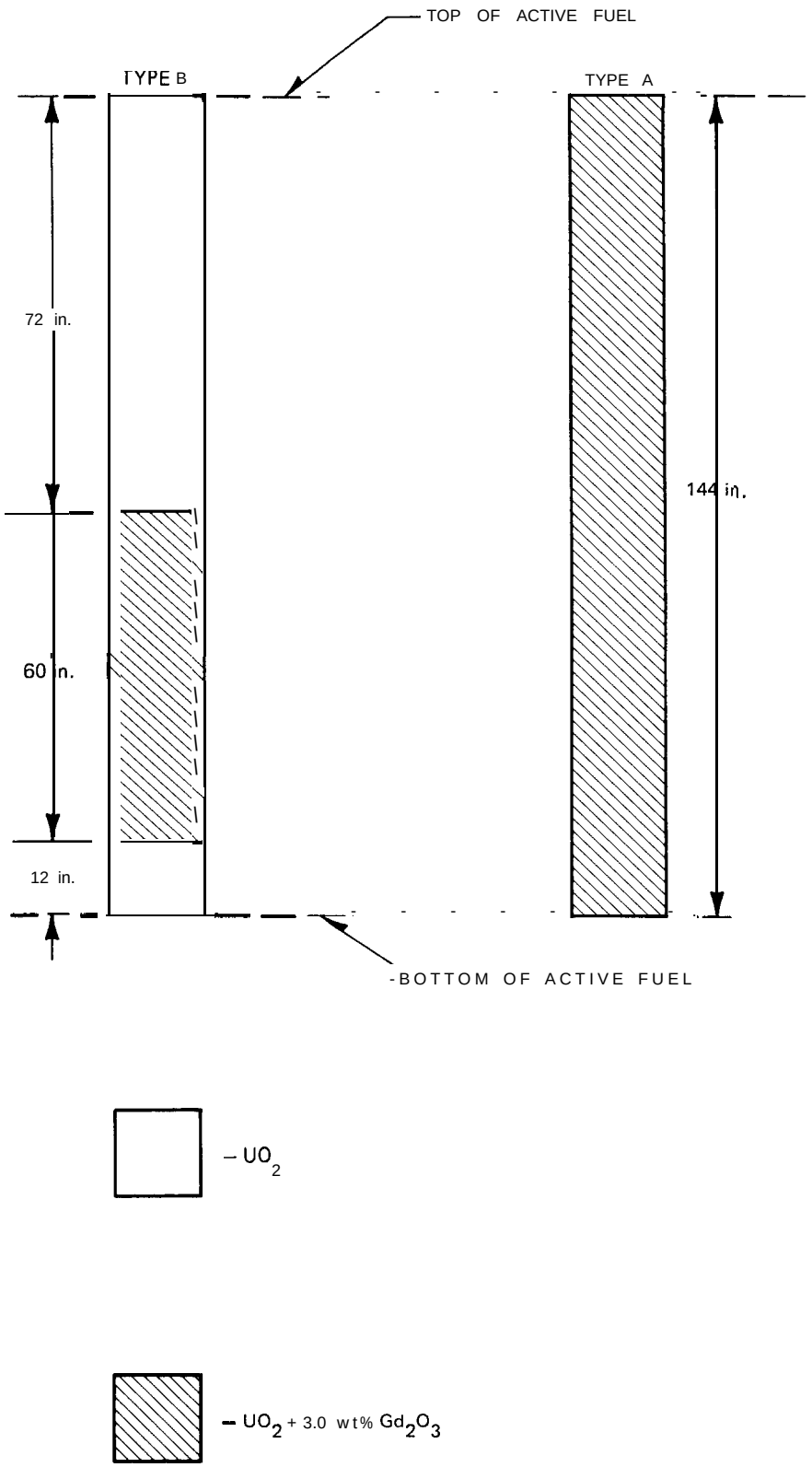


Figure 3. Spatial Gd_2O_3 Variation Initial Type 2 Fuel Rods

2.50 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

4	3	T 3	2	T 2	2	3
3	8D	1	1	1	1	2
T 3	1	1	1	1	5 A	T 1
2	1	1	S 6C	1	1	1
T 2	1	1	1	1	1	T 1
2	1	5 A	1	1	7E	2
3	2	T 1	1	T 1	2	2

ROD TYPE	U-235 (wt%)	Gd_2O_3 (wt%)	NO. OF RODS
1	2.93	0	26
2	1.94	0	11
3	1.69	0	6
4	1.33	0	1
5 A	2.93	3.0	2
6C	2.93	3.0	1
7E	2.93	4.0	1
8D	1.94	4.0	1

S = SPACER POSITIONING ROD
T = TIE ROD

Figure 4. Bundle Design for Type 3 Initial Fuel

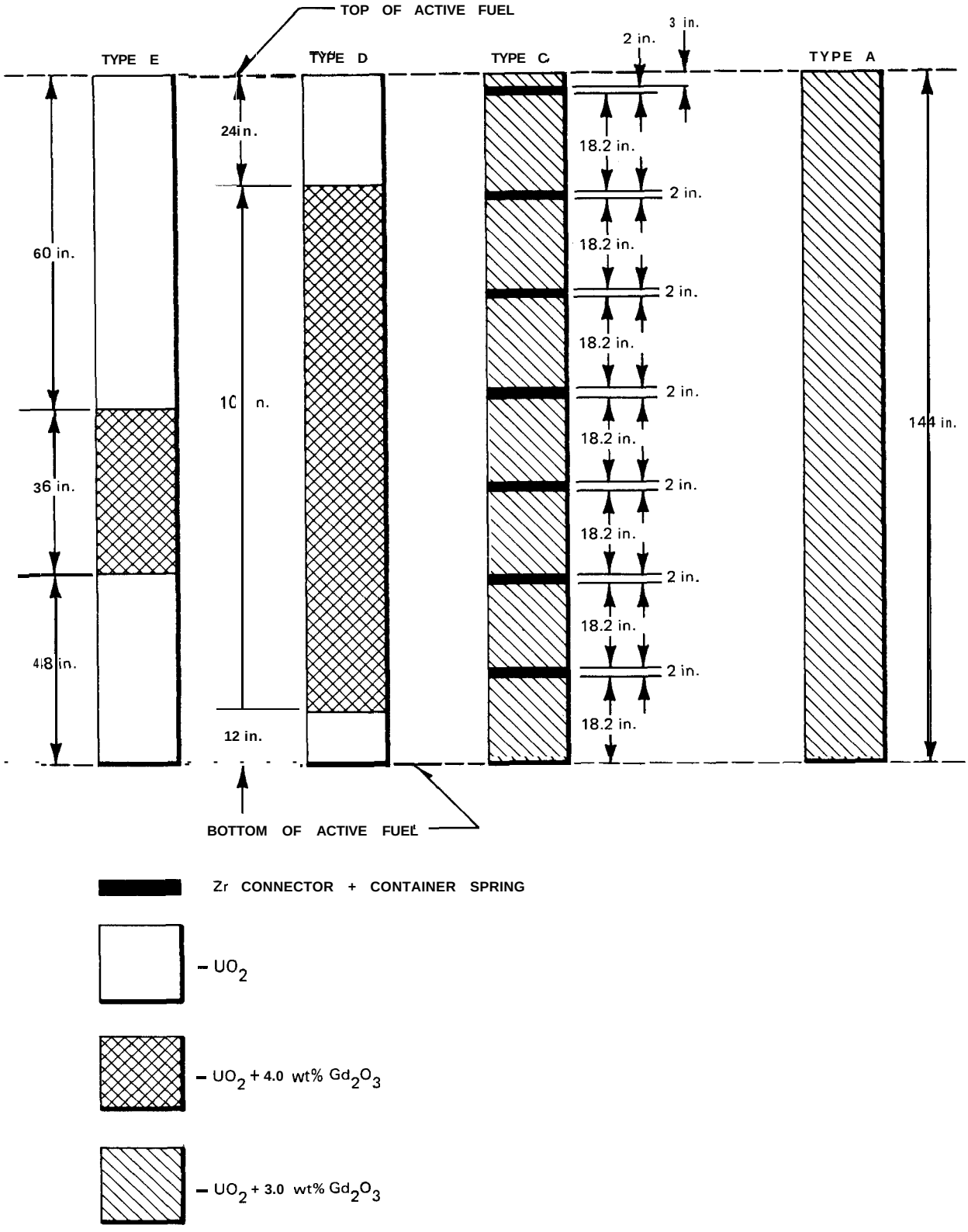


Figure 5. Spatial Gd_2O_3 Variation Initial Type 3 Fuel Rods

2.74 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

4	3	T 2	2	2	T 2	2	3
3	2	1	G 5	1	1	1	2
T 2	1	1	1	1	1	G 5	T 1
2	G 5	1	1	1	1	1	1
2	1	1	1	ws	1	1	1
T 2	1	1	1	1	1	1	T 1
2	1	G 5	1	1	1	G 5	1
3	2	T 1	1	1	T 1	1	2

ROD TYPE	ENRICHMENT wt% U-235	Gd_2O_3 wt%	NUMBER OF RODS
1	3.01	0	39
2	2.22	0	14
3	1.87	0	4
4	1.45	0	1
5	3.01	3.0	5
ws		0	1

WS – SPACER POSITIONING WATER ROD
T – TIE RODS
G – GADOLINIUM RODS

Figure 6. Bundle Design for Type 4 8x8 UO_2 Reload

2.74 wt% U-235 BUNDLE AVERAGE

WIDE-WIDE CORNER

4	3	T 2	2	2	T 2	2	3
3	2	1	G 5	1	1	1	2
T 2	1	1	1	1	1	G 5	T 1
2	G 5	1	1	1	1	1	1
2	1	1	1	WS	1	1	1
T 2	1	1	1	1	1	1	T 1
2	1	G 5	1	1	1	G 5	1
3	2	T 1	1	1	T 1	1	2

ROD TYPE	ENRICHMENT wt% U-235	Gd_2O_3 wt%	NUMBER OF RODS
1	3.01	0	39
2	2.22	0	14
3	1.87	0	4
4	1.45	0	1
5	3.01	2.0	5
WS	–	0	1

WS – SPACER POSITIONING WATER ROD
T – TIE RODS
G – GADOLINIUM RODS

Figure 7. Bundle Design for Type 5 8x8 UO_2 Reload

2.73 wt% U-235 BUNDLE AVERAGE, CENTRAL ZONE*

WIDE-WIDE CORNER

4	3	T 2	2	2	T 2	2	3
3	2		G 5	1		1	2
T 2	1	1	1	1	1	G 5	T 1
2	G 5	1	1	W R	1	1	1
2	1	1	WS	1	1	1	1
T 2	1	1	1	1	1	1	T 1
2	1	G 5	1	1	1	G 5	1
3	2	T 1	1	1	T 1	1	2

*NATURAL UO_2 LOCATED IN END ZONES, 62 RODS. SEE FIGURE 9

ROD TYPE	ENRICHMENT wt% U-235	Gd_2O_3 wt%	NUMBER OF RODS
1	3.01	0	38
2	2.22	0	14
3	1.87	0	4
4	1.45	0	1
5	3.01	2.0	5
WS		0	1
WR	—	0	1

WS — SPACER POSITIONING WATER ROD
WR - WATER ROD
T TIE RODS
G — GADOLINIUM RODS

Figure 8. Bundle Design for Type 6 8x8 UO_2 Reload, LTA

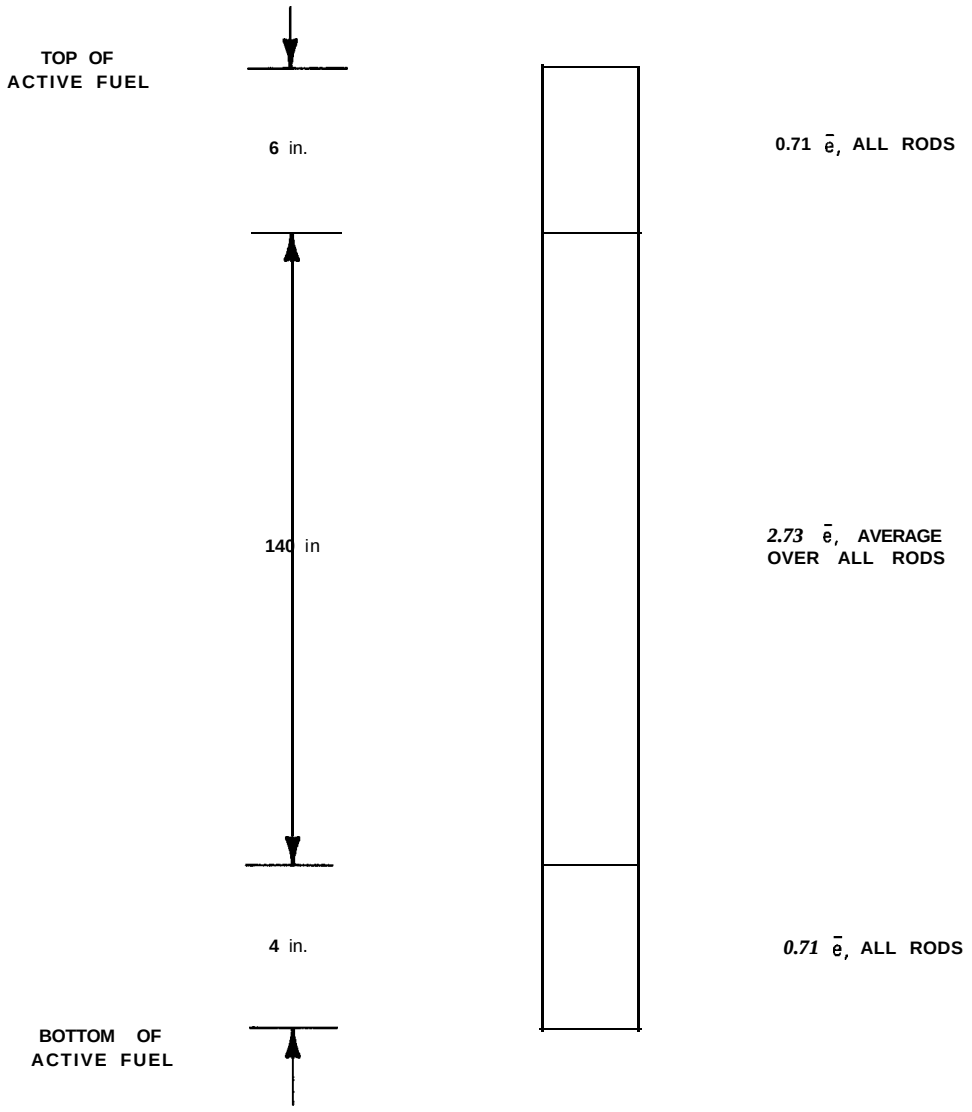
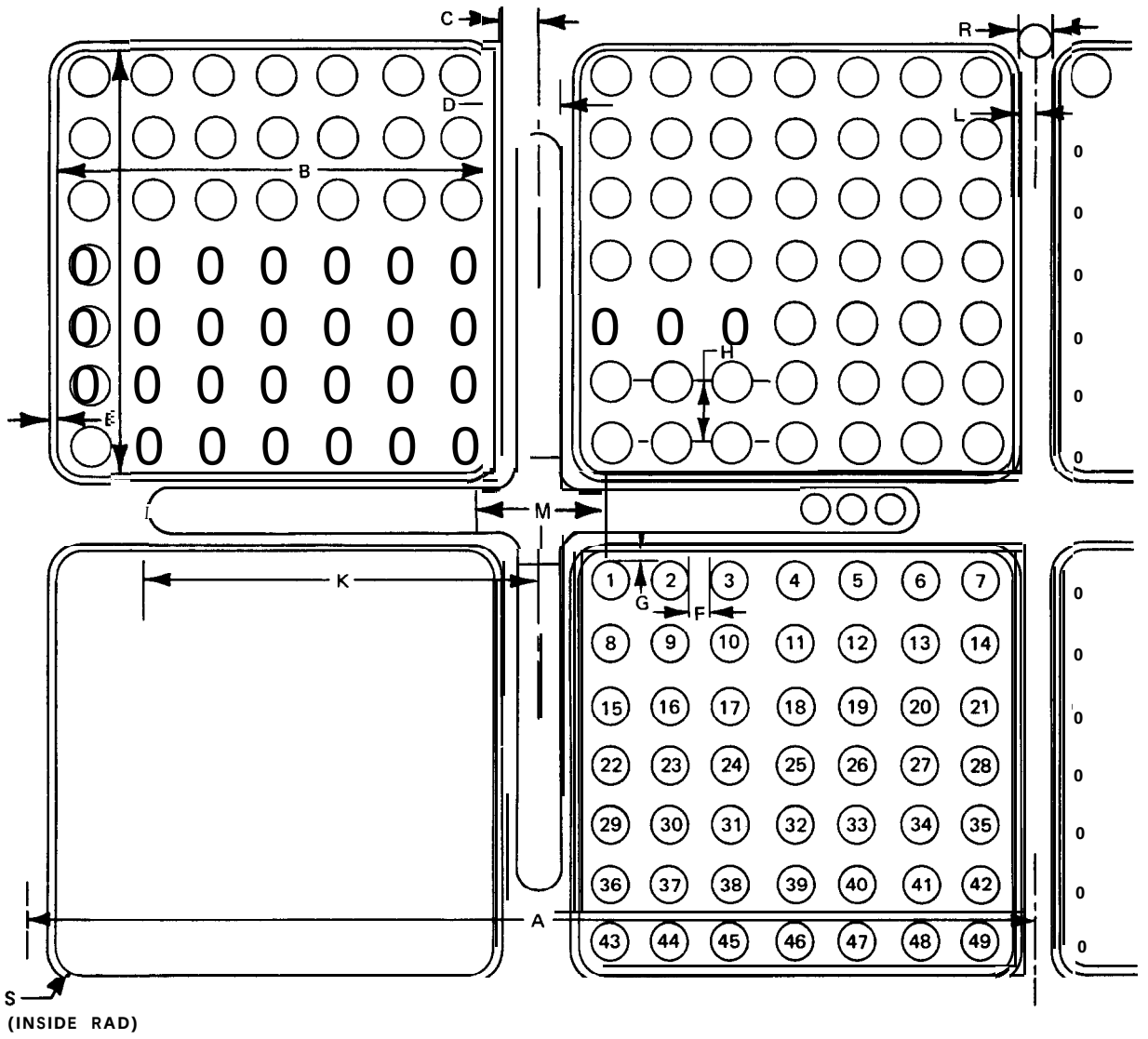


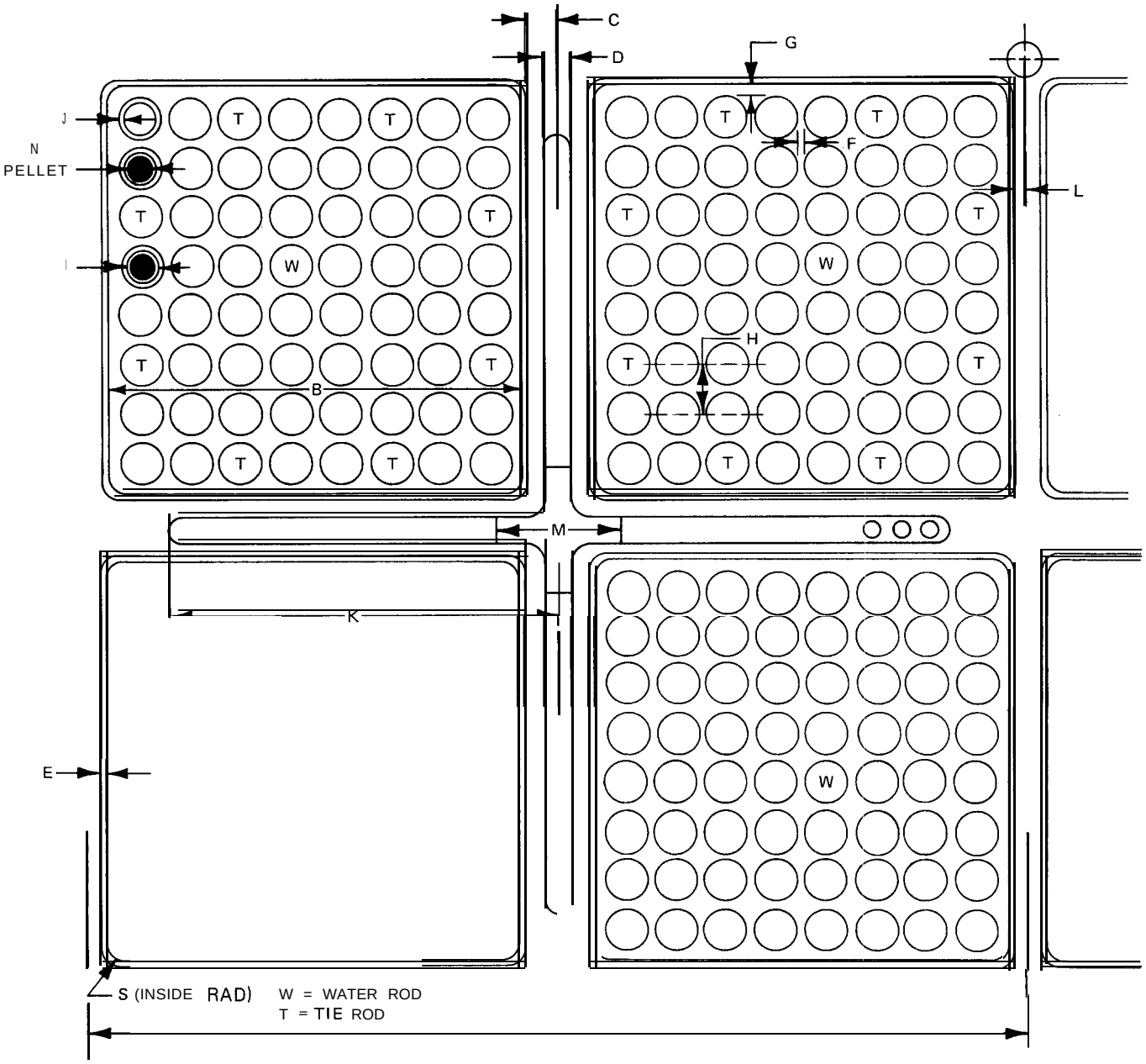
Figure 9. Lead Test Assembly U-235 Enrichment Axial Profile



DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.375		0.080	0.175	0.1435	0.738		

DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.187							0.380	

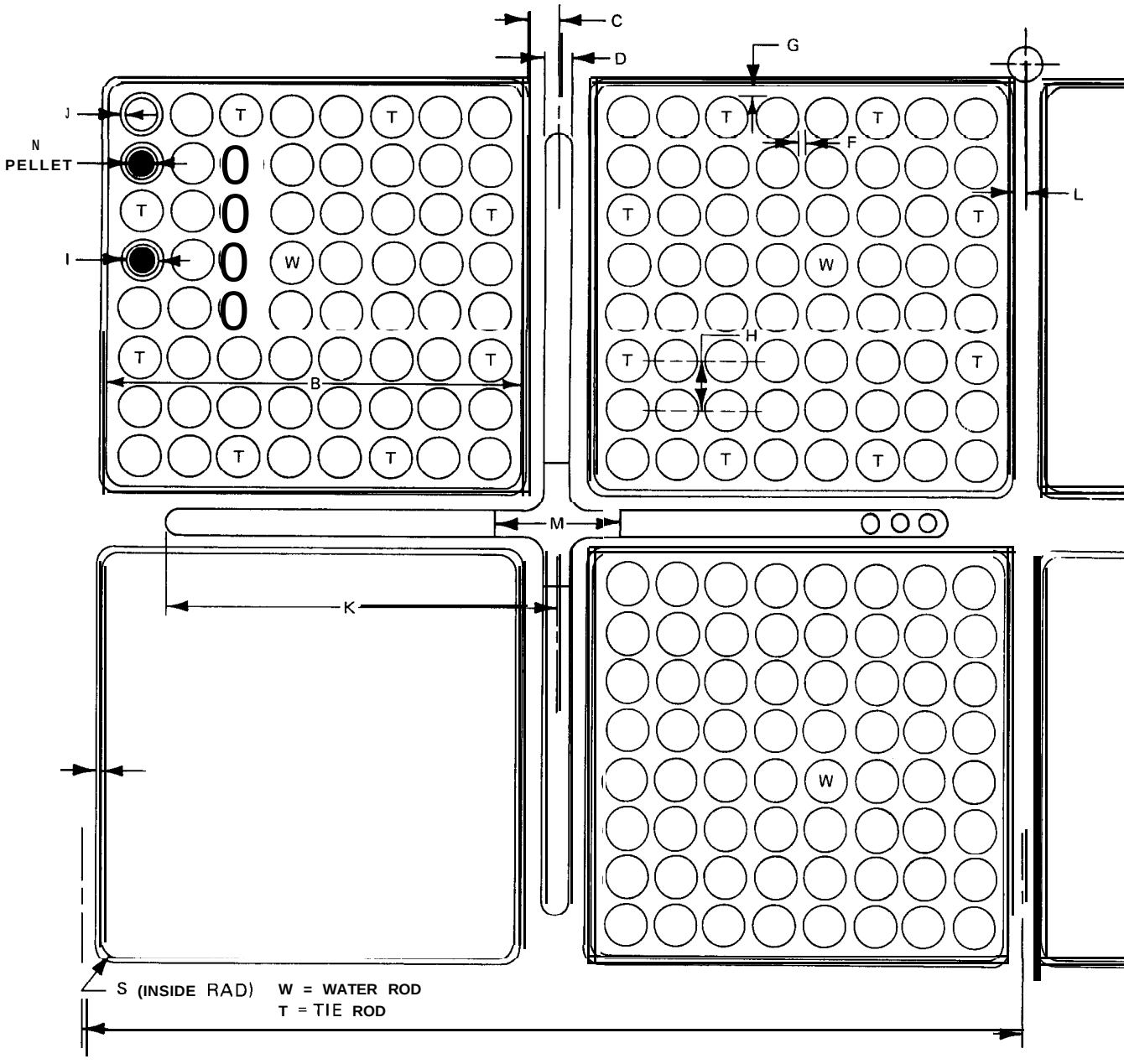
Figure 10. Initial Fuel Assembly Lattice



DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.355		0.100	0.147	0.153	0.640		

DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.167							0.380	

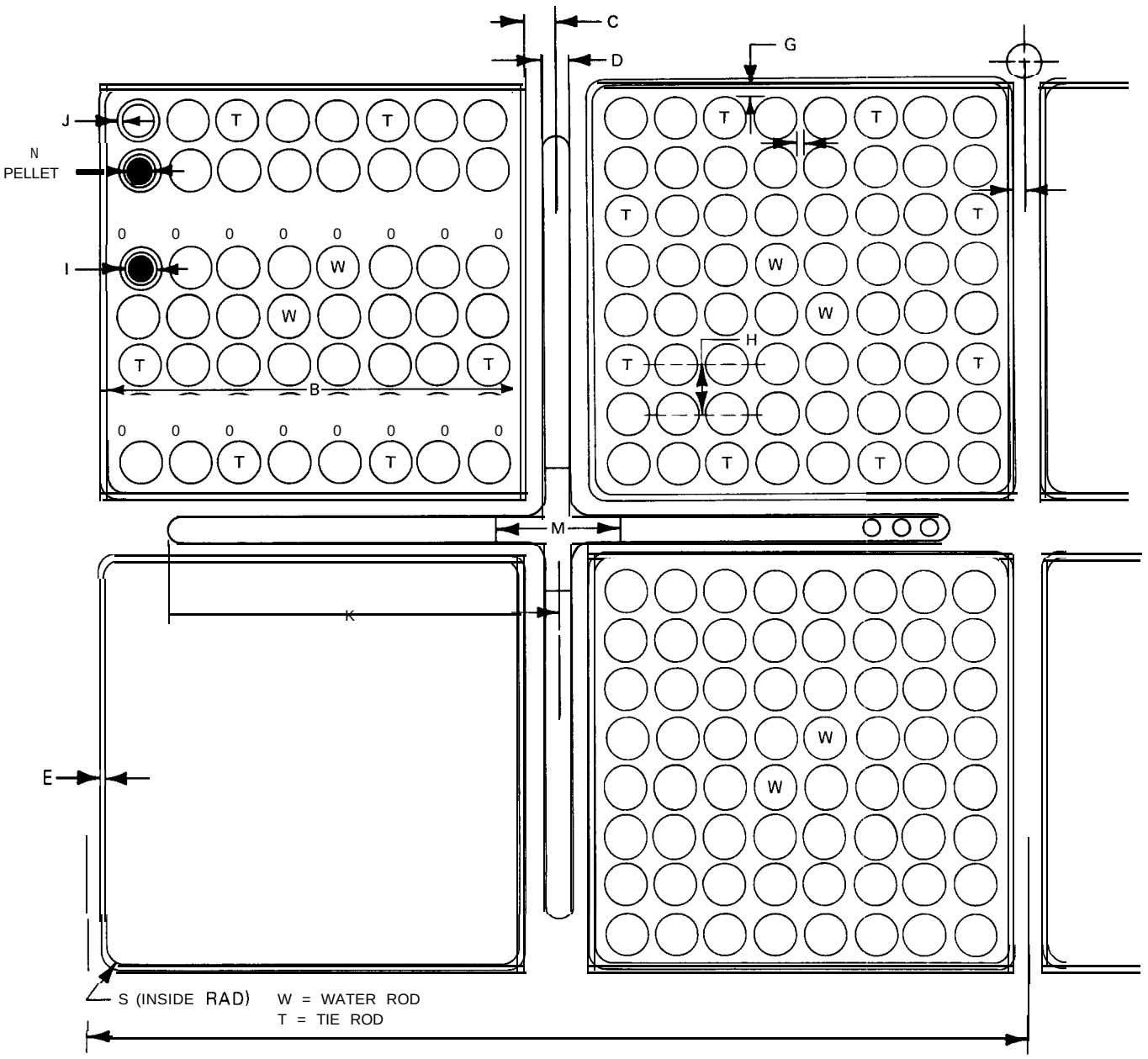
Figure 11. Reload Fuel Assembly Lattice for 100 mil Channels



DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.335		0.120	0.147	0.153	0.640		

DIM. IDENTIFICATION	K	L	M	N	O	P	Q	R	S	
DIM. INCHES		0.147							0.380	

Figure 12. Reload Fuel Assembly Lattice for 120 mil Channels



DIM. IDENTIFICATION	A	B	C	D	E	F	G	H	I	J
DIM. INCHES	12.0	5.278	0.355		0.100	0.157	0.158	0.640		

DIM. IDENTIFICATION	K	L	M	N	0	P	Q	R	s	
DIM. INCHES		0.167							0.380	

Figure 13. Reload Fuel Assembly Lattice for LTA Assemblies

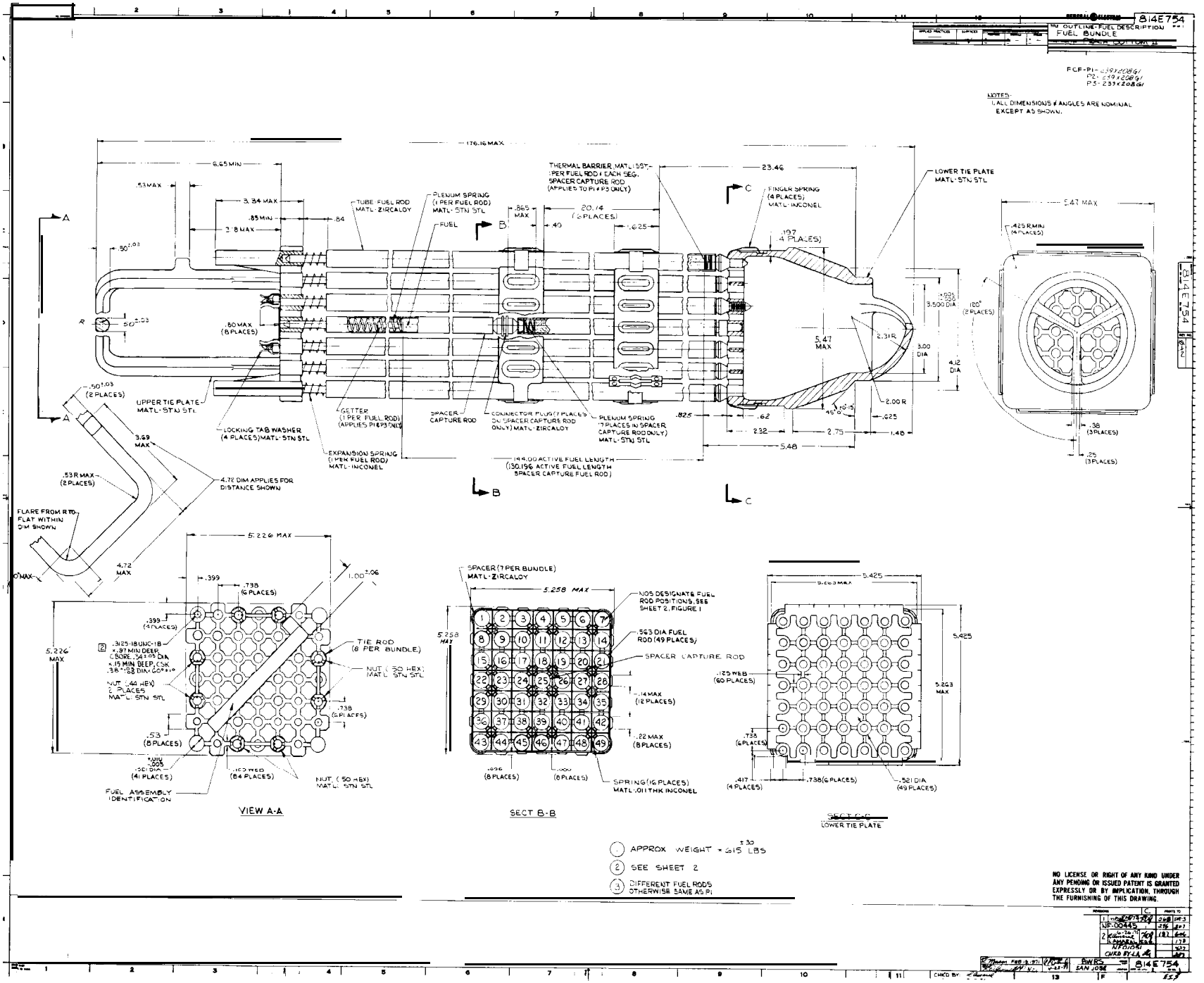


Figure 74. Fuel Assembly Drawing for Initial Core Fuel

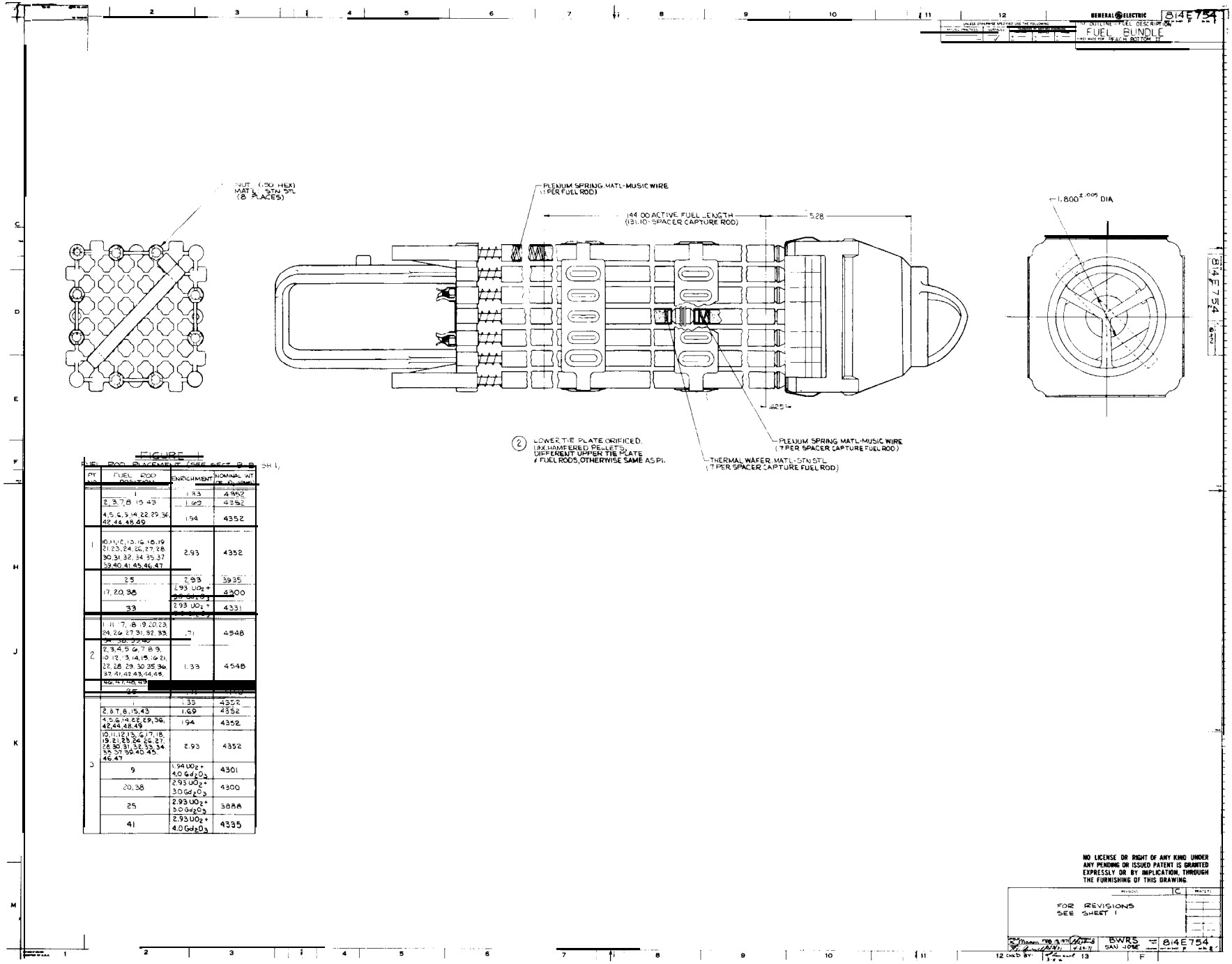


FIGURE 1

FUEL ROD PLACEMENT (SEE SHEET 2-8 SH 1)

PT. NO.	FUEL ROD POSITION	ENRICHMENT	NOMINAL WT (G UO2/CM)
1	1	1.33	4952
	2, 3, 7, 8, 15, 43	1.69	4352
	4, 5, 6, 9, 14, 22, 29, 36, 42, 44, 48, 49	1.94	4352
	10, 11, 12, 13, 16, 18, 19, 21, 23, 24, 26, 27, 28, 30, 31, 32, 34, 35, 37, 39, 40, 41, 45, 46, 47	2.93	4352
	25	2.93	3935
	17, 20, 38	2.93 UO_2 + ~~2.0 Gd_2O_3~~	4300
	33	2.93 UO_2 + ~~2.0 Gd_2O_3~~	4331
2	1, 11, 7, 8, 9, 20, 23, 24, 26, 27, 31, 32, 33, 34, 38, 39, 45	.71	4548
	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 21, 22, 28, 29, 30, 35, 36, 37, 41, 42, 43, 44, 48, 46, 47, 48, 49	1.33	4548
	25	[redacted]	[redacted]
3	1	1.33	4352
	2, 3, 7, 8, 15, 43	1.69	4352
	4, 5, 6, 14, 22, 29, 36, 42, 44, 48, 49	1.94	4352
	10, 11, 12, 13, 16, 17, 18, 19, 21, 23, 24, 26, 27, 28, 30, 31, 32, 33, 34, 35, 37, 39, 40, 45, 46, 47	2.93	4352
	9	1.94 UO_2 + 4.0 Gd_2O_3	4301
	20, 38	2.93 UO_2 + 3.0 Gd_2O_3	4300
	25	2.93 UO_2 + 3.0 Gd_2O_3	3888
	41	2.93 UO_2 + 4.0 Gd_2O_3	4335

Figure 15. Fuel Assembly Drawing for Initial Core Fuel (Continued)

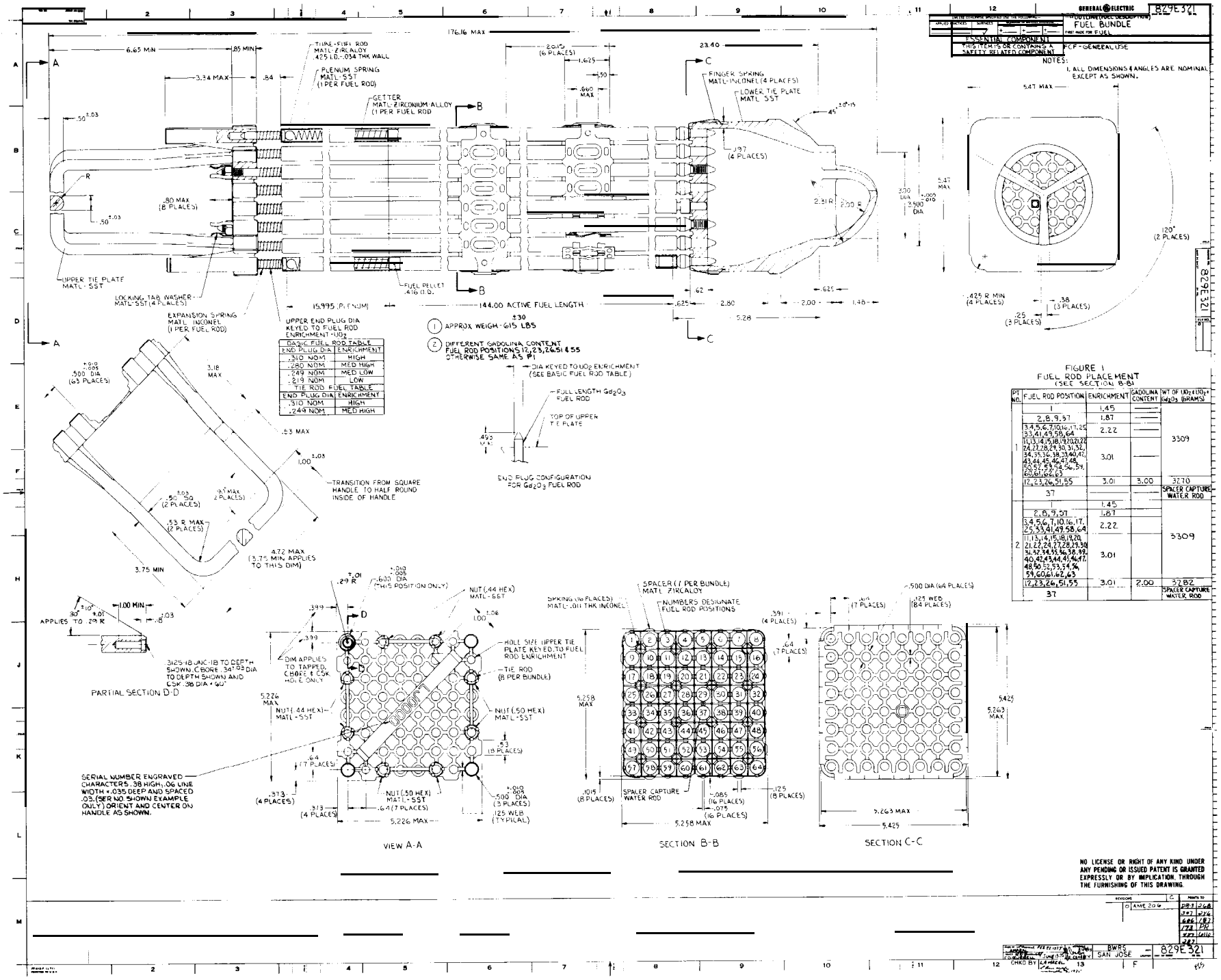
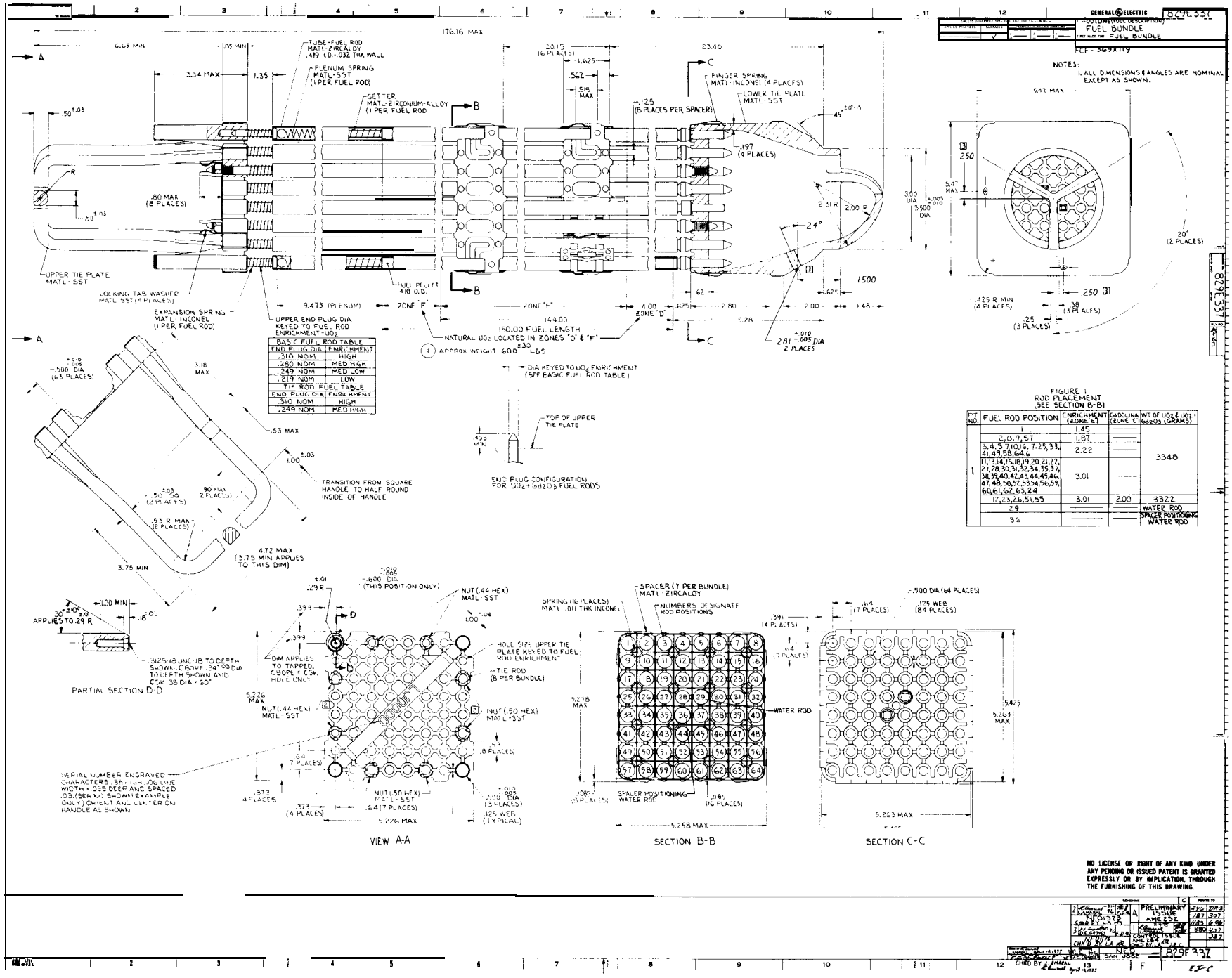


FIGURE 1
FUEL ROD PLACEMENT
(SEE SECTION B-B)

PT NO.	FUEL ROD POSITION	ENRICHMENT	GADOLINA CONTENT	WT OF UO_2 & UO_2 + Gd_2O_3 (GRAMS)
1	1	1.45	—	3309
	2,8,9,57	1.87	—	
	3,4,5,6,7,10,16,17,25,33,41,49,58,64	2.22	—	
	11,13,14,15,18,19,20,21,22,24,27,28,29,30,31,32,34,35,36,38,39,40,42,43,44,45,46,47,48,50,52,53,54,56,59,60,61,62,63	3.01	—	
	12,23,26,51,55	3.01	3.00	3270
	37		—	SPACER CAPTURE WATER ROD
2	1	1.45		3309
	2,8,9,57	1.87		
	3,4,5,6,7,10,16,17,25,33,41,49,58,64	2.22		
	11,13,14,15,18,19,20,21,22,24,27,28,29,30,34,35,36,38,39,40,42,43,44,45,46,47,48,50,52,53,54,56,59,60,61,62,63	3.01		
	12,23,26,51,55	3.01	2.00	3282
	37			SPACER CAPTURE WATER ROD

figure 76. Fuel Assembly Drawing for 8x8 Reload Fuel



BASIC FUEL ROD TABLE	
END PLUG DIA	ENRICHMENT
.310 NOM	HIGH
.280 NOM	MED HIGH
.249 NOM	MED LOW
.219 NOM	LOW
TIE ROD FUEL TABLE	
END PLUG DIA	ENRICHMENT
.310 NOM	HIGH
.249 NOM	MED HIGH

FIGURE 1
ROD PLACEMENT
(SEE SECTION B-B)

PT NO.	FUEL ROD POSITION	ENRICHMENT (ZONE E)	GADOLINA (ZONE E)	WT OF UO2 & UO2+ Gd2O3 (GRAMS)
1	1	1.45	—	3348
	2,8,9,57	1.87	—	
	3,4,5,7,10,16,17,25,33,41,49,58,64,6	2.22	—	
	11,13,14,15,18,19,20,21,22,27,28,30,31,32,34,35,37,38,39,40,42,43,44,45,46,47,48,50,52,53,54,56,59,60,61,62,63,24	3.01	—	
	12,23,26,51,55	3.01	2.00	3322
	29	—	—	WATER ROD
	36	—	—	SPACER POSITIONING WATER ROD

figure 17. Fuel Assembly Drawing for LTA Reload Fuel

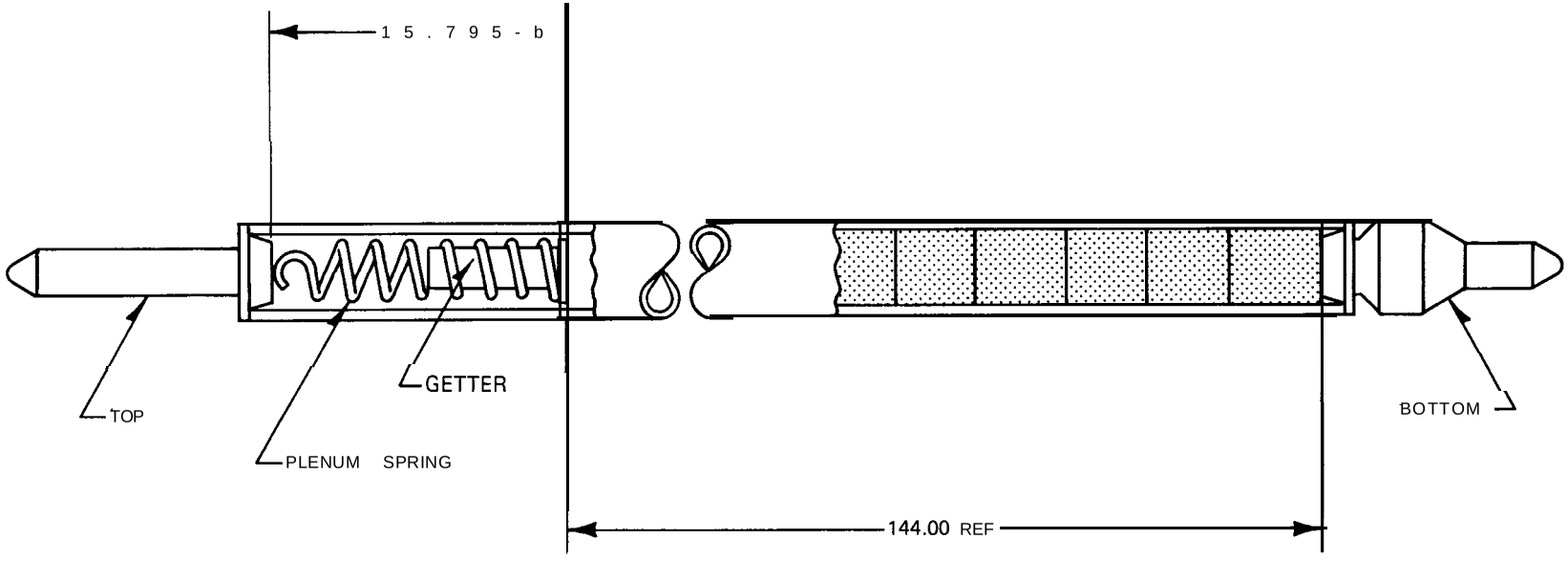
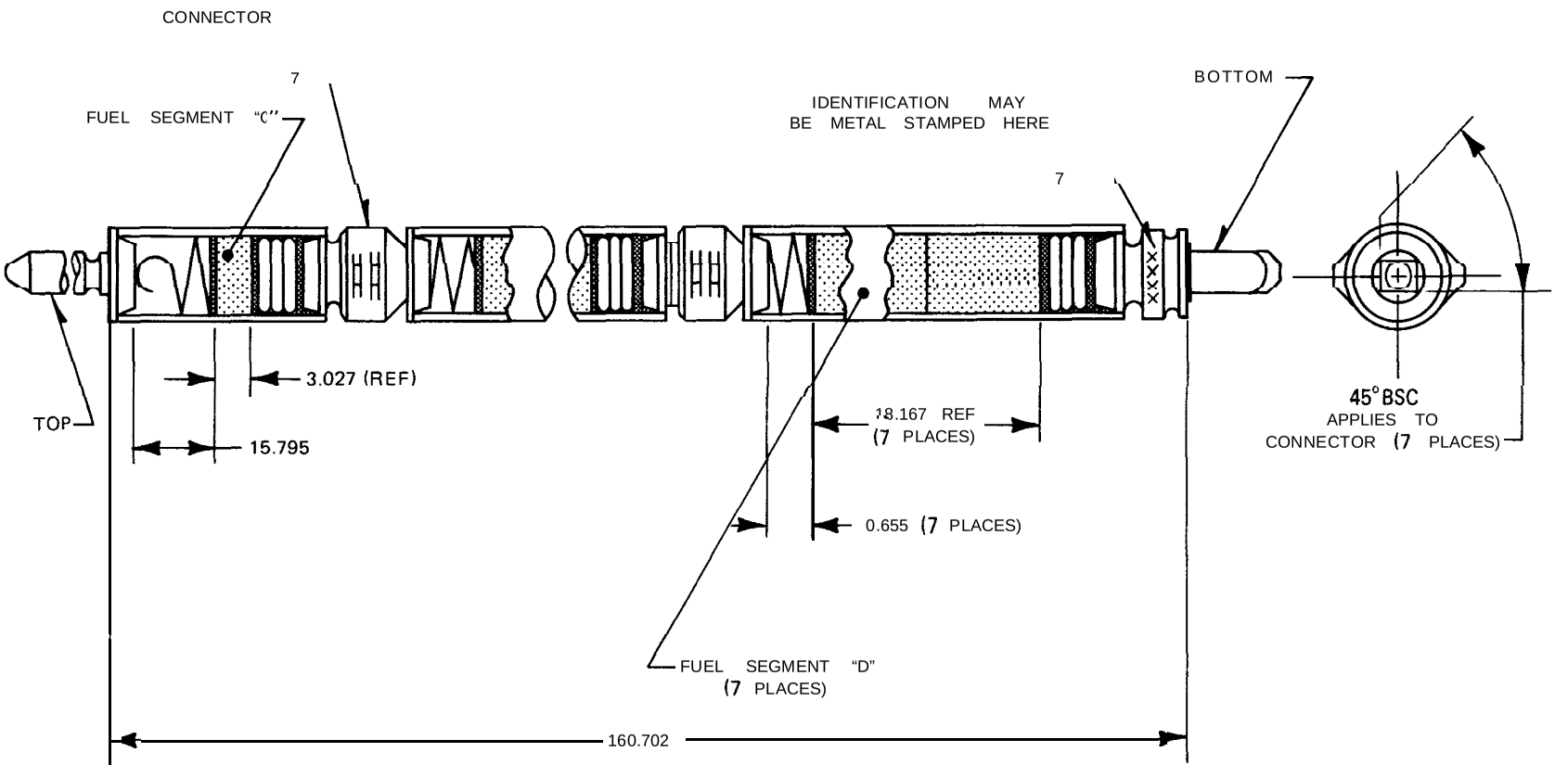


Figure 18. Typical Fuel Rod



FUEL SEGMENT	WEIGHT OF FUEL GRAMS
"C"	90
"D"	542

Figure 19. Spacer Positioning Rod for Type 3 Initial Fuel

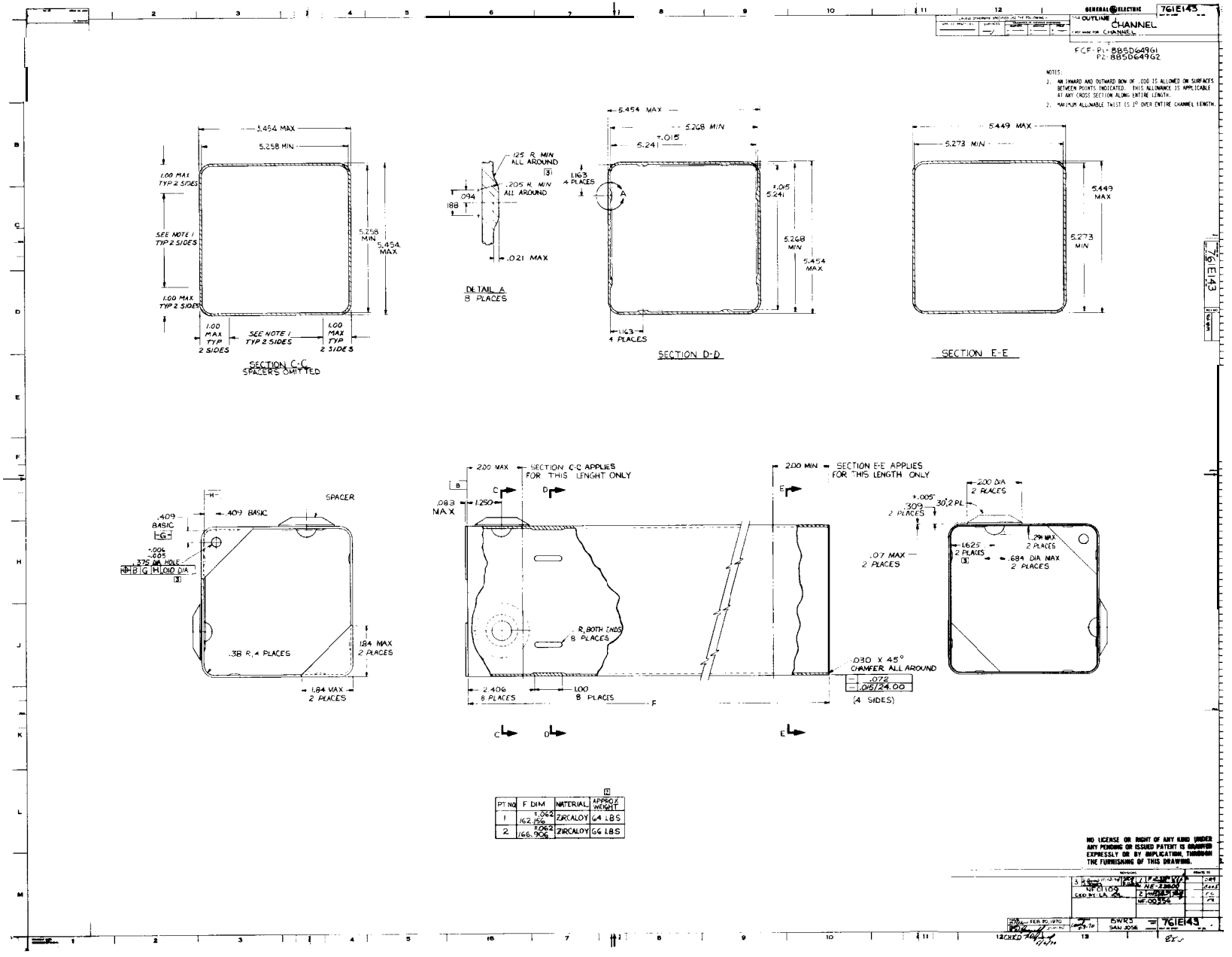


Figure 20. Channel Outline Drawing for Use With Initial Fuel

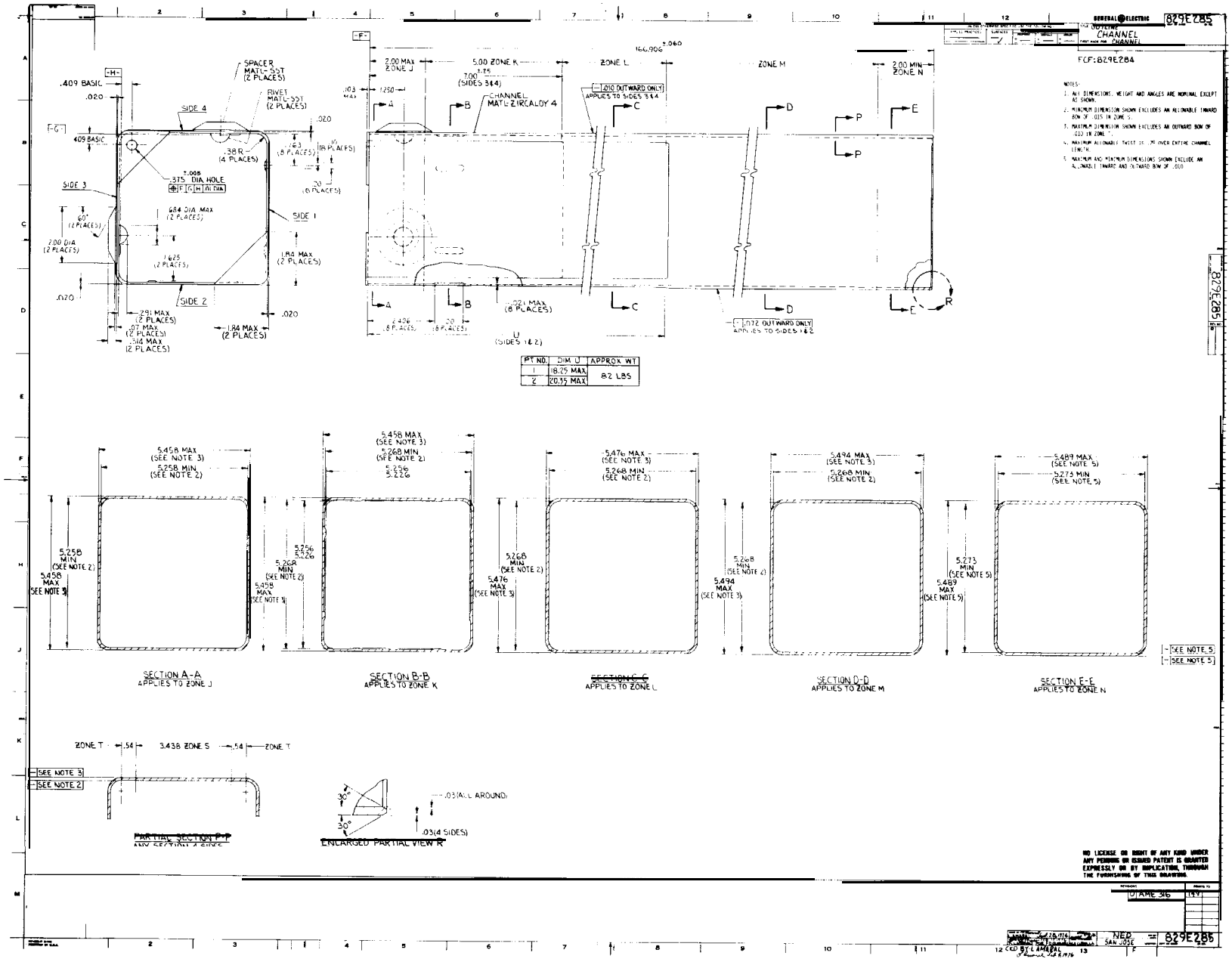
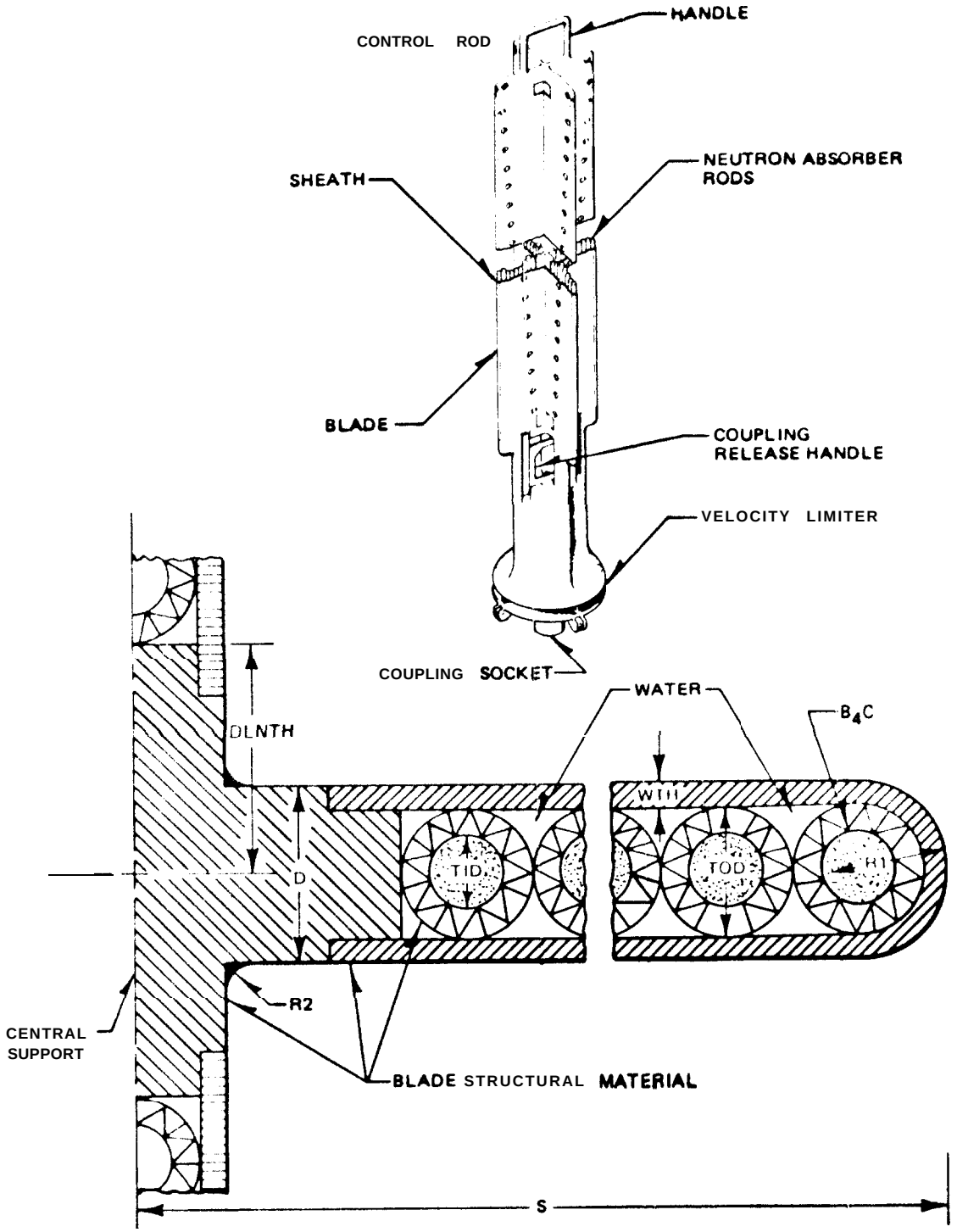
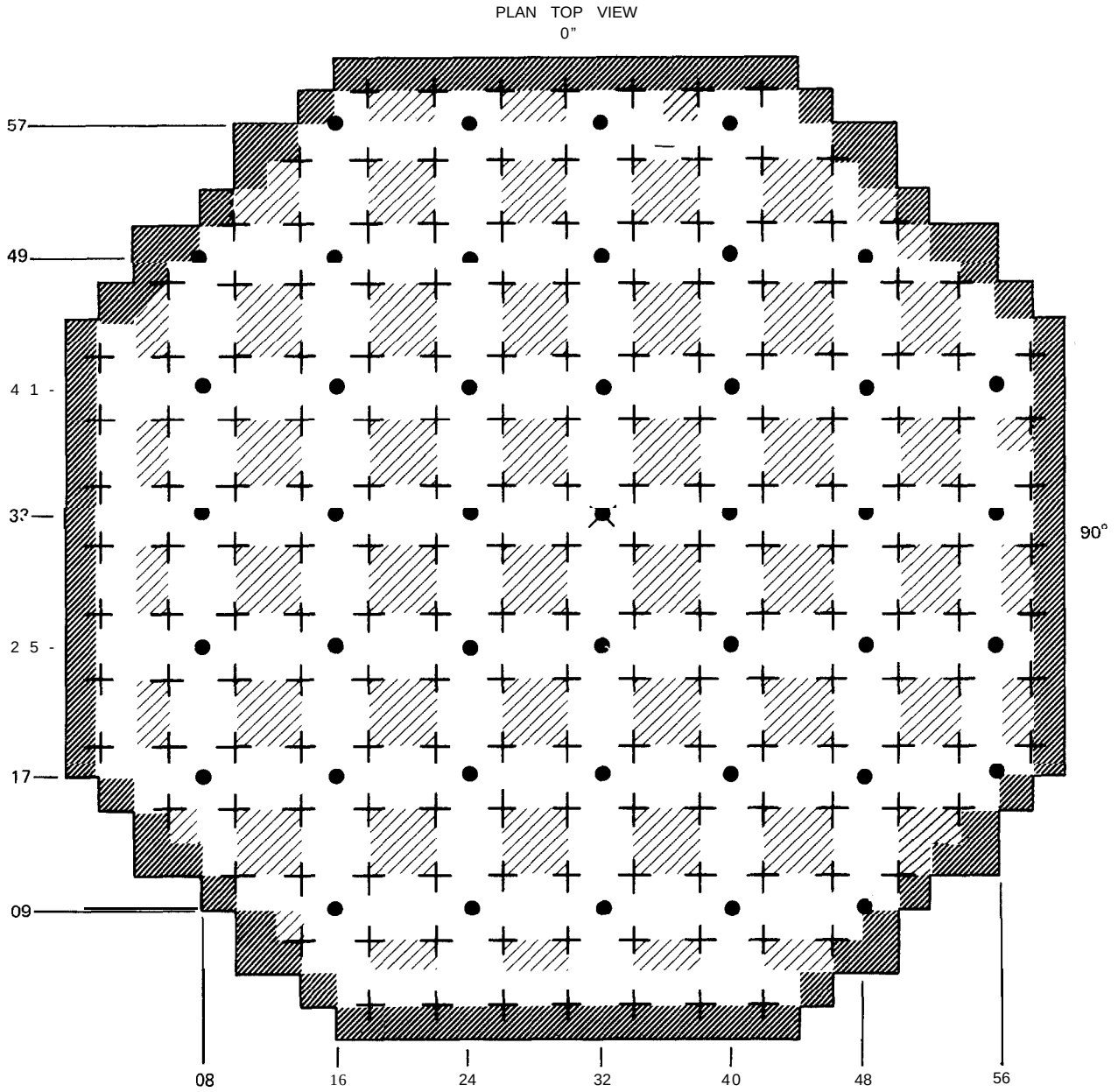


Figure 21. Channel Outline Drawing for Use With 8x8 Reload Fuel



S	CONTROL BLADE SPAN
D	CONTROL BLADE FULL THICKNESS
DLNTH	DEAD LENGTH. i.,., CENTRAL STRUCTURE LENGTH
TID	TUBE i.d.
TOD	TUBE o.d.
WTH	SHEATH THICKNESS
NBKT	NUMBER OF BLANK TUBES ADJACENT TO CENTRAL STRUCTURE PER WING
R1	BLADE TIP RADIUS
R2	BLADE FILLET RADIUS

Figure 22. B_4C Control Blade Model (Schematic)



NUMBER OF FUEL ASSEMBLIES — 764

NUMBER OF CONTROL RODS — 185

NUMBER OF TIP INSTRUMENT ASSEMBLIES — 43

COMMON POSITION FOR ALL TIP MACHINES

FUEL BUNDLES WITH 2.211 in. ORIFICE DIAMETER — 672

FUEL BUNDLES WITH 1.469 in. ORIFICE DIAMETER — 92

TYPE 1 ASSEMBLIES WITH 2.211 in. ORIFICE AND RESTRICTED LOWER TIE PLATE — 168 (CYCLE 1 ONLY)

Figure 23. Core Orificing and TIP System Arrangement

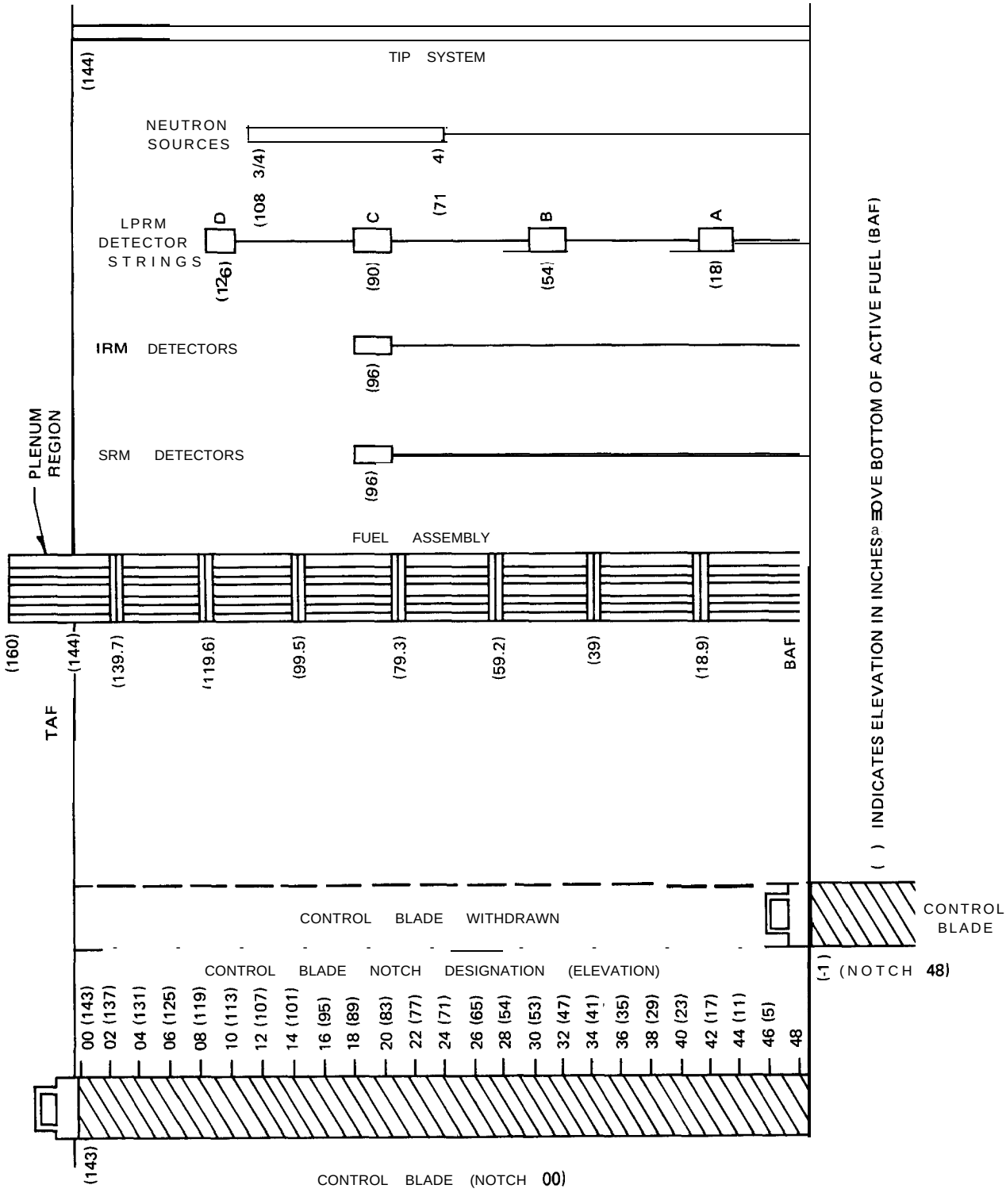
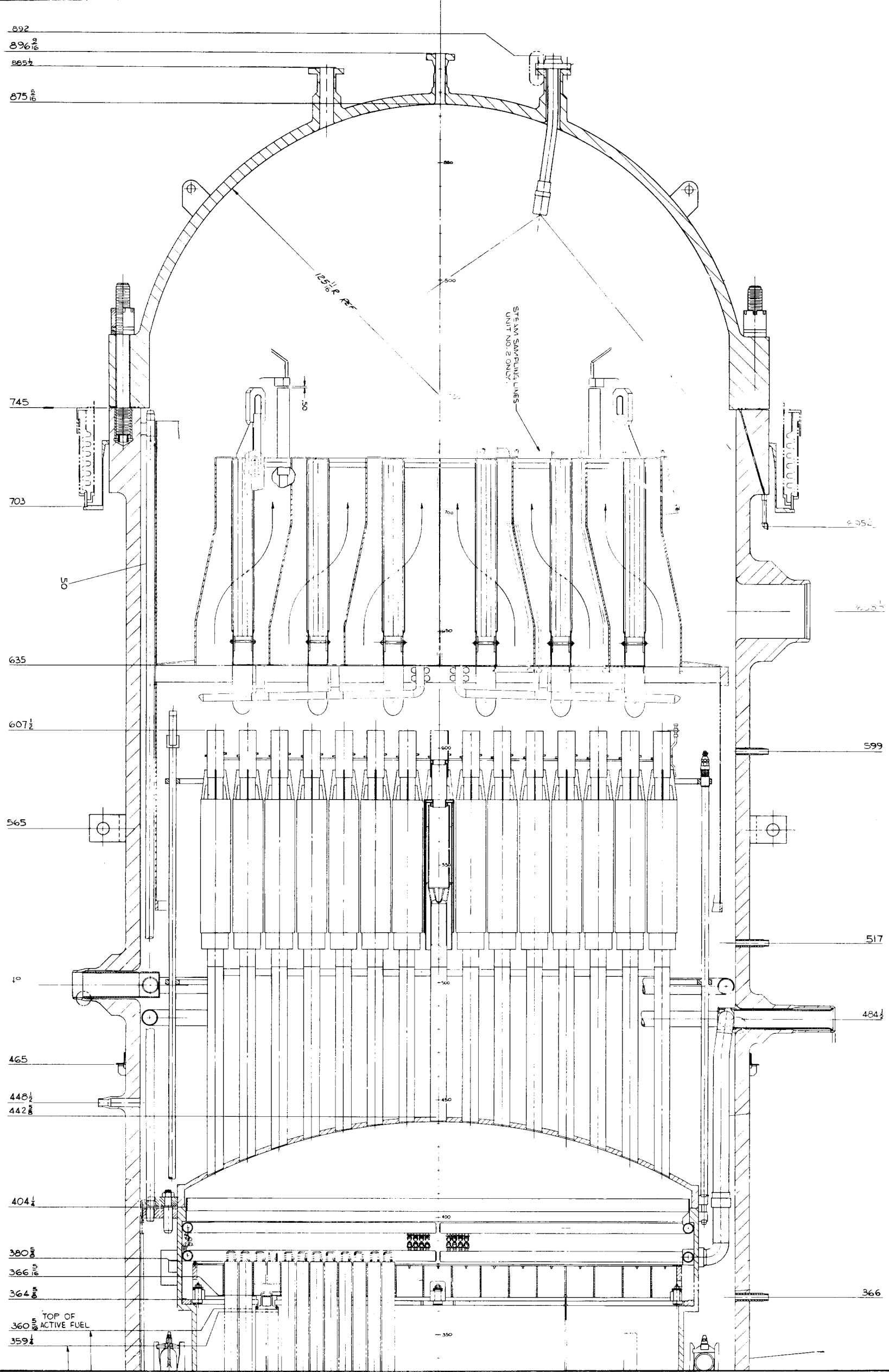


Figure 24. Elevation of Core Components


892
896 2/16
885½
875 5/16
745
703
50
635
607½
565
10
465
448½
442 5/8
404¼
380 5/8
366 5/16
364 5/8
360 5/16
359¼
TOP OF ACTIVE FUEL
125 11/16 R REF
STEAM SAMPLING LINES UNIT NO. 2 ONLY
50
599
517
484½
366

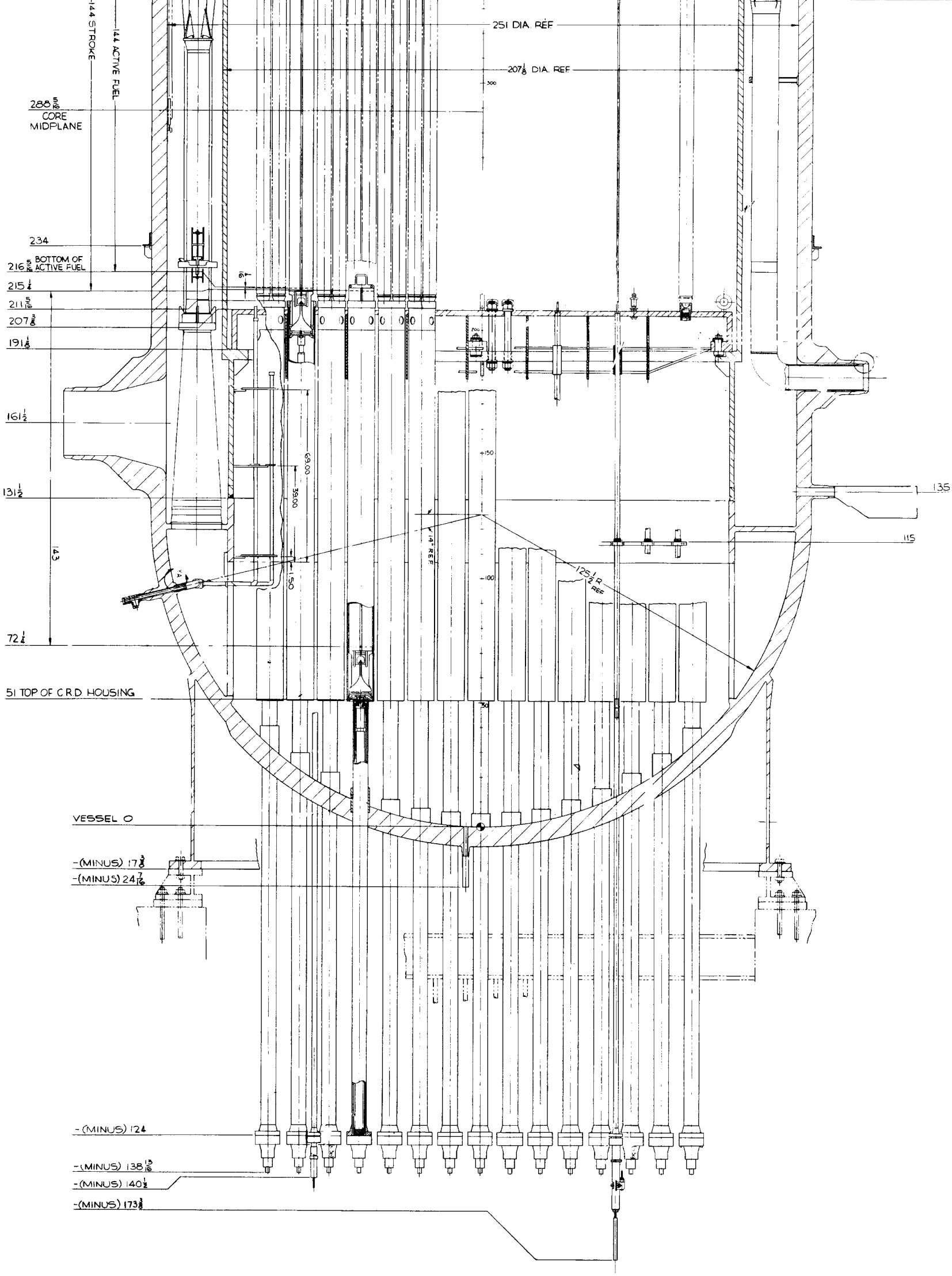


Figure 25. Reactor Assembly Drawing

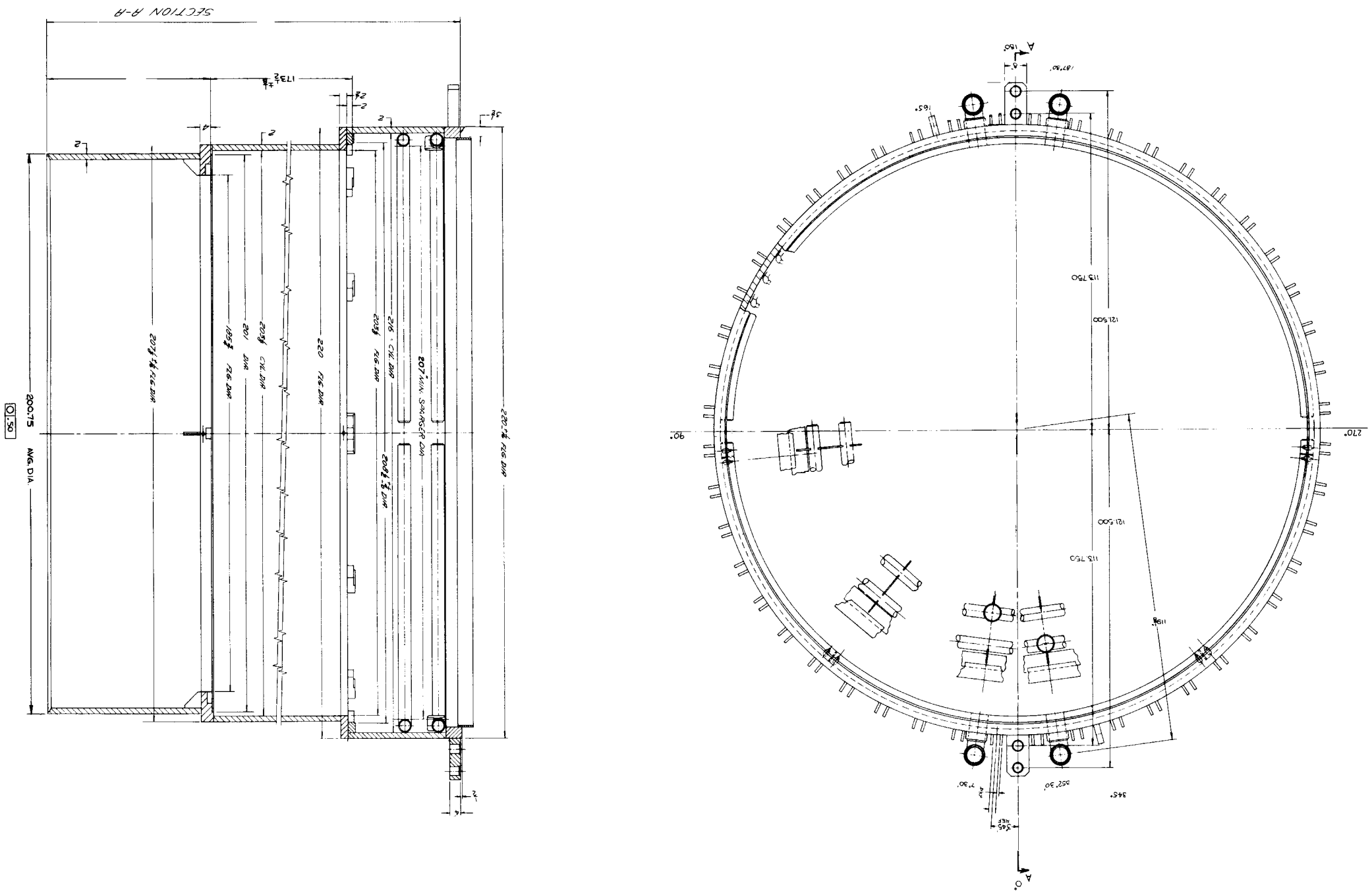


Figure 26. Shroud Drawing

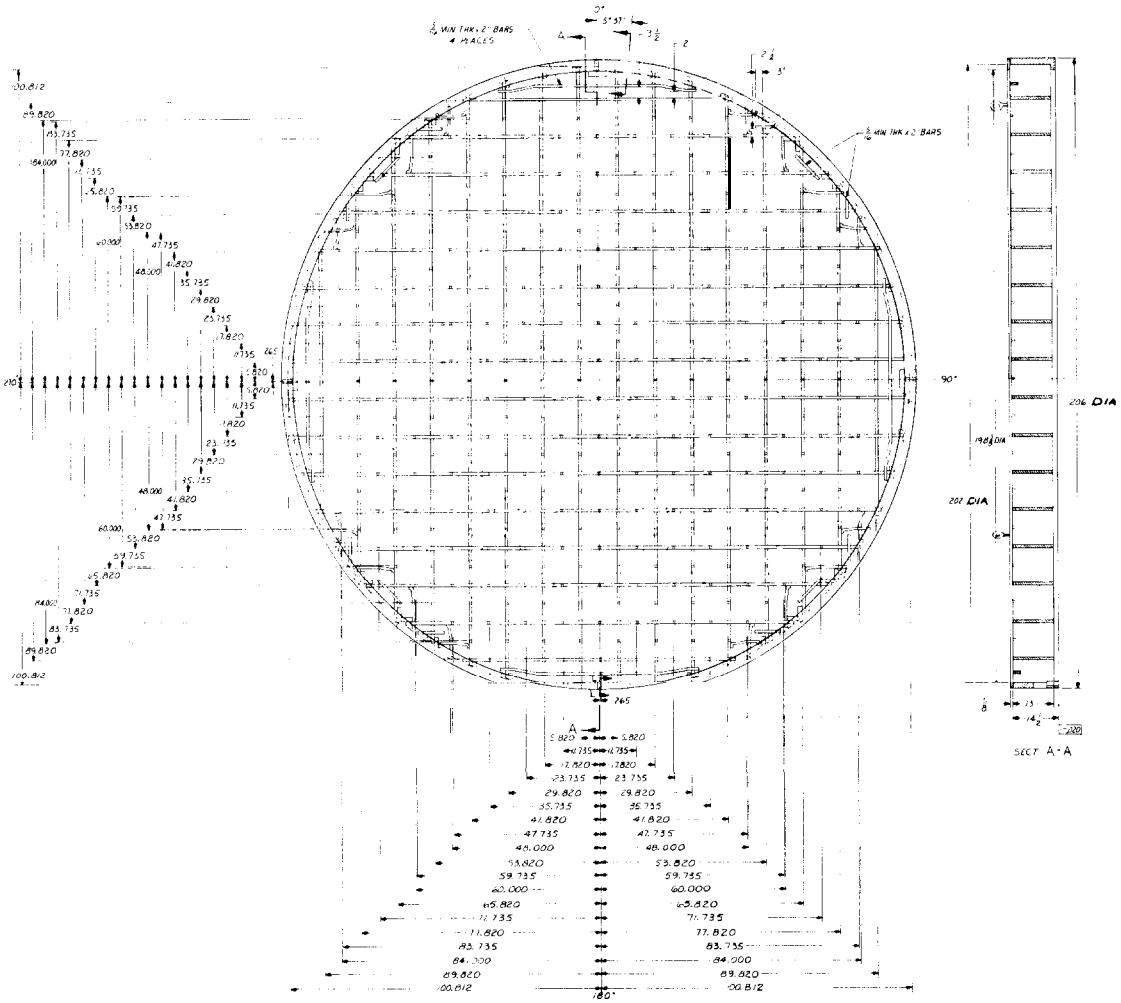


Figure 27. *Top Guide Drawing*

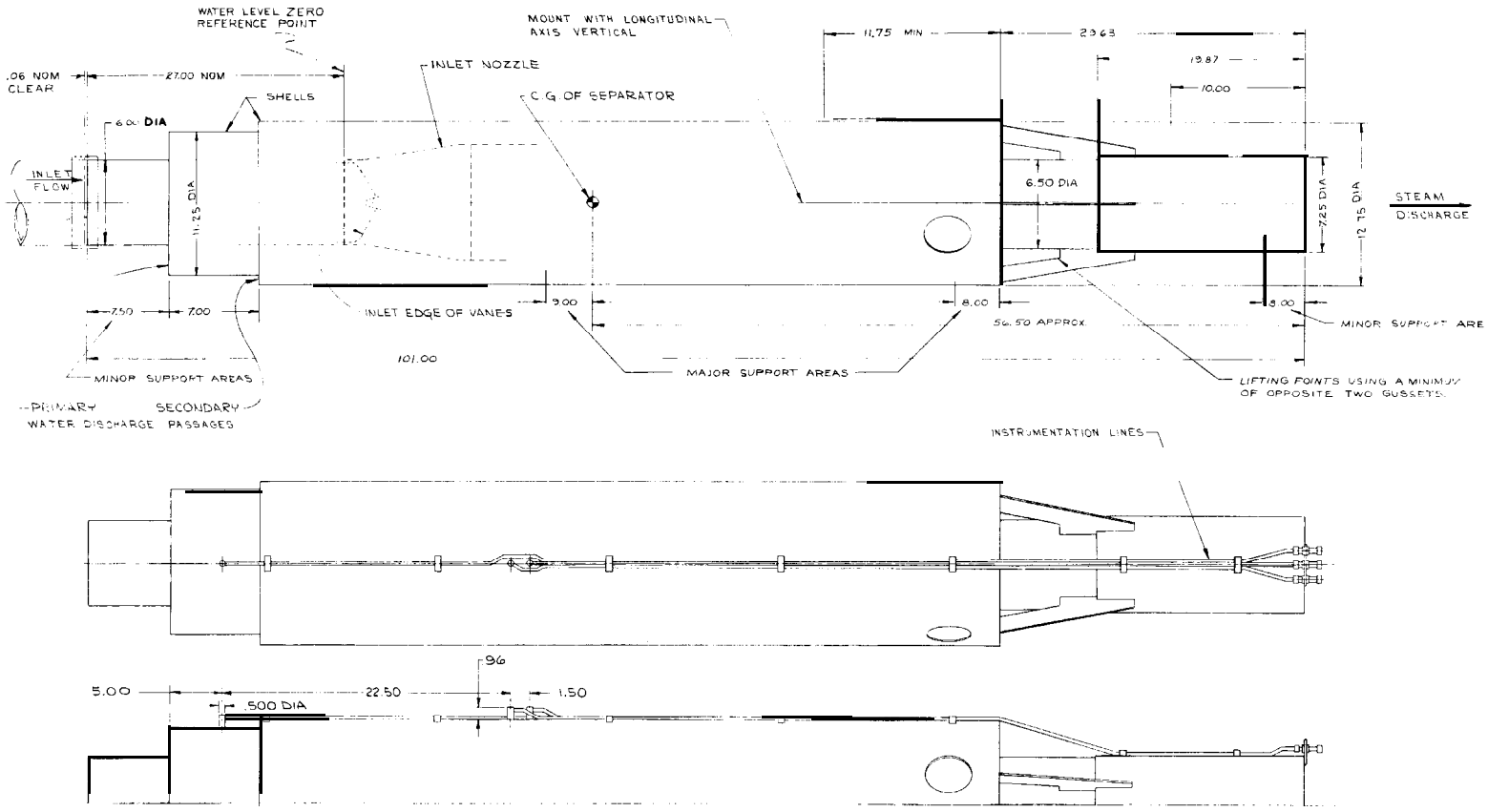


Figure 28. Steam Separator Outline Drawing

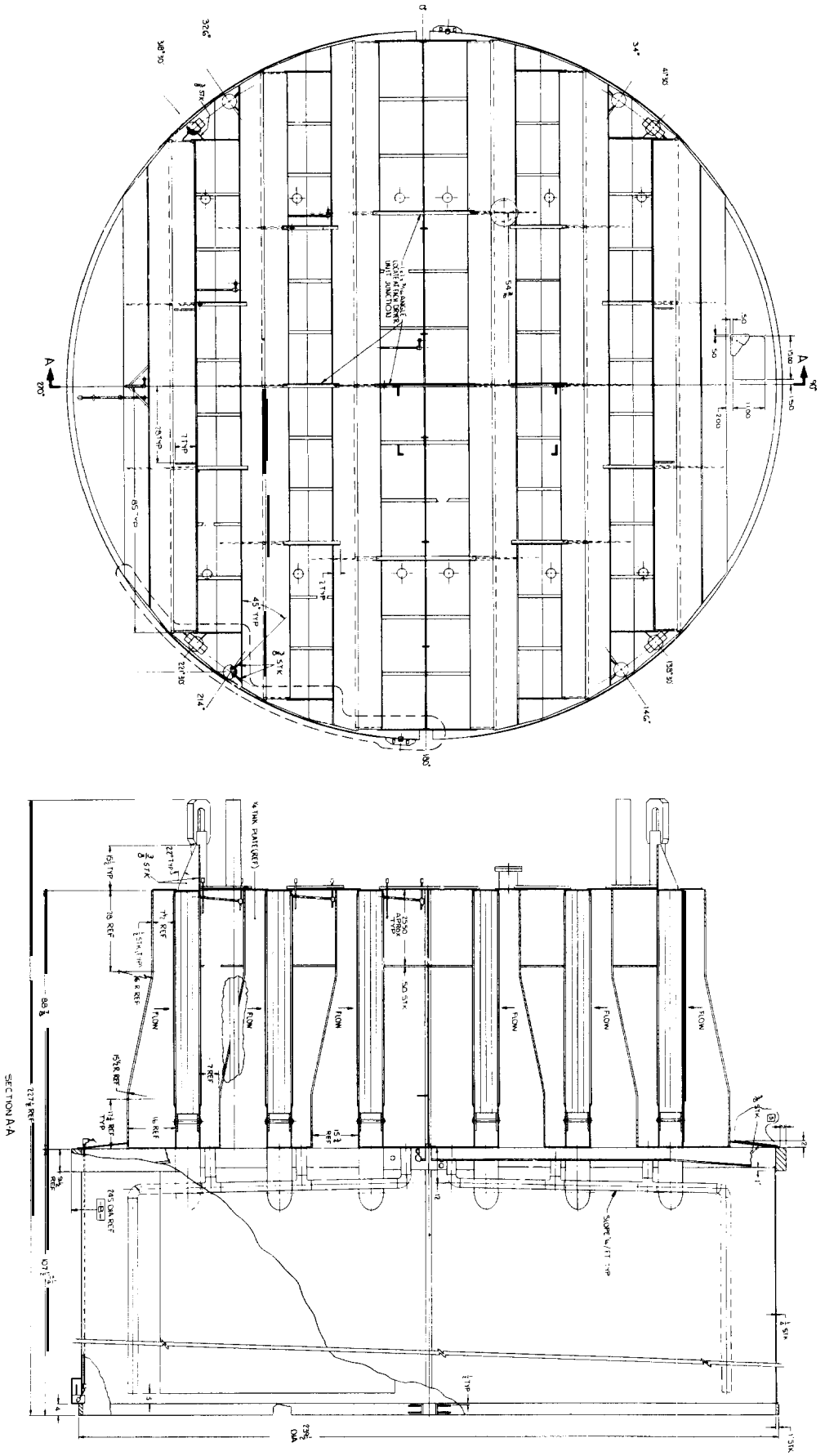


Figure 29 . Steam Dryer Drawing

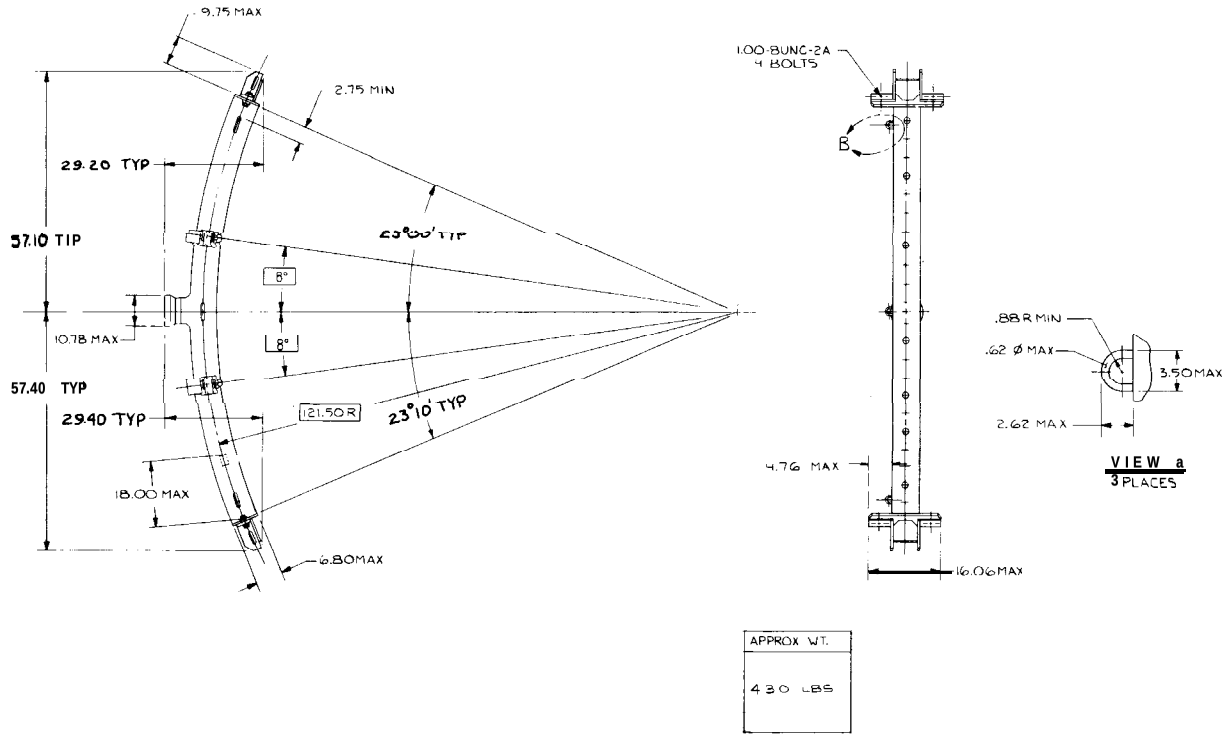


Figure **30.** *Feedwater Sparger Outline*

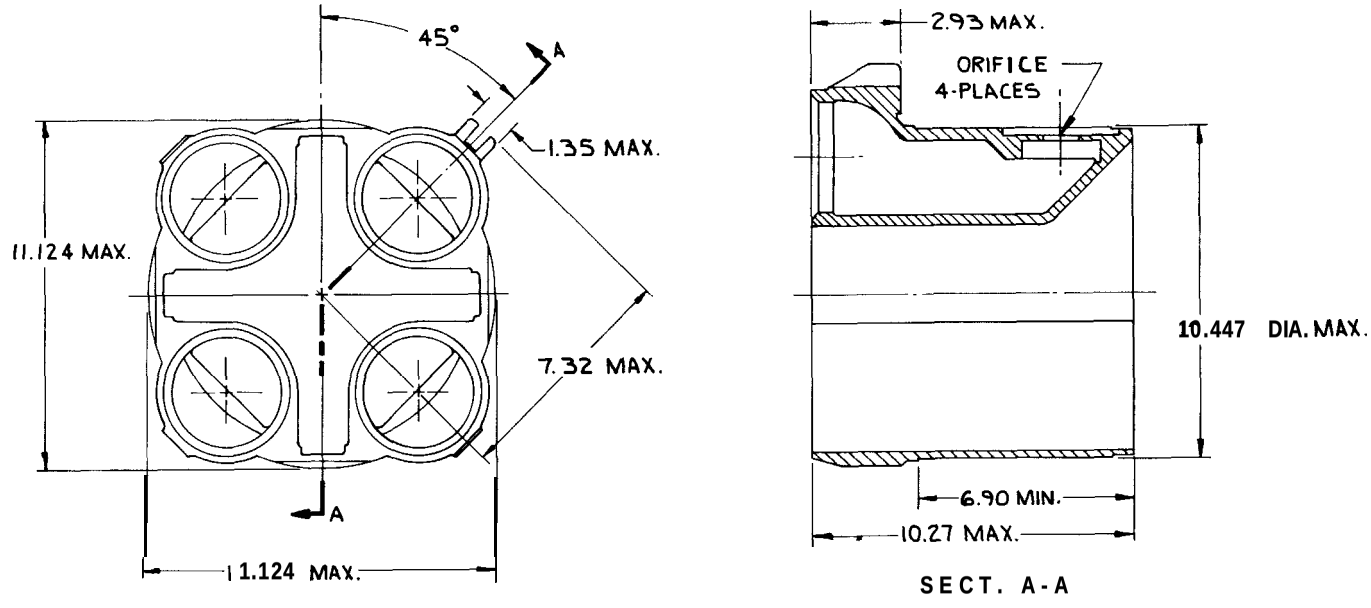


Figure 31. Orificed Fuel Support

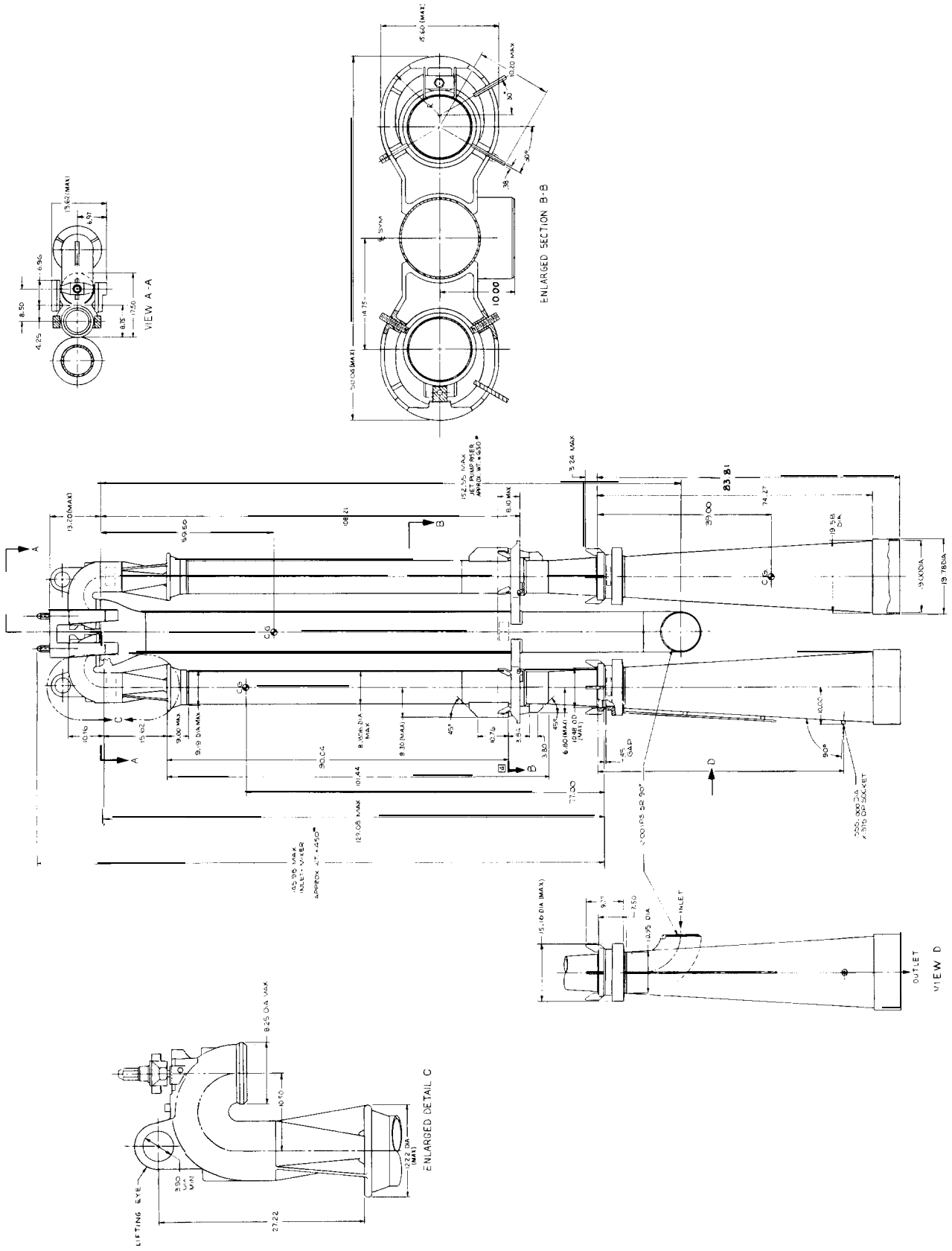
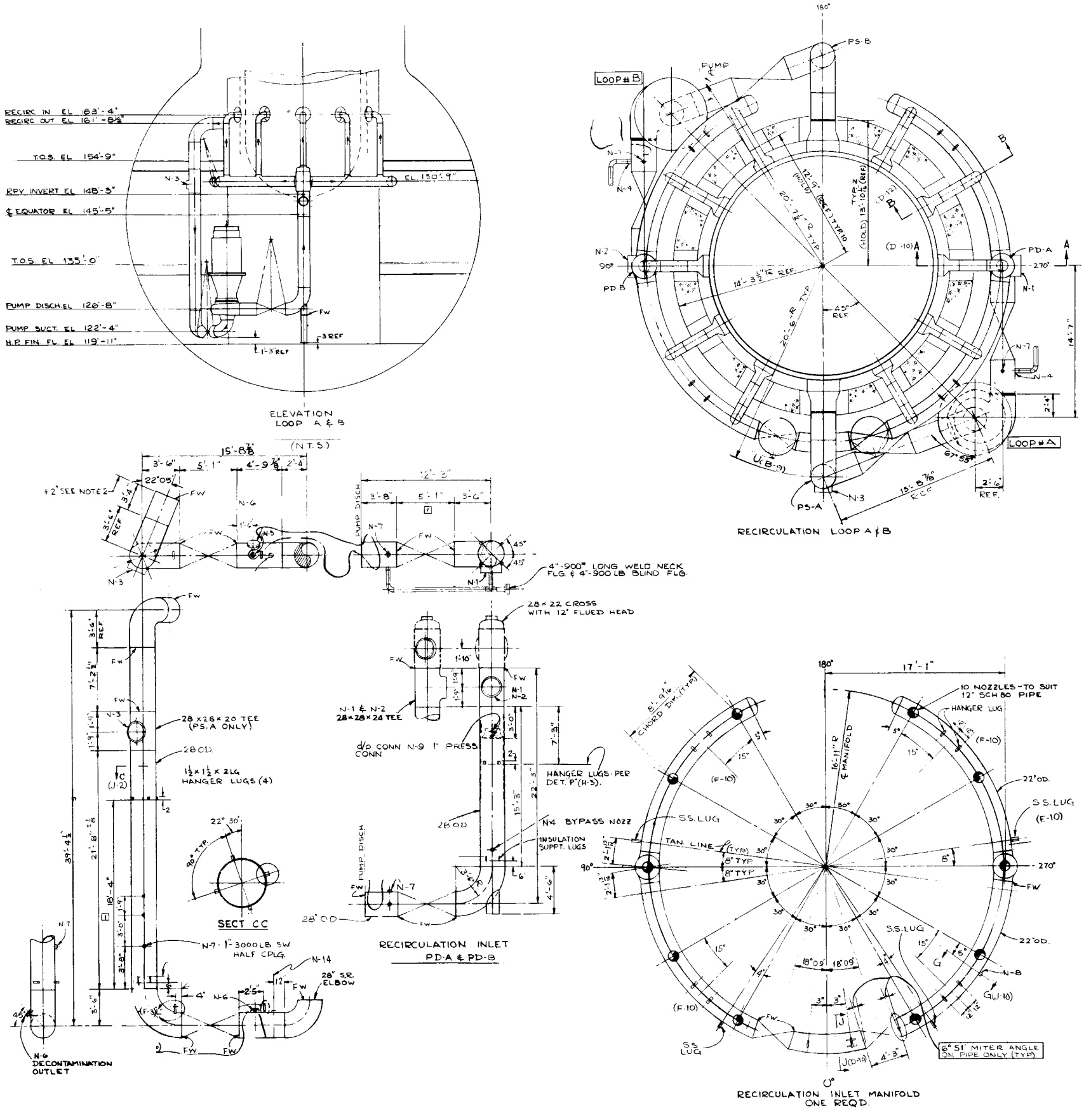


Figure 32. Jet Pump Drawing



BRANCH CONNECTION SCHEDULE				
No.	SIZE	DESCRIPTION	LOCATION	QTY
N-1	24"	RHR RETURN	PD. A	1
N-2	24"	RHR RETURN	PD. B	1
N-3	20"	SHUTDOWN SUPPLY	PS. A	1
N-4	4"	DISCHARGE VALVE BYPASS	PD. A & B	4
N-5	1½"	THERMOWELL	PD. A & B	2
N-6	4"	DECONTAMINATION	PS. A & B	2
N-7	1"	PUMP d/p CONN.	PS A&B, PD-A&B	4
N-8	¾"	SAMPLE CONN.	PD. A MANIFOLD	1
N-9	1"	FLOW TUBE d/p CONN	PD-A & B	4
N-10	2	DRAIN	PS. A & B	2
N-11	1"	RHRS d/p CONN	12" RISER	10
N-12	1"	PRESSURE CONN.	PS-A	2
~~N-13~~	~~1"~~	~~d/p CONN~~	~~MANIFOLD PD-B~~	~~2~~
N-14	1"	PRESSURE CONN.	PS. A & B	2

Figure 33. Recirculation Loop Piping

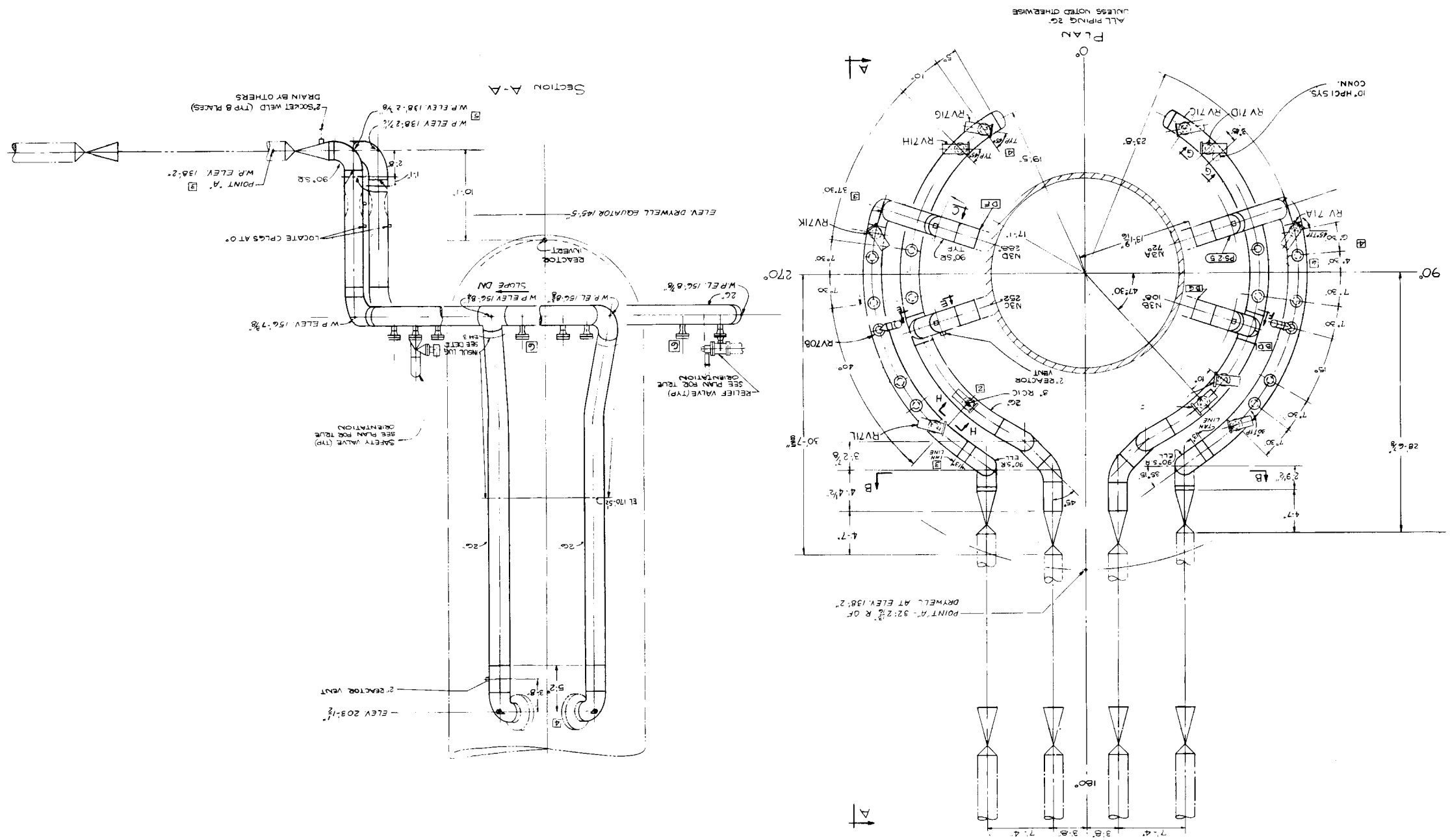
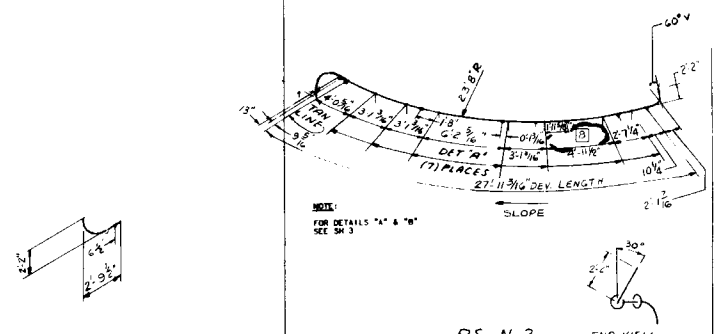
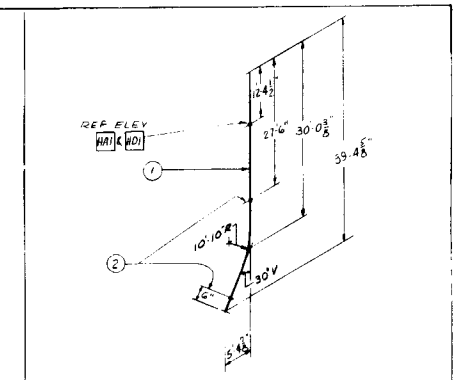


Figure 34. Primary Steam Piping



PS-N-2

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" 90° SR ELL		2'-2"	992
2	1	26" PIPE		27'-11 3/16"	7658
3	7	6" x 6" SCH 160 S O L		15 11/16"	246
4	7	6" PIPE		8 11/16"	221
5	7	6" 1500# LG GR WNF		7"	1148
6	1	26" 90° SR ELL		2'-2" X 2'-1 7/16"	992
7	2	26" PIPE		1'-1"	628
					11687

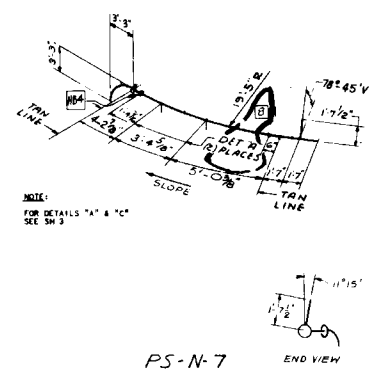


PS-N-4
PS-N-19

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" PIPE		40'-8 7/16"	10870
2	6	INSUL. LUG			

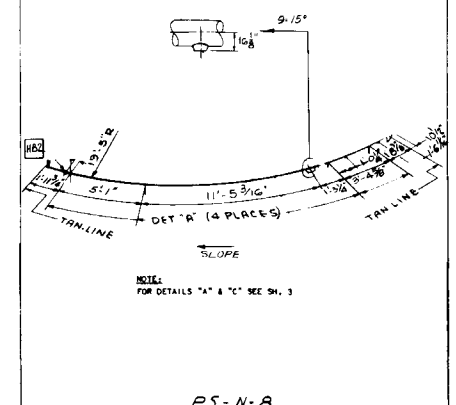
PS-N-6

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" PIPE		3'-0 1/2"	816
2	1	26" 45° LR ELL		16"	734
3	1	26" 90° LR ELL		3'-3"	1467
					3017



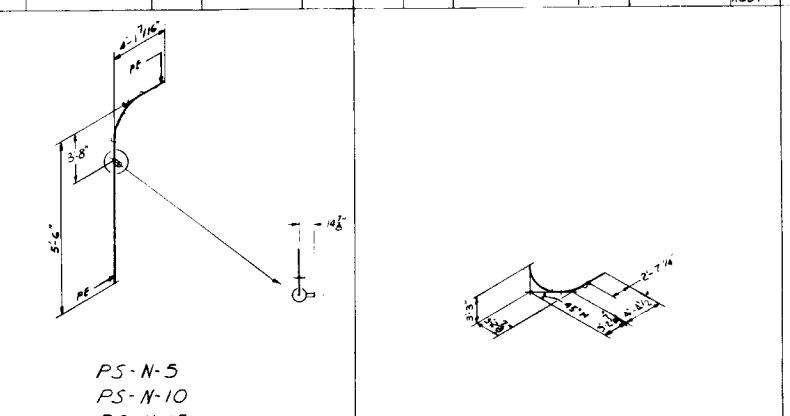
PS-N-7

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" 90° LR ELL		3'-3"	1467
2	1	26" PIPE		12'-7 7/8"	3378
3	2	26" x 6" SCH 160 S O L		15 11/16"	71
4	2	6" PIPE		8 11/16"	66
5	2	6" 1500# LG GR WNF		7"	328
6	1	26" x 26" x 26" TEE		17" x 17" x 1'-7 7/8"	1890
					7200



PS-N-8

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" CAP		10 1/2"	306
2	1	26" PIPE		24'-10 3/16"	6635
3	4	26" x 6" SCH 160 S O L		15 11/16"	142
4	4	6" PIPE		8 11/16"	132
5	4	6" 1500# LG GR WNF		7"	756
6	1	26" x 6" SCH. 80 S O L		16 1/8"	78
					8049

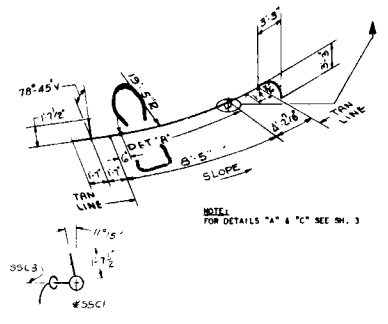


PS-N-9
PS-N-14

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" PIPE		39'-10 3/16" SEE DETAIL "B" SH 3	10642
2	6	INSUL. LUG			

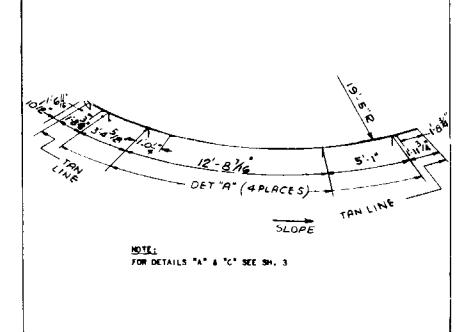
PS-N-11

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" PIPE		3'-0 1/2"	816
2	1	26" 45° LR ELL		16"	734
3	1	26" 90° LR ELL		3'-3"	1467
					3017



PS-N-12

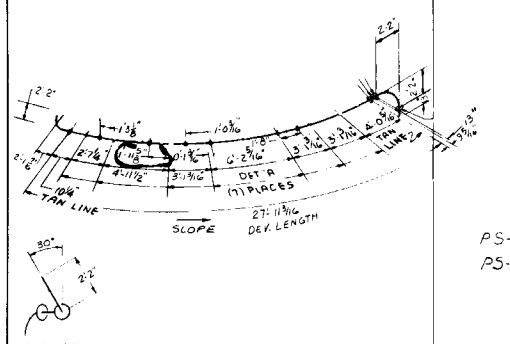
ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" 90° LR ELL		3'-3"	1467
2	1	26" PIPE		12'-7 7/8"	3378
3	1	26" x 6" SCH 160 S O L		15 11/16"	35
4	1	6" PIPE		8 11/16"	33
5	1	6" 1500# LG GR WNF		7"	164
6	1	26" x 26" x 26" TEE		17" x 17" x 1'-7 7/8"	1890
7	1	26" SCH 80 x 3" SCH 160 SWEEPOLET		16 11/16"	4
					6971



PS-N-13

ITEM NO	QUAN FOR (1)	DESCRIPTION		LENGTH	WT LBS
1	1	26" CAP		10 1/2"	306
2	1	26" PIPE		24'-10 3/16"	6635
3	4	26" x 6" SCH 160 S O L		15 11/16"	142
4	4	6" PIPE		8 11/16"	132
5	4	6" 1500# LG GR WNF		7"	756
					7971

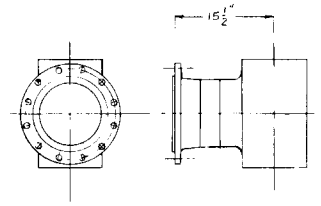
Figure 35. Primary Steam Piping (Continued)



PS-N-17

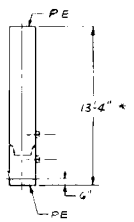
(1) REQ'D

ITEM NO	QUAN FOR (1)	DESCRIPTION	LENGTH	WT LBS
1	1	26" 90° SR ELL	2'-2"	992
2	1	26" PIPE	27'-11 9/16"	7433
3	7	26"x6" SCH 160 S-O-L	15 11/16"	248
4	7	6" PIPE	8 11/16"	221
5	7	6" 1500# RG GR WNF	7	1148
6	1	26" 90° SR ELL	2'-2"x2'-7 11/16"	992
7	2	26" PIPE	13"	628
				11662



PS-N-25
PS-N-26

ITEM NO	QUAN FOR (1)	DESCRIPTION	LENGTH	WT LBS
1	1	10"-150# RF WN FLG	4"	56
2	1	10" PIPE	3"	10
3	1	10" TEE	3 1/2"x8 1/2"x8 1/2"	91
4	12	7/8 DIA STUD BOLTS	4 1/2"	157
5	24	7/8 DIA NUTS	-	
6	1	GASKET, ELEKTALIC CG-12 OR EQ.	-	



* A MIN. OF 4" WAS ADDED TO PURCHASED PART FOR FIELD MAKE-UP. SHIP DIRECT TO PLANT SITE BY VENDOR

PS-N-21 & PS-N-23

2 REQ (FURNISHED BY OTHERS)

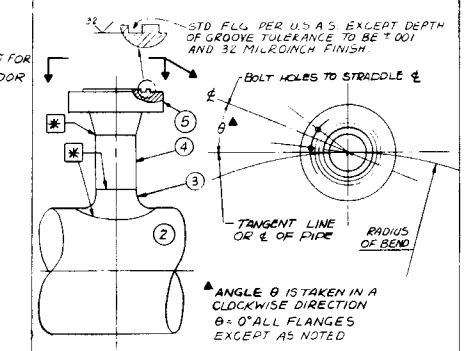
ITEM NO.	QUAN FOR (1)	DESCRIPTION	LENGTH	WT. LBS.
1	1	26" PIPE PBE	13'-4" *	9535
2	2	COUPLING		
3	1	FLOW ELEMENT		
4	3	INSULATION LUG	SEE DETAIL 'D'	

* A MIN. OF 4" WAS ADDED TO PURCHASED PART FOR FIELD MAKE-UP. SHIP DIRECT TO PLANT SITE BY VENDOR

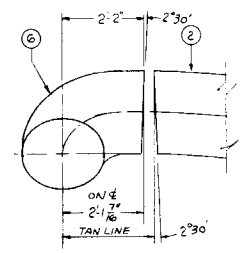
2 REQ. (FURNISHED BY OTHERS)

PS-N-22 & PS-N-24

ITEM NO	QUAN. FOR (1)	DESCRIPTION	LENGTH	WT. LBS.
1	1	26" PIPE	12'-3" *	3270
2	2	COUPLING		
3	1	FLOW ELEMENT		
4	3	INS. LUG	SEE DETAIL 'D'	

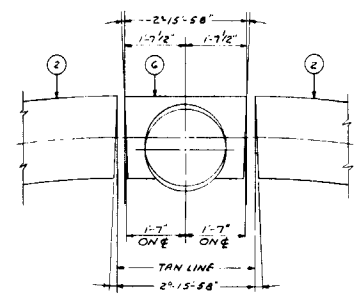


DETAIL "A"



NOTE: ELBOW MUST BE ORIENTED BEFORE MITER IS MADE. FOR ORIENTATION SEE ISOMETRIC SPOOLS.

DETAIL "B"



NOTE: BRANCH OUTLET OF TEE MUST BE ORIENTED BEFORE MITER IS MADE. FOR BRANCH OUTLET ORIENTATION SEE ISOMETRIC SPOOLS.

DETAIL "C"

12 REQUIRED

ITEM NO	QUAN. FOR (1)	DESCRIPTION	LENGTH	WT. LBS.
1	1	6" 1500# LRFC TONGUE & GROOVE FLG		160
2	12	STUD BOLT 7/8" DIA.	10"	36
3	24	HEAVY HEX NUT 7/8" DIA		10
4	1	GASKET 7/8" I.D. x [illegible] O.D. (ALL SEAL) (R3-150 OR EQUAL)		206

Figure 36. Primary Steam Piping (Continued)

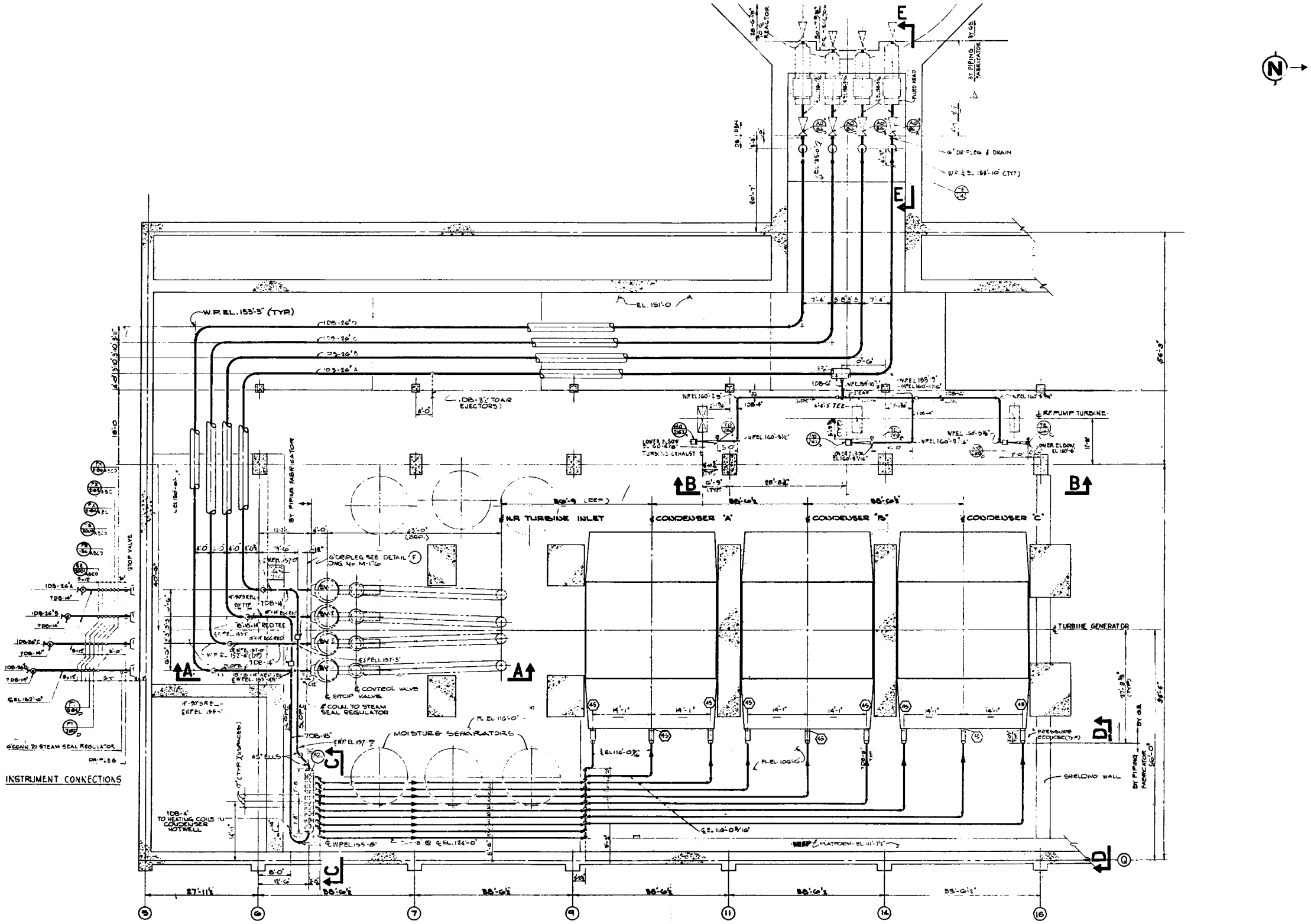


Figure 37. Main Steam and Bypass Line Piping

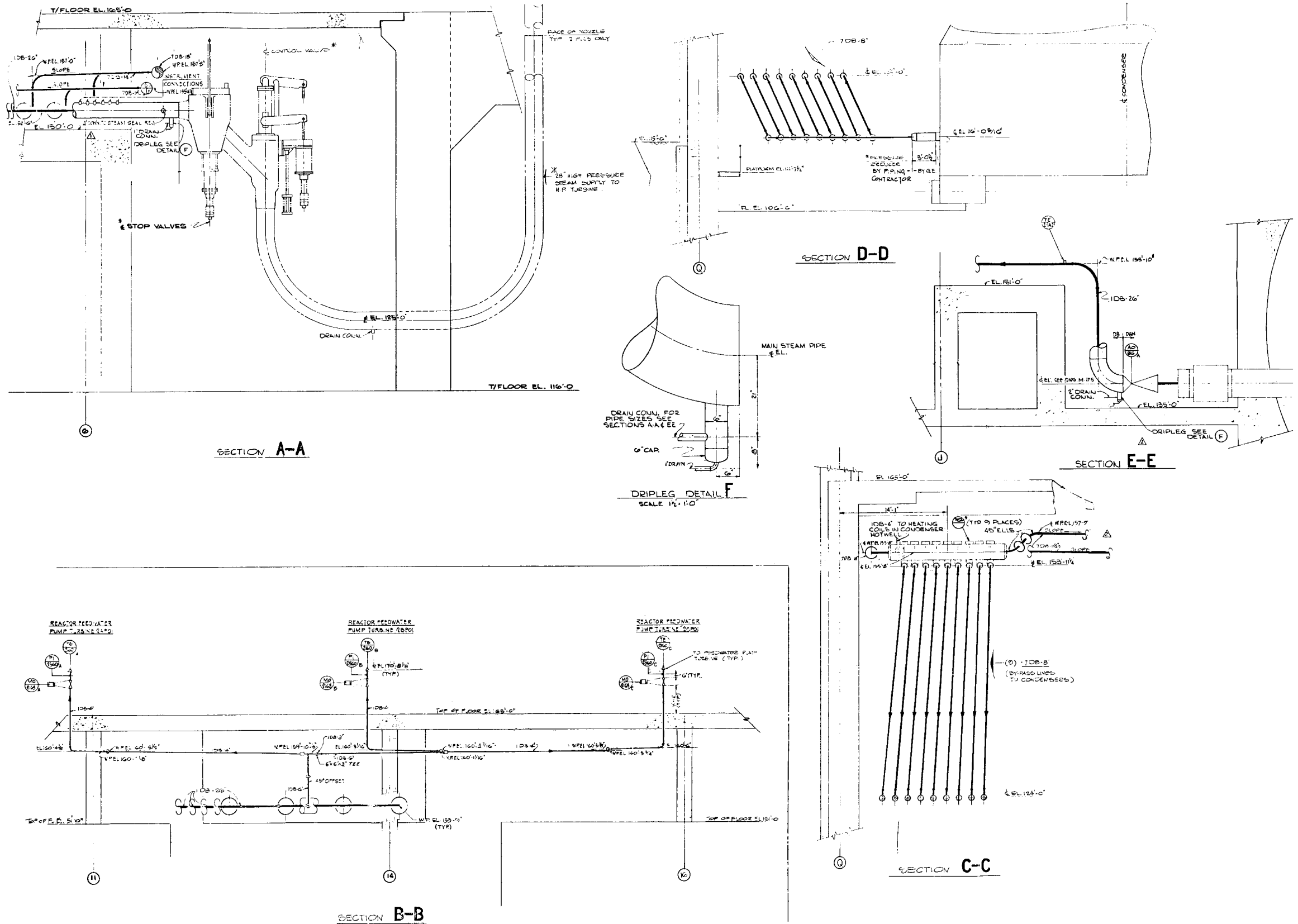


Figure 38. Main Steam and Bypass Line Piping (Continued)

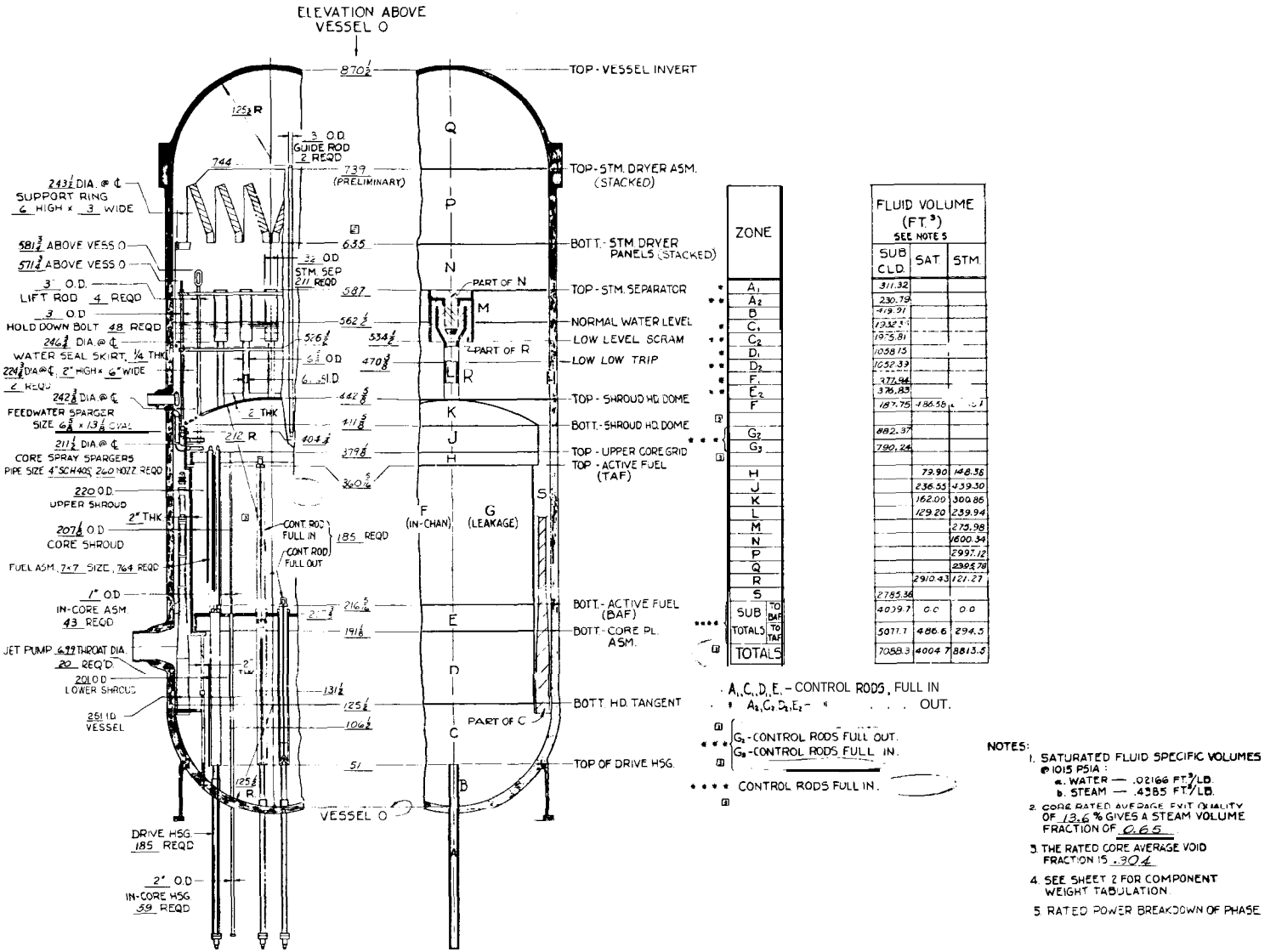
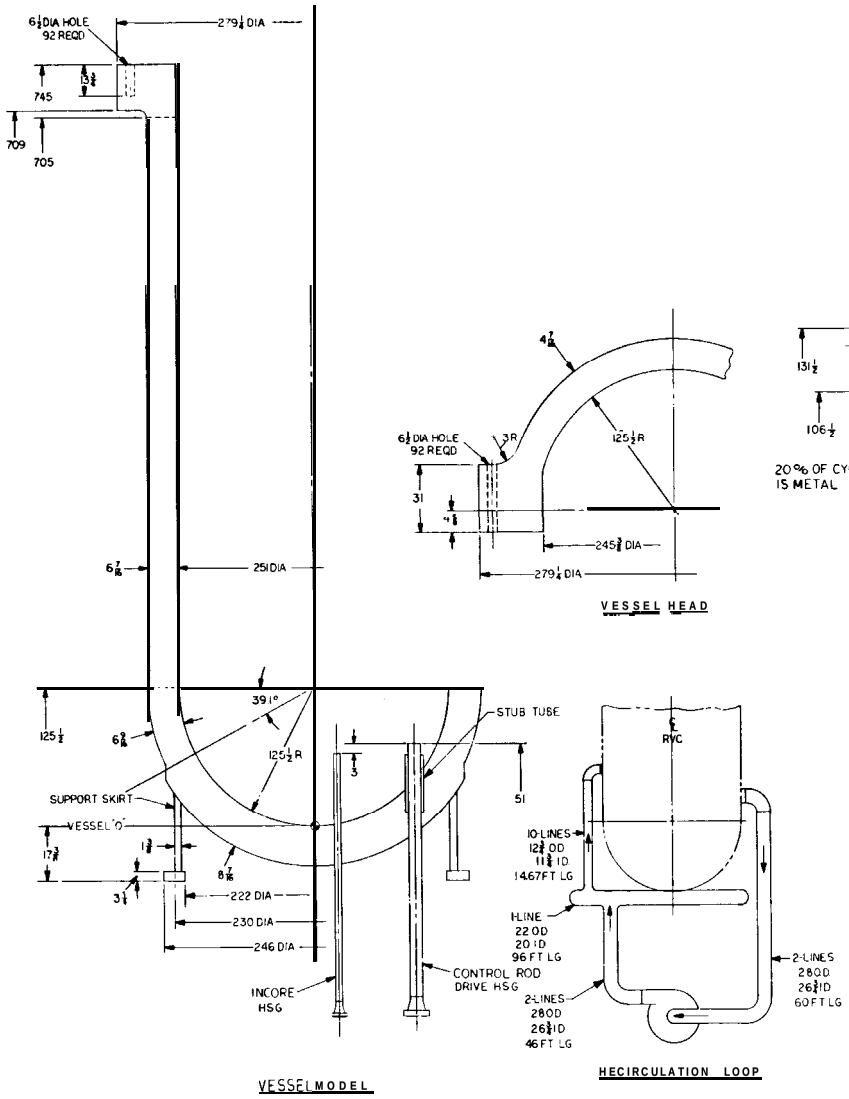
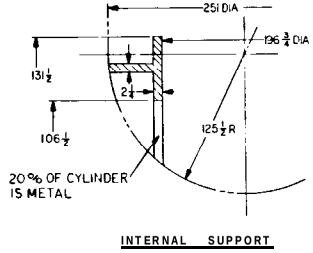


Figure 39. Reactor Primary System Weights and Volumes





2 STEAM LINE FLUID VOLUME & WEIGHTS TO TURBINE STOP VALVE.

4 FEEDWATER FLUID VOLUME & WEIGHTS TO LAST FEEDWATER HEATER.

PRIMARY PIPING SYSTEM FLUID VOLUME & WEIGHT

		FLUID VOLUME (FT³)	WEIGHTS (LBS) RATED	HOT STAND	COLD
	RECIRC PIPING	1227.1	63566.	56655.	76574.
SEE NOTE 2	STEAM PIPING	3125.6	7128.	—	—
SEE NOTE 4	FEEDWATER PIPING	815.9	44549.	44549.	—

Figure 40. Reactor Primary System Weights and Volumes (Continued)

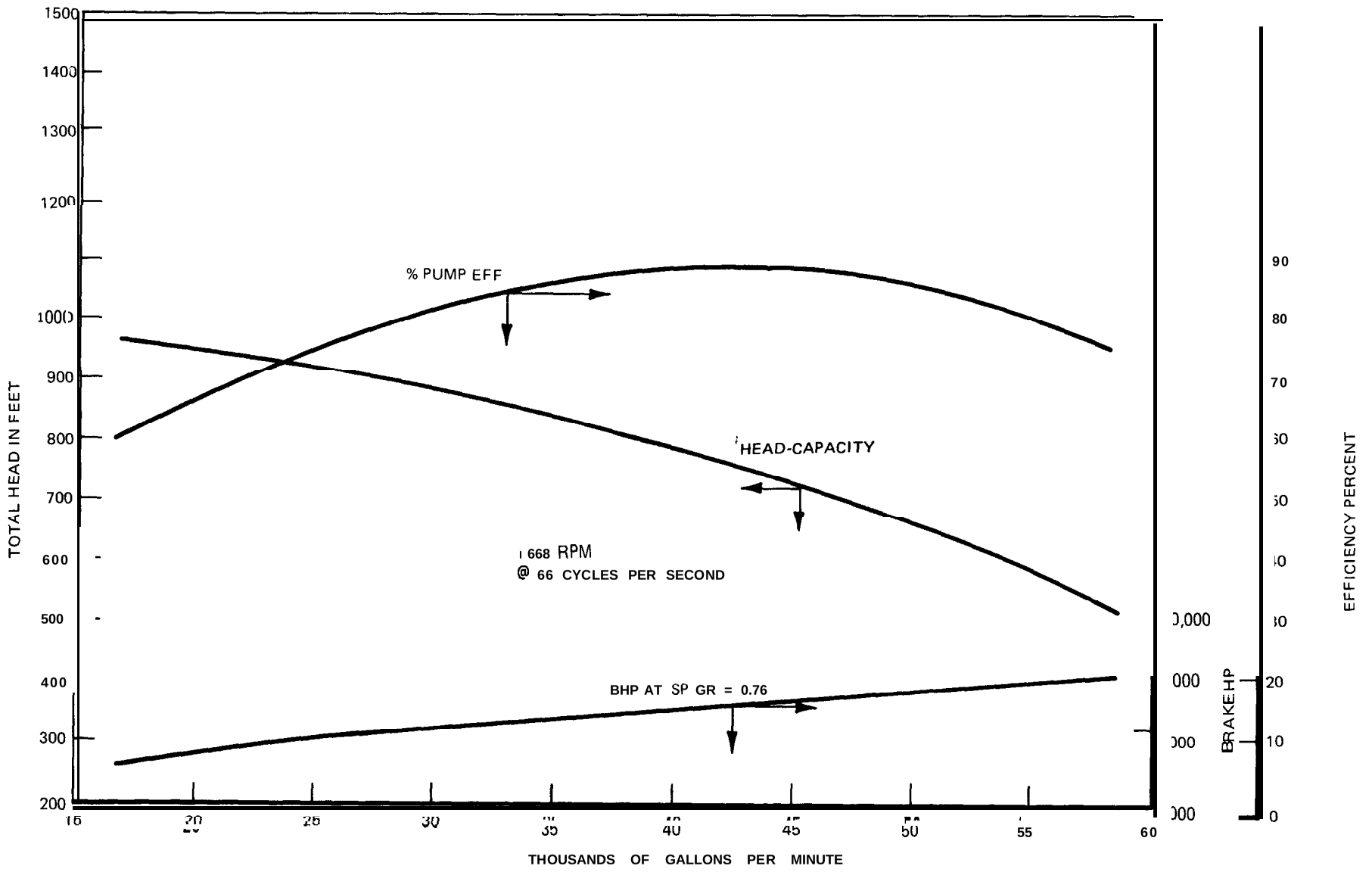


Figure 41. Recirculation Pump Characteristics at Rated Pump Speed

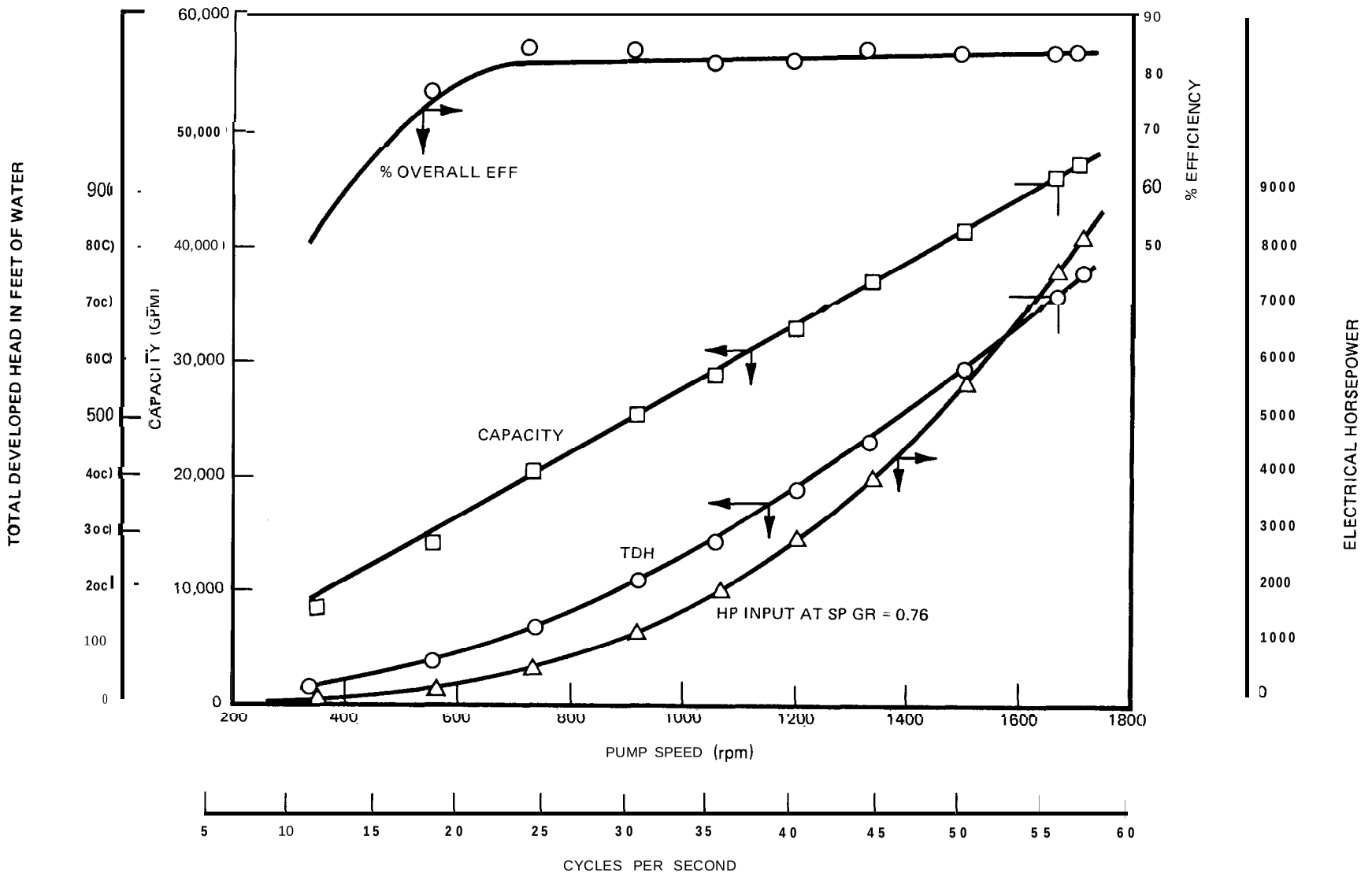


figure 42. Recirculation Pump Characteristics at Various Pump *Speeds*

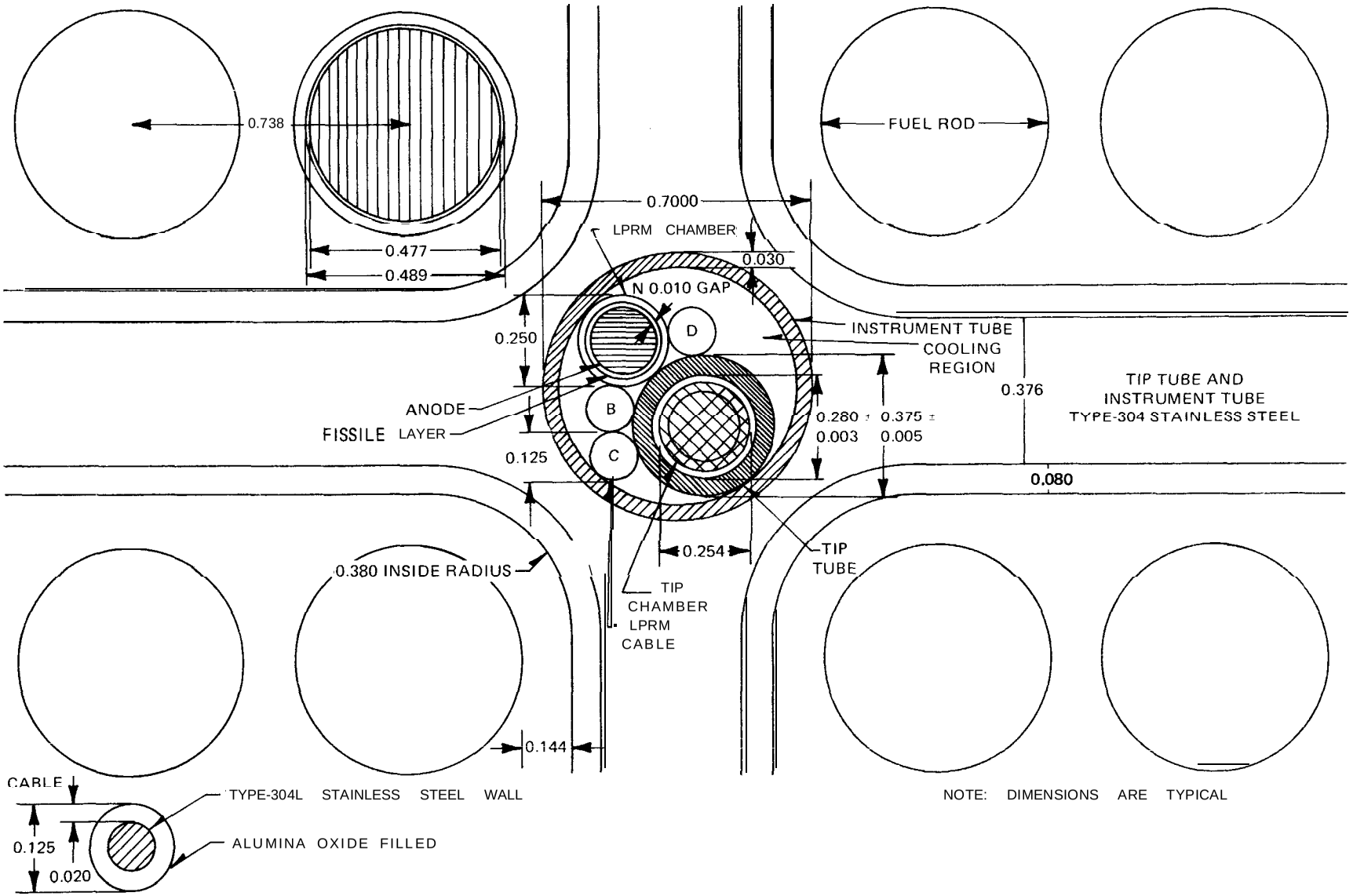


Figure 43. TIP/LPRM In-Core Assembly Cross Section

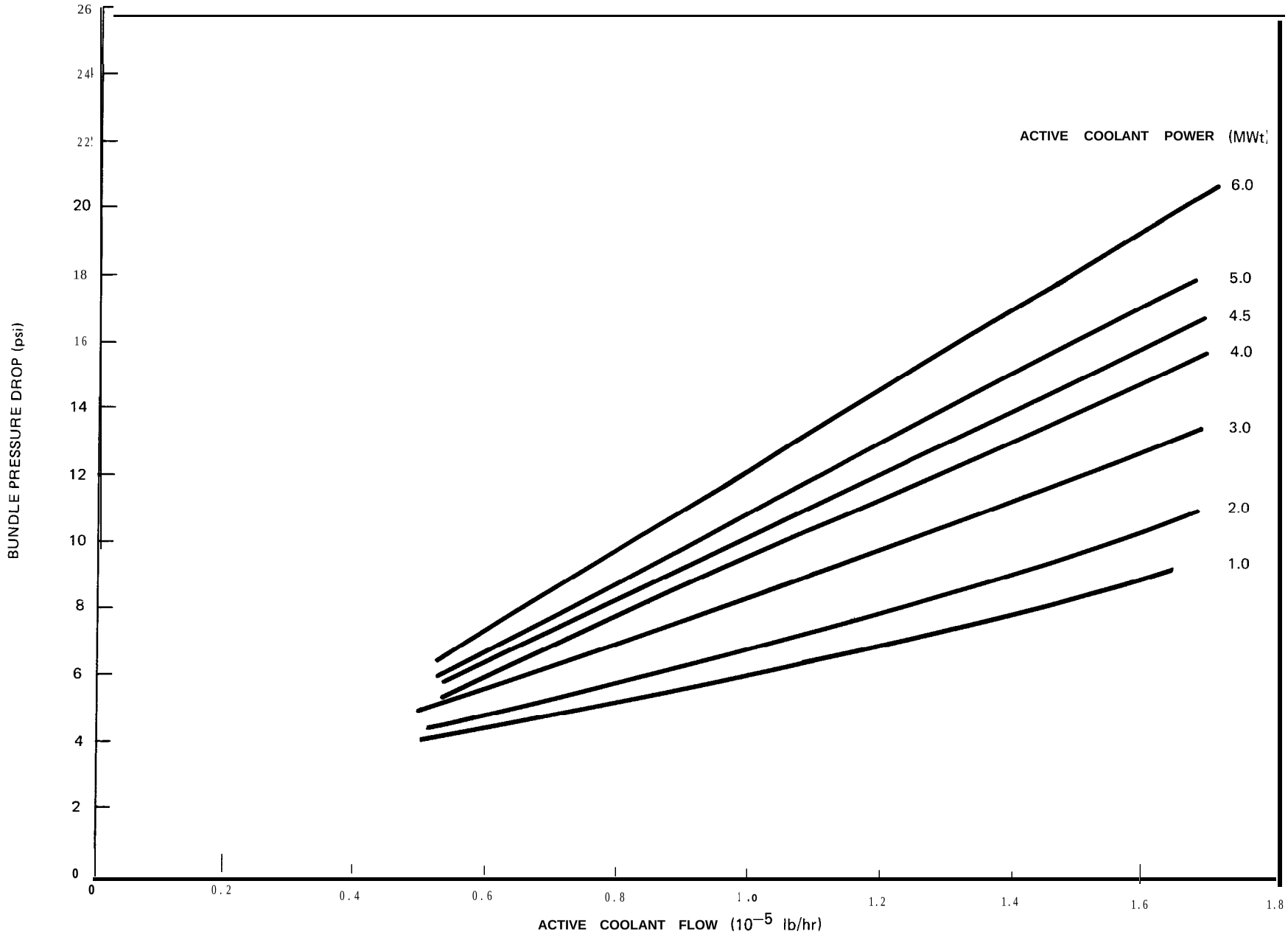


Figure 44. Flow Characteristics 7x7 Fuel Assemblies, 20 Btu/lb Subcooling

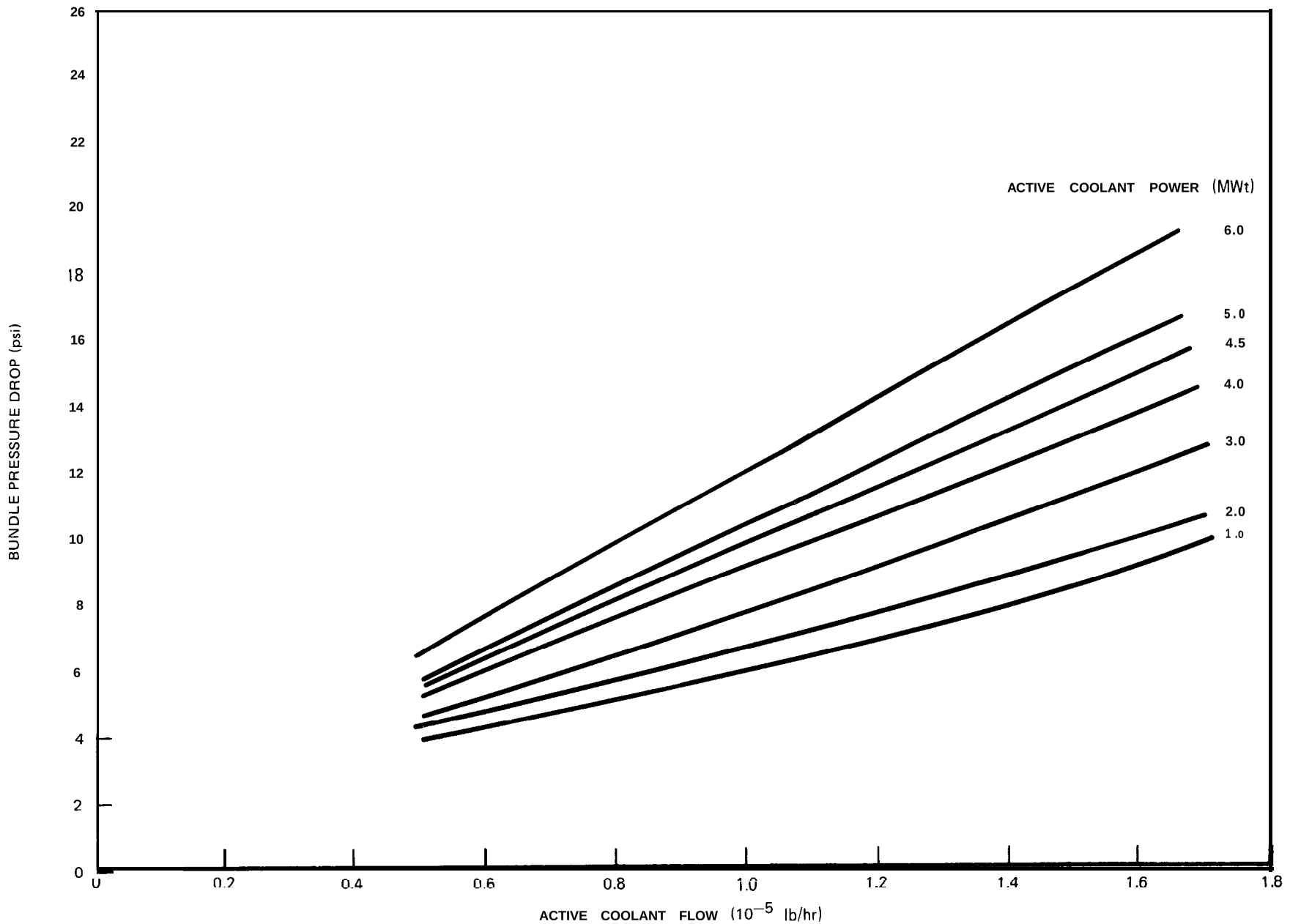


Figure 45. Flow Characteristics 7x7 Fuel Assemblies, 30 Btu/lb Subcooling

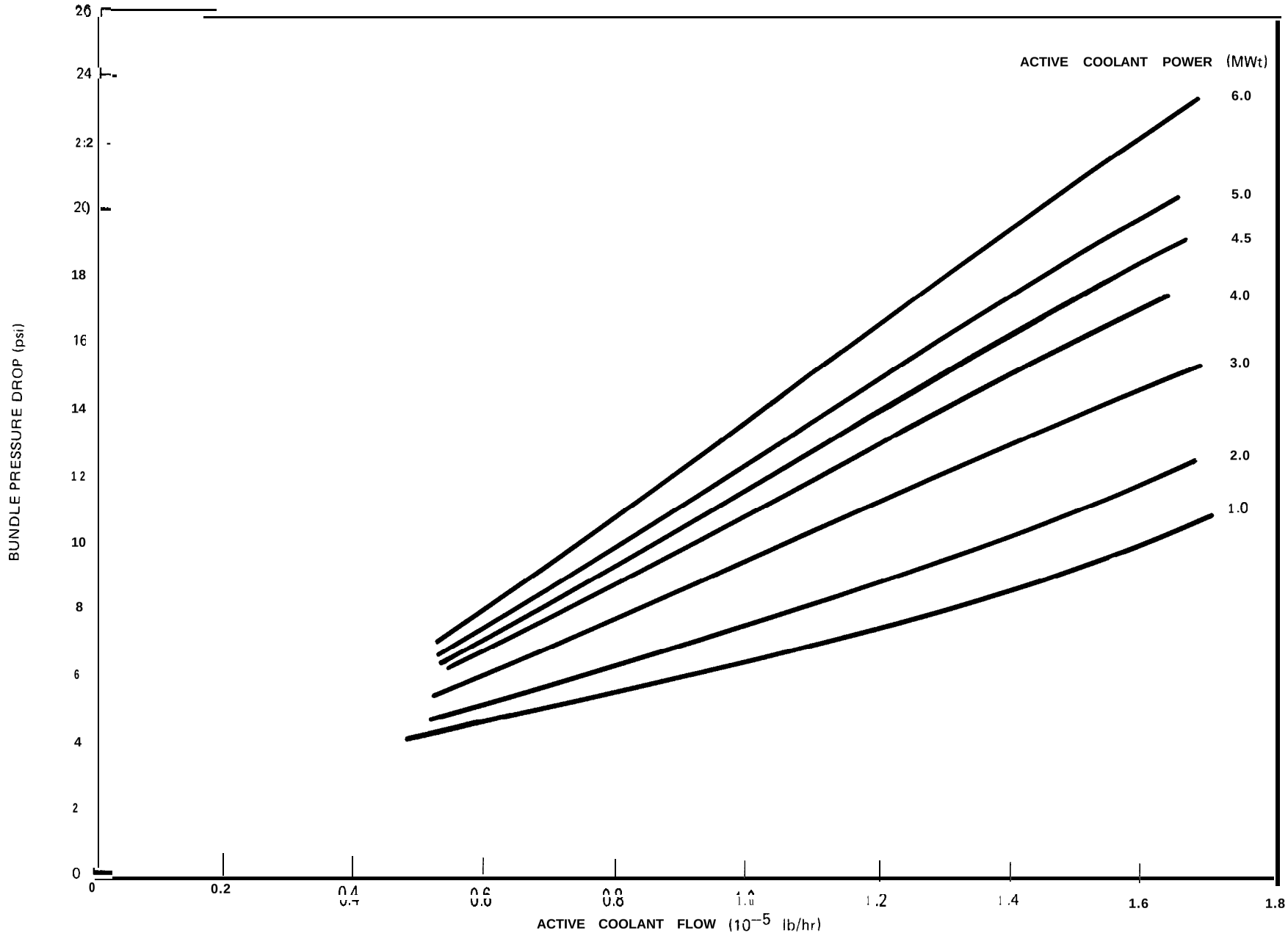


Figure 46. Flow Characteristics 8x8 Fuel Assemblies, 20 Btu/lb Subcooling

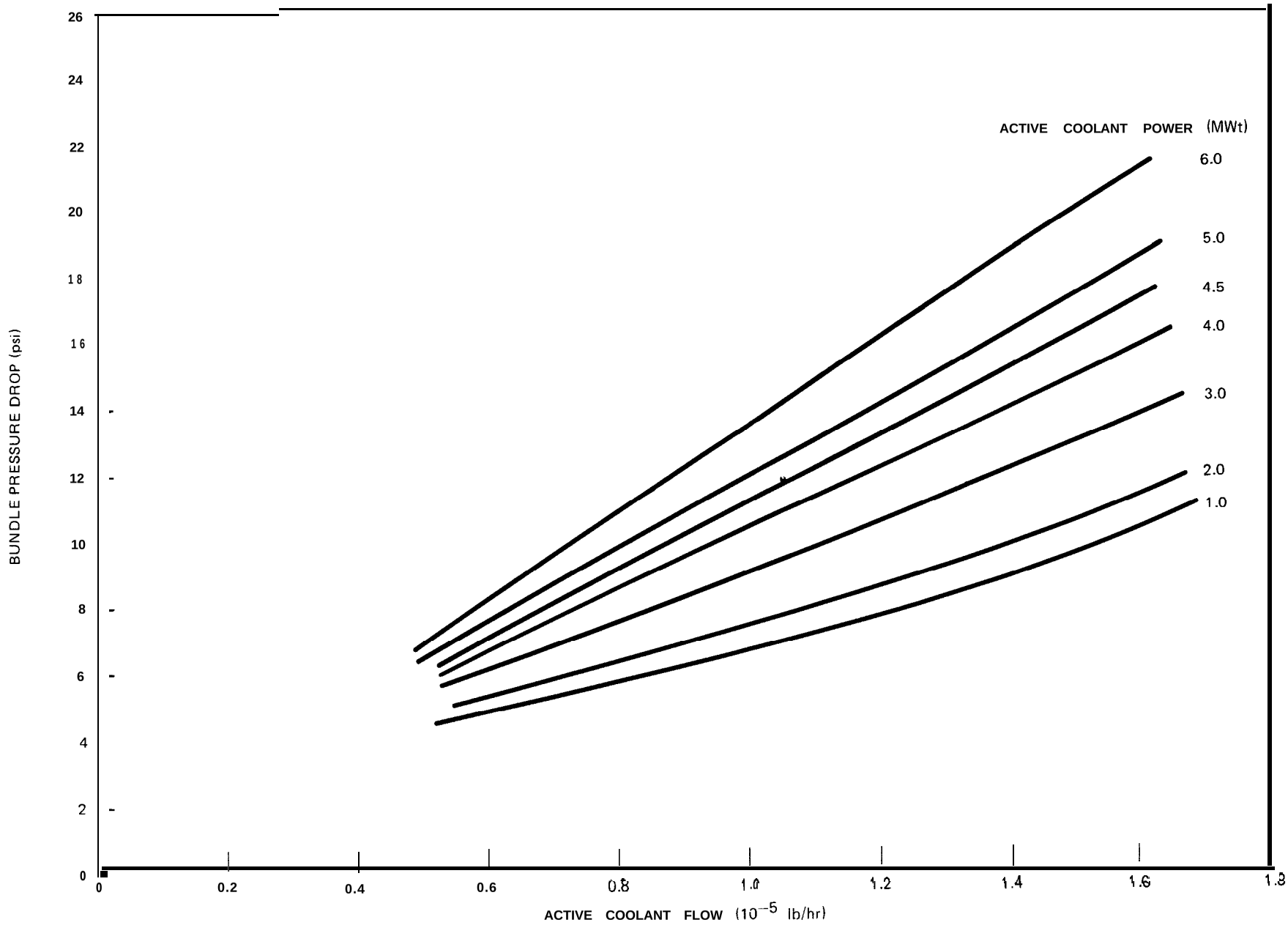


Figure 47. Flow Characteristics 8x8 Fuel Assemblies, 30 Btu/lb Subcooling

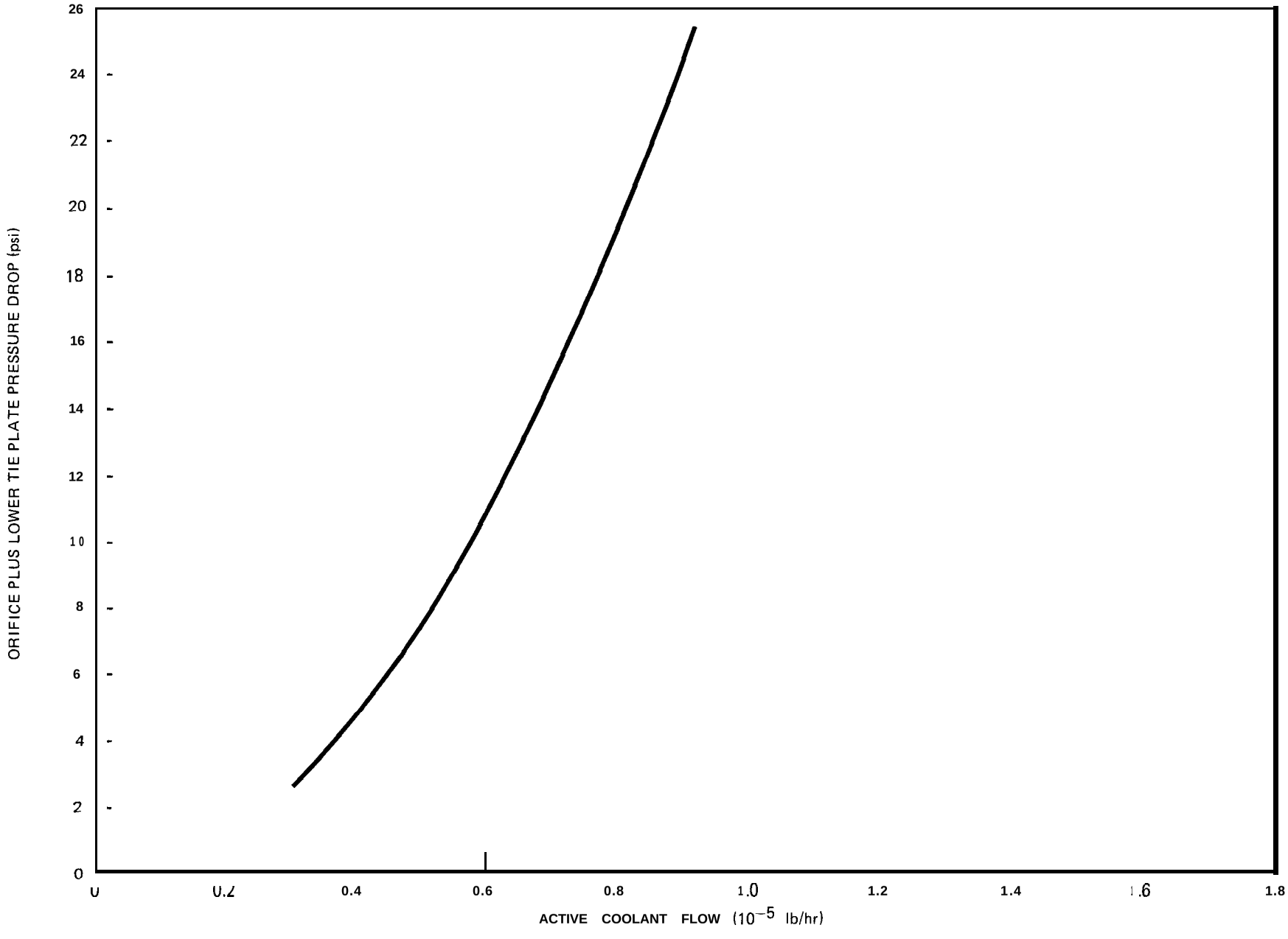


Figure 48. 1.469 in Orifice Diameter, 20 Btu/lb Subcooling

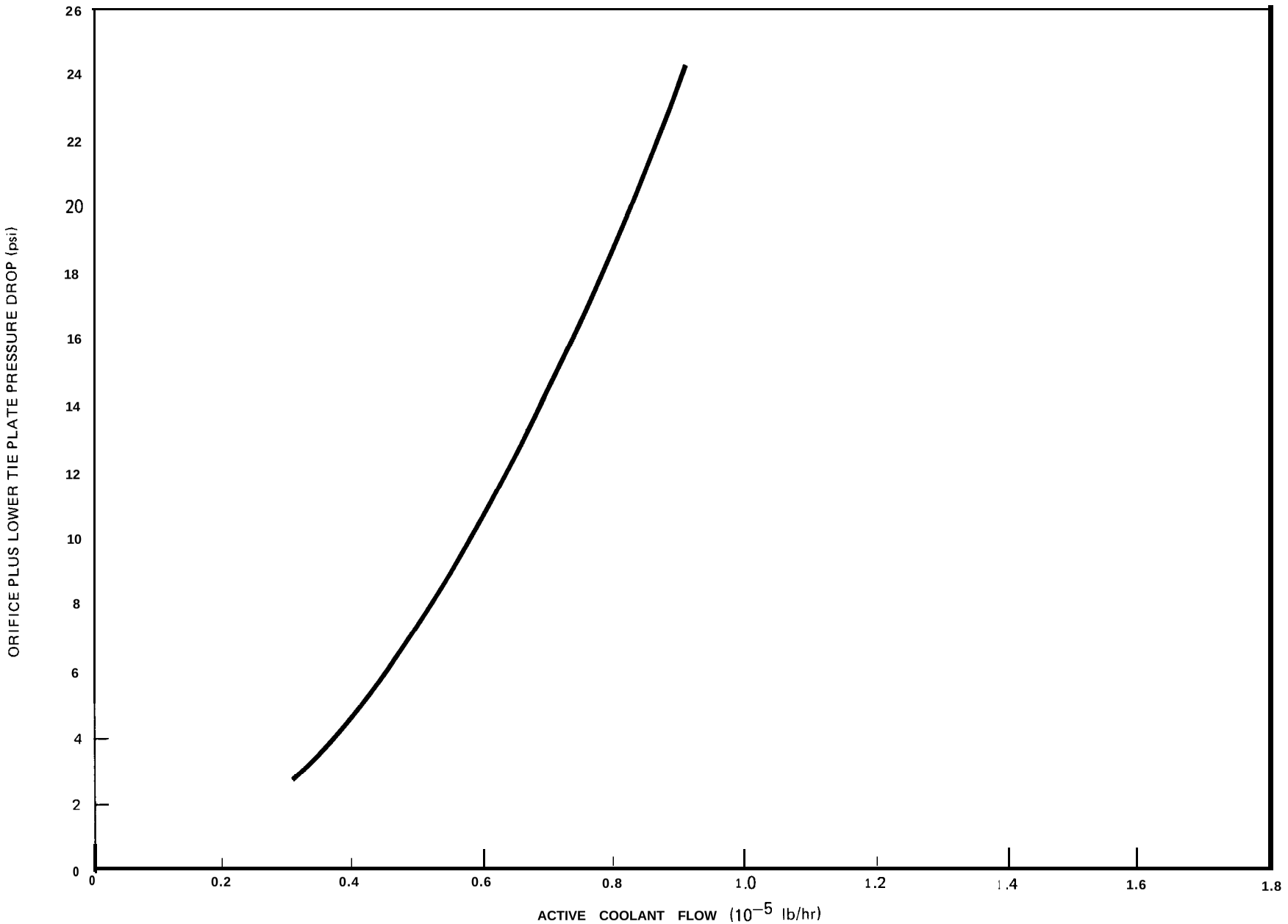


Figure 49. 1.469 in Orifice Diameter, 30 Btu/lb Subcooling

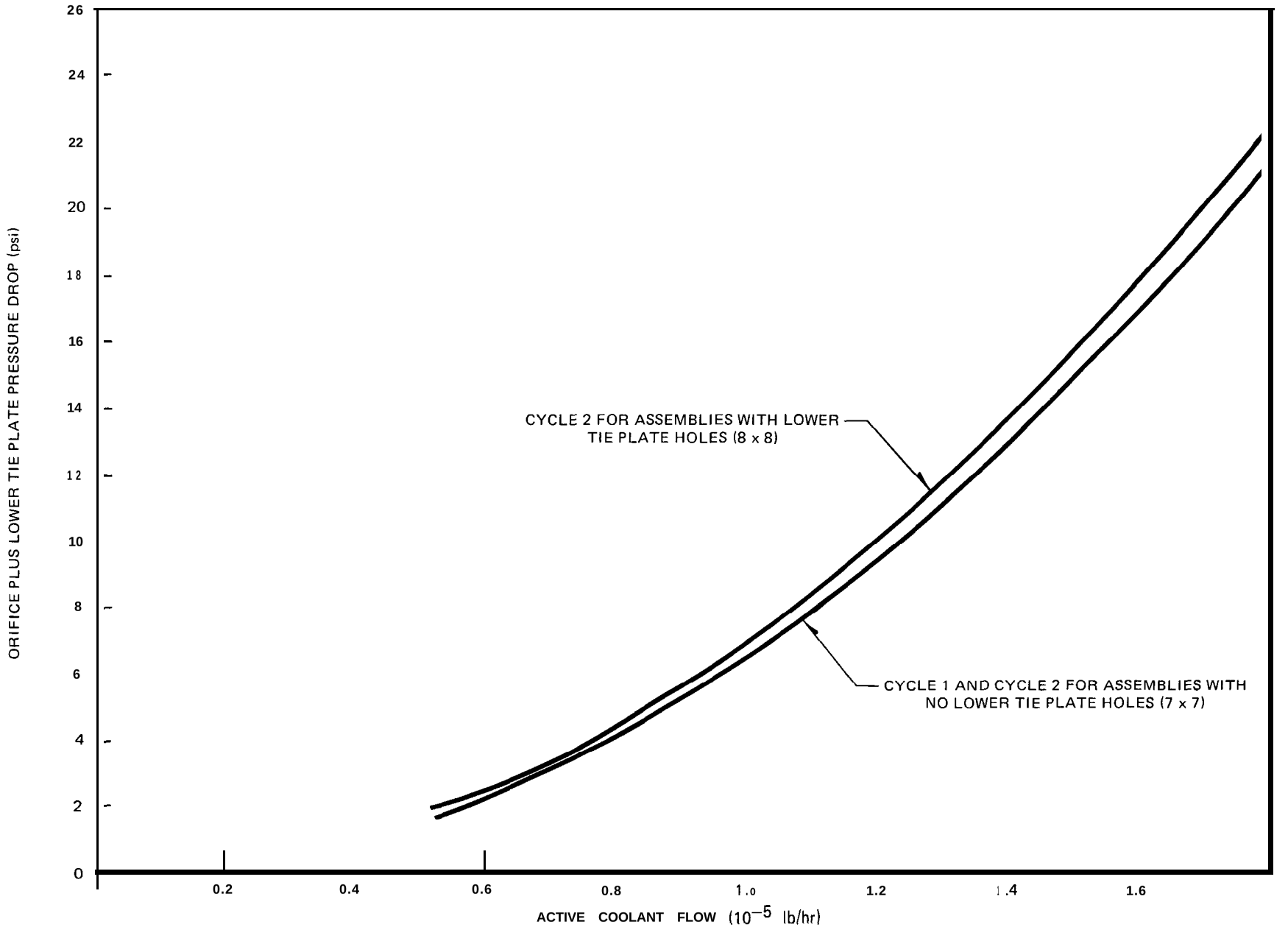


Figure 50. 2.211 in Orifice Diameter, 20 Btu/lb Subcooling

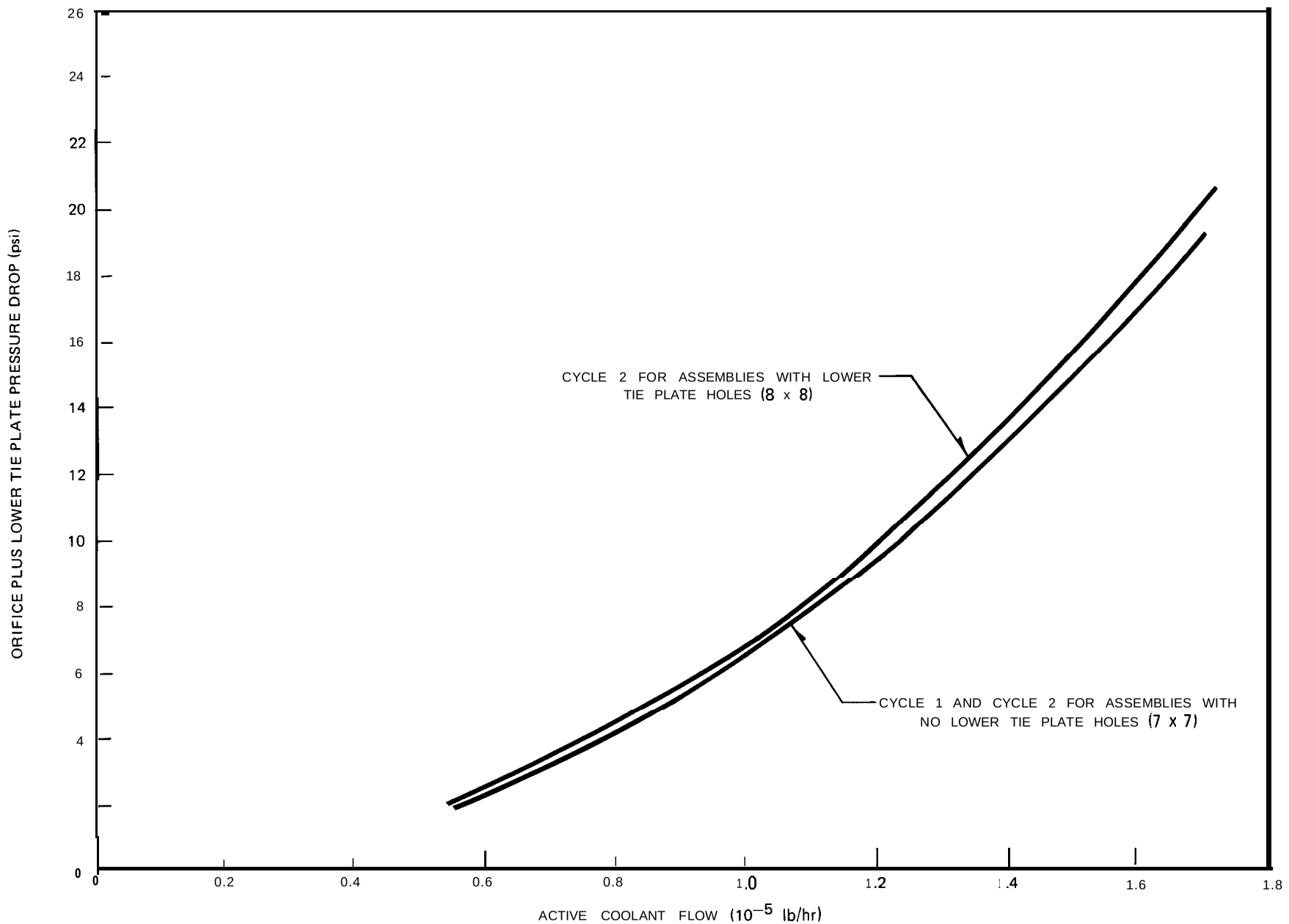


Figure 51. 2.211 in Orifice Diameter, 30 Btu/lb Subcooling

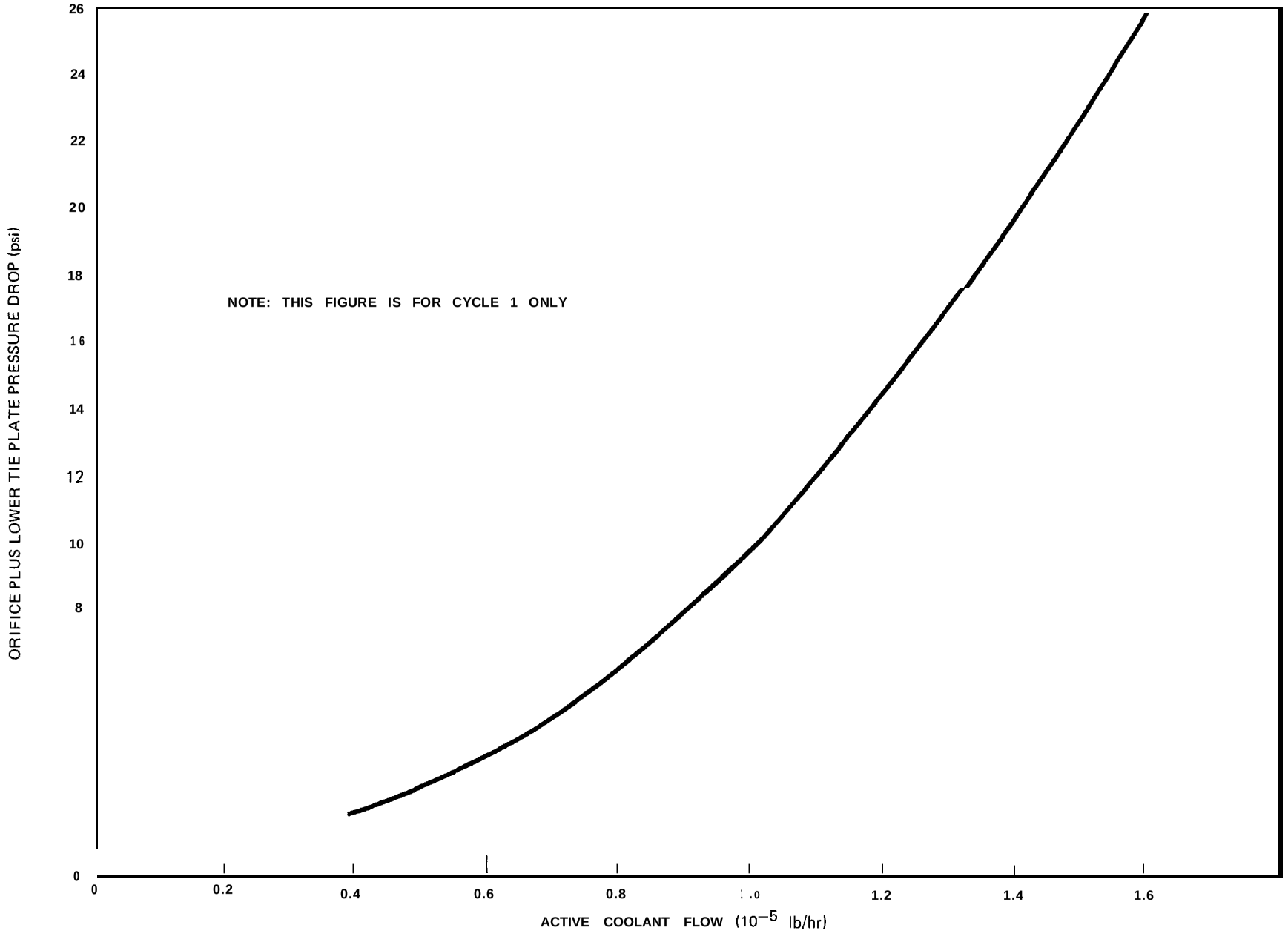


Figure 52. 2.211 in Orifice Diameter With Orificed Lower Tie Plate, 20 Btu/lb Subcooling

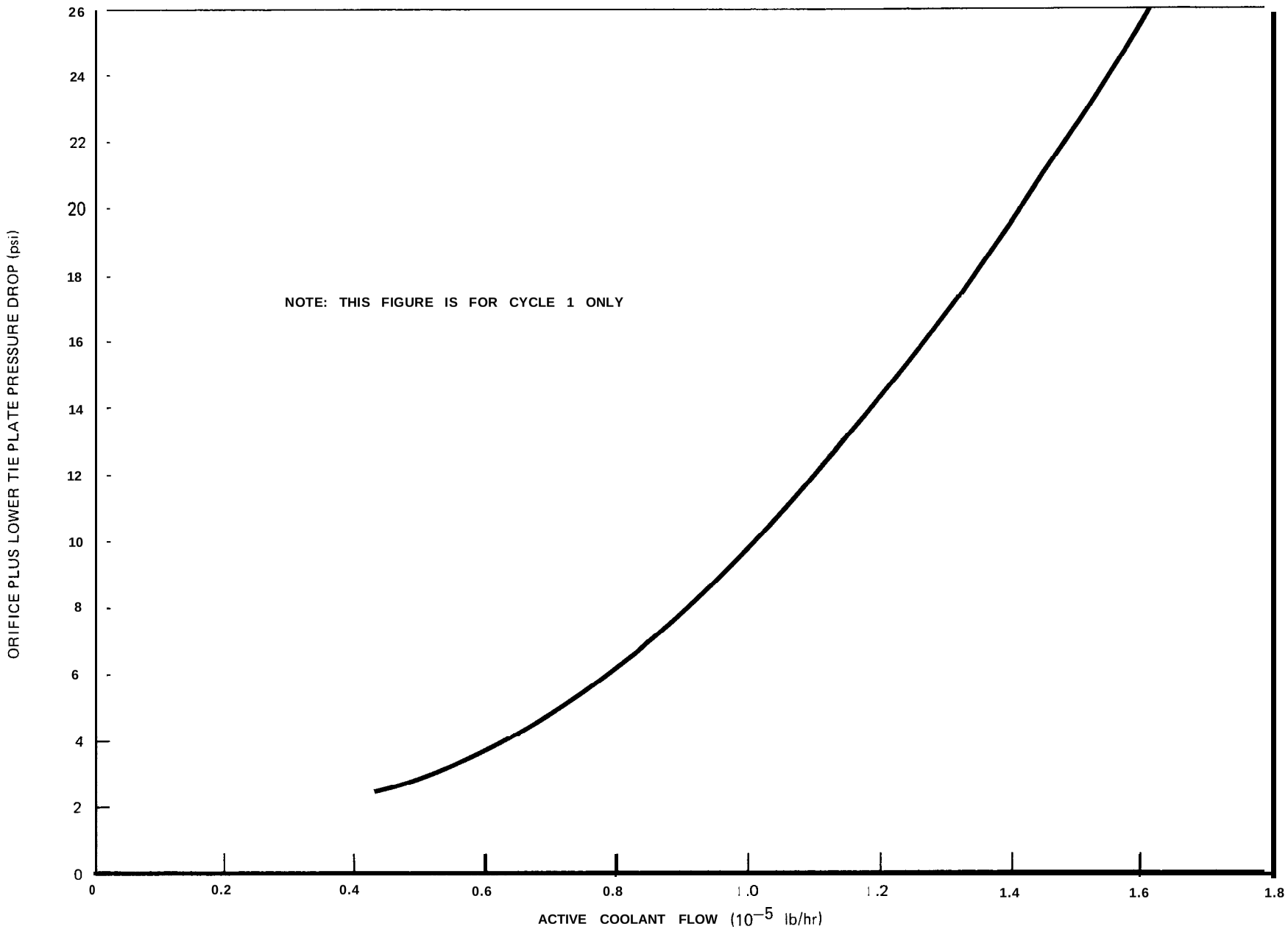


Figure 53. 2.211 in Orifice Diameter With Orificed Lower Tie Plate, 30 Btu/lb Subcooling

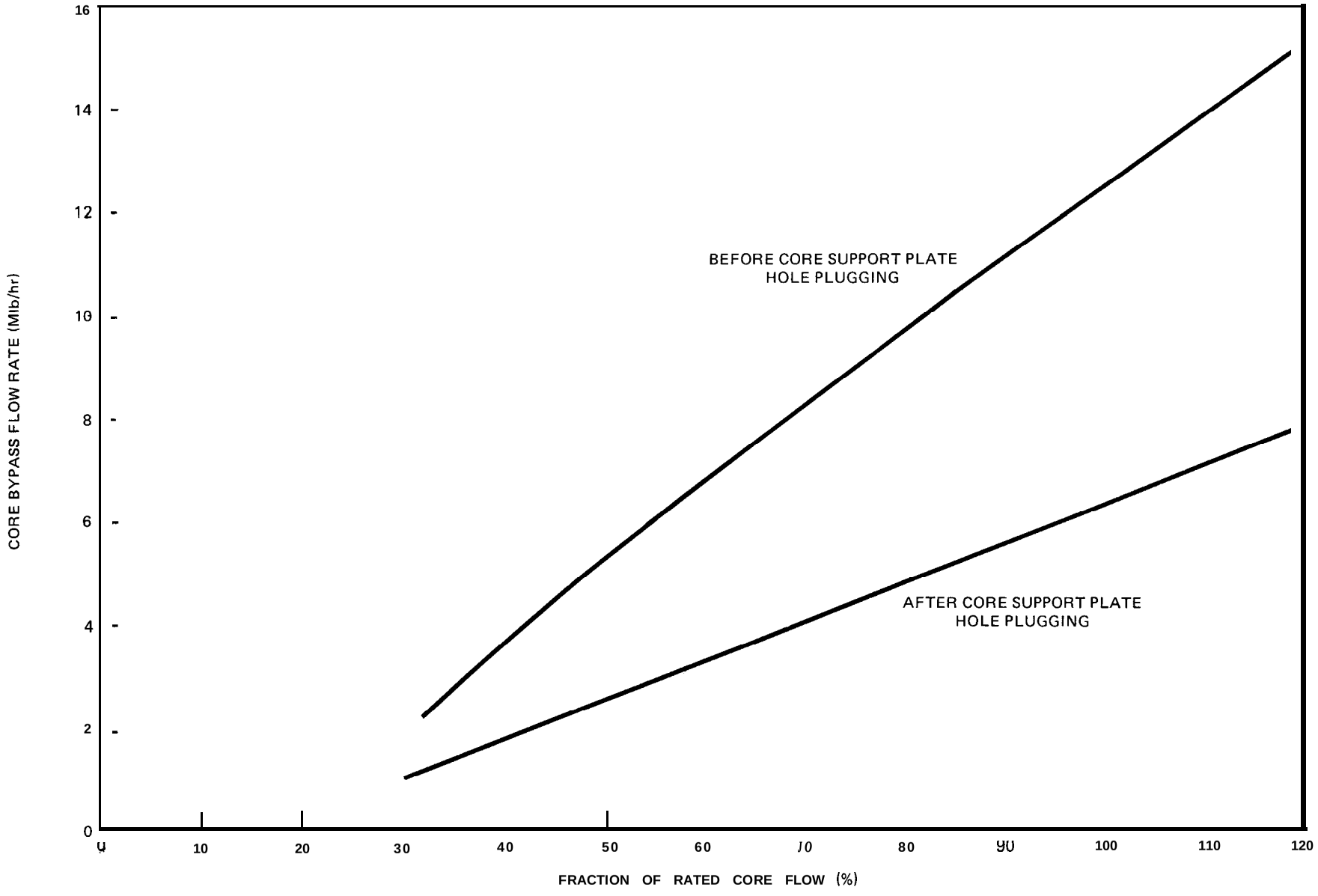


Figure 54. Core Bypass Flow for Cycle 1

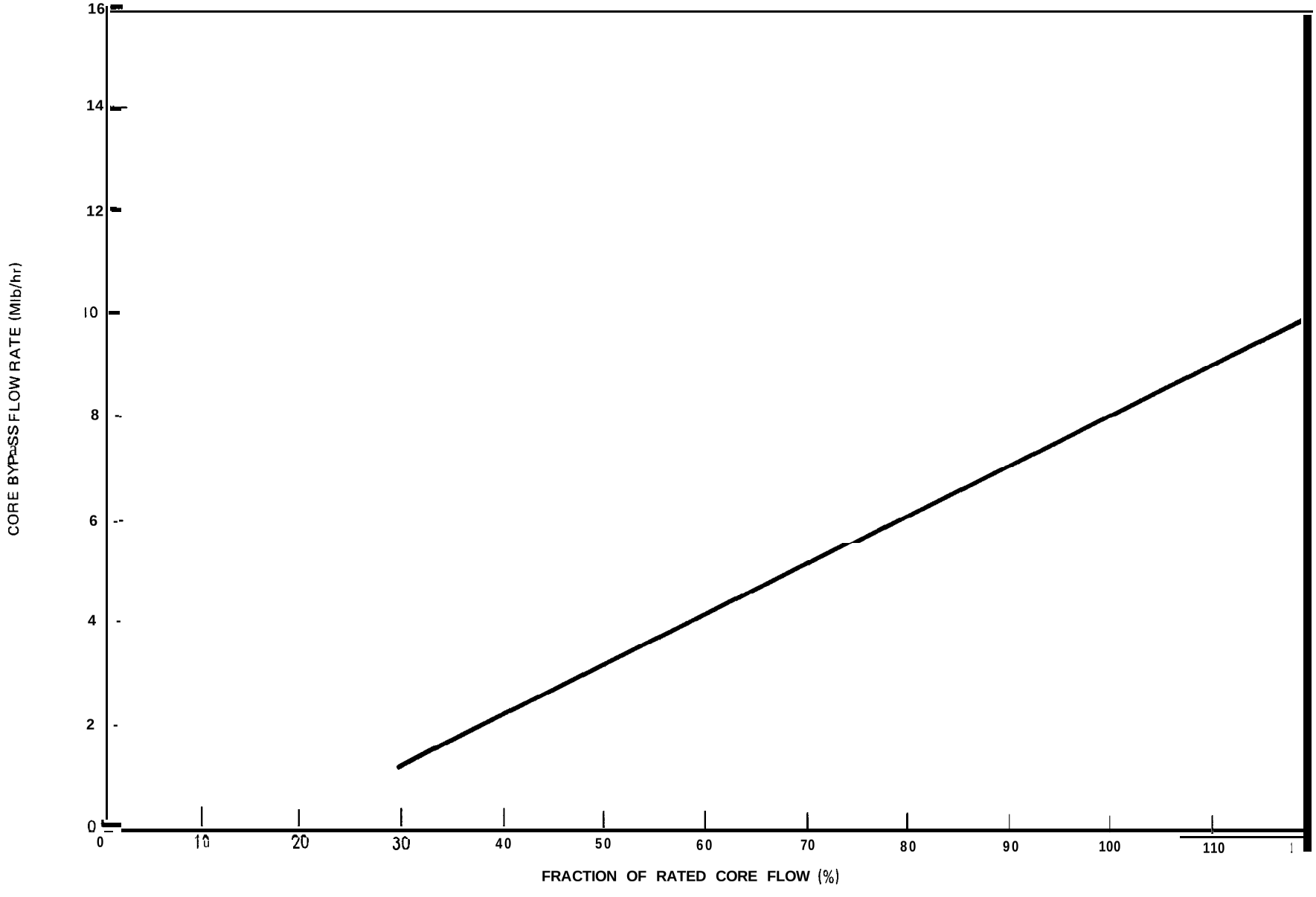


Figure 55. Core Bypass Flow for Cycle 2

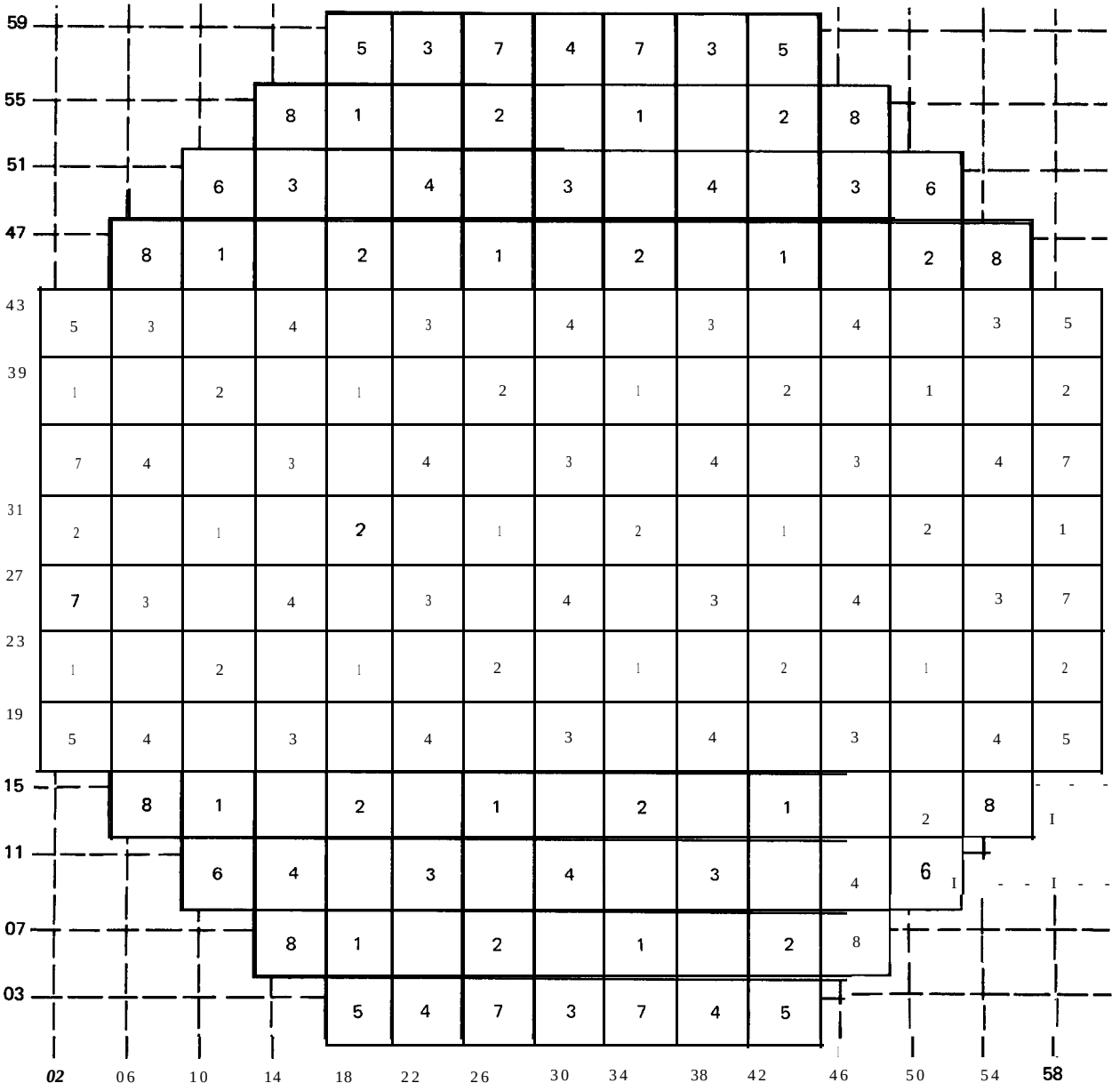


Figure 56. Peach Bottom 2 Control Rod A Sequence Groups I-8

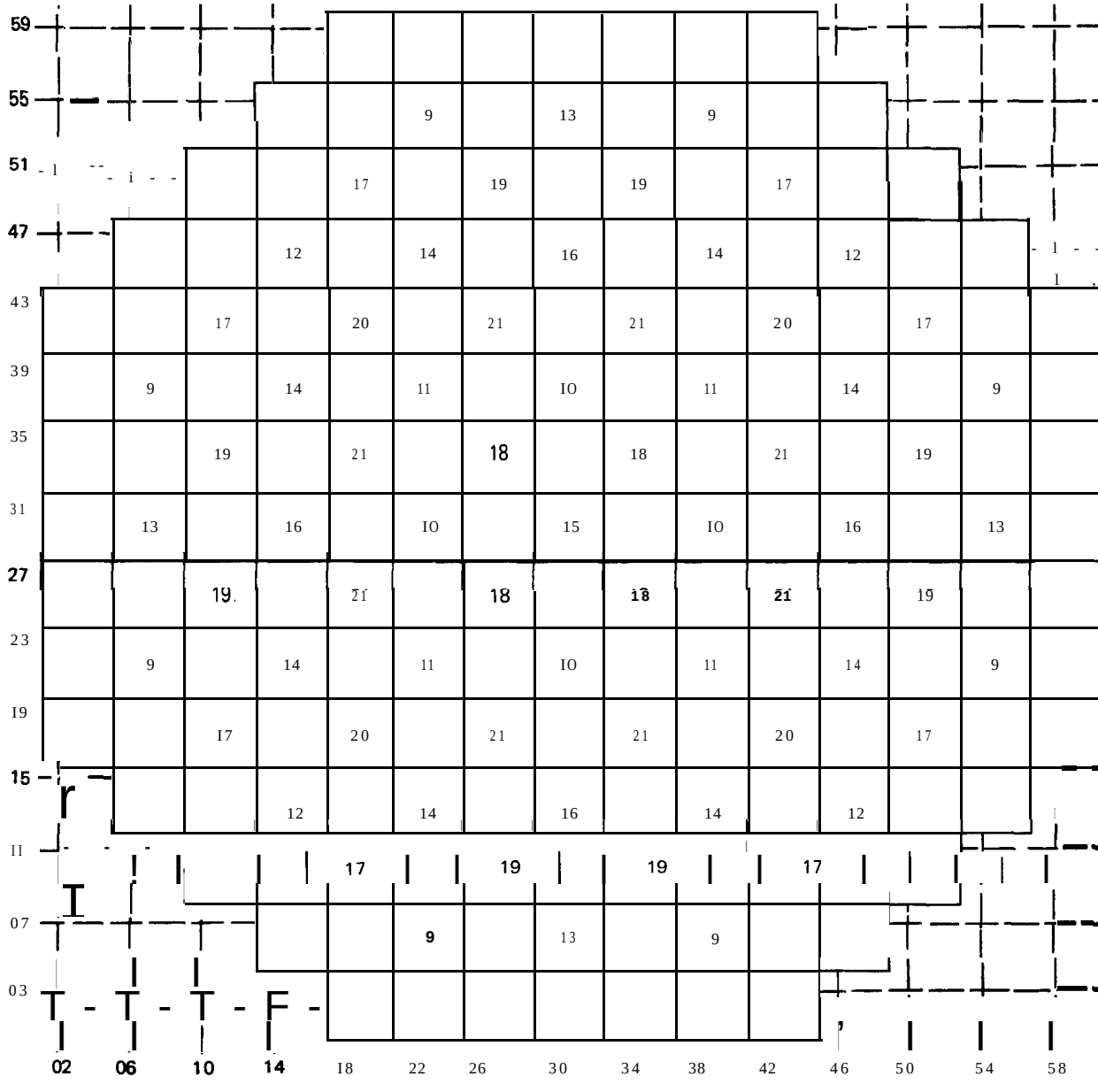


Figure 57. Peach Bottom 2 Control Rod AI Sequence Groups 9-21

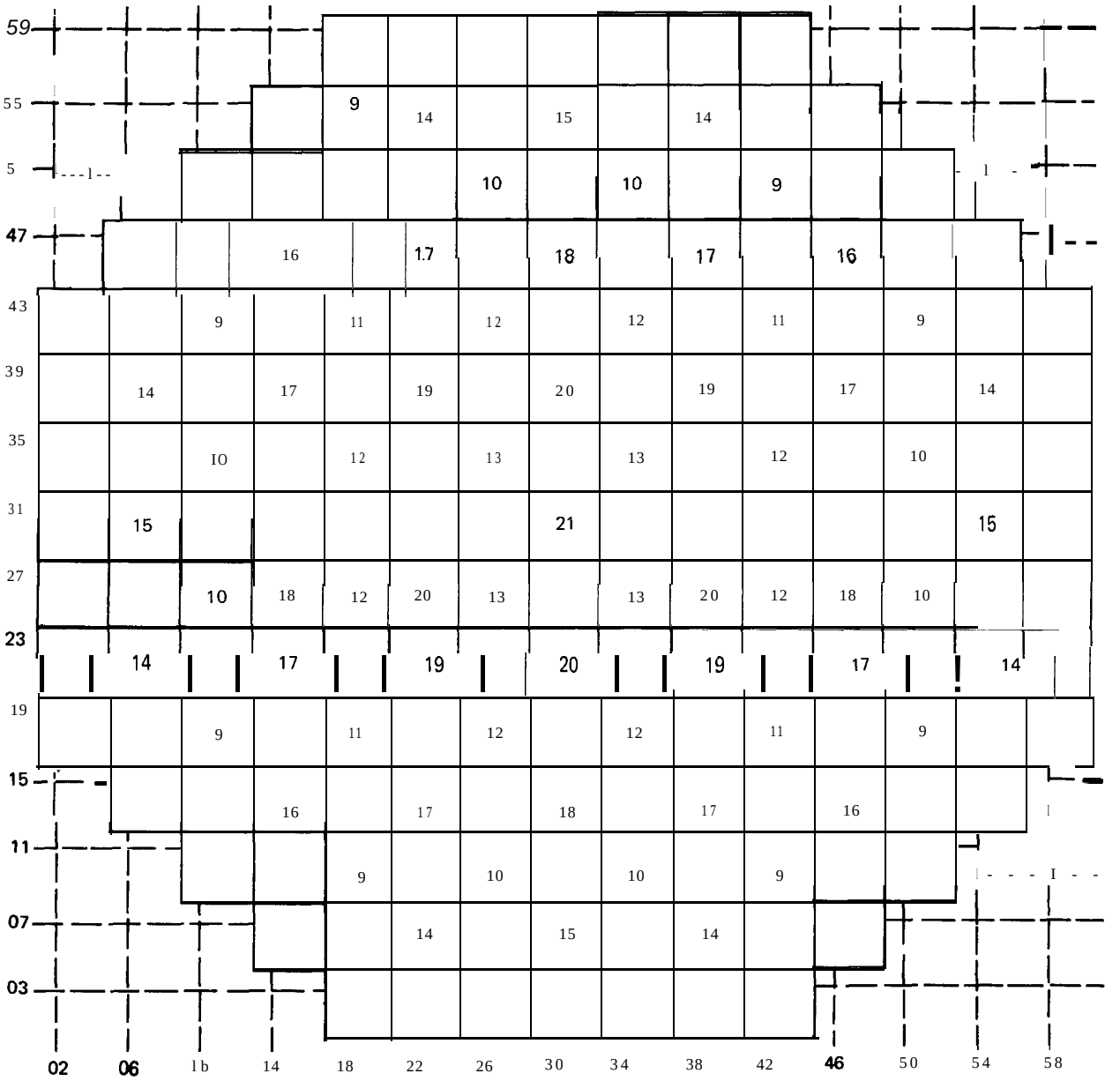


Figure 58. Peach Bottom 2 Control Rod A2 Sequence Groups 9-21

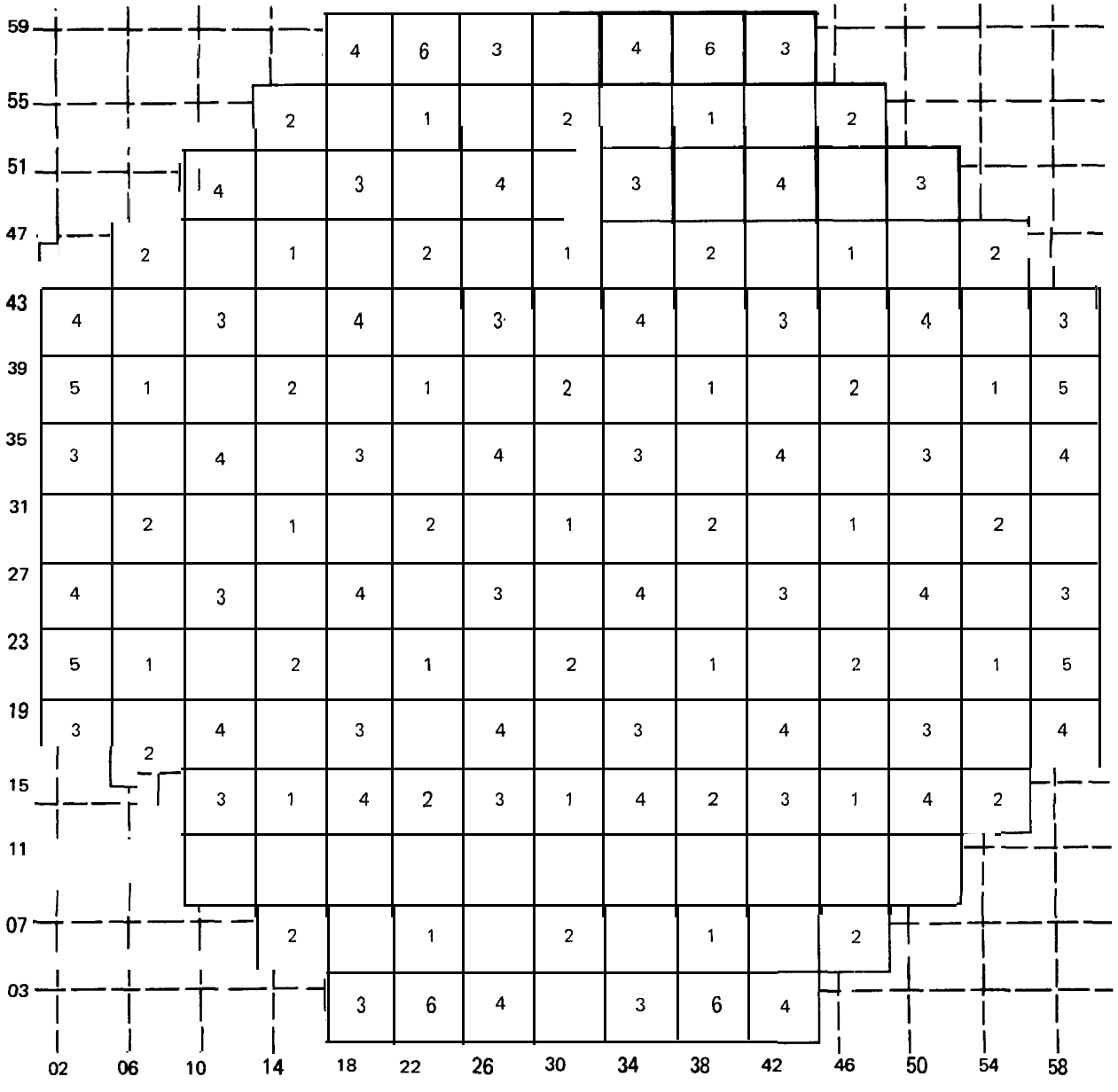


Figure 59. Peach Bottom 2 Control Rod B Sequence Groups I-6

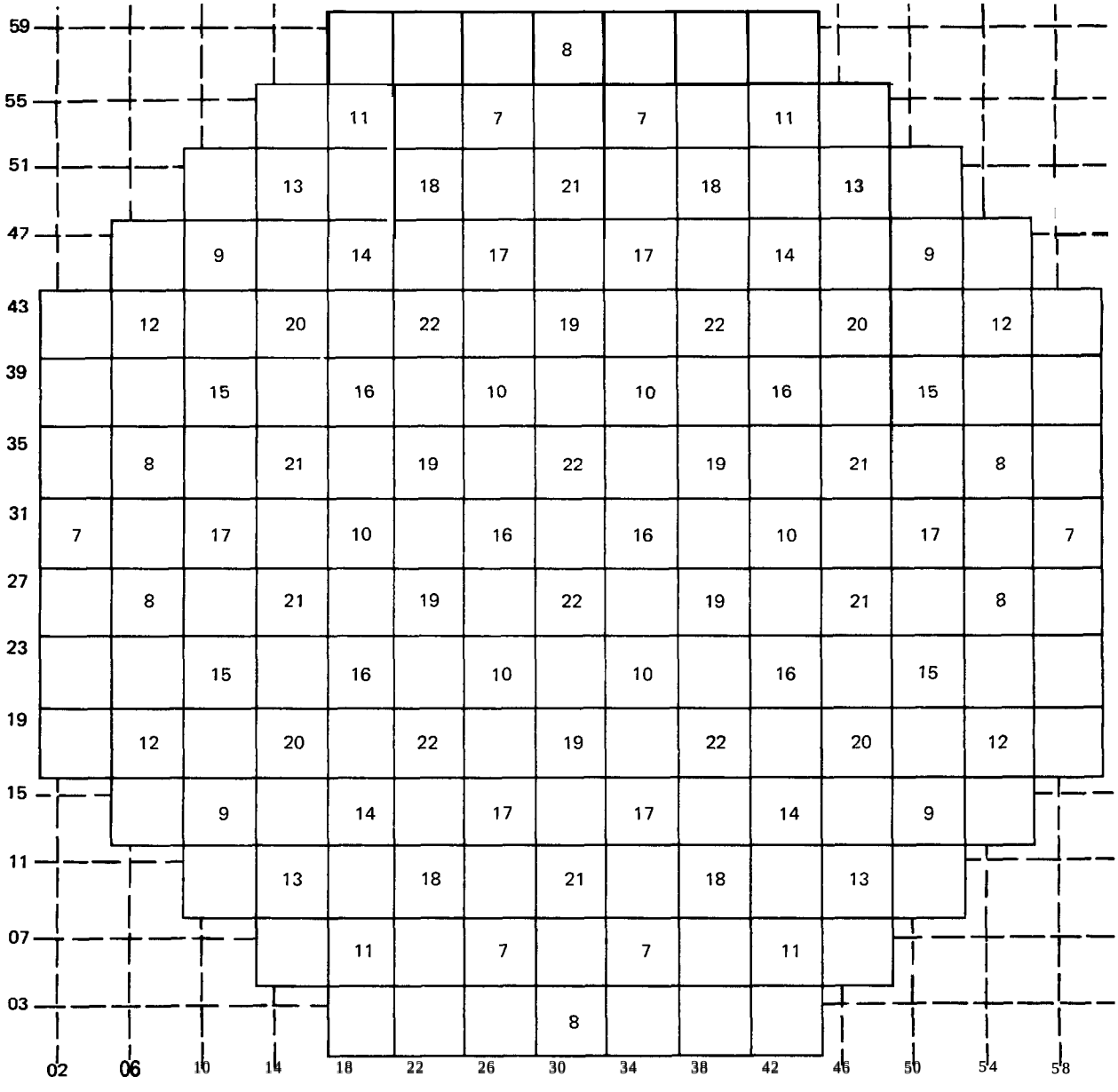


Figure 60. Peach Bottom 2 Control Rod B1 Sequence Groups 7-21

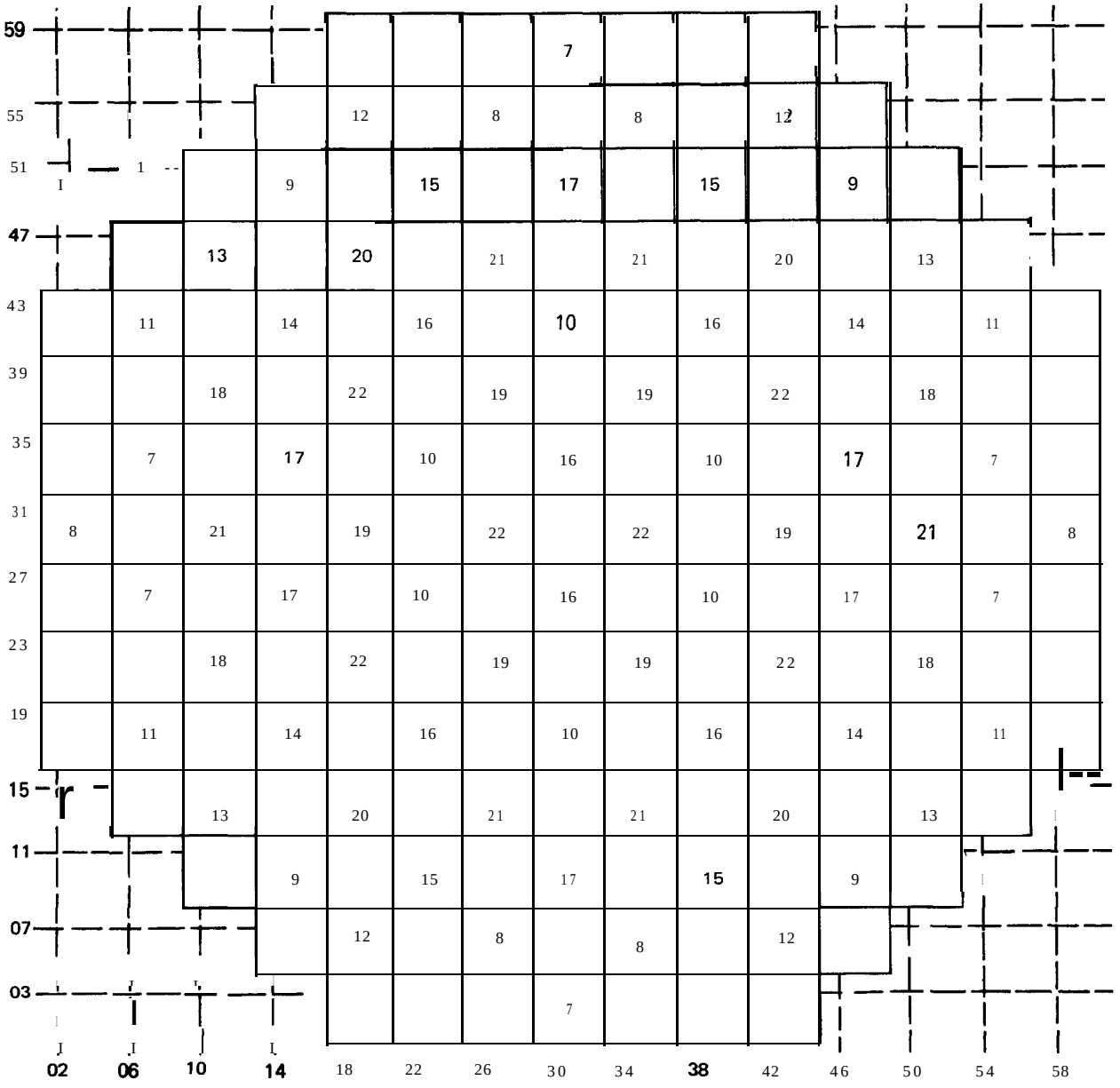


Figure 61. Peach Bottom 2 Control Rod B2 Sequence Groups 7-22

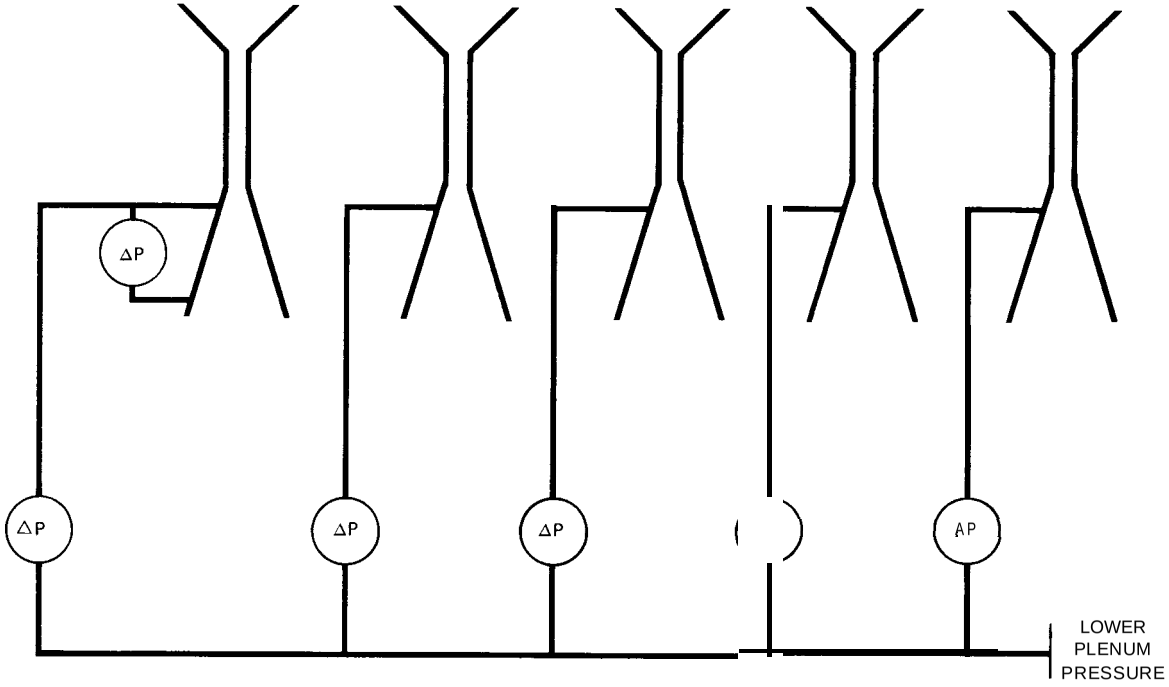


Figure 62. Core Flow Measurement System Schematic Showing One of Four Groups of Jet Pumps

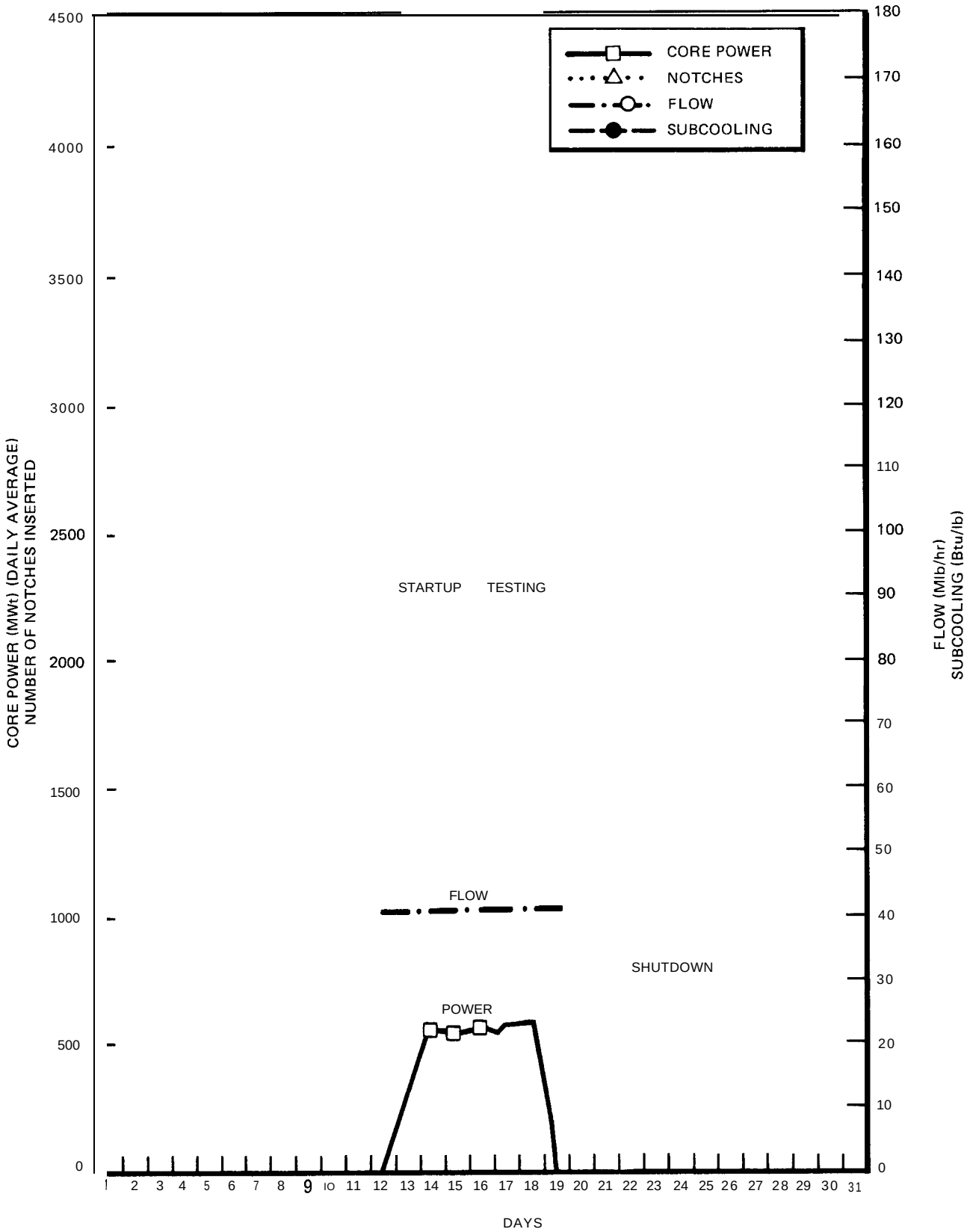


Figure 63. Data Summaries, January 1974

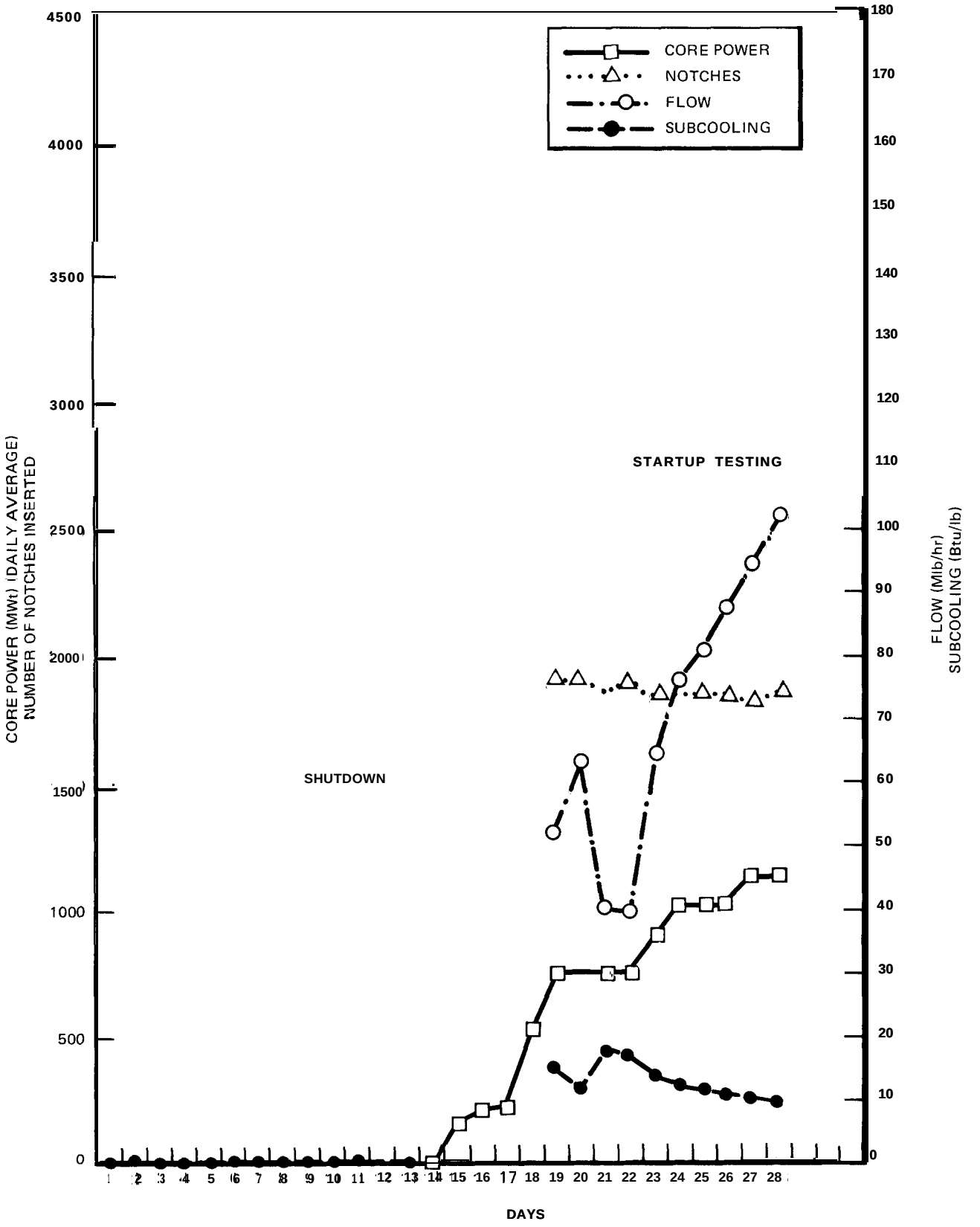


Figure 64. Data Summaries, February 1974

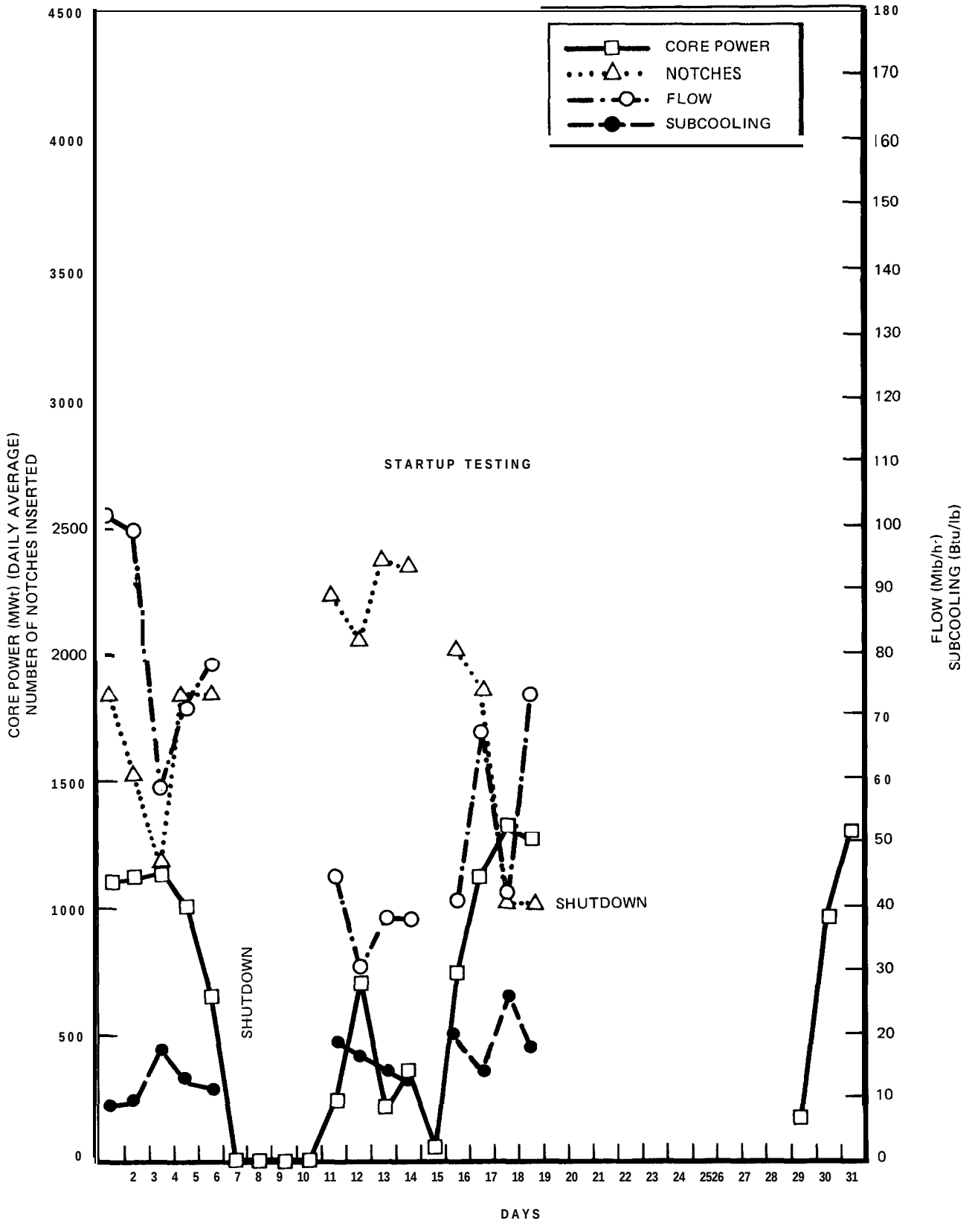


Figure 65. Data Summaries, March 1974

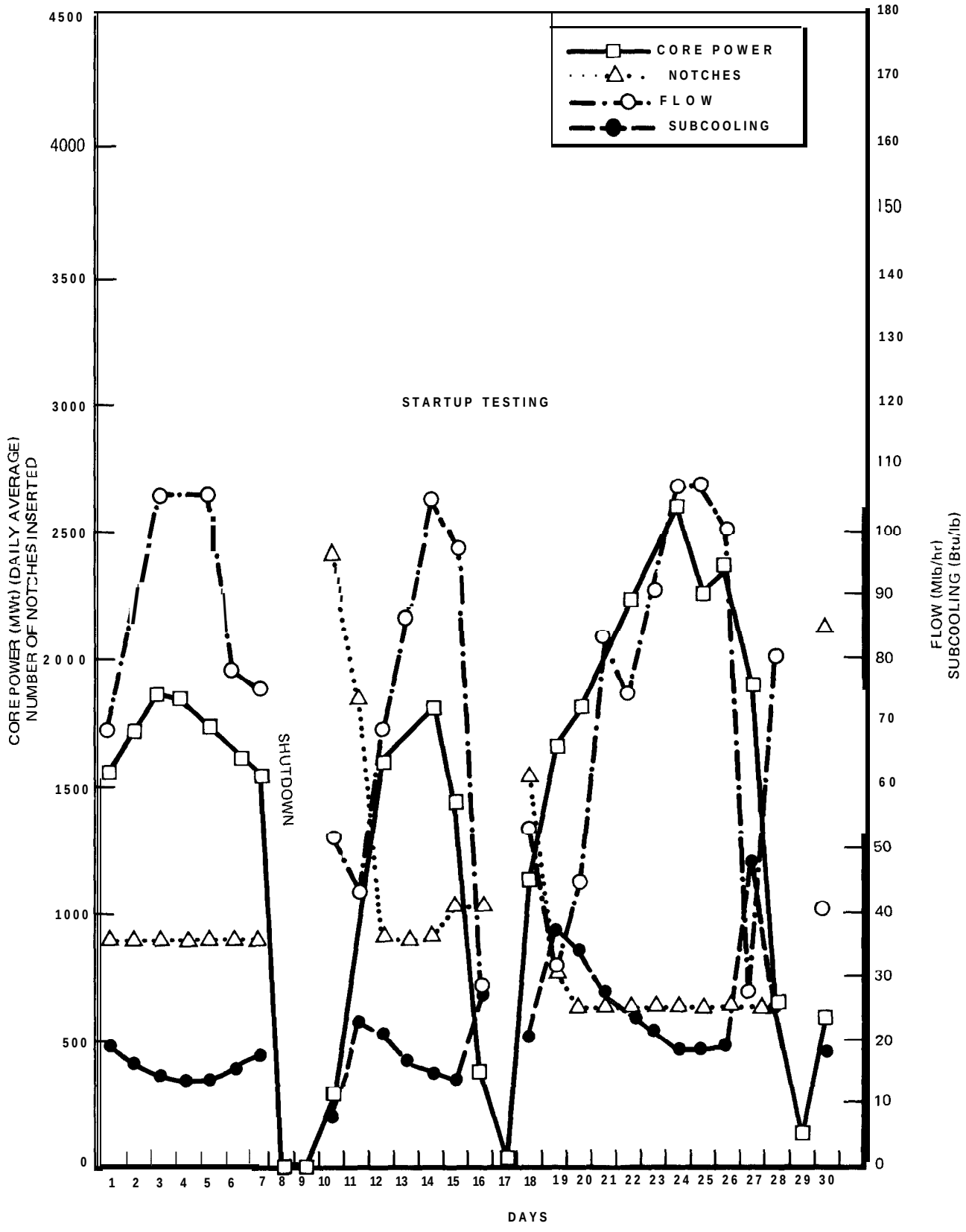


Figure 66. Data Summaries, April 1974

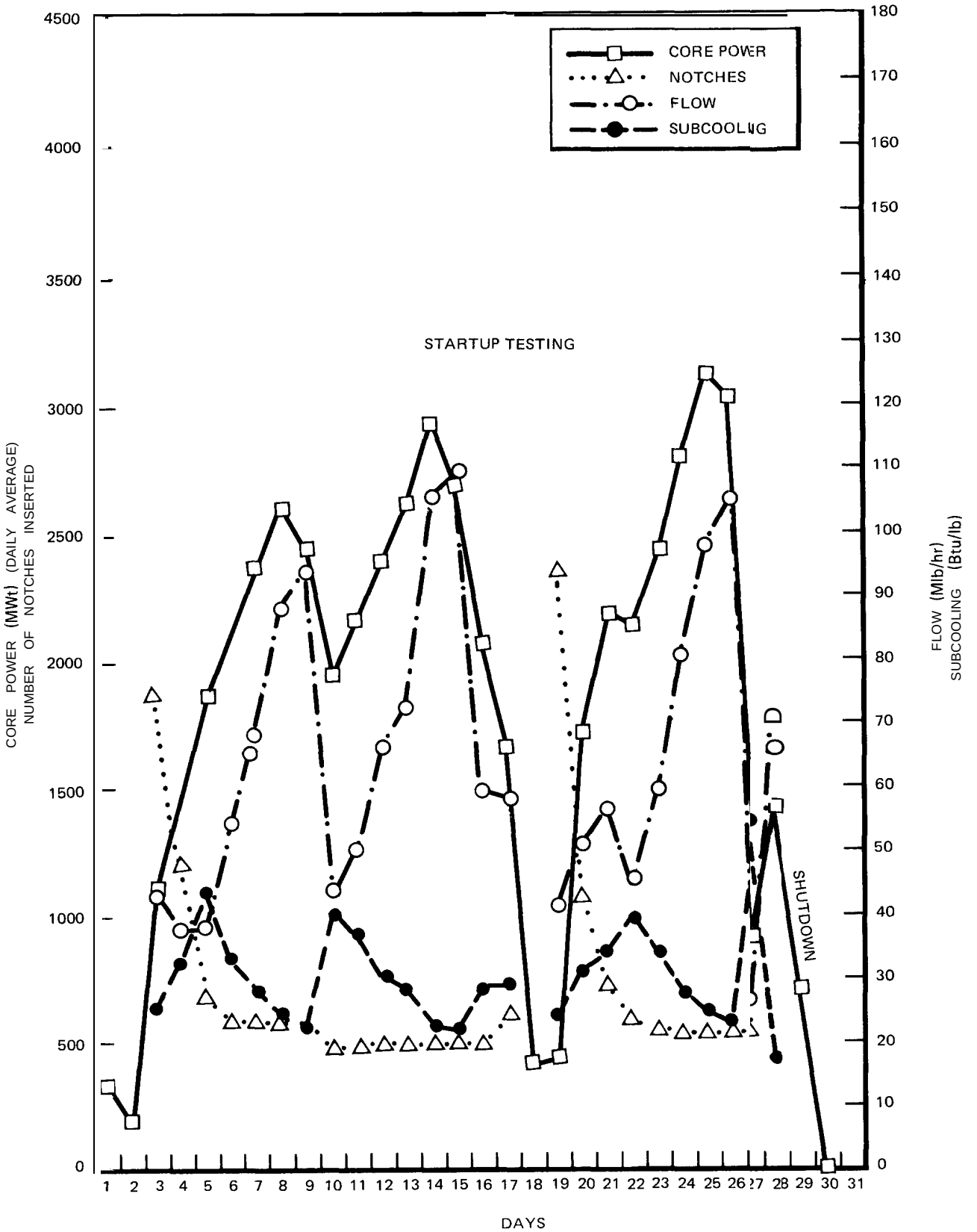


Figure 67. Data Summaries, May 1974

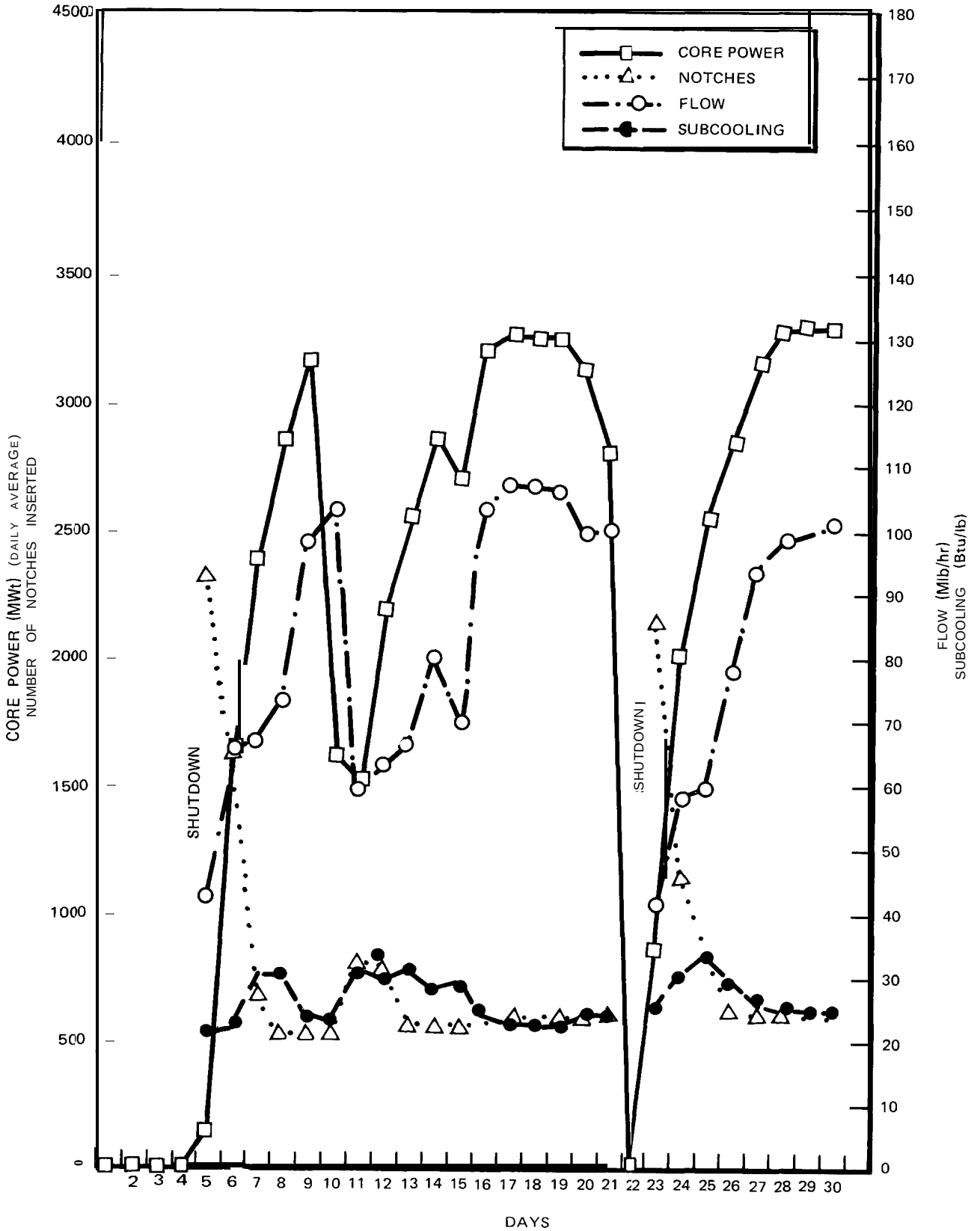


Figure 68. Data Summaries, June 1974

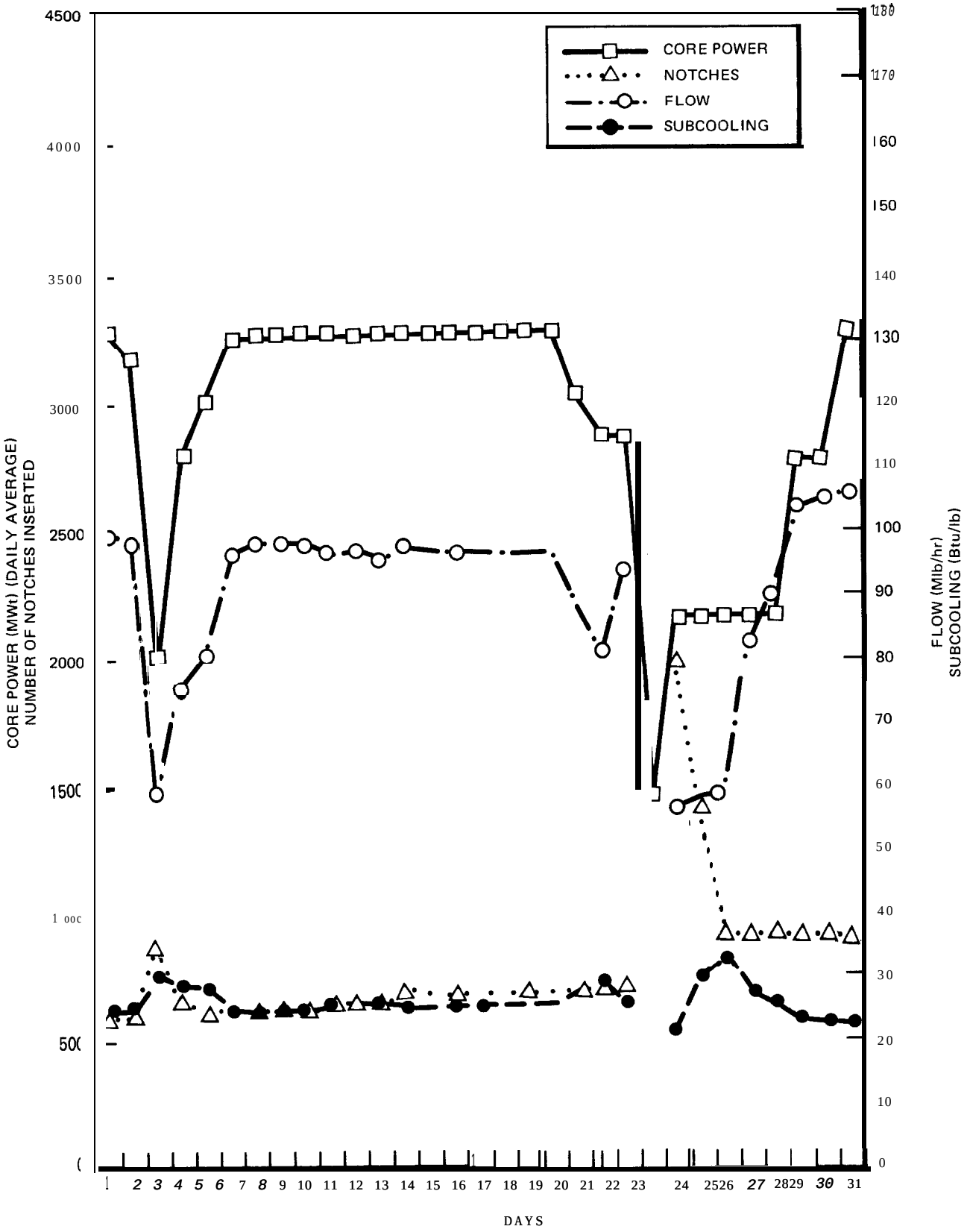


Figure 69. Data Summaries, July 1974

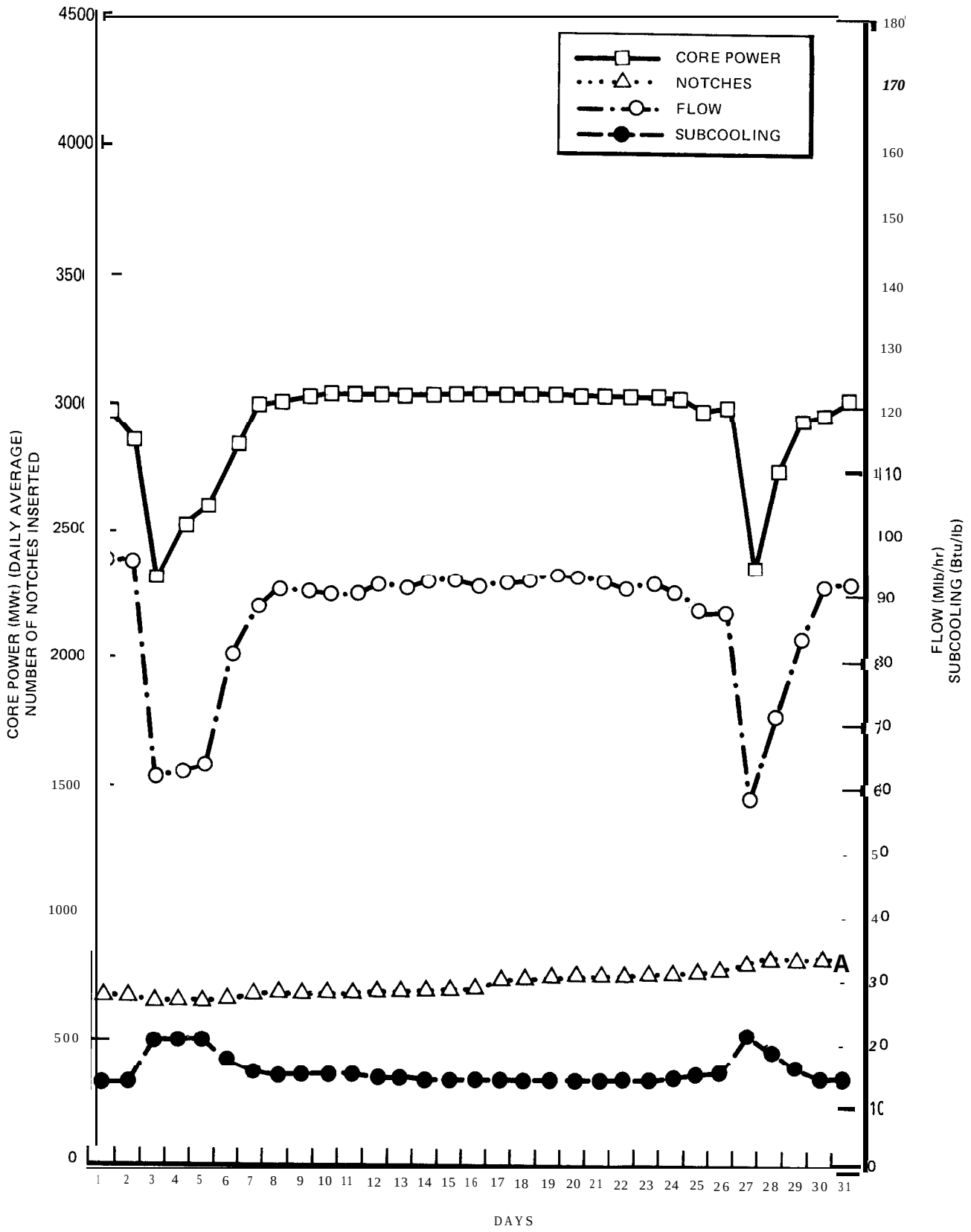


Figure 70. Data Summaries, August 1974

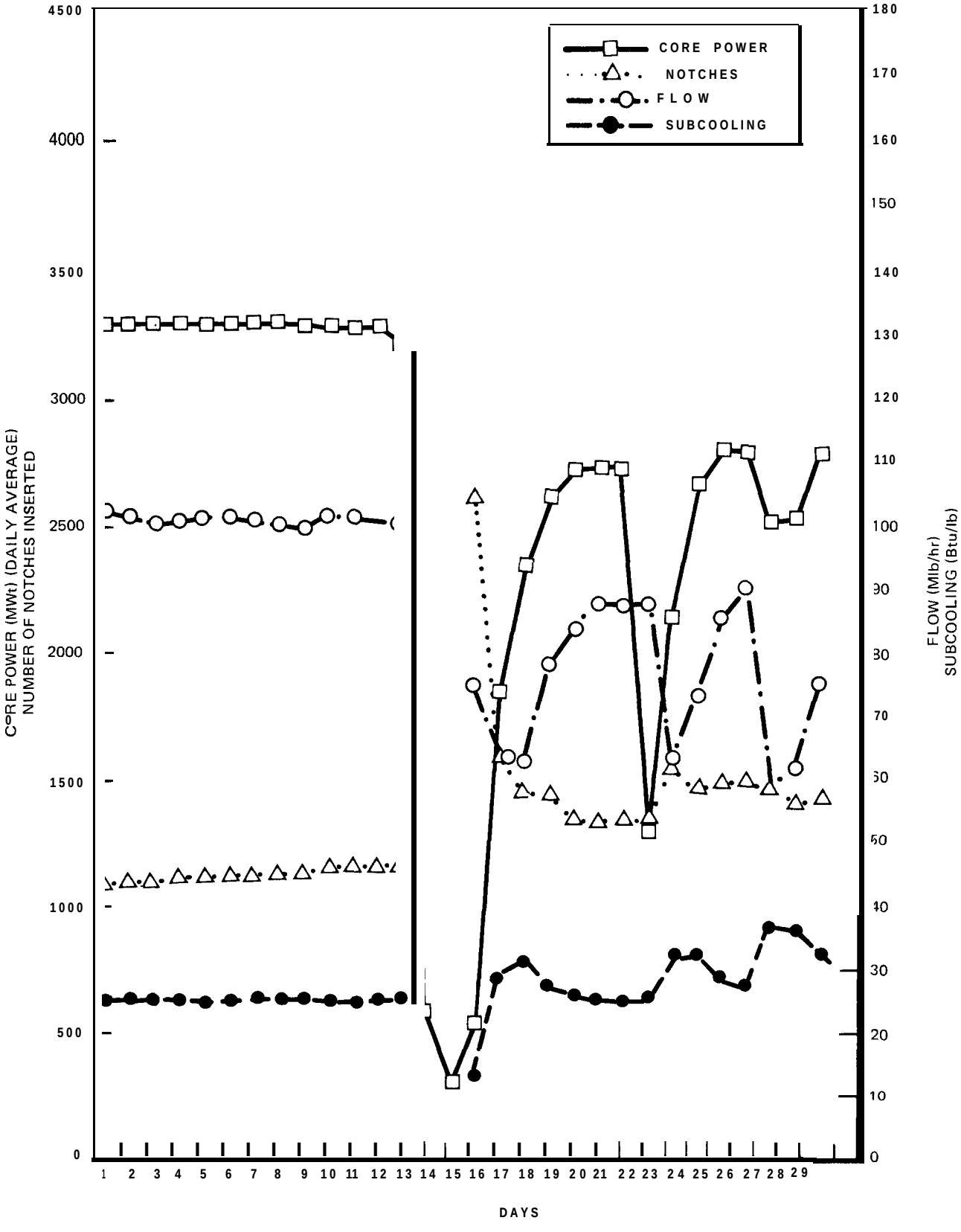


Figure 71. Data Summaries, September 1974

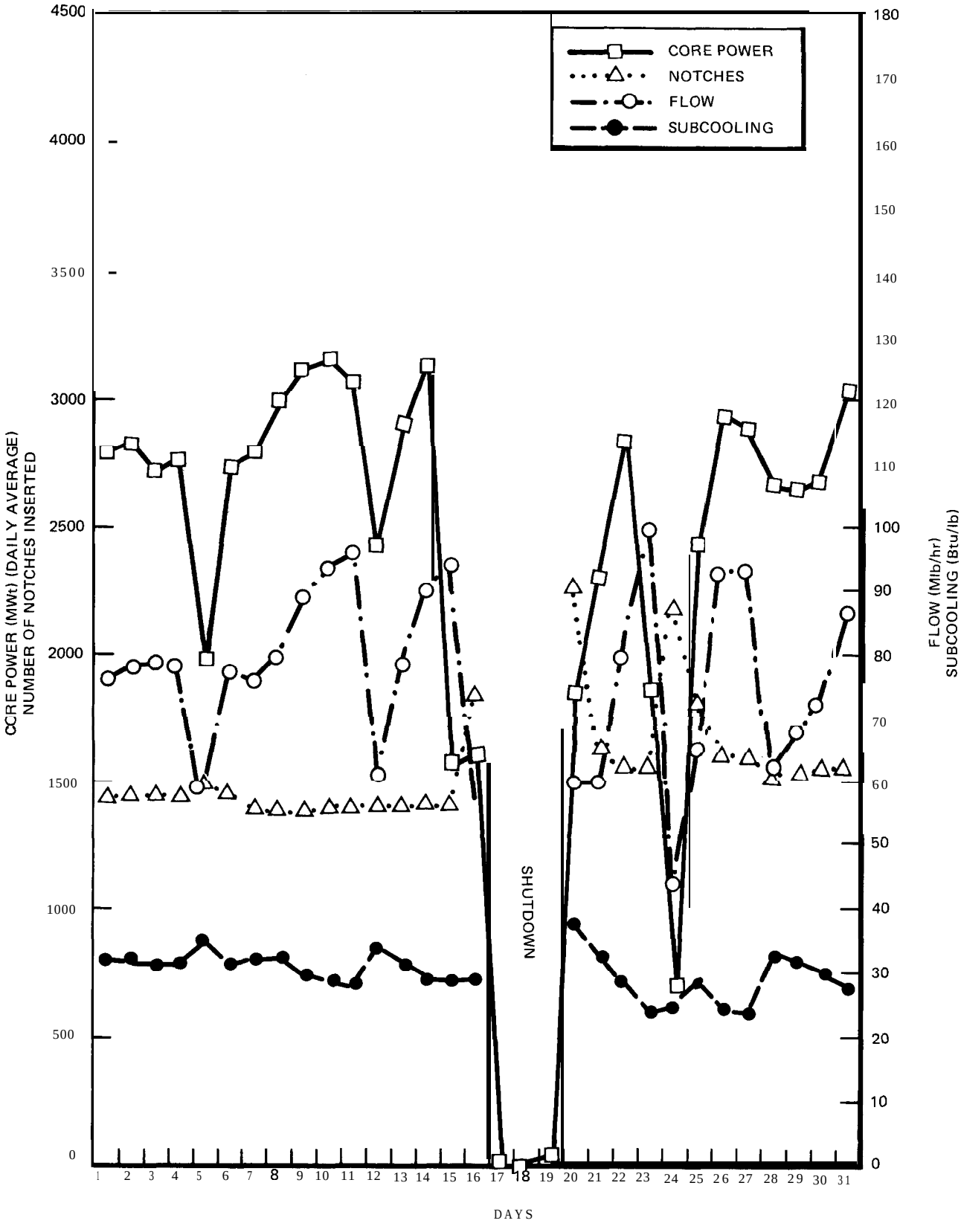


Figure 72. Data Summaries, October 1974

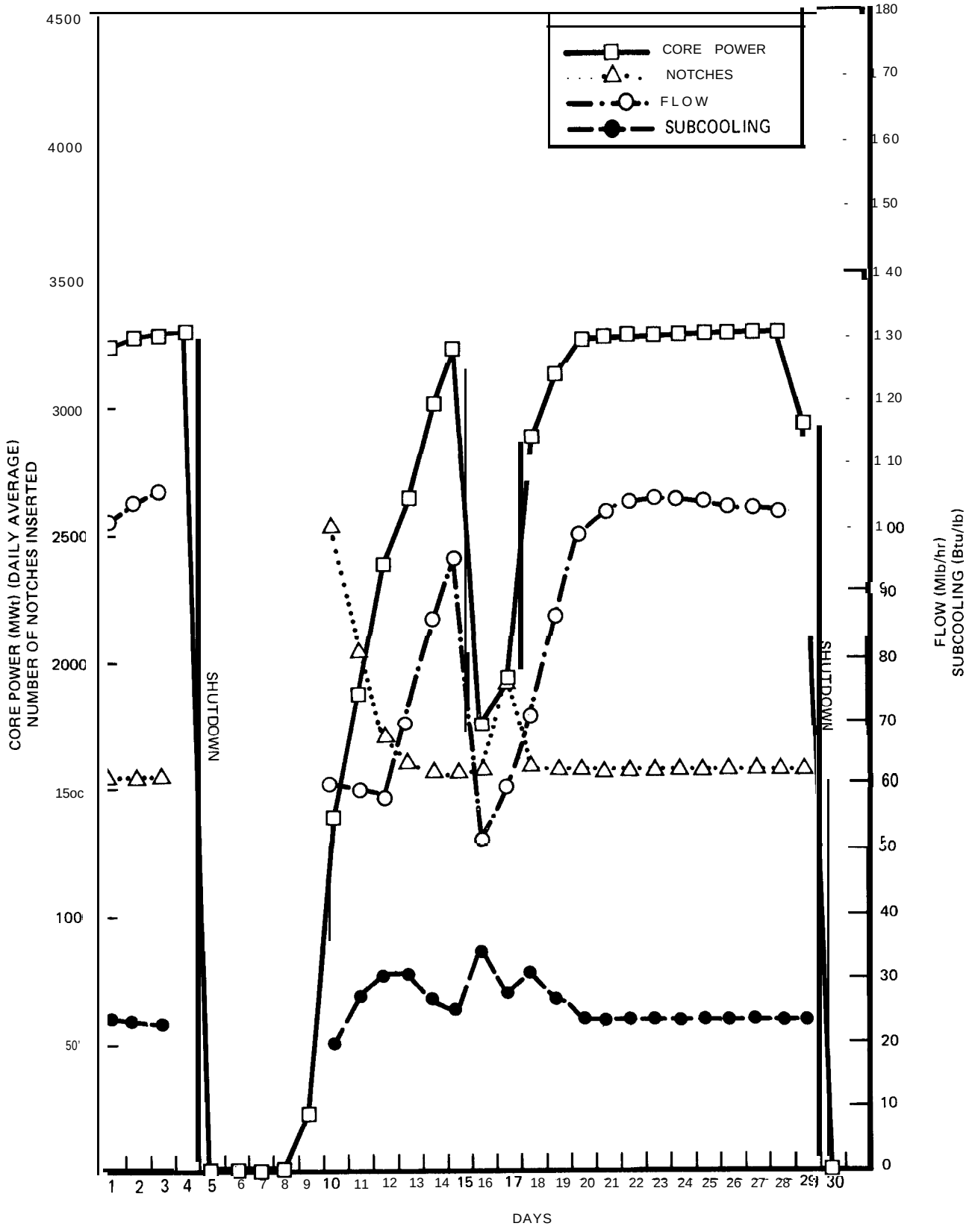


Figure 73. Data Summaries, November 1974

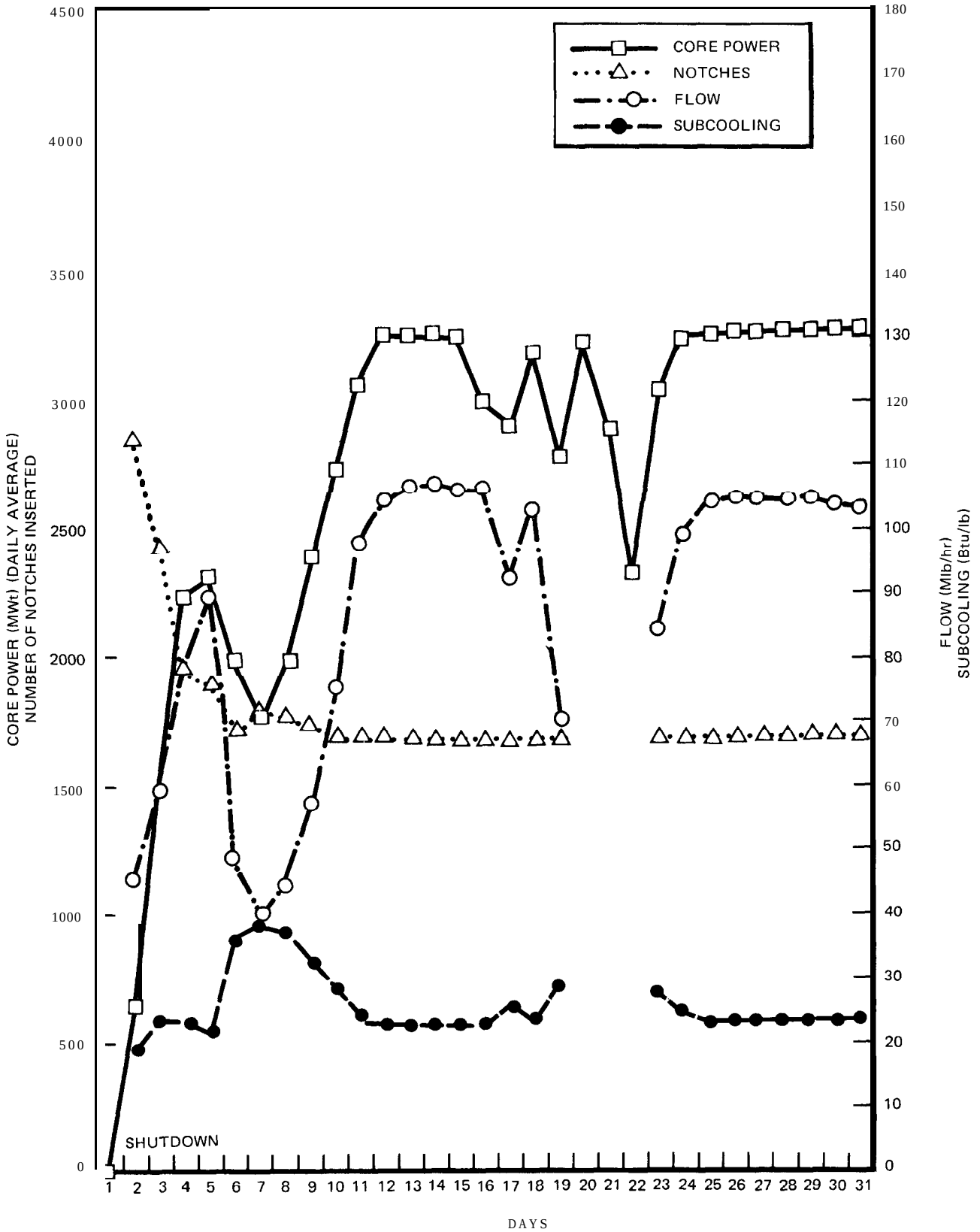


Figure 74. Data Summaries, December 1974

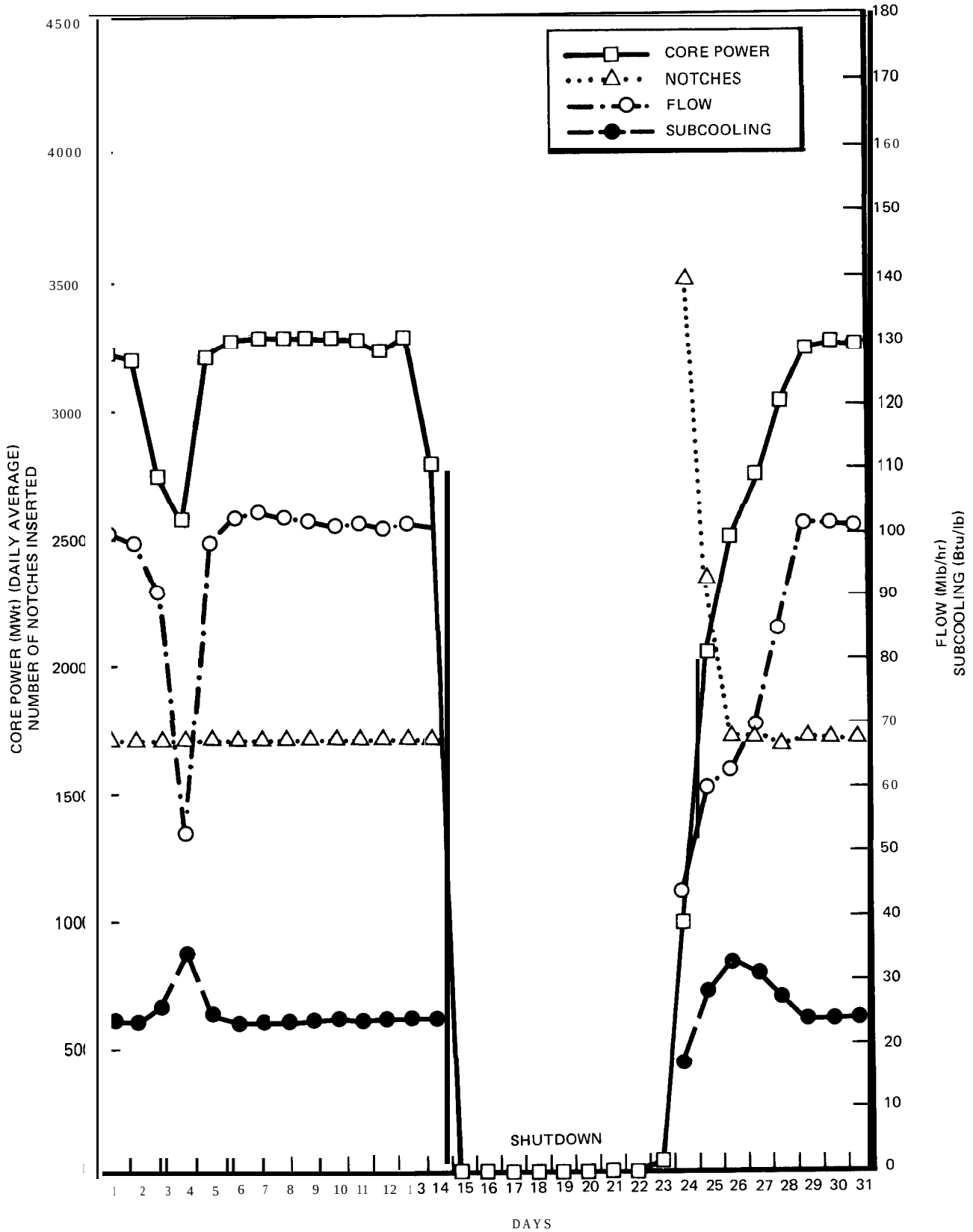


Figure 75. Data Summaries, January 1975

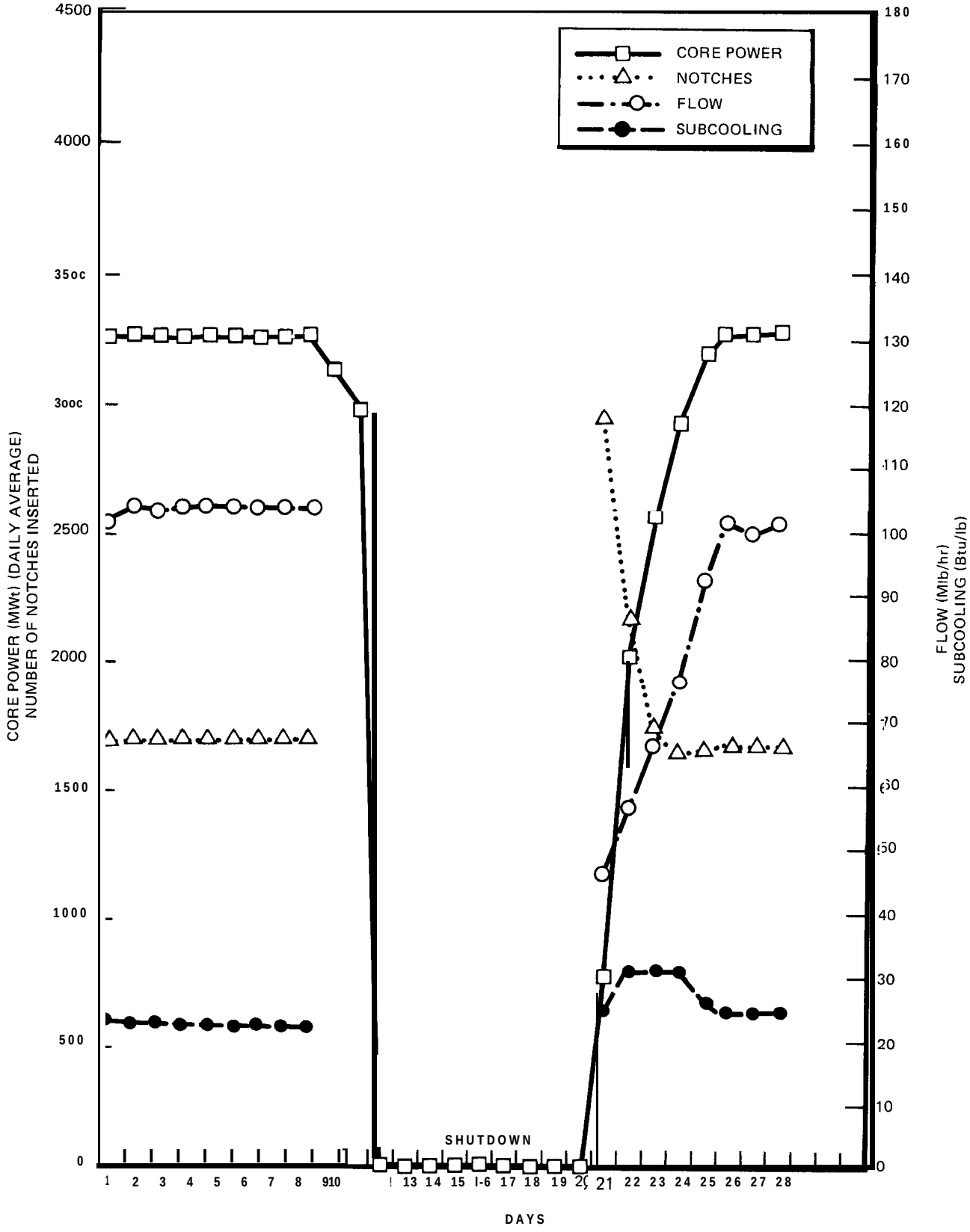


Figure 76. Data Summaries, February 1975

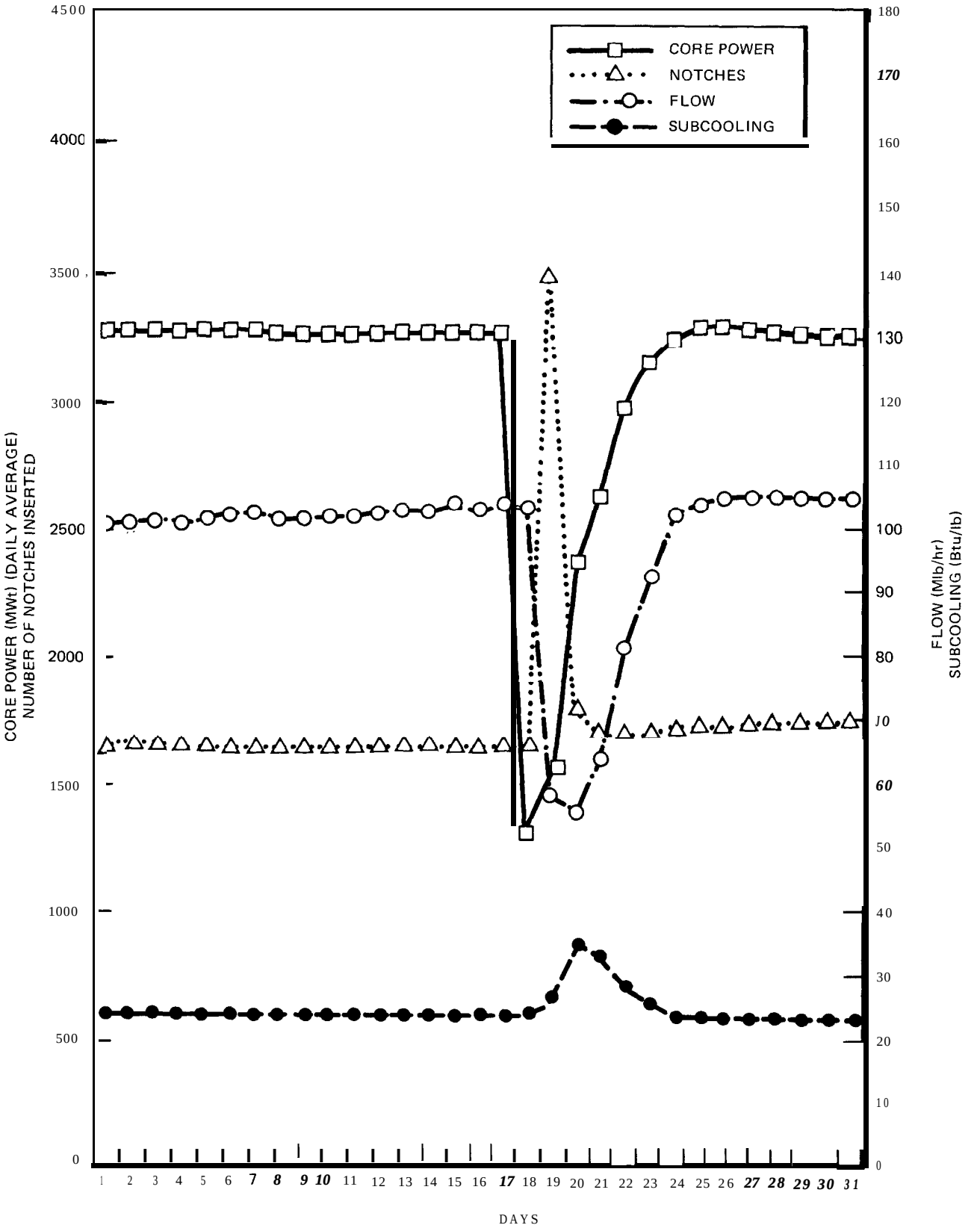


Figure 77. Data Summaries, March 1975

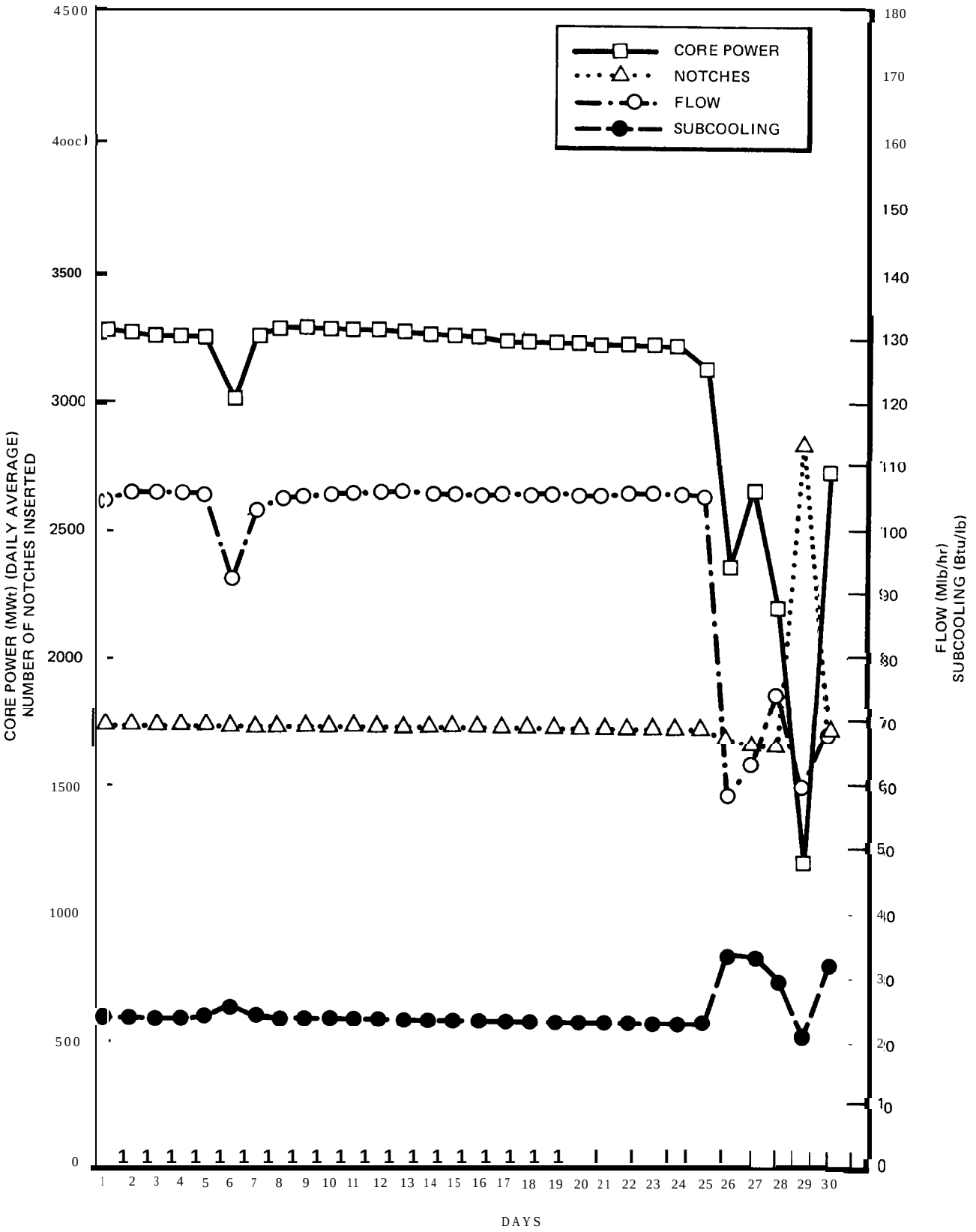


Figure 78. Data Summaries, April 1975

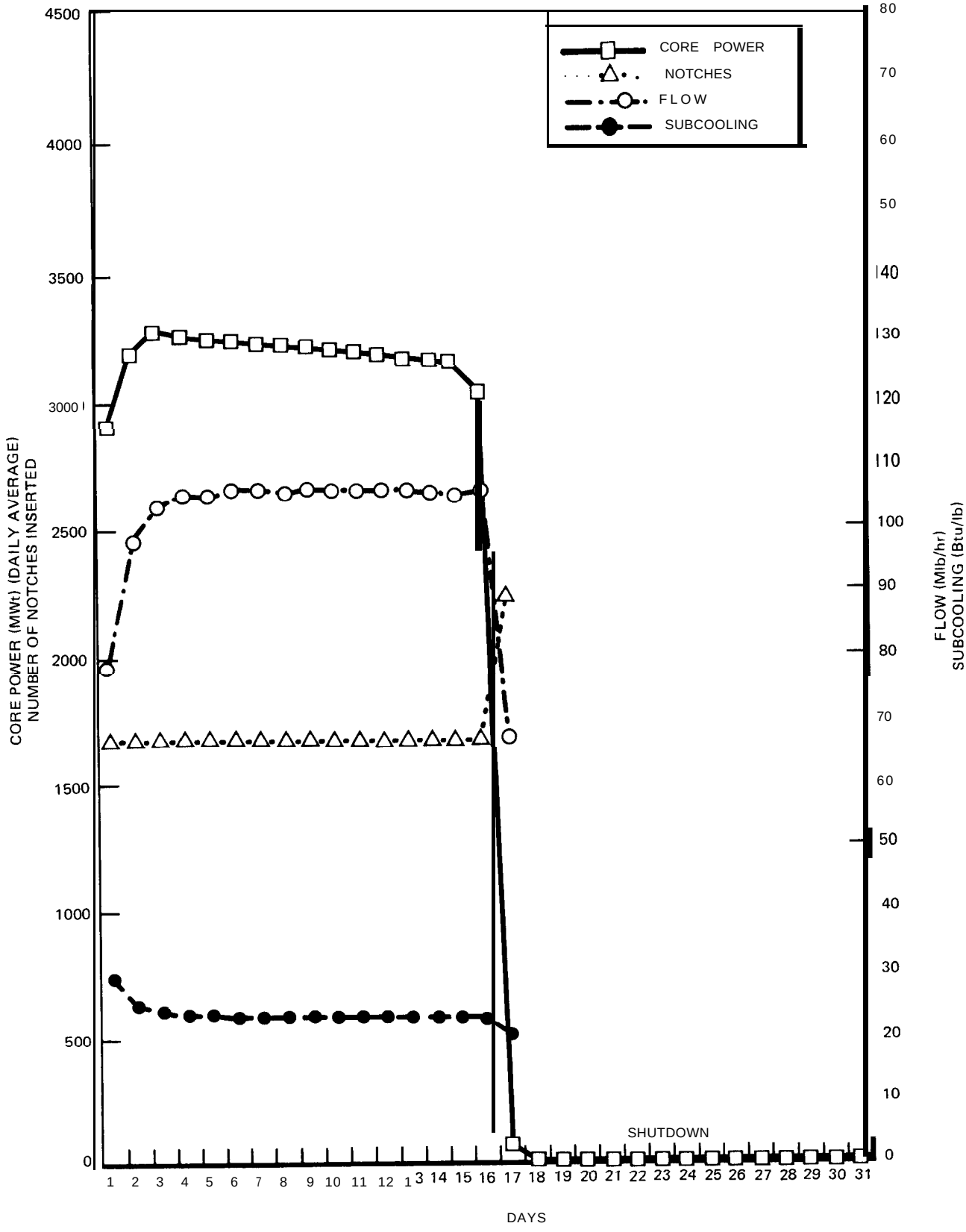


Figure 79. Data Summaries, May 1975

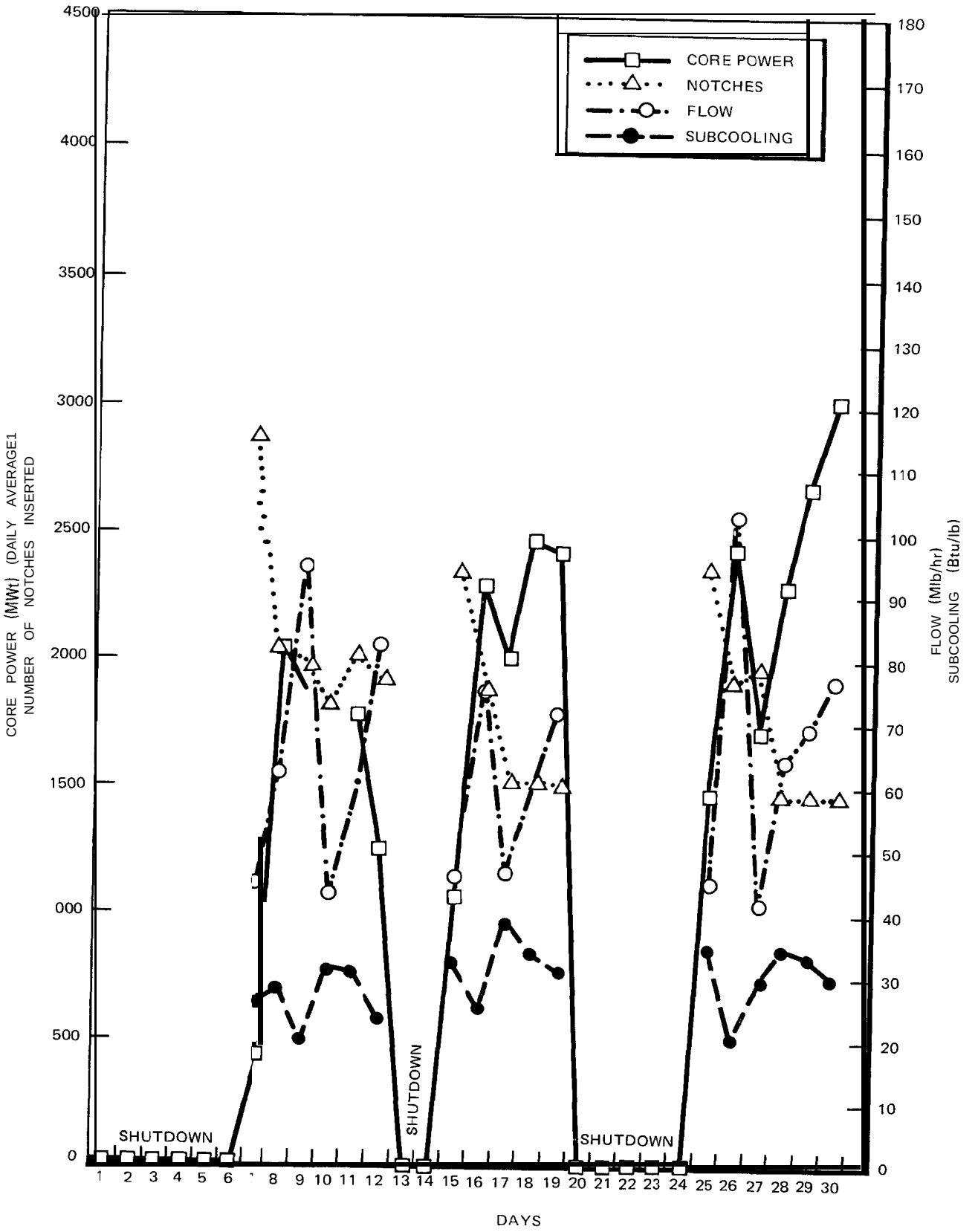


Figure 80. Data Summaries, June 1975

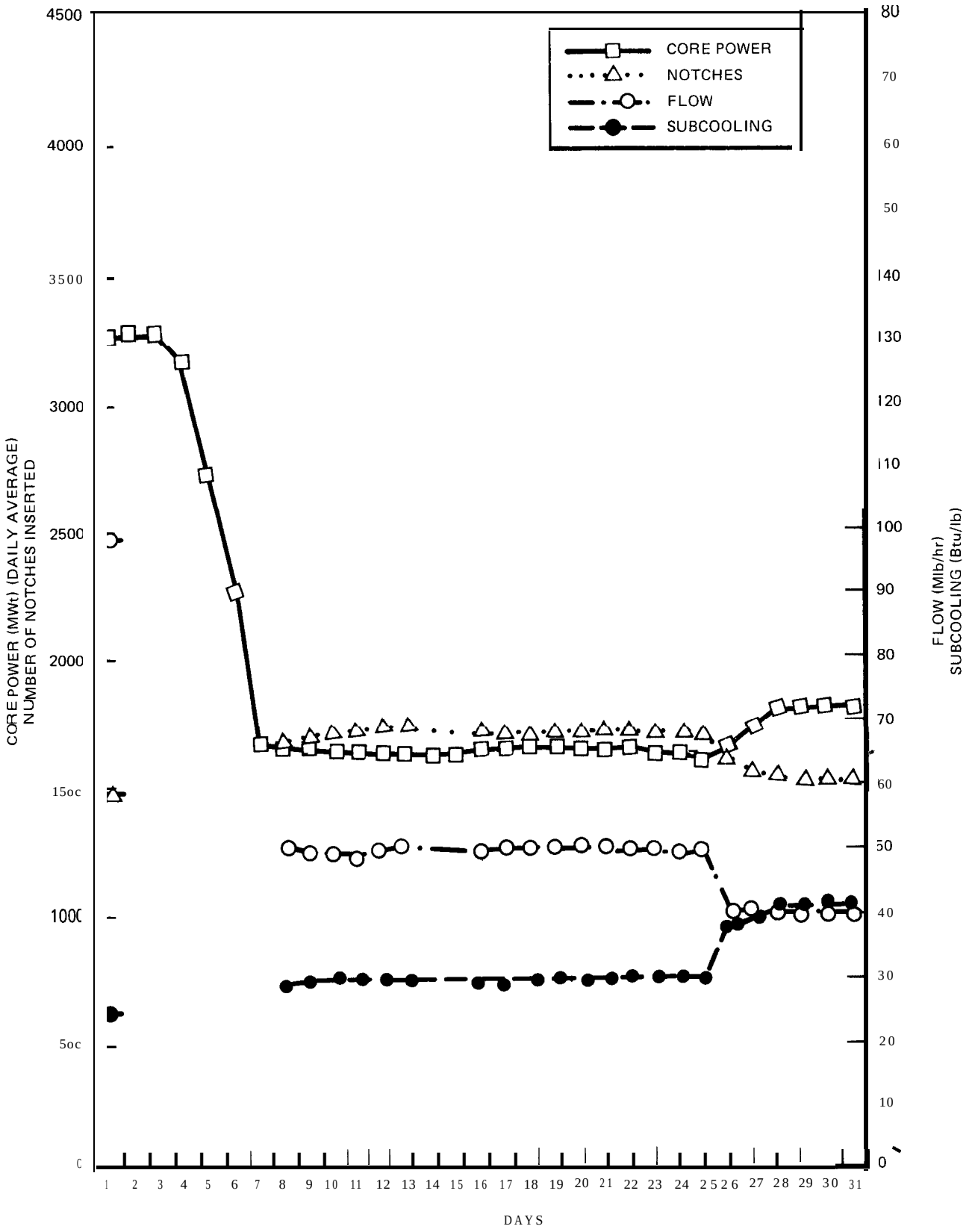


Figure 81. Data Summaries, July 1975

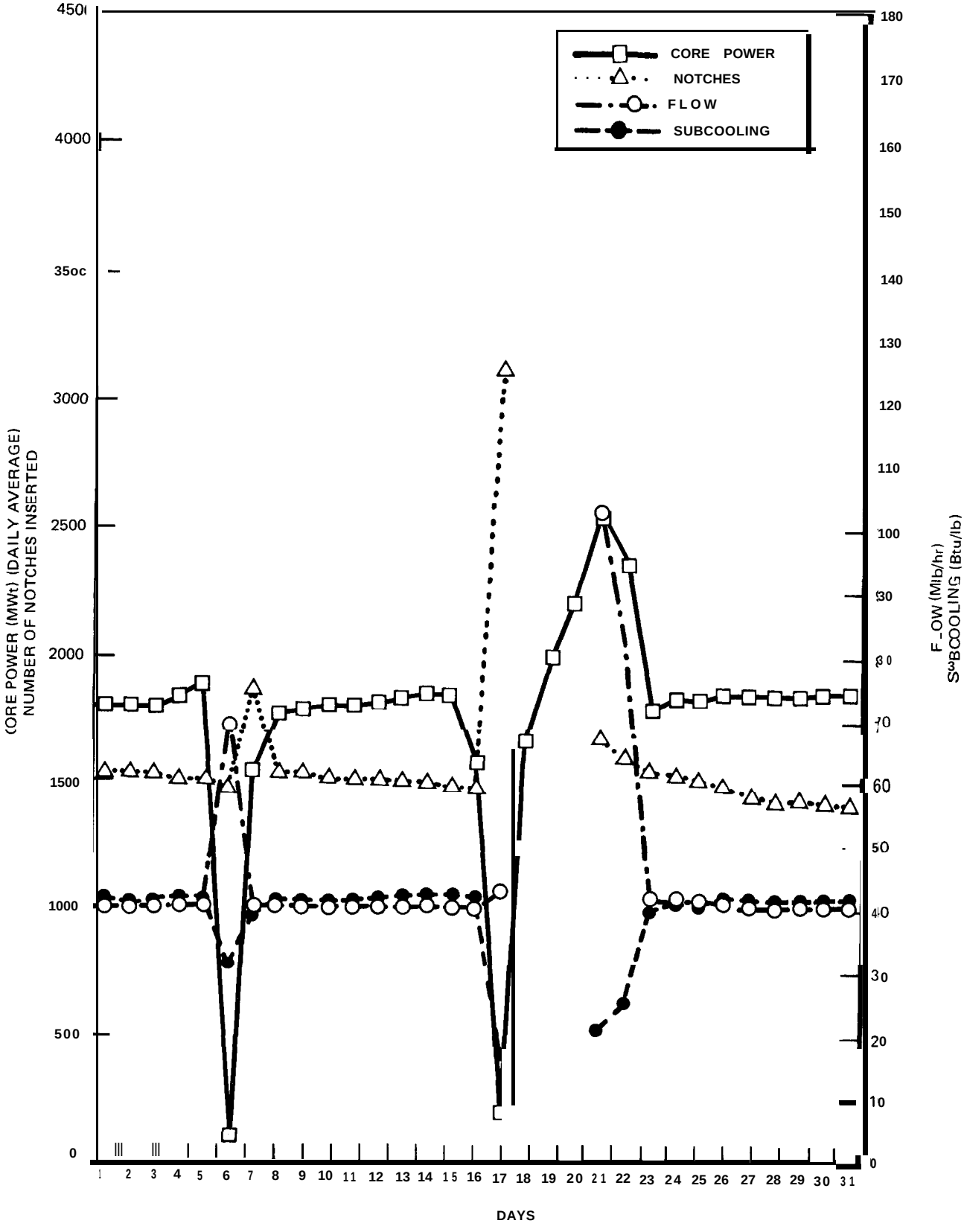


Figure 82. Data Summaries, August 1975

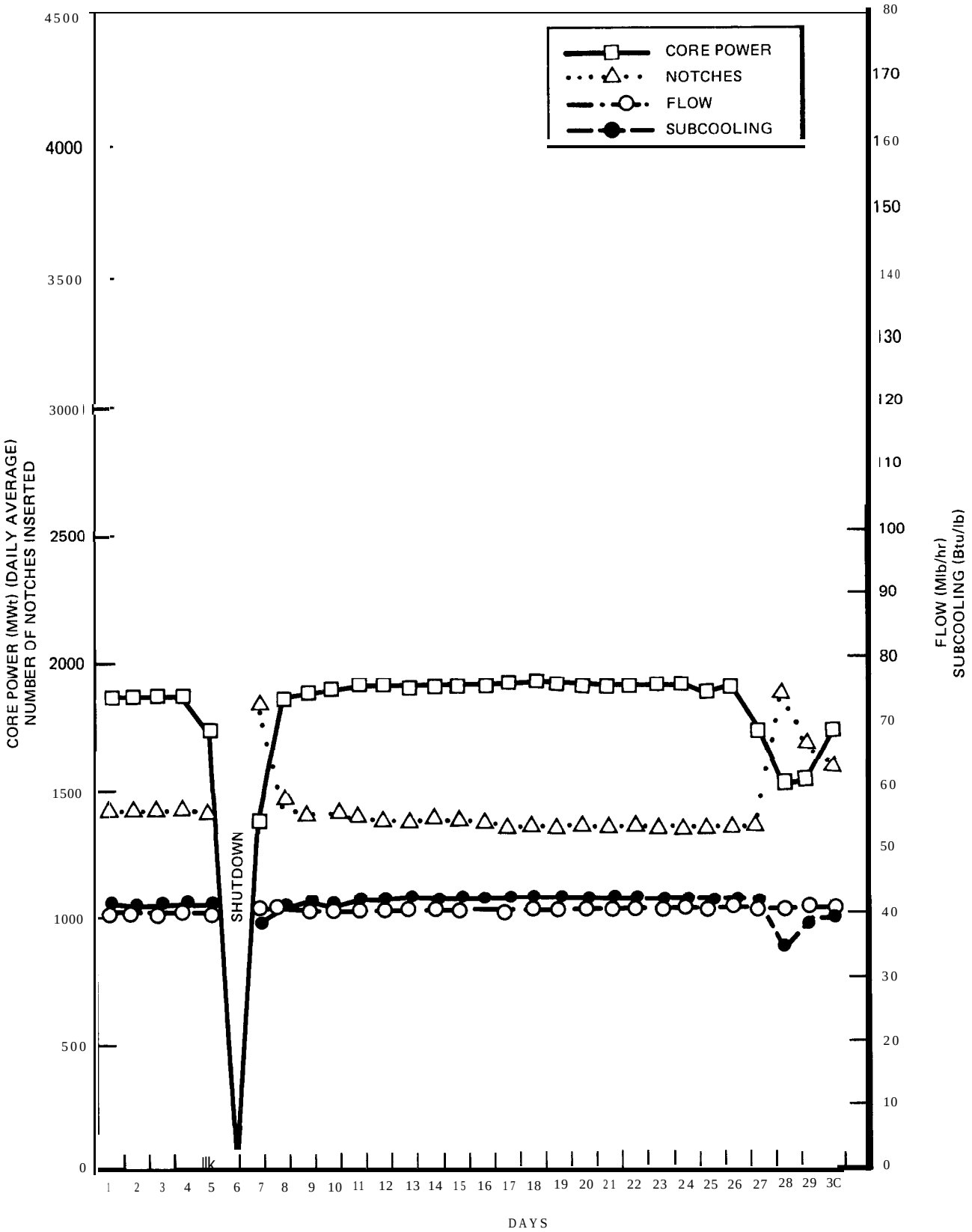


Figure 83. Data Summaries, September 1975

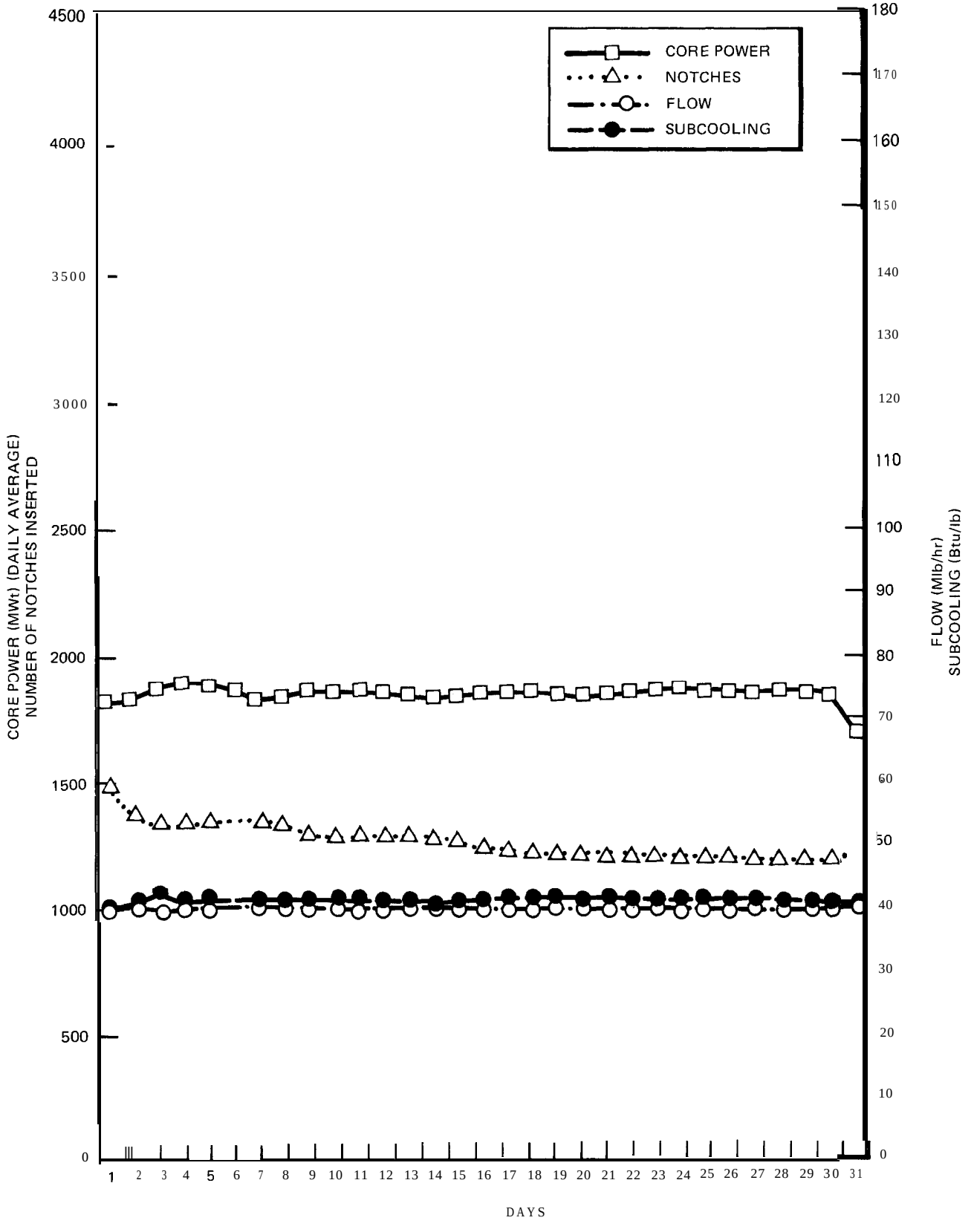


Figure 84. Data Summaries, October 1975

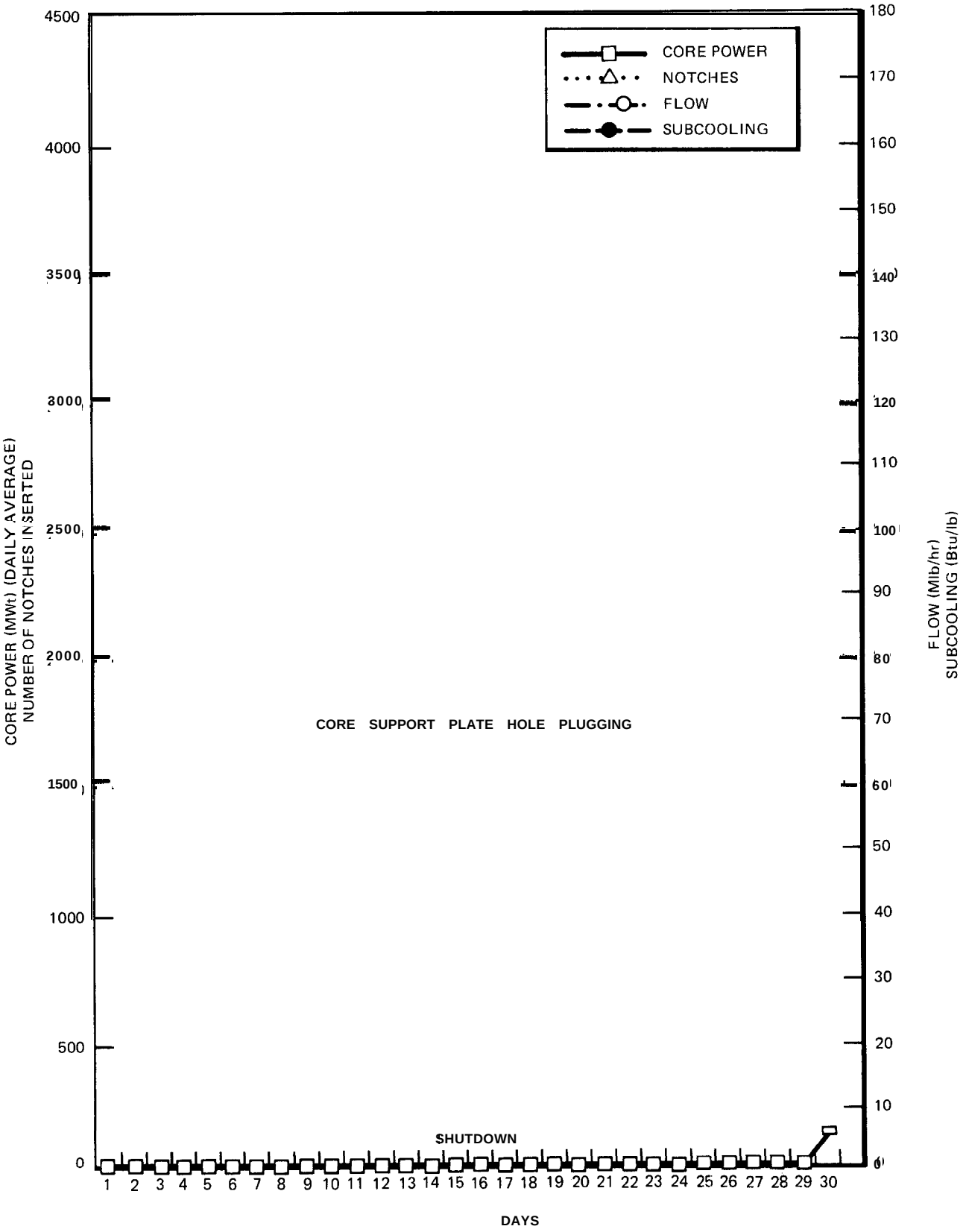


Figure 85. Data Summaries, November 1975

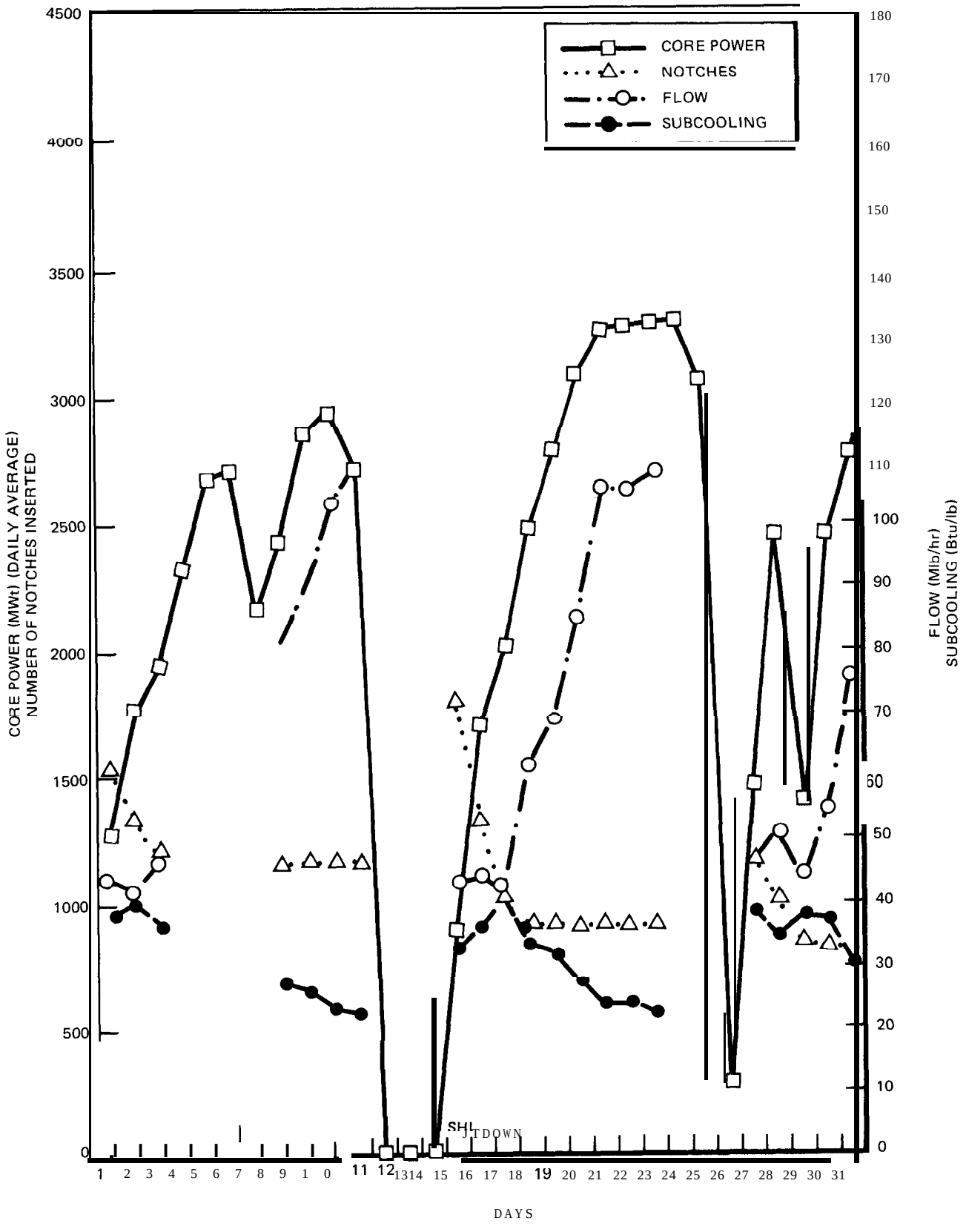


Figure 86. Data Summaries, December 1975

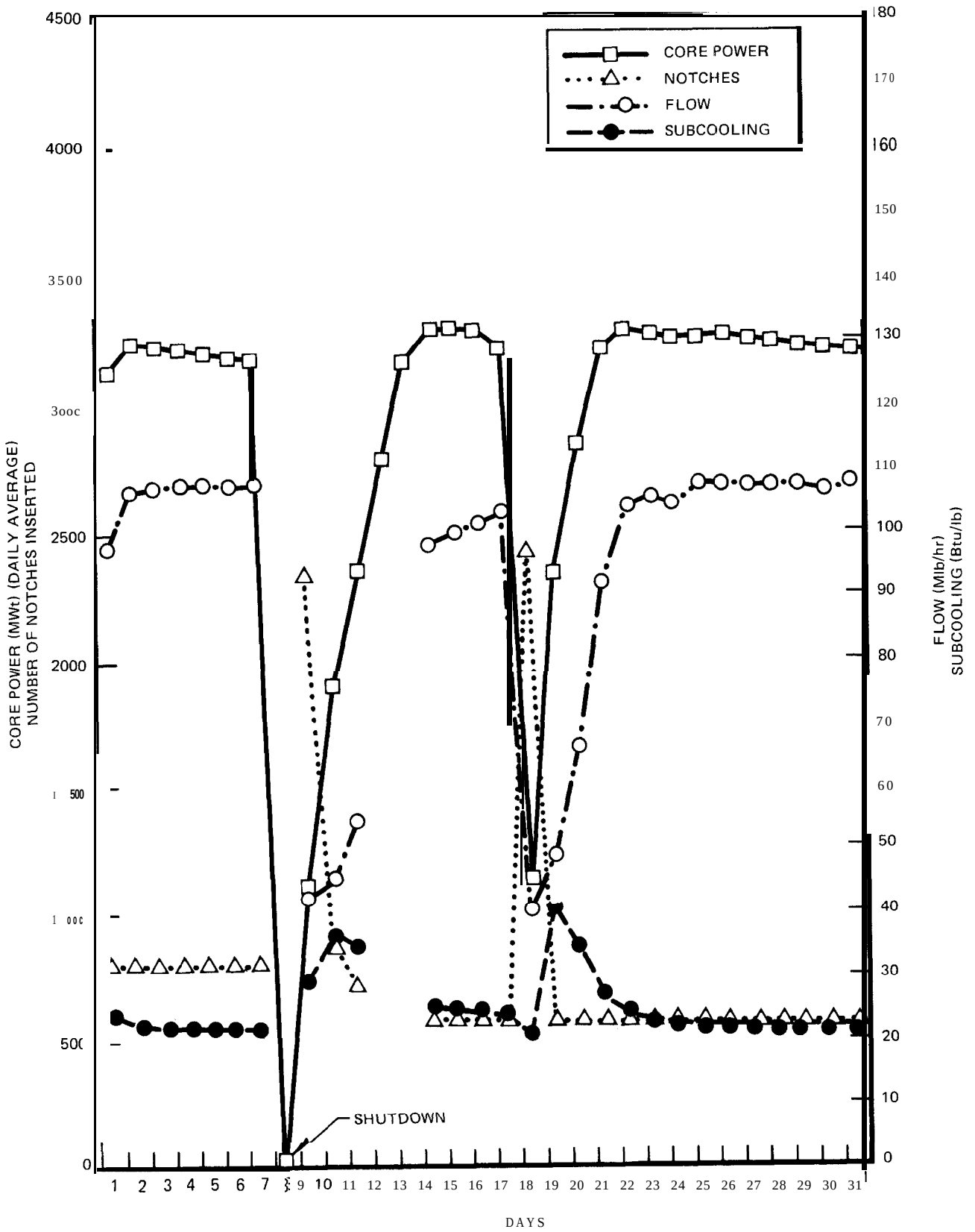


Figure 87. Data Summaries, January 1976

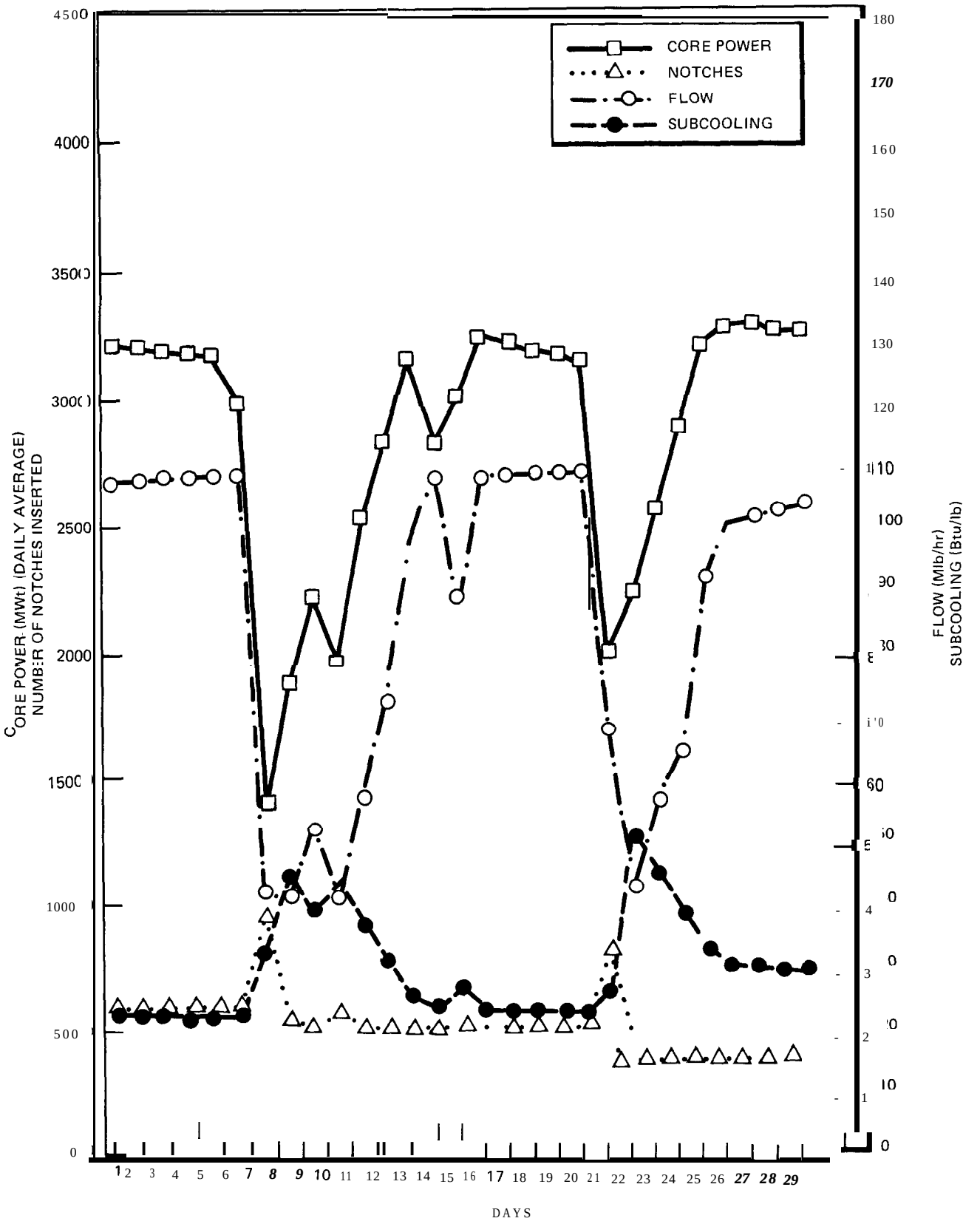


Figure 88. Data Summaries, February 1976

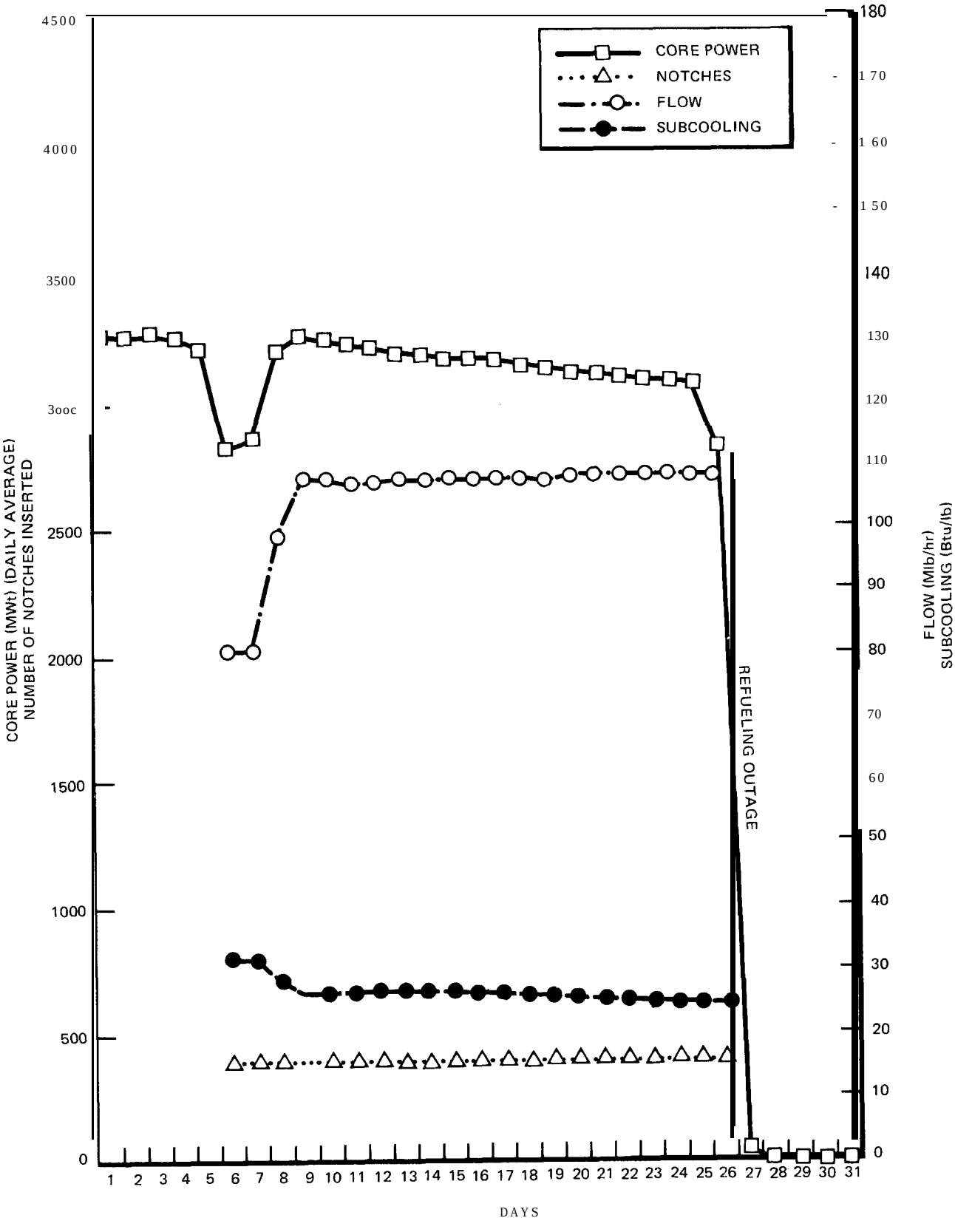


Figure 89. Data Summaries, March 1976

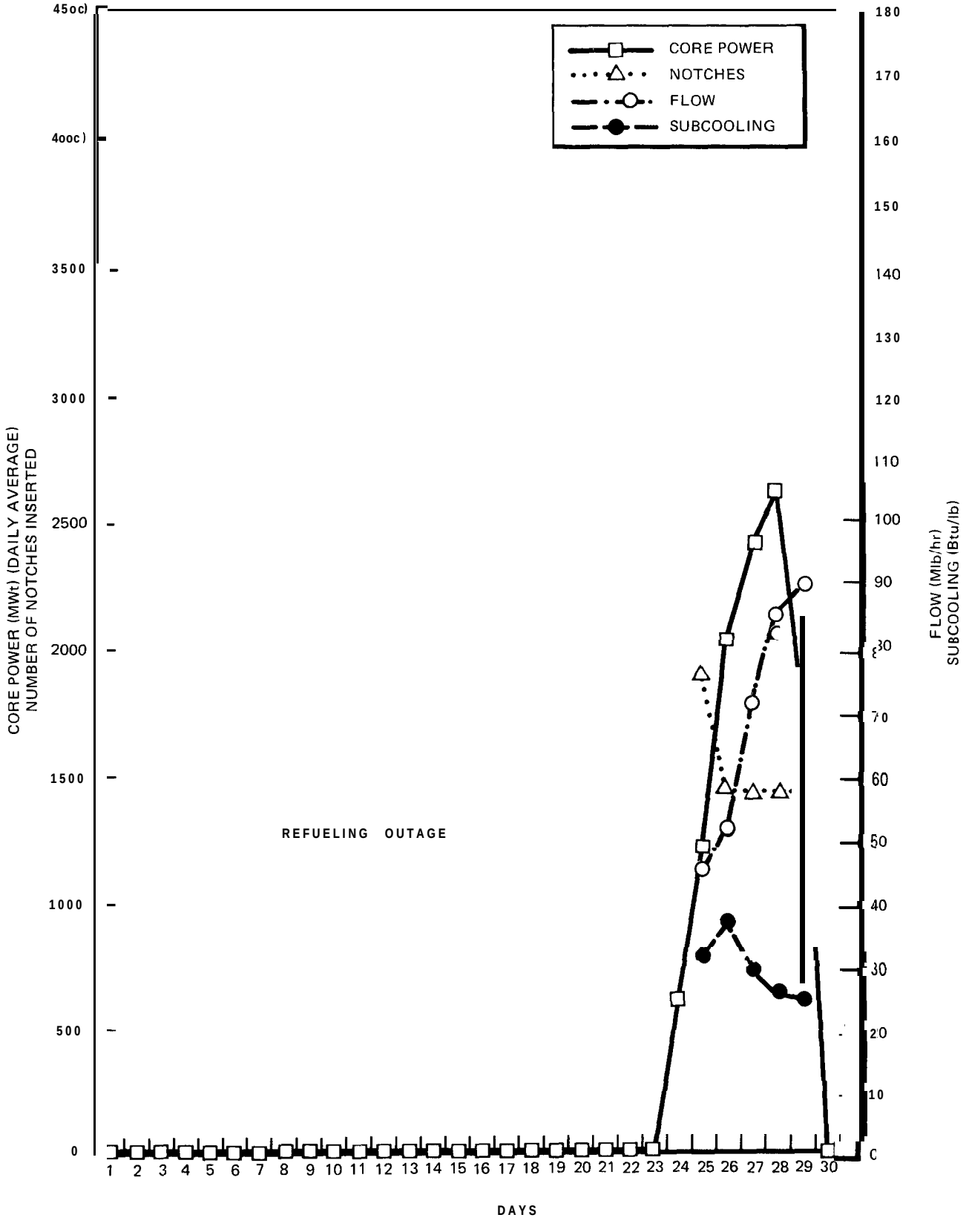


Figure 90. Data Summaries, June 1976

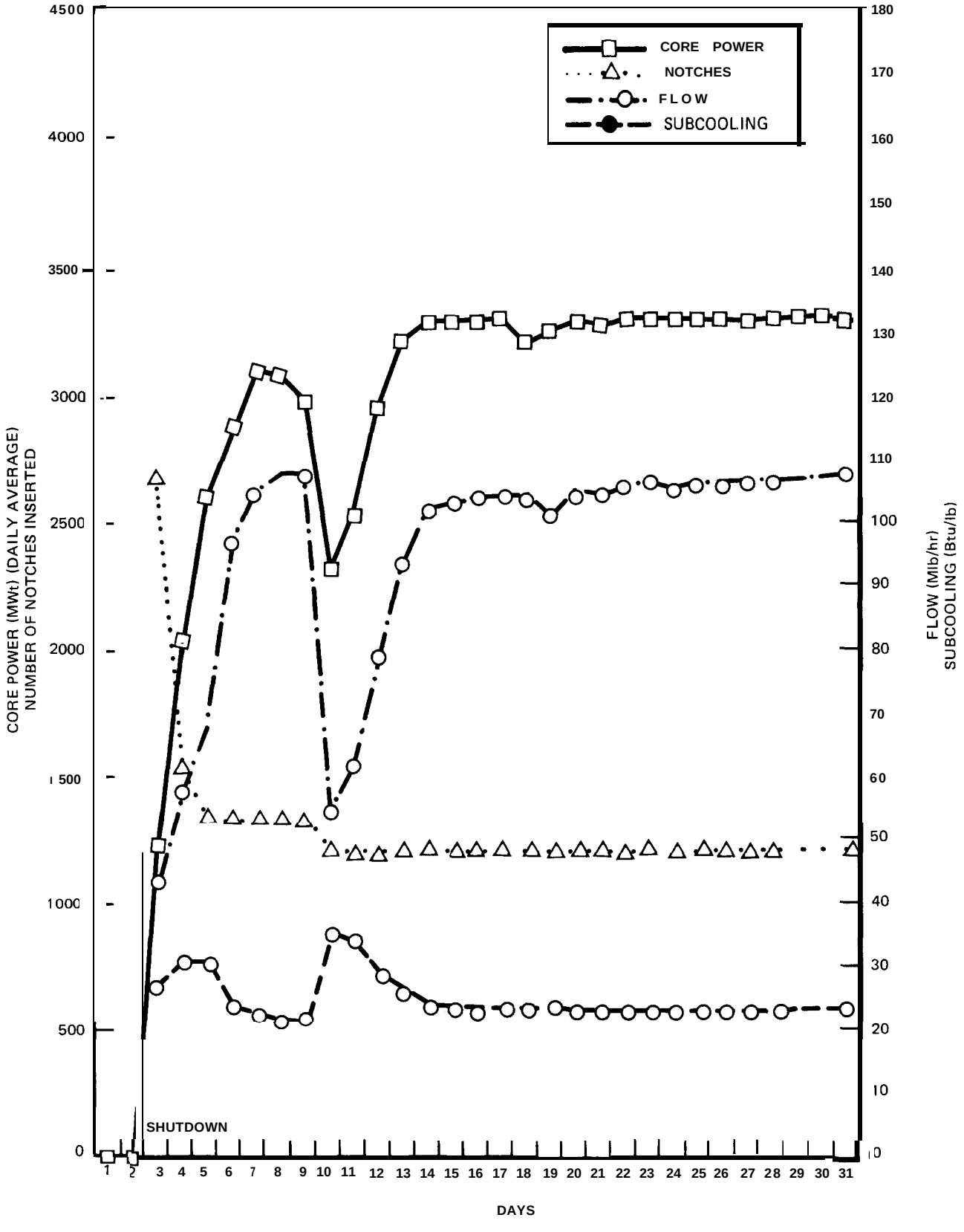


Figure 91. Data Summaries, July 1976

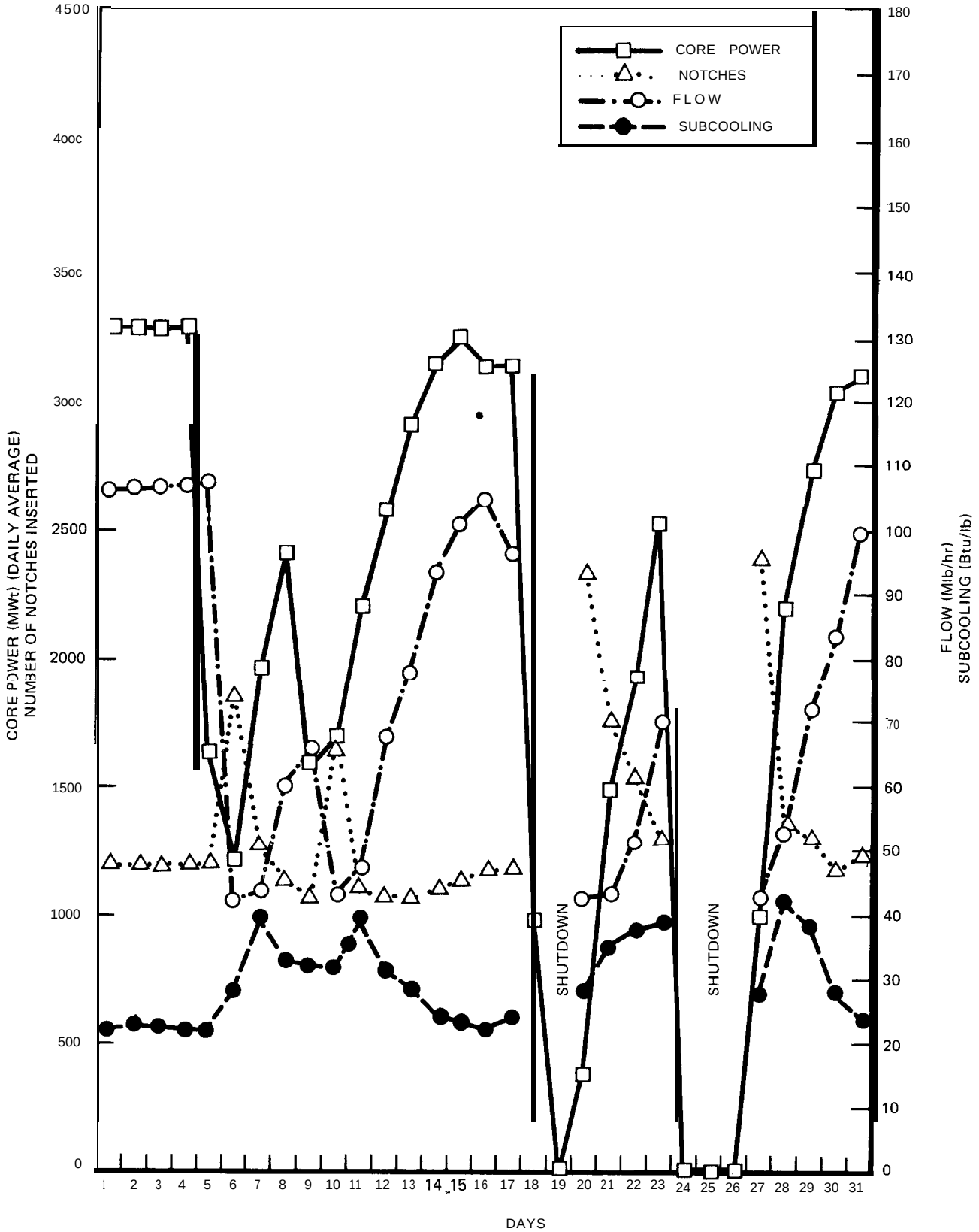


Figure 92. Data Summaries, August 1976

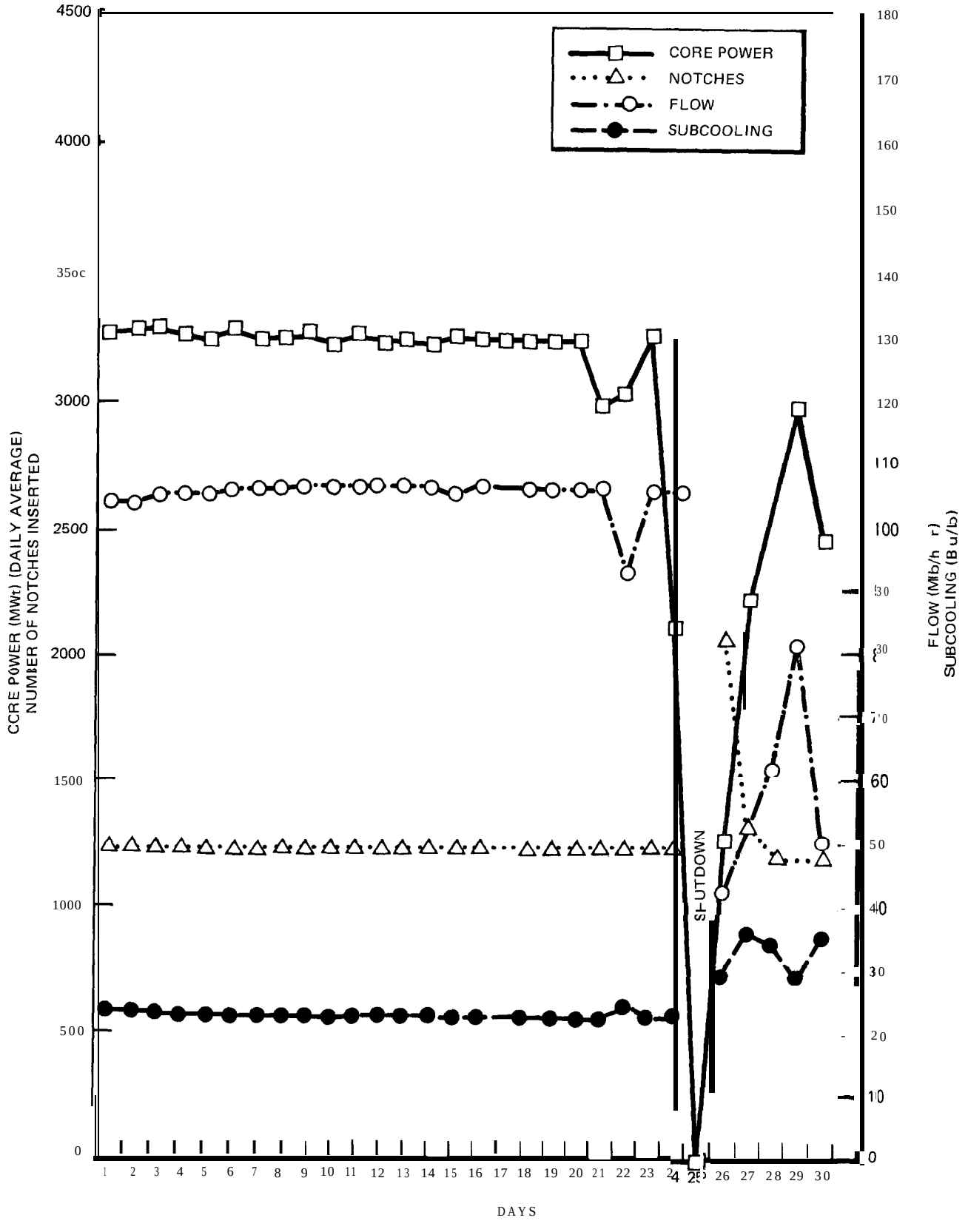


Figure 93. Data Summaries, September 1976

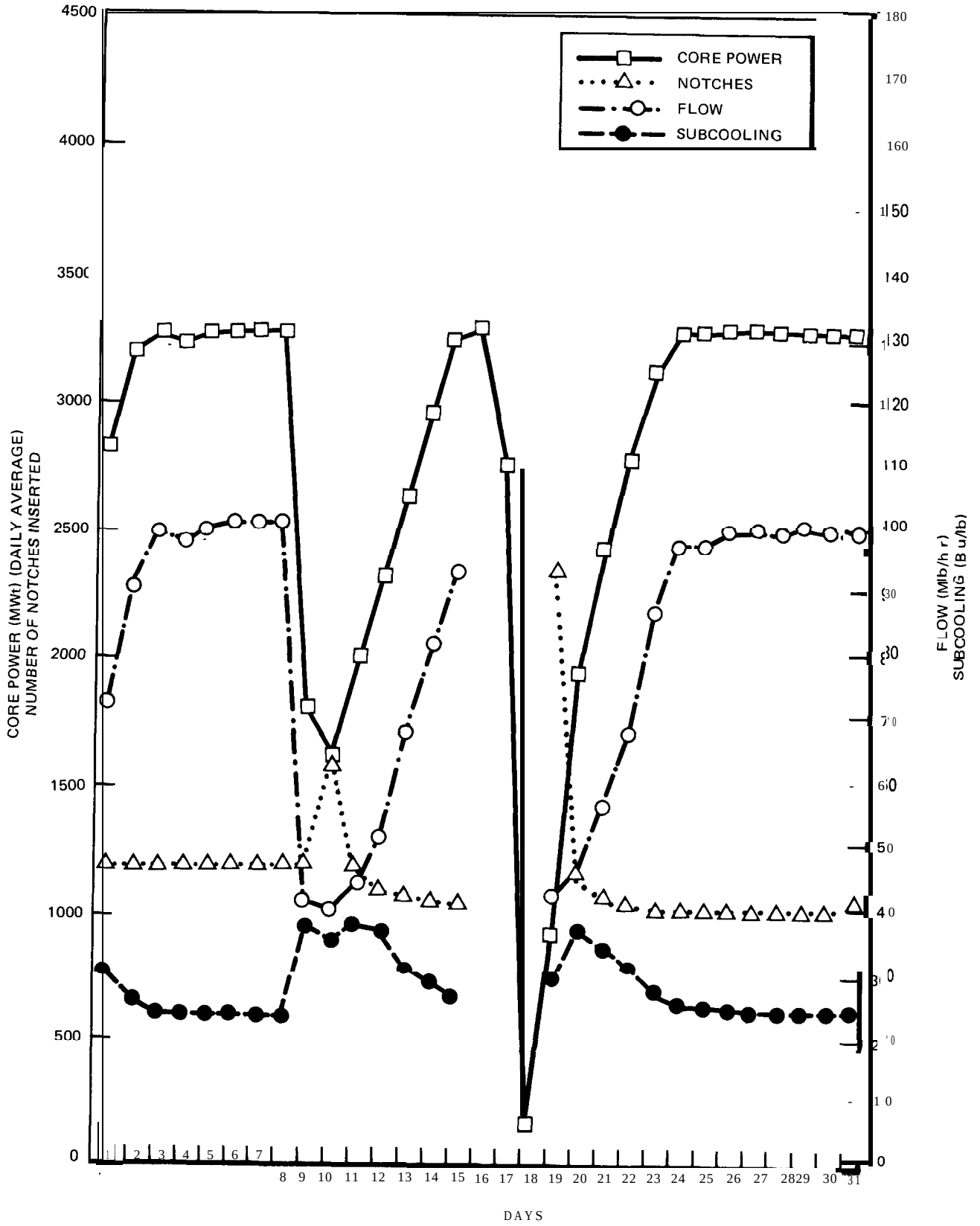


Figure 94. Data Summaries, October 1976

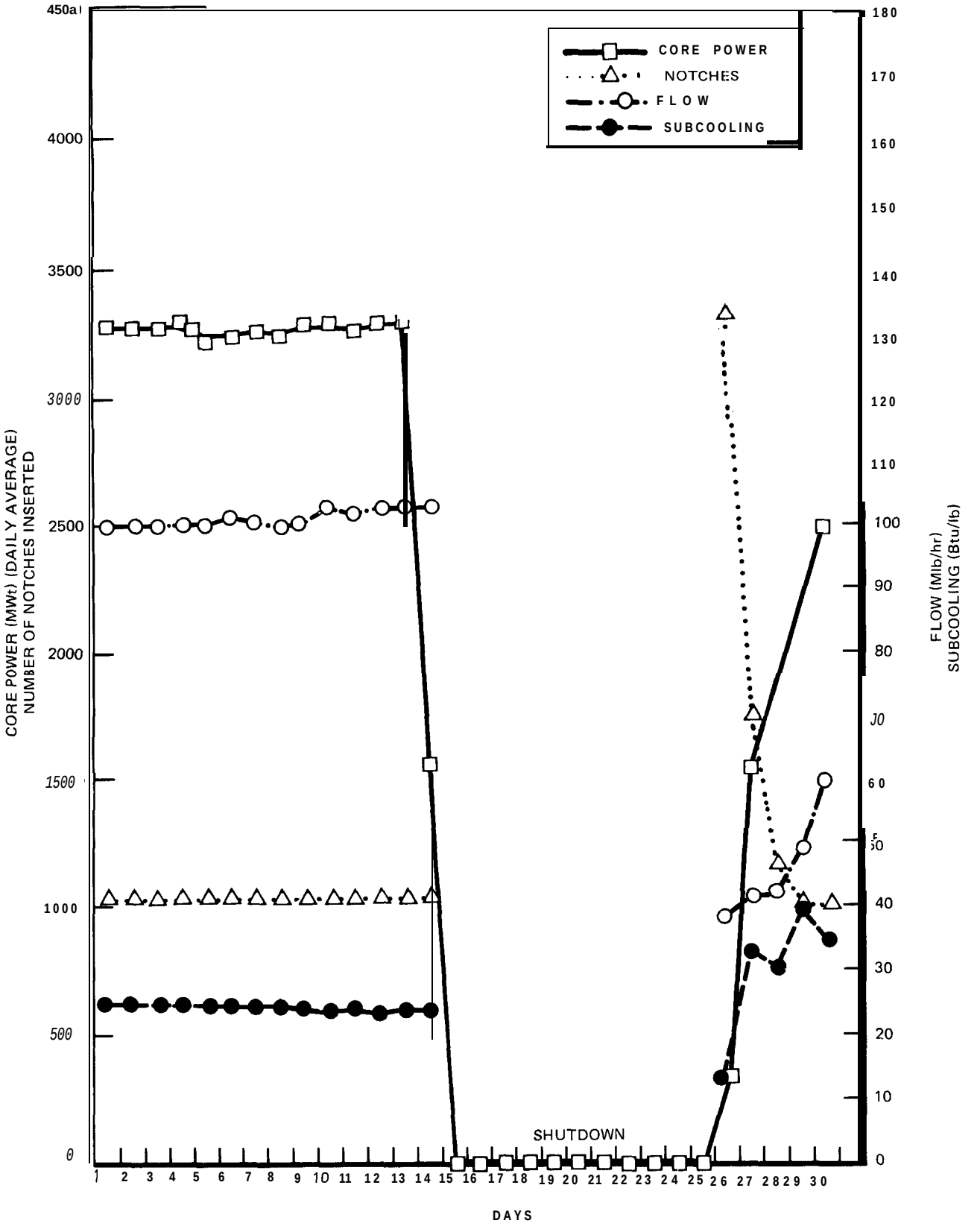


Figure 95. Data Summaries, November 1976

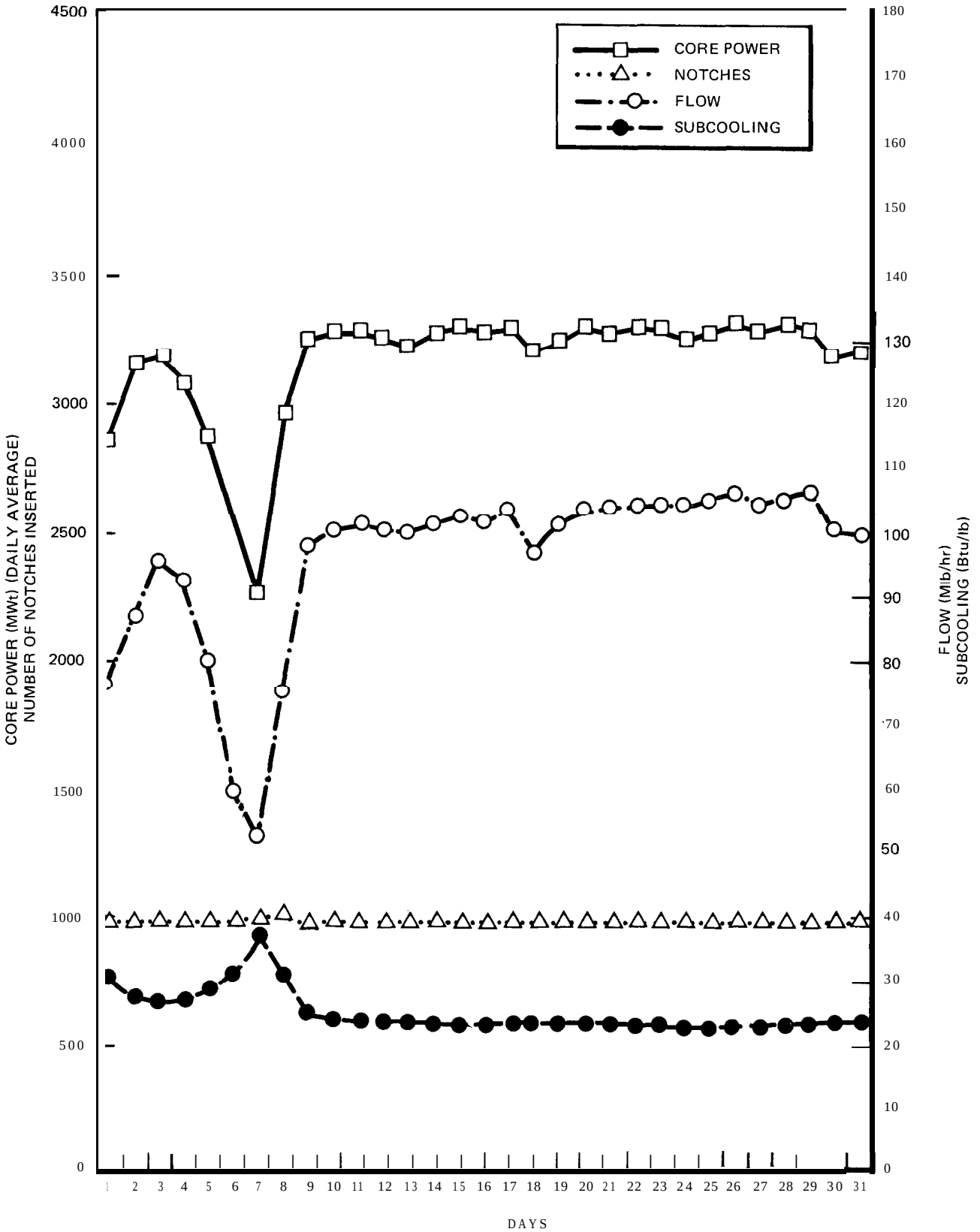


Figure 96. Data Summaries, December 1976

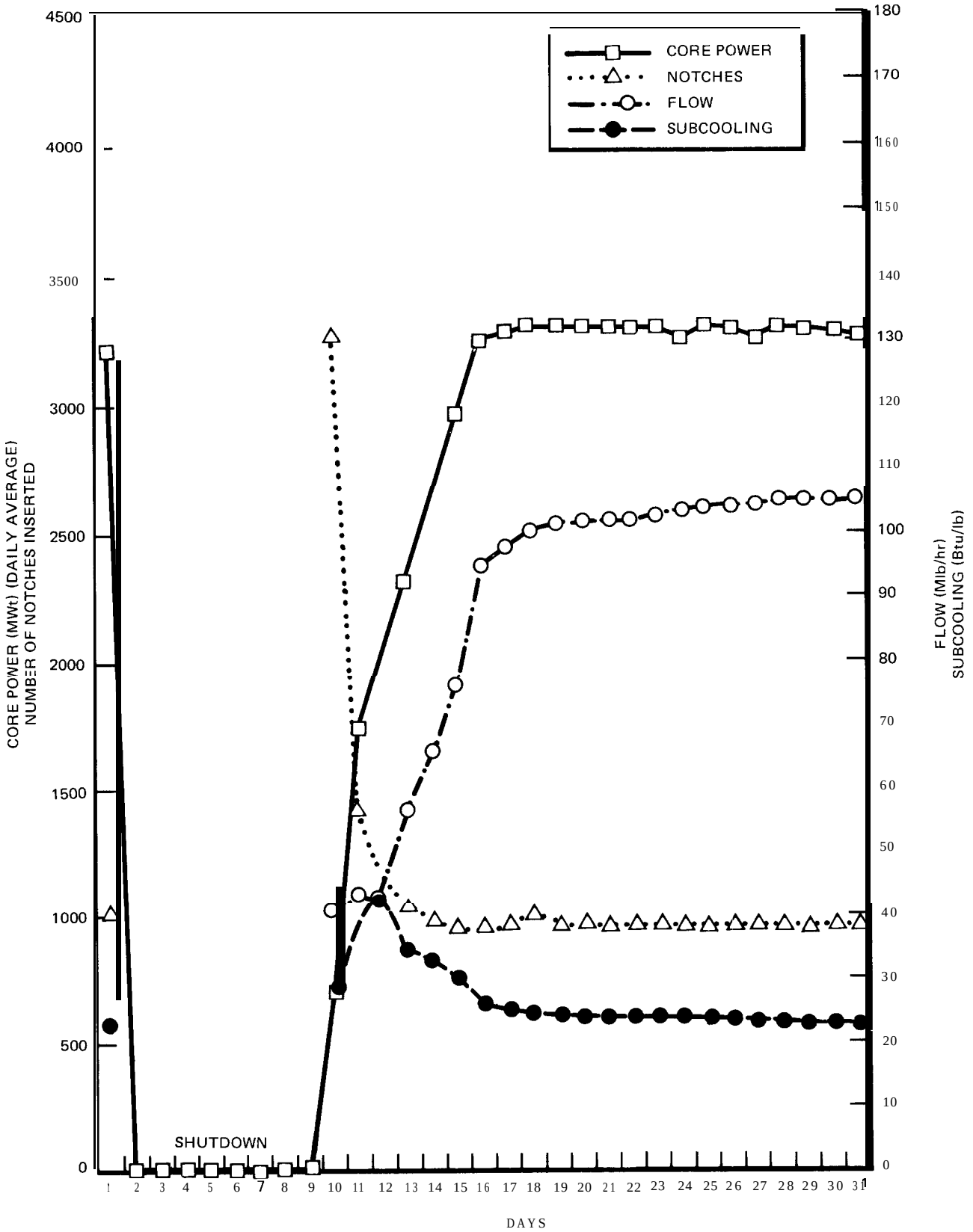


Figure 97. Data Summaries, January 1977

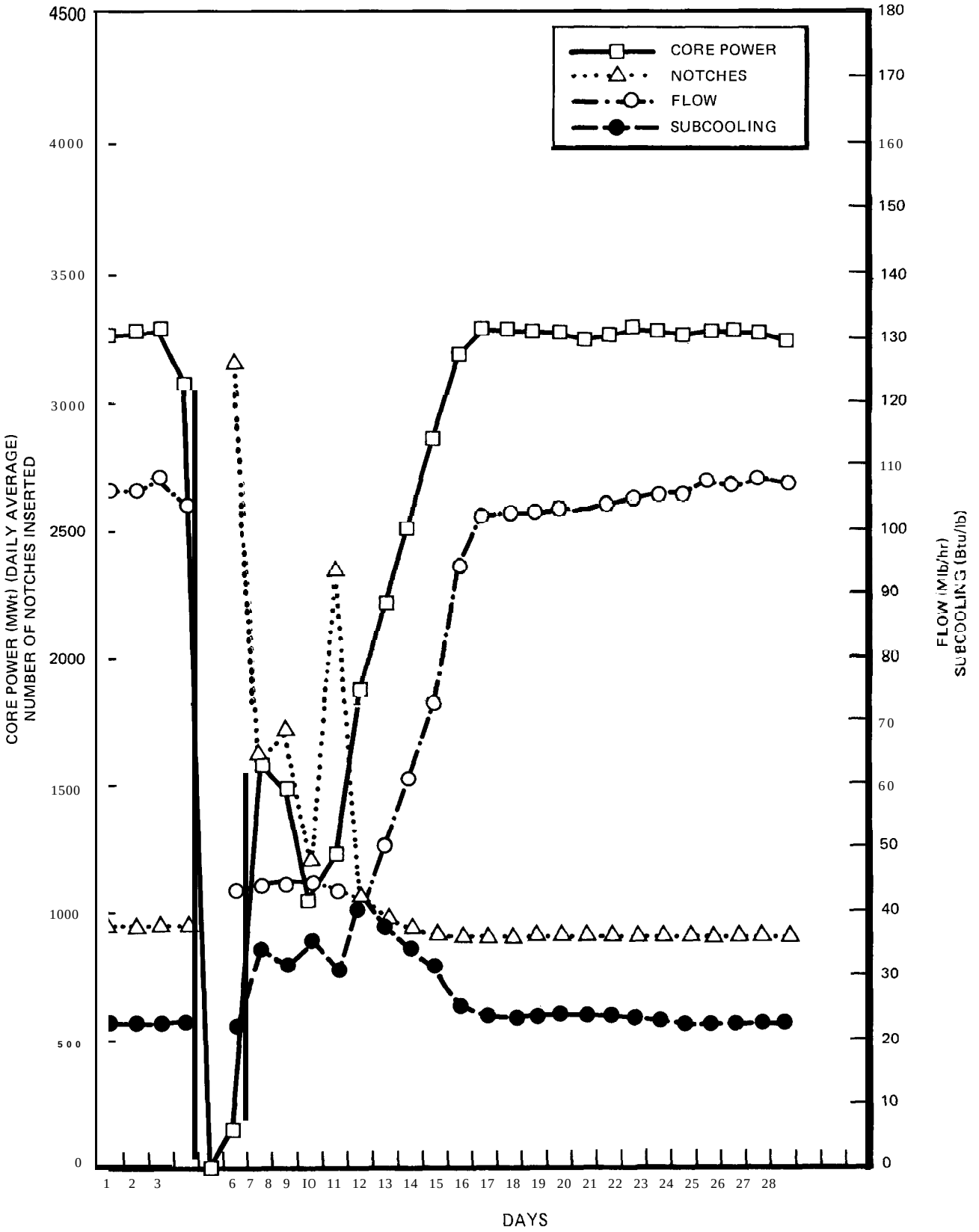


Figure 98. Data Summaries, February 1977

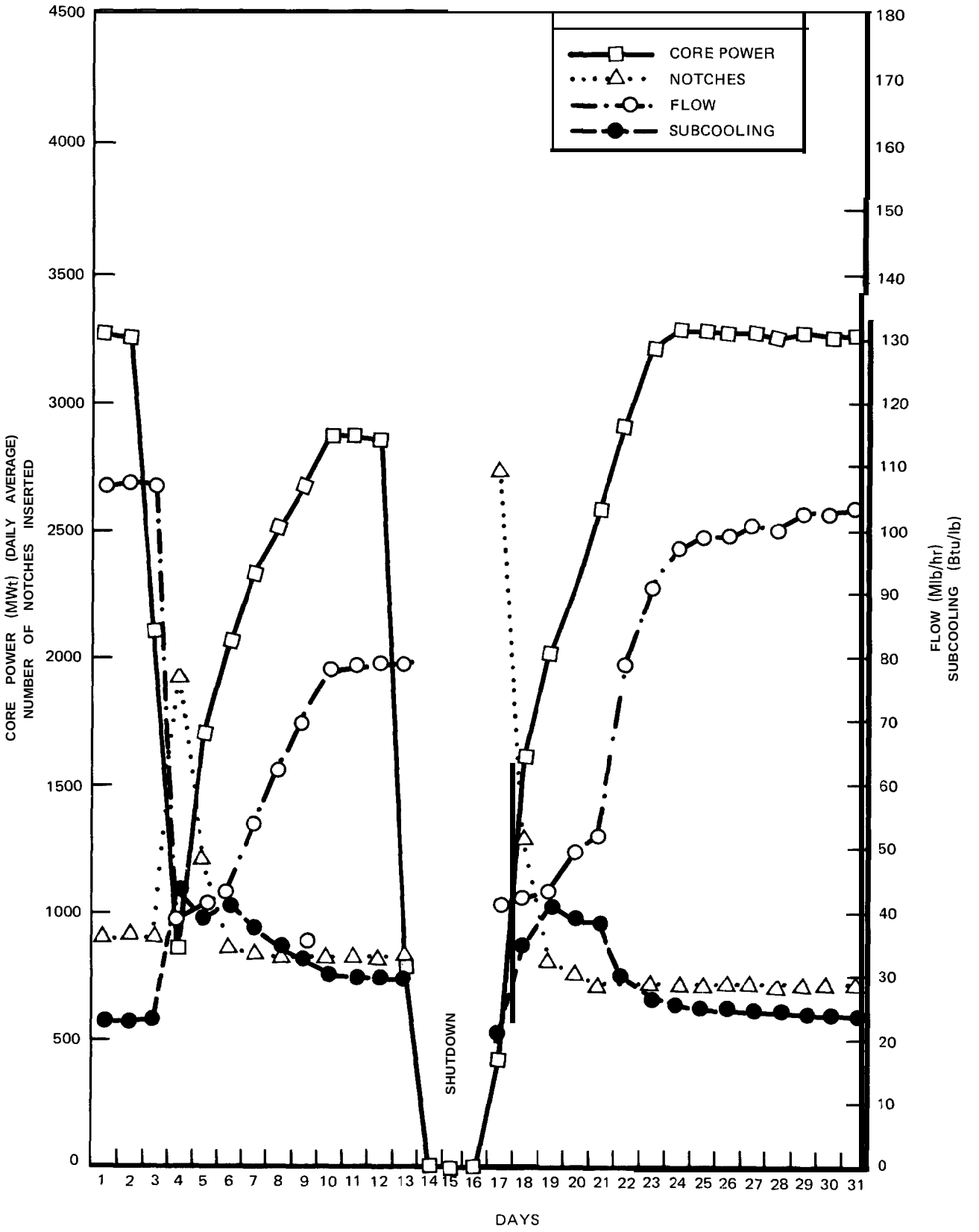


Figure 99. Data Summaries, March 1977

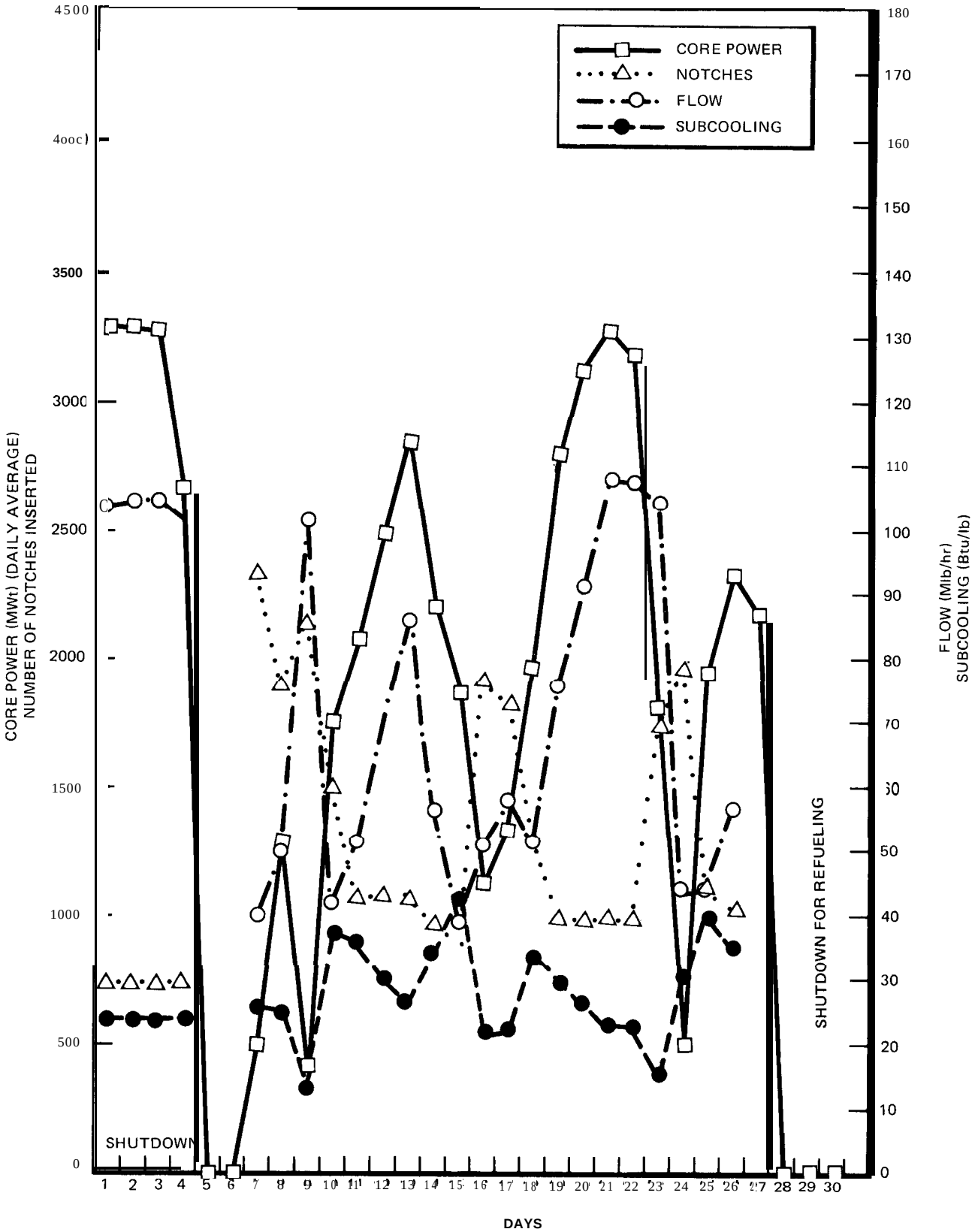


Figure 100. Data Summaries, April 1977

CYCLE 1 DATA

DATASET 01, APRIL 5, 1974

Reactor Conditions

Core Average Exposure, 230 MWd/t
Core Thermal Power, 1835 MWT
Dome Pressure, P, 973 psia
Core Flow, 105.9 Mlb/hr
Inlet Subcooling at P, 14.2 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	8.	48.	38.	48.	8.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	38.	48.	4.	48.	38.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	8.	48.	38.	48.	4.	48.	38.	48.	4.	48.	38.	48.	8.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	4.	48.	38.	48.	10.	48.	38.	48.	4.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	8.	48.	38.	48.	4.	48.	38.	48.	4.	48.	38.	48.	8.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	38.	48.	4.	48.	38.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	8.	48.	38.	48.	8.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	32.0	49.8	57.8	67.6	71.8	72.7	69.4	65.9	59.2	54.4	53.2	55.3
	55.2	54.6	57.5	59.6	55.3	56.0	55.0	50.6	45.4	40.6	27.3	18.8
24 9	27.9	44.0	53.1	63.7	69.0	72.0	71.1	67.2	58.5	55.9	55.4	55.6
	57.6	58.3	63.6	66.6	63.5	63.9	63.0	61.5	57.9	54.2	38.1	26.2
32 9	28.0	43.9	53.4	65.2	74.3	81.3	81.0	79.1	70.3	65.3	64.5	65.2
	66.4	67.3	71.6	74.4	69.3	69.1	69.1	63.0	56.5	51.5	34.9	22.6
40 9	29.2	46.4	55.3	65.4	70.9	72.7	70.8	67.9	59.9	54.5	55.1	55.3
	56.3	56.8	62.1	65.0	59.7	61.7	62.0	58.1	56.3	51.9	35.4	23.8
48 9	24.0	37.2	44.1	53.7	57.7	58.1	57.6	56.4	53.0	50.5	51.3	52.2
	53.4	53.6	52.9	53.6	49.9	49.2	47.1	42.2	36.3	31.5	20.3	12.9
817	36.4	52.9	60.7	70.5	74.5	74.3	72.7	69.1	63.2	59.5	60.1	61.5
	62.2	62.9	66.3	67.3	63.0	63.2	61.2	54.9	49.5	43.1	26.6	17.9
1617	39.3	57.1	67.8	82.6	92.2	95.2	92.9	83.2	68.5	62.3	60.4	58.2
	59.3	63.1	70.1	74.2	70.0	71.4	70.5	64.4	60.7	52.6	33.8	23.2
2417	36.5	56.3	68.3	82.1	90.8	94.9	92.2	82.1	66.0	58.7	56.8	56.4
	56.6	58.9	68.7	71.4	70.7	72.7	72.7	69.6	64.1	58.9	40.0	27.7
3217	38.9	57.1	67.1	79.2	83.0	82.3	76.4	67.7	55.0	49.4	48.0	47.7
	47.8	52.0	59.0	63.1	60.3	63.1	63.6	60.2	56.7	53.1	35.8	24.9
4017	37.5	58.8	71.0	85.5	95.4	99.3	93.4	86.0	72.0	63.4	61.1	59.1
	59.8	63.5	71.0	76.7	72.4	74.3	73.4	67.7	63.7	58.0	38.0	23.4
4817	30.7	49.9	61.6	77.3	87.1	93.0	88.5	82.0	67.5	62.1	60.5	60.6
	60.4	61.8	69.4	73.0	70.1	71.2	68.4	63.5	58.3	52.7	35.3	22.5
5617	17.5	27.1	31.7	37.9	41.3	42.9	43.3	43.3	41.1	39.9	40.1	41.7
	43.1	43.8	43.5	42.2	40.6	40.7	38.0	34.8	30.8	27.1	17.4	11.1
825	32.8	48.2	56.7	67.7	72.4	72.2	71.6	66.7	60.0	56.5	56.4	56.3
	57.9	60.1	64.6	66.1	63.2	64.3	62.9	59.7	56.7	51.2	33.1	22.1
1625	44.2	61.5	72.6	84.9	91.8	91.8	87.5	74.8	62.5	55.9	55.9	55.5
	56.2	62.1	67.9	71.4	70.5	74.2	74.1	67.8	63.8	53.4	33.6	22.2

2425	39.7	61.2	73.0	85.0	90.1	89.6	81.6	72.0	57.2	51.1	49.9	50.0
	51.4	56.5	66.8	73.9	73.1	77.3	79.8	77.4	74.9	70.5	48.7	33.7
3225	40.0	60.9	72.4	87.0	94.4	96.8	89.8	79.4	64.1	56.9	54.6	54.2
	54.4	58.4	68.1	72.8	70.4	73.8	76.4	73.3	69.2	63.7	43.2	28.9
4025	39.5	60.6	71.2	83.6	86.4	85.2	79.4	70.8	56.6	51.1	48.5	48.0
	48.6	53.2	62.6	65.3	64.7	67.9	67.4	64.7	61.4	58.3	39.0	26.3
4825	33.7	52.6	63.3	77.4	85.9	91.2	87.7	80.0	64.2	57.0	55.8	54.7
	55.7	60.2	67.7	70.7	68.0	72.3	70.0	66.4	62.2	56.4	37.5	23.5
5625	16.1	26.1	31.3	39.1	44.1	47.6	48.1	49.0	46.6	46.7	47.9	48.1
	50.1	51.1	51.5	52.1	50.1	51.2	51.3	49.3	47.3	44.1	28.8	17.7
833	35.8	50.4	59.7	72.1	80.6	84.0	84.2	76.9	69.0	64.3	65.3	67.8
	68.0	71.4	74.6	74.8	70.3	70.6	68.5	61.0	56.1	46.8	29.0	18.7
1633	41.9	58.3	68.8	78.6	81.5	77.9	73.9	63.1	51.5	47.1	46.7	47.6
	47.5	54.6	61.0	62.9	61.7	63.7	64.1	60.4	56.9	47.5	30.8	21.6
2433	41.6	60.4	70.6	84.1	91.1	91.6	87.0	75.3	62.1	55.3	53.7	53.4
	52.6	60.0	67.9	73.3	71.9	76.3	77.5	73.6	70.1	60.4	39.1	26.9
3233	45.5	64.2	75.0	85.7	89.1	85.6	78.9	67.4	54.5	49.1	48.1	47.6
	48.1	53.4	62.1	66.9	67.0	72.8	80.1	77.5	75.9	65.0	40.6	28.7
4033	35.6	56.2	68.4	83.2	90.9	92.3	89.1	80.1	65.4	58.2	54.9	53.4
	53.8	55.8	65.2	72.2	70.7	72.1	74.5	70.4	67.2	62.1	42.6	28.3
4833	34.0	52.2	62.4	73.5	79.0	79.5	75.0	67.2	55.0	49.9	49.8	49.7
	50.6	54.5	60.9	64.1	62.6	63.9	63.4	59.7	56.8	52.0	35.2	21.9
5633	19.5	28.3	33.9	43.4	52.7	58.6	62.5	63.9	60.6	59.4	61.5	64.8
	63.8	64.4	64.2	63.4	58.1	57.1	54.9	49.0	43.4	36.7	22.4	15.2
841	35.5	50.8	59.1	69.1	73.6	74.5	72.3	66.6	59.3	56.3	56.0	57.0
	57.4	60.4	65.3	66.1	63.0	63.2	63.4	60.7	57.3	49.3	30.3	20.7
1641	35.9	56.1	68.2	84.3	93.4	99.4	94.5	88.0	71.4	64.2	61.7	61.6
	61.2	64.4	73.1	76.3	72.7	74.9	75.0	70.0	64.1	58.1	38.2	25.5
2441	39.3	57.1	67.7	77.2	81.6	79.7	74.8	65.0	53.4	48.1	46.9	45.7
	46.5	51.6	59.2	63.1	60.0	63.3	62.7	59.7	57.1	50.5	34.6	23.8
3241	40.9	59.9	71.4	84.0	91.5	91.5	86.7	75.9	62.8	55.5	53.8	53.2
	54.7	61.6	69.1	73.3	71.5	75.9	75.3	71.4	66.8	59.0	38.6	26.1
4041	39.5	60.9	72.0	84.7	90.1	88.8	82.4	73.4	59.3	53.7	52.3	52.0
	51.6	58.8	65.5	71.0	67.7	70.2	69.0	65.6	62.2	57.6	38.5	26.3
4841	37.5	55.1	65.9	81.9	88.9	91.3	85.9	77.7	64.9	59.9	58.3	58.0
	57.6	63.5	69.1	72.4	69.3	71.2	69.9	63.2	59.6	52.9	33.4	23.7
5641	20.9	29.6	33.9	40.1	43.7	44.8	46.0	45.7	44.5	43.4	44.2	45.6
	46.2	47.8	46.9	46.6	44.1	44.3	44.0	41.7	40.8	35.2	22.0	15.3
849	23.7	36.8	43.8	51.9	56.7	59.1	58.2	57.6	53.1	49.0	48.8	48.5
	50.3	50.1	50.3	51.0	48.2	48.3	46.0	39.8	35.2	30.3	19.5	12.4
1649	34.7	52.6	63.7	78.3	88.1	91.9	89.8	80.3	67.1	61.2	60.5	61.5
	60.7	64.6	72.6	74.1	70.7	72.8	69.9	63.7	57.8	50.9	31.5	20.1
2449	33.4	51.2	61.5	75.1	83.4	87.6	83.7	75.0	61.3	55.2	54.5	54.7
	54.3	59.5	66.6	70.7	68.9	69.8	70.4	64.7	61.2	54.7	35.1	23.4
3249	37.2	54.9	63.9	75.7	80.0	80.1	75.2	67.0	55.8	52.4	51.2	50.9
	50.7	58.1	63.7	65.5	61.4	65.8	63.7	60.2	57.5	52.6	33.9	24.8
4049	34.7	53.5	65.6	78.9	88.4	94.0	90.4	81.7	67.5	61.1	60.5	60.7
	61.6	65.1	73.8	78.8	77.4	79.7	79.2	75.7	71.4	63.1	41.6	27.3
4849	28.9	44.1	53.4	65.9	75.1	80.5	80.1	75.3	68.2	62.5	62.3	62.6
	63.6	64.4	66.0	68.0	62.9	63.6	60.4	53.6	48.8	42.7	26.2	17.9
1657	17.2	26.1	31.0	37.0	40.0	41.4	41.4	41.7	39.7	38.9	39.8	41.5
	42.1	42.6	42.4	42.8	40.5	40.3	39.1	34.8	31.2	26.4	16.5	10.5
2457	16.9	25.5	30.6	37.1	41.3	44.8	45.8	47.1	45.1	44.7	46.5	47.6
	49.0	50.4	49.6	50.6	46.8	47.2	46.2	43.4	41.3	37.4	23.6	15.9
3257	18.2	27.8	34.0	43.1	52.4	59.2	63.4	65.2	62.7	60.4	61.3	63.8
	65.5	65.1	63.6	63.5	59.1	59.5	55.8	49.3	43.6	37.2	23.1	14.7
4057	18.5	27.9	32.7	39.2	42.9	44.6	45.2	45.5	44.4	43.0	44.9	45.8
	47.3	48.5	48.2	47.4	45.1	46.1	45.5	43.8	41.9	36.7	23.4	14.9

CYCLE 1 DATA

DATASET 02, APRIL 25, 1974

Reactor Conditions

Core Average Exposure, 390 MWd/t
Core Thermal Power, 2603 MWT
Dome Pressure, P, 991 psia
Core Flow, 107.9 Mlb/hr
Inlet Subcooling at P, 18.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	38.	48.	34.	48.	38.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	34.	48.	14.	48.	34.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	34.	48.	12.	48.	38.	48.	12.	48.	34.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	34.	48.	14.	48.	38.	48.	14.	48.	38.	48.	14.	48.	34.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	34.	48.	12.	48.	38.	48.	12.	48.	34.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	38.	48.	34.	48.	14.	48.	34.	48.	38.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	38.	48.	34.	48.	38.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	33.9	47.2	55.1	64.2	66.2	66.6	69.2	64.3	58.2	55.1	55.9	58.6
	56.4	58.4	58.2	57.6	52.8	53.0	49.5	42.9	38.5	31.4	19.3	13.0
24 9	32.5	44.3	53.7	64.9	73.7	77.1	81.6	76.4	71.7	70.7	71.3	72.3
	69.0	75.3	77.2	75.2	71.9	71.4	66.0	57.4	51.3	41.2	25.8	17.9
32 9	29.8	41.7	49.2	59.2	65.8	68.4	76.3	76.5	72.8	70.1	73.4	74.6
	75.2	77.1	80.8	80.4	76.0	75.9	72.2	61.8	54.9	44.7	28.2	18.2
40 9	34.7	47.4	56.7	68.7	77.0	81.9	83.3	78.1	73.3	69.9	71.2	73.0
	71.9	75.9	75.5	73.7	69.5	68.3	63.9	54.8	49.2	38.0	22.9	16.2
48 9	20.9	33.2	39.2	48.0	52.4	55.5	55.1	55.6	52.1	48.6	50.4	50.1
	51.1	50.0	49.3	50.4	45.0	46.1	42.5	37.6	32.2	27.8	18.0	11.6
817	31.8	46.1	53.9	64.2	69.5	70.8	69.9	68.6	63.5	60.7	62.7	64.2
	63.5	65.0	65.6	66.4	61.2	60.8	58.3	50.2	43.8	38.1	23.6	15.9
1617	32.2	47.4	57.4	69.5	77.9	80.8	78.2	72.3	63.2	59.7	58.5	58.8
	58.5	63.2	69.6	71.4	69.2	70.4	69.6	62.5	57.6	50.1	31.4	20.8
2417	35.8	50.3	59.2	67.7	70.5	71.1	74.1	66.8	58.6	55.7	55.7	55.8
	58.0	64.6	71.6	75.7	76.5	79.3	79.5	72.0	68.3	56.3	34.8	24.4
3217	37.9	51.4	58.9	67.2	69.6	67.1	65.8	56.3	49.3	47.2	47.9	48.5
	50.7	59.5	66.4	70.1	76.0	81.3	80.5	74.4	69.3	55.5	34.0	25.1
4017	31.0	48.2	57.9	68.7	74.5	78.3	78.3	74.6	65.4	60.1	59.8	61.7
	61.6	66.0	73.8	77.3	74.6	77.2	77.1	73.4	66.3	59.6	37.6	23.8
4817	26.1	43.0	53.6	67.5	77.0	81.9	80.0	76.9	65.9	61.7	61.1	61.0
	61.9	61.6	69.6	72.6	68.6	67.8	66.3	60.4	53.2	48.5	31.8	19.7
5617	15.4	24.2	29.5	36.6	40.9	44.4	45.8	47.3	45.2	44.5	46.0	47.6
	47.3	46.2	45.6	45.3	41.3	41.0	37.9	32.8	28.2	23.8	15.0	9.7
825	28.1	42.2	50.0	62.0	72.7	81.4	84.3	81.5	75.3	72.6	73.6	74.1
	76.1	77.4	79.9	81.9	74.2	74.9	71.6	63.0	54.8	47.4	30.6	20.1
1625	36.3	50.6	59.1	67.8	70.8	70.4	73.1	66.0	57.5	54.7	55.4	56.5
	57.7	66.2	74.0	77.6	78.6	82.7	82.8	73.7	70.1	56.4	35.3	24.2

2425	40.1	55.2	65.1	74.7	76.6	74.2	68.8	58.2	50.3	46.0	46.9	49.8
	52.4	63.0	71.4	79.4	84.4	95.2	99.4	94.5	89.0	73.0	44.8	31.1
3225	40.6	55.9	66.5	77.5	83.3	80.5	77.7	64.4	54.8	50.1	50.5	51.0
	53.0	63.3	72.1	76.7	78.5	82.8	84.9	78.4	73.5	60.7	37.7	27.0
4025	33.0	49.6	58.4	69.5	72.5	71.7	67.8	60.6	50.2	46.2	46.5	46.9
	48.2	53.8	63.2	69.8	72.1	79.8	84.9	81.3	76.8	69.6	44.0	27.5
4825	28.1	43.1	52.1	64.3	70.2	73.2	75.0	74.2	63.5	59.7	60.4	60.3
	61.1	65.5	72.6	77.7	76.0	75.7	75.2	70.2	63.7	57.3	37.2	23.8
5625	14.2	23.1	28.8	38.3	47.7	57.3	63.3	69.2	69.1	66.2	66.7	66.2
	67.5	66.3	67.8	67.9	61.9	61.4	58.4	52.3	44.6	39.1	25.0	16.1
833	29.5	42.0	49.9	60.7	66.7	70.9	76.5	77.0	74.4	71.7	73.4	75.1
	73.8	79.1	81.3	81.2	75.4	75.7	71.9	62.1	55.9	46.2	28.6	19.2
1633	33.9	46.6	54.9	64.1	67.3	66.7	64.9	55.6	48.1	44.9	45.4	47.8
	48.4	57.9	65.5	70.8	74.2	80.7	81.2	76.6	70.6	56.2	34.3	23.3
2433	34.6	50.5	60.3	71.9	78.8	79.8	74.7	65.7	55.0	49.7	49.7	50.6
	52.2	60.7	69.7	76.0	77.0	83.3	86.4	81.3	75.4	64.7	41.2	26.7
3233	37.2	53.3	62.9	72.8	77.0	74.3	69.3	59.4	49.8	44.4	44.7	44.8
	47.0	55.2	63.6	73.0	76.1	85.8	88.6	83.4	78.3	67.9	42.7	29.8
4033	29.8	46.9	56.8	69.3	75.7	78.9	75.4	70.7	58.7	52.5	50.2	51.6
	53.7	56.2	67.4	75.7	75.8	81.1	83.5	80.4	76.2	68.2	46.6	29.1
4833	28.2	43.5	51.8	60.9	66.3	68.8	68.4	63.2	55.0	52.4	53.2	54.3
	55.2	59.0	66.9	73.7	75.8	80.5	80.7	75.4	69.1	61.3	40.3	24.7
5633	16.7	24.5	30.0	38.3	44.2	50.6	59.1	65.4	67.7	67.9	69.5	72.7
	71.4	70.6	69.9	68.1	60.4	61.2	56.8	48.4	41.1	34.4	21.0	14.7
841	30.9	44.5	53.4	66.1	75.8	80.3	82.2	78.2	72.5	68.3	70.8	71.4
	71.0	74.0	76.6	76.7	71.3	70.5	66.0	57.4	51.3	42.2	25.5	16.6
1641	29.3	45.6	55.6	67.2	72.1	75.7	76.8	75.7	66.3	62.0	61.0	61.4
	61.9	67.0	73.9	78.9	75.2	77.5	78.2	73.1	67.9	60.1	38.2	24.9
2441	32.0	47.1	56.0	65.0	67.6	67.7	64.2	56.9	48.0	44.6	44.9	45.1
	46.0	52.4	61.0	65.9	66.7	74.1	79.4	75.4	71.2	59.6	39.2	27.0
3241	34.1	49.3	58.3	70.4	75.6	77.7	75.0	66.1	56.1	50.9	50.3	52.1
	53.4	62.0	70.7	77.4	78.7	84.3	85.8	79.2	73.7	63.7	41.2	27.1
4041	32.9	49.8	58.9	68.7	72.3	73.1	70.3	63.3	55.1	50.9	50.9	51.3
	52.3	58.6	67.9	73.4	74.4	80.8	84.5	81.1	74.9	66.0	42.7	29.1
4841	31.7	46.7	56.2	67.4	74.4	77.8	79.1	73.4	65.3	61.3	62.0	64.1
	62.6	67.5	73.6	73.6	70.2	71.1	70.6	63.5	57.1	49.6	32.0	21.5
5641	19.0	28.2	34.1	43.0	52.1	59.9	65.1	66.0	62.8	59.0	59.4	59.7
	60.3	59.3	56.9	56.9	51.7	50.2	45.5	39.4	35.1	29.7	17.8	12.4
849	20.7	31.9	38.3	46.7	51.6	53.9	54.7	52.9	49.4	47.2	46.4	48.1
	48.7	46.9	47.9	48.0	45.2	44.5	41.6	36.2	31.4	26.9	17.0	10.8
1649	28.9	45.0	55.3	68.0	76.7	81.5	78.7	74.1	64.4	60.6	61.2	62.5
	62.9	66.0	72.7	74.9	68.5	69.9	68.4	61.4	54.9	46.3	29.1	18.9
2449	28.2	43.5	51.6	62.2	67.6	71.4	72.8	71.1	61.7	59.1	60.0	60.1
	60.7	66.3	73.9	78.3	74.3	76.2	77.2	70.0	62.6	54.6	34.6	23.0
3249	31.3	45.3	53.2	63.0	67.5	70.0	68.9	64.1	56.0	54.5	55.7	56.7
	56.4	61.4	69.5	75.0	74.7	81.6	80.5	74.0	68.6	60.9	38.1	26.6
4049	29.6	46.2	57.2	69.0	76.9	80.5	82.6	79.8	70.1	66.8	67.2	66.8
	68.0	72.1	81.5	86.4	83.3	82.7	80.5	75.6	68.3	59.4	38.5	25.2
4849	24.8	38.1	46.5	59.3	68.3	72.3	73.1	71.7	64.9	61.8	62.0	62.2
	60.2	62.0	63.3	64.6	59.1	57.9	55.9	49.2	43.2	37.5	23.8	16.2
1657	15.5	23.7	28.4	35.4	40.4	43.4	44.6	46.4	45.5	45.0	45.8	46.1
	46.1	44.8	45.3	46.1	41.8	41.5	38.9	33.4	28.4	24.1	14.8	9.4
2457	15.3	23.6	28.8	37.7	47.3	56.5	63.0	66.7	65.2	63.1	65.9	67.4
	66.2	65.3	65.8	63.8	57.8	56.6	52.6	45.3	38.2	32.4	19.9	12.5
3257	16.0	24.7	30.1	38.7	45.5	51.8	60.5	66.8	68.5	68.0	70.5	73.5
	73.1	73.3	71.2	70.5	62.7	62.4	58.1	48.6	42.4	34.9	21.1	13.6
4057	17.5	26.6	32.3	42.1	52.2	61.2	65.9	69.2	65.8	63.5	64.3	65.0
	63.5	62.8	63.4	62.5	55.8	55.6	52.2	44.3	38.5	31.4	19.5	12.1

CYCLE 1 DATA

DATASET 03, MAY 12, 1974

Reactor Conditions

Core Average Exposure, 648 MWd/t
Core Thermal Power, 2513 MWT
Dome Pressure, P, 1007 psia
Core Flow, 72.1 Mlb/hr
Inlet Subcooling at P, 28.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	40	48	40	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	38	48	32	48	32	48	38	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	38	48	14	48	40	48	40	48	14	48	38	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	30	48	38	48	16	48	16	48	38	48	30	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	38	48	14	48	40	48	40	48	14	48	38	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	38	48	32	48	32	48	38	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	40	48	40	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,
No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 04, MAY 26, 1974

Reactor Conditions

Core Average Exposure, 741 MWd/t
Core Thermal Power, 3164 MWT
Dome Pressure, P, 1009 psia
Core Flow, 107.7 Mlb/hr
Inlet Subcooling at P, 22.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	40.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	38.	48.	38.	48.	38.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	30.	48.	38.	48.	14.	48.	38.	48.	14.	48.	38.	48.	30.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	38.	48.	38.	48.	16.	48.	38.	48.	38.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	30.	48.	38.	48.	14.	48.	38.	48.	14.	48.	38.	48.	30.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	38.	48.	38.	48.	38.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	40.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	38.6	53.0	61.3	69.4	70.3	68.8	66.9	63.1	58.5	53.4	54.7	54.4
	52.9	53.9	54.5	53.0	48.7	47.8	44.4	38.8	33.0	27.7	17.0	11.4
24 9	39.5	53.2	63.4	73.8	74.4	75.3	76.4	70.7	69.6	67.9	72.9	76.8
	73.4	74.0	74.6	71.7	67.5	65.7	59.9	50.6	44.1	34.3	21.4	15.7
32 9	37.5	54.7	67.2	84.0	92.9	92.9	90.9	85.4	77.5	74.1	75.5	74.8
	74.1	74.2	77.4	76.2	69.4	67.6	63.5	54.4	46.7	38.2	24.2	15.5
40 9	39.8	53.8	63.7	72.6	75.2	72.4	74.0	70.9	69.6	69.2	71.9	72.0
	70.6	74.4	74.6	71.3	65.4	63.1	59.1	50.1	43.4	33.3	20.0	14.5
48 9	24.2	38.2	46.3	56.7	59.8	58.8	57.2	56.1	51.7	48.3	47.6	49.0
	47.9	46.6	46.9	46.5	42.4	41.0	38.5	33.2	28.3	24.3	15.5	9.7
817	36.1	52.2	60.4	72.1	74.6	73.5	70.6	67.8	62.5	58.2	60.7	62.7
	61.0	61.2	61.8	61.8	55.6	54.9	51.7	44.9	38.4	32.7	19.8	14.1
1617	40.5	60.8	72.7	89.4	97.6	95.5	89.3	81.9	68.2	63.0	60.2	58.2
	55.8	59.7	64.9	67.4	62.0	62.5	61.0	54.5	49.1	42.6	26.8	18.4
2417	46.1	65.5	78.4	92.0	97.5	97.8	92.9	81.2	69.8	62.4	62.9	61.7
	59.4	65.8	70.7	73.6	70.1	71.2	69.2	63.1	56.8	46.8	29.1	20.4
3217	47.7	65.4	78.4	91.9	97.7	95.0	91.8	79.3	68.3	62.1	63.4	63.1
	60.7	65.6	71.7	71.2	70.5	70.1	67.9	60.3	55.8	44.0	27.0	20.1
4017	38.8	60.9	72.5	88.7	97.3	99.4	93.3	85.6	72.0	66.2	62.9	63.2
	61.7	62.0	68.7	72.4	68.8	70.3	67.8	62.2	55.9	50.4	31.9	21.3
4817	32.2	53.7	66.4	84.0	91.3	93.2	86.6	80.1	68.1	61.5	60.5	59.4
	59.2	58.5	64.4	67.8	61.4	60.6	58.6	52.9	46.2	40.6	27.5	16.9
5617	17.4	27.5	32.8	39.3	42.6	43.9	43.9	44.2	43.2	42.9	45.0	46.7
	46.3	45.1	44.3	44.3	38.8	38.2	35.0	29.2	25.1	21.4	13.6	8.5
825	34.1	51.0	61.6	74.7	77.6	77.6	75.3	73.3	72.8	71.4	75.3	76.8
	75.6	74.8	77.1	76.2	70.4	68.0	62.7	54.8	47.4	40.5	25.6	16.7
1625	44.9	63.6	76.5	88.9	95.0	92.1	89.0	78.5	67.7	61.4	61.1	61.1
	59.5	64.9	69.9	72.2	71.2	72.1	71.0	64.8	57.0	47.7	29.0	20.3
2425	48.7	67.1	78.1	88.5	89.5	86.0	80.6	69.1	58.6	54.5	54.5	54.7
	56.0	64.2	71.3	78.5	79.6	86.0	84.9	78.5	71.0	57.7	35.8	25.0

3225	49.5	68.4	80.1	92.3	95.0	93.1	87.2	73.5	63.0	57.1	55.0	55.2
	55.1	64.0	71.8	74.7	74.7	77.2	75.4	68.8	61.7	50.0	31.6	23.2
4025	41.6	63.3	74.9	88.0	90.2	87.8	81.9	74.5	60.5	53.7	51.9	51.2
	50.4	54.4	63.2	67.9	69.4	74.8	76.5	71.3	65.2	57.1	36.4	24.3
4825	35.7	55.6	67.4	84.9	90.6	98.2	92.6	84.9	73.6	67.8	65.1	64.6
	62.3	64.9	70.8	74.3	70.0	67.6	68.1	59.9	53.3	47.0	30.3	20.7
5625	16.8	27.3	33.7	42.5	48.2	52.6	53.6	58.0	59.4	62.3	67.4	68.0
	68.9	66.6	66.4	66.7	59.9	58.1	54.1	48.1	40.0	35.1	22.1	14.1
833	37.4	54.9	67.7	84.6	90.8	92.6	88.4	84.6	77.7	72.6	74.4	75.0
	73.7	74.9	76.5	76.3	68.4	68.3	62.7	54.3	46.5	38.3	23.6	16.5
1633	42.7	60.5	71.8	85.3	92.3	93.9	89.4	79.3	66.3	61.7	61.5	60.4
	59.4	65.6	71.2	73.1	70.3	70.2	68.7	61.3	55.0	43.2	26.9	18.9
2433	41.9	59.9	71.9	84.7	89.2	89.4	82.0	72.8	62.3	54.0	53.8	54.1
	53.7	59.3	67.2	73.9	72.9	76.2	76.1	69.6	64.1	54.9	34.5	22.4
3233	44.5	64.2	75.2	85.8	86.4	83.0	76.4	65.9	55.4	48.6	47.6	47.5
	48.6	56.4	64.6	72.4	73.7	79.9	81.0	74.0	67.5	57.3	36.2	26.1
4033	37.0	58.8	71.4	86.4	93.8	94.8	90.0	83.4	70.7	63.5	59.7	58.4
	57.3	59.0	66.3	73.7	73.1	74.8	74.9	69.6	63.3	56.4	38.7	25.8
4833	36.7	57.0	70.0	86.1	94.7	97.3	94.3	87.7	74.2	68.8	67.4	66.2
	66.3	67.7	74.1	76.2	71.9	70.4	68.8	63.5	55.9	48.5	31.5	20.7
5633	21.1	31.6	40.9	54.5	64.2	67.7	69.6	70.2	68.4	66.3	66.5	67.2
	66.3	64.5	63.9	62.2	53.9	53.5	49.4	41.7	34.7	28.8	17.9	12.0
841	35.2	51.0	60.6	71.3	74.7	75.3	72.5	71.3	67.8	67.8	69.8	73.3
	71.3	72.1	73.9	73.3	66.7	66.1	61.2	53.2	46.8	38.6	23.3	16.0
1641	38.4	58.9	70.9	86.1	95.1	98.3	93.5	85.4	72.3	65.8	63.1	62.5
	61.7	63.0	69.2	72.7	68.3	70.8	68.9	63.0	56.0	49.6	31.3	21.9
2441	41.3	59.2	69.3	82.3	83.6	80.9	74.5	66.0	56.2	50.9	49.8	49.8
	47.5	54.1	59.2	63.1	65.2	70.4	71.1	64.9	60.0	49.6	32.4	22.3
3241	42.9	63.1	73.3	89.2	94.4	96.7	87.1	80.1	67.3	59.8	60.0	59.0
	58.7	64.3	71.5	77.3	74.2	76.2	75.6	69.1	62.3	53.5	34.5	24.0
4041	41.0	63.0	75.1	88.5	91.7	89.0	81.7	73.0	60.8	54.4	52.9	53.3
	53.4	57.4	65.9	70.1	70.6	74.5	75.6	70.8	64.7	55.8	36.1	25.1
4841	39.2	58.3	69.8	85.4	92.2	91.9	88.0	79.9	70.4	64.5	64.2	64.1
	61.5	64.9	69.8	71.5	65.3	66.1	62.3	55.2	48.8	41.1	26.1	17.4
5641	21.9	31.0	35.9	43.2	47.5	49.1	52.0	54.2	56.2	59.9	61.7	62.8
	60.4	59.0	58.0	56.0	49.7	48.3	42.9	35.9	31.4	26.3	15.8	10.4
849	24.8	37.7	45.4	53.7	56.8	56.7	55.5	53.5	49.4	45.8	45.0	44.3
	44.0	44.1	43.6	42.6	39.9	39.1	37.0	31.7	27.1	23.0	14.3	9.9
1649	37.2	55.1	67.9	84.6	90.1	90.1	83.7	75.4	65.6	61.0	60.2	61.5
	59.8	63.1	67.1	68.8	63.0	62.9	58.8	53.2	46.1	38.1	23.6	16.2
2449	37.0	55.2	67.3	80.8	91.1	94.5	88.3	81.5	69.0	64.0	63.7	64.3
	62.5	65.3	71.7	74.0	68.5	69.0	65.3	58.5	52.1	44.6	28.8	19.1
3249	39.3	58.7	71.3	87.5	94.7	96.9	94.5	87.8	76.1	69.3	67.5	68.0
	65.7	69.4	74.4	74.8	69.0	70.6	68.4	62.2	54.6	46.6	30.1	21.2
4049	37.1	57.4	70.3	84.9	93.2	95.4	91.7	84.8	73.6	69.7	68.0	68.6
	68.5	72.6	78.3	79.8	75.2	75.6	72.4	65.6	56.9	48.6	30.8	20.8
4849	30.5	47.1	58.4	74.2	81.7	82.3	78.5	74.1	66.2	59.6	59.0	57.8
	57.0	56.6	59.1	58.1	52.9	52.5	49.5	42.4	37.4	32.3	20.0	13.7
1657	17.8	26.5	31.1	37.4	40.0	41.3	42.5	43.8	42.3	40.8	42.6	43.5
	43.8	44.9	43.4	42.7	38.0	37.6	34.6	29.2	25.3	20.6	12.5	8.2
2457	18.7	27.8	33.8	42.4	47.6	49.7	53.0	55.5	58.1	59.9	62.7	66.8
	64.9	63.5	62.5	59.8	53.5	51.3	47.3	39.0	33.5	27.3	16.7	10.8
3257	20.9	31.7	40.3	54.6	65.4	68.2	70.5	71.8	67.6	66.0	67.1	68.3
	66.9	66.5	64.1	63.0	56.0	54.2	49.7	41.4	35.0	28.8	17.3	11.2
4057	19.5	29.1	33.6	40.7	45.1	47.9	50.5	54.1	56.4	59.2	63.0	63.4
	61.9	62.4	59.6	59.4	53.7	50.7	46.0	39.5	32.8	26.7	16.3	10.4

CYCLE 1 DATA

DATASET 05, JUNE 19, 1974

Reactor Conditions

Core Average Exposure, 1010 MWd/t
Core Thermal Power, 3261 MWT
Dome Pressure, P, 1017 psia
Core Flow, 105.6 Mlb/hr
Inlet Subcooling at P, 22.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	32.	48.	40.	48.	32.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	34.	48.	28.	48.	38.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	32.	48.	38.	48.	12.	48.	38.	48.	12.	48.	34.	48.	32.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	28.	48.	38.	48.	14.	48.	38.	48.	28.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	32.	48.	34.	48.	12.	48.	38.	48.	12.	48.	38.	48.	32.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	40.	48.	38.	48.	28.	48.	34.	48.	40.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	32.	48.	40.	48.	32.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	41.5	56.5	64.8	74.9	72.8	70.1	67.7	65.4	60.5	55.3	55.2	54.9
	53.1	52.6	53.7	52.4	46.5	45.5	42.8	36.6	31.9	26.1	15.9	10.8
24 9	39.8	54.9	64.6	74.4	78.0	74.4	76.5	75.5	73.0	69.9	72.2	73.5
	70.0	73.6	73.3	71.7	65.7	64.0	58.3	49.6	43.2	33.4	21.1	14.9
32 9	37.5	53.6	65.3	82.1	88.1	88.3	85.5	81.6	75.9	72.9	75.7	76.8
	75.1	76.0	77.2	75.6	70.3	66.2	61.2	52.9	45.3	37.0	22.8	15.1
40 9	40.4	54.6	64.0	72.8	76.3	73.4	76.2	75.6	75.0	71.6	75.5	73.3
	71.0	73.9	74.5	70.5	64.3	61.9	57.3	48.5	42.0	31.8	18.8	14.8
48 9	25.5	40.4	47.8	56.7	61.1	61.3	57.7	57.4	51.4	48.3	47.2	48.1
	46.8	44.9	44.9	44.3	40.0	38.5	36.3	31.4	26.7	22.9	15.1	9.6
817	38.8	55.5	65.5	75.7	77.4	75.3	73.0	71.0	63.9	62.1	61.9	63.5
	61.7	60.6	61.8	60.3	55.3	53.3	49.1	42.7	36.7	30.3	18.8	12.0
1617	42.4	63.3	77.3	92.1	99.0	96.6	89.2	82.0	70.3	62.6	62.0	60.4
	59.6	59.9	65.1	67.2	62.6	60.9	58.6	53.3	47.5	40.9	25.9	17.8
2417	46.9	66.9	77.8	90.0	93.6	93.9	90.6	80.0	69.6	62.1	63.1	63.7
	62.5	67.6	72.3	73.0	70.1	69.4	68.3	61.9	56.0	45.6	28.4	20.2
3217	47.4	64.9	73.7	80.6	82.0	78.7	74.6	64.9	60.5	60.1	63.5	65.1
	64.1	71.9	76.2	75.9	71.3	72.4	68.8	60.8	55.2	44.3	27.5	20.6
4017	39.3	61.3	71.8	85.9	88.5	89.0	85.1	83.0	72.9	67.8	65.4	64.7
	64.8	65.5	72.4	72.9	68.7	69.0	67.3	61.8	55.1	48.2	30.5	20.0
4817	33.4	55.8	70.3	86.1	95.0	96.1	89.4	83.5	70.3	64.1	61.3	60.2
	59.2	58.3	64.4	64.7	61.9	58.6	56.7	50.7	44.3	38.5	26.5	16.8
5617	18.7	29.5	35.5	42.5	46.1	47.6	47.2	48.3	46.8	45.0	46.6	45.4
	45.4	44.2	42.9	42.4	37.5	35.8	33.3	28.4	23.8	20.0	12.6	7.9
825	35.2	51.4	61.3	73.0	76.4	77.8	76.4	78.9	77.1	74.9	76.5	78.9
	76.1	76.6	76.6	77.2	70.4	66.6	62.7	54.3	46.6	39.6	24.9	16.2
1625	46.4	63.4	70.9	80.5	80.5	79.0	79.1	73.6	66.6	62.4	62.2	64.5
	63.4	68.4	72.9	74.5	72.0	73.6	71.7	63.1	58.0	46.3	28.6	19.6

2425	50.0	69.2	79.5	88.4	88.7	82.9	77.5	66.6	58.1	53.6	53.9	55.2
	55.0	62.2	68.8	72.5	73.3	78.7	79.4	72.8	65.0	52.7	33.6	23.4
3225	51.1	70.2	82.7	93.1	95.7	92.8	87.9	74.3	64.5	57.1	56.2	56.5
	56.6	63.4	69.4	73.6	72.3	75.0	72.8	66.3	61.1	50.1	30.9	22.7
4025	42.5	63.8	74.9	87.9	88.4	86.2	79.3	70.9	59.0	53.8	52.3	52.2
	52.2	54.8	62.7	67.1	65.5	69.2	71.8	69.2	63.9	56.6	35.7	24.4
4825	36.4	56.9	69.1	85.5	94.5	94.6	88.5	82.5	71.7	67.4	65.2	65.8
	65.0	65.7	71.7	75.7	69.9	69.3	66.3	60.5	51.5	46.2	29.5	19.7
5625	17.7	28.7	35.3	43.9	50.2	55.0	57.5	64.4	66.9	66.8	70.2	69.2
	69.0	66.8	66.2	64.3	59.2	56.4	53.6	46.7	38.8	32.9	21.1	13.0
833	38.6	55.4	68.5	83.2	90.2	87.8	86.1	83.1	77.6	75.5	75.7	77.1
	75.2	76.1	78.4	76.1	70.6	67.5	61.9	53.9	45.0	37.4	23.2	15.8
1633	43.1	60.7	71.3	79.1	80.3	78.0	73.7	65.7	58.2	57.5	61.9	64.3
	63.5	69.2	74.8	76.8	72.9	72.8	70.5	61.6	55.4	44.3	27.8	19.2
2433	44.4	63.6	74.2	86.9	90.4	89.2	83.0	74.2	62.2	56.1	55.0	55.4
	54.7	60.5	66.9	72.1	70.6	74.3	74.1	68.1	61.8	52.7	33.3	22.8
3233	47.3	67.5	78.0	87.8	87.6	86.6	77.6	66.0	54.9	50.6	48.9	48.1
	48.9	54.9	61.6	67.5	69.6	75.6	77.0	71.9	65.5	53.8	34.1	24.2
4033	37.4	59.7	71.5	85.6	92.0	91.7	85.8	80.1	67.8	62.4	59.8	59.3
	60.0	61.3	68.0	74.4	72.6	73.1	74.3	68.1	61.4	55.7	36.5	24.3
4833	35.7	54.8	65.6	77.7	80.2	79.3	74.9	71.7	64.8	64.5	66.8	70.5
	70.2	72.0	77.6	80.6	74.2	73.0	70.2	62.8	55.7	48.5	31.3	20.2
5633	21.4	32.3	41.4	54.4	64.4	68.3	70.3	71.5	67.2	64.4	68.1	68.8
	66.6	65.3	63.2	60.6	54.6	52.9	47.5	40.8	34.8	27.9	17.1	11.5
841	37.0	53.1	62.7	74.9	78.0	77.4	76.1	75.9	74.6	71.0	72.4	72.9
	70.6	71.6	72.5	71.9	64.6	63.1	58.7	51.8	44.1	36.9	22.1	14.6
1641	40.4	61.1	73.9	89.1	96.1	99.4	93.6	86.0	72.5	67.0	64.2	65.1
	64.1	65.8	71.6	72.8	67.9	69.3	67.5	60.8	54.5	47.0	30.0	20.3
2441	40.7	59.4	68.5	77.8	79.3	76.0	70.7	63.6	54.8	49.8	50.1	49.7
	49.8	53.9	57.8	63.0	61.1	66.1	66.8	63.0	58.1	47.4	31.0	21.8
3241	43.3	62.7	72.4	85.2	89.7	88.3	81.6	74.1	64.5	58.2	58.4	58.8
	58.9	64.4	71.1	73.6	70.6	74.6	73.6	67.1	59.1	50.9	32.7	23.3
4041	42.8	64.2	74.9	86.8	88.0	86.6	78.7	71.9	61.6	56.4	54.4	54.5
	54.7	58.3	64.1	67.6	67.3	71.7	72.6	67.7	61.1	53.7	33.9	23.6
4841	40.0	59.2	70.5	82.2	85.1	85.2	84.3	80.9	71.9	68.2	67.9	67.5
	65.9	67.2	71.0	72.6	67.5	65.8	63.0	54.2	48.1	40.5	25.8	18.1
5641	21.7	31.2	35.9	42.8	47.7	51.0	56.2	59.6	61.5	60.0	61.7	62.3
	58.2	57.1	55.8	52.6	46.0	45.5	42.1	35.1	30.6	24.7	15.2	10.6
849	26.3	40.5	48.5	57.0	61.2	60.2	58.1	54.6	50.6	46.6	45.2	45.0
	43.9	42.9	43.4	42.3	38.9	38.5	35.6	30.2	26.1	21.9	13.5	8.8
1649	38.3	58.3	72.2	87.7	91.4	89.9	84.2	77.9	67.2	62.2	62.6	62.0
	60.8	64.6	67.6	68.3	62.4	61.6	57.9	51.0	44.4	37.2	22.3	15.0
2449	36.7	54.4	64.5	75.4	77.6	77.0	78.7	75.8	69.4	65.0	67.4	67.0
	66.9	69.9	73.8	76.1	71.1	69.4	67.0	59.4	52.6	43.9	27.9	17.8
3249	39.5	56.9	67.6	79.1	82.5	81.1	76.2	72.0	65.0	65.1	67.0	68.9
	68.0	71.7	77.3	78.4	71.7	70.9	69.6	59.9	54.8	46.4	28.9	21.3
4049	38.6	59.3	71.4	85.9	92.7	95.8	92.6	86.2	74.5	71.1	69.8	69.5
	69.4	70.3	75.9	78.9	73.1	72.0	68.0	61.0	53.9	45.3	28.2	18.5
4849	31.8	49.5	60.8	78.5	84.5	85.1	79.1	75.2	67.4	60.3	58.3	58.0
	57.4	56.4	58.1	57.6	51.4	50.5	48.1	41.5	35.7	30.4	18.8	13.0
1657	18.6	27.6	32.3	39.0	42.5	43.5	44.5	45.4	44.4	44.2	44.7	44.5
	43.0	43.3	41.6	41.5	37.6	36.5	33.7	28.2	24.0	19.6	12.0	7.1
2457	19.0	28.5	33.9	42.1	47.7	51.2	56.1	60.8	63.0	62.2	65.1	64.8
	63.6	62.3	60.0	58.9	51.5	50.1	46.2	38.2	32.5	26.9	16.5	10.8
3257	21.1	32.6	41.6	55.0	65.7	69.3	71.2	71.3	67.9	65.6	68.2	69.5
	67.9	65.6	63.7	62.2	55.7	52.6	48.7	40.3	34.0	28.3	17.1	11.2
4057	20.6	30.8	36.2	44.1	48.1	51.8	56.6	61.6	63.6	63.1	63.8	65.0
	62.0	60.2	57.8	55.6	49.6	48.9	44.8	37.3	31.7	26.1	15.6	10.0

CYCLE 1 DATA

DATASET 06, JULY 15, 1974

Reactor Conditions

Core Average Exposure, 1585 MWd/t
Core Thermal Power, 3280 MWT
Dome Pressure, P, 1033 psia
Core Flow, 97.1 Mlb/hr
Inlet Subcooling at P, 25.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	32	48	40	48	32	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	32	48	20	48	32	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	32	48	32	48	8	48	36	48	8	48	32	48	32	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	40	48	20	48	36	48	10	48	36	48	20	48	40	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	32	48	32	48	8	48	36	48	8	48	32	48	32	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	32	48	20	48	32	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	32	48	40	48	32	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,
No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 07, AUGUST 17, 1974

Reactor Conditions

Core Average Exposure, 2080 MWd/t
Core Thermal Power, 3292 MWT
Dome Pressure, P, 1015 psia
Core Flow, 103.1 Mlb/hr
Inlet Subcooling at P, 23.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	26	48	26	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	34	48	30	48	8	48	8	48	30	48	34	48	48
48	48	48	44	48	42	48	48	48	42	48	44	48	48	48
48	48	32	48	8	48	28	48	28	48	8	48	32	48	48
48	48	48	44	48	40	48	44	48	40	48	44	48	48	48
48	48	14	48	32	48	6	48	6	48	32	48	14	48	48
48	48	48	44	48	40	48	44	48	40	48	44	48	48	48
48	48	32	48	8	48	28	48	28	48	8	48	32	48	48
48	48	48	44	48	42	48	48	48	42	48	44	48	48	48
48	48	34	48	30	48	8	48	8	48	30	48	34	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	26	48	26	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,
No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 08, SEPTEMBER 10, 1974

Reactor Conditions

Core Average Exposure, 2555 MWd/t
Core Thermal Power, 3265 MWT
Dome Pressure, P, 1022 psia
Core Flow, 101.2 Mlb/hr
Inlet Subcooling at P, 24.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	26.	48.	26.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	34.	48.	20.	48.	6.	48.	6.	48.	20.	48.	34.	48.	48.
48.	48.	48.	38.	48.	42.	48.	48.	48.	42.	48.	38.	48.	48.	48.
48.	48.	26.	48.	4.	48.	24.	48.	24.	48.	4.	48.	26.	48.	48.
48.	48.	48.	44.	48.	40.	48.	40.	48.	40.	48.	44.	48.	48.	48.
48.	48.	10.	48.	32.	48.	6.	48.	6.	48.	32.	48.	10.	48.	48.
48.	48.	48.	44.	48.	40.	48.	40.	48.	40.	48.	44.	48.	48.	48.
48.	48.	26.	48.	4.	48.	24.	48.	24.	48.	4.	48.	26.	48.	48.
48.	48.	48.	38.	48.	42.	48.	48.	48.	42.	48.	38.	48.	48.	48.
48.	48.	34.	48.	20.	48.	6.	48.	6.	48.	20.	48.	34.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	26.	48.	26.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	34.9	50.9	61.4	71.6	76.9	75.6	74.4	71.9	64.8	57.8	57.3	58.1
	55.3	54.5	56.2	54.4	48.9	47.2	43.7	36.5	31.9	25.9	15.9	10.8
24 9	46.5	64.9	74.0	82.2	79.5	76.8	71.0	66.5	60.9	60.4	67.1	70.7
	70.6	73.4	72.9	69.6	65.4	61.5	56.4	46.5	41.0	31.8	19.7	14.8
32 9	45.6	66.1	75.7	84.9	82.7	76.2	70.0	66.9	61.2	61.1	65.8	73.2
	72.9	75.9	75.7	74.9	67.5	64.6	59.9	50.4	43.3	35.3	21.4	15.0
40 9	47.6	67.3	78.4	92.4	94.9	91.2	90.4	84.2	76.1	70.3	72.6	74.2
	71.7	72.9	73.3	72.3	64.9	62.9	56.2	47.3	40.8	30.4	18.5	14.2
48 9	24.4	38.9	48.5	60.2	65.8	66.5	66.1	65.2	60.8	55.9	55.1	53.4
	53.5	51.6	50.5	49.5	44.9	42.8	39.0	33.2	28.0	23.2	15.1	9.3
817	34.3	50.7	59.1	71.6	77.0	77.0	79.9	79.0	75.5	71.2	71.3	69.4
	67.6	66.2	65.8	65.5	58.3	56.1	51.2	44.2	36.9	30.6	18.8	12.8
1617	29.2	45.8	57.9	75.5	84.8	91.2	87.5	80.3	70.0	63.7	62.4	61.8
	62.9	66.9	72.9	74.6	69.2	66.2	62.0	54.2	47.0	38.6	23.5	17.1
2417	40.8	62.7	80.8	94.2	96.4	88.2	83.2	70.5	62.5	55.9	57.0	56.9
	57.4	62.0	65.9	66.6	62.7	62.7	58.5	51.1	48.2	41.0	25.2	18.8
3217	53.2	75.5	87.7	93.6	90.6	83.1	75.6	65.9	57.5	53.1	54.2	56.1
	55.7	62.0	64.5	66.2	61.4	59.3	56.2	50.9	47.5	38.7	23.9	19.5
4017	31.5	53.0	70.6	90.7	96.6	93.8	86.0	81.0	69.1	62.4	60.7	61.2
	62.0	64.7	74.0	78.5	74.1	72.3	67.8	59.4	51.7	45.7	28.9	19.6
4817	22.1	37.7	49.0	65.9	77.7	87.4	91.1	91.1	83.3	76.0	74.4	72.5
	71.1	68.5	74.5	75.2	69.3	65.2	60.1	53.1	44.7	38.9	25.7	16.0
5617	20.1	31.8	39.2	48.3	52.0	54.1	55.3	55.3	51.5	48.9	49.0	48.1
	48.0	45.0	43.9	43.9	38.8	38.1	33.3	28.6	23.8	20.4	12.3	8.0
825	52.0	76.3	86.8	98.6	95.1	88.7	79.6	75.7	69.8	68.3	67.8	73.0
	72.3	72.4	72.7	71.4	64.8	63.1	58.1	50.5	43.6	36.1	22.6	15.8
1625	38.4	59.9	78.8	91.2	93.1	89.3	84.7	78.5	67.8	62.7	63.3	63.6
	63.2	66.1	68.3	68.9	63.7	63.0	59.5	51.9	47.1	38.5	24.1	17.9

2425	32.2	49.3	66.4	85.3	93.9	90.6	87.2	76.5	67.6	63.1	66.3	71.5
	75.4	83.1	88.5	87.2	82.8	80.6	75.4	65.8	56.8	44.9	28.4	20.6
3225	35.5	53.6	70.6	89.6	97.2	92.2	85.0	74.4	65.3	60.7	64.0	69.2
	70.6	80.1	85.1	83.8	78.7	77.3	71.8	62.3	54.9	44.2	27.1	21.5
4025	29.2	48.6	65.5	87.7	97.3	96.8	89.9	81.4	69.5	64.1	62.9	63.9
	63.1	64.9	69.9	73.0	68.3	66.6	63.5	57.3	50.2	45.3	29.6	20.8
4825	31.5	54.8	72.0	88.7	95.6	92.9	85.1	77.8	69.4	64.0	64.6	69.8
	70.3	70.9	75.9	77.6	70.0	68.1	63.9	57.0	49.6	42.3	27.3	18.3
5625	35.0	54.3	64.8	76.2	78.8	77.0	70.1	70.2	63.5	58.6	59.1	61.1
	59.7	57.2	56.6	58.5	52.8	50.4	46.9	41.1	33.8	28.6	18.2	12.0
833	56.2	80.0	88.0	99.4	97.4	88.7	80.3	74.5	67.6	62.7	62.3	63.1
	60.8	61.7	62.0	60.9	55.7	56.1	54.0	48.3	42.5	35.2	21.6	15.1
1633	37.1	60.2	76.1	88.9	92.0	88.4	86.0	80.3	74.6	68.4	69.4	69.6
	66.6	69.6	73.3	73.3	68.8	67.4	64.4	55.6	48.5	37.8	23.8	17.9
2433	26.7	43.9	59.0	80.0	89.6	90.1	86.0	78.3	68.6	63.1	63.4	63.1
	63.8	66.1	69.5	72.3	68.2	67.5	64.5	58.0	52.3	45.2	28.9	20.4
3233	21.6	37.8	54.2	74.7	90.1	93.6	87.9	82.1	68.2	59.7	57.9	58.1
	59.3	59.7	66.6	71.6	67.1	67.6	64.9	61.2	54.8	50.9	35.3	25.7
4033	25.0	42.4	59.1	79.8	93.1	95.4	91.7	89.1	83.0	76.6	74.0	72.7
	71.0	69.7	74.0	78.6	73.4	71.6	68.5	61.9	53.6	46.7	31.8	20.7
4833	34.7	58.0	74.7	90.0	93.9	90.4	82.5	78.8	68.1	61.5	62.3	63.4
	62.6	64.0	66.8	67.2	63.2	62.8	63.4	58.3	51.5	44.9	28.9	19.2
5633	44.0	63.0	71.6	81.8	83.6	75.8	70.8	67.4	62.9	57.2	55.8	57.1
	54.1	53.0	51.9	50.6	45.7	44.4	41.1	36.0	30.9	25.6	16.0	11.6
841	44.5	64.3	76.4	87.5	88.1	85.5	80.3	76.9	71.3	67.4	71.6	74.6
	72.0	72.3	75.2	74.4	66.5	64.0	58.7	50.2	42.3	34.3	20.2	14.3
1641	26.5	43.3	57.1	75.0	85.0	90.2	88.6	82.8	73.4	67.8	65.4	66.3
	65.6	66.2	70.8	71.6	66.3	64.5	60.6	52.7	46.6	40.4	27.2	18.4
2441	31.6	50.8	66.6	83.8	85.9	82.5	76.7	67.3	56.9	52.9	54.8	58.2
	60.3	67.1	73.0	74.7	66.9	68.1	64.8	57.5	49.5	41.7	26.4	18.9
3241	44.2	65.3	77.7	89.5	90.6	85.1	76.1	68.1	57.5	54.8	56.5	61.6
	65.3	72.0	77.8	80.7	76.7	75.9	70.7	63.2	54.3	46.1	29.0	20.8
4041	28.2	48.2	66.4	87.4	94.3	92.0	85.3	77.6	65.6	58.3	58.0	59.8
	61.0	64.6	71.3	74.3	69.9	67.8	64.5	56.8	49.9	43.9	28.8	20.5
4841	29.7	46.3	58.9	75.7	87.4	89.9	87.2	82.4	72.3	70.4	72.9	75.2
	74.5	76.1	79.6	78.7	69.8	68.1	62.5	53.4	45.0	38.7	23.6	17.5
5641	38.3	54.8	62.4	72.6	72.6	71.3	68.8	64.8	59.2	55.3	55.7	54.5
	52.6	51.6	50.6	49.6	43.1	42.3	38.9	32.8	27.7	23.2	14.1	10.1
849	18.4	28.6	34.8	43.0	48.3	52.7	57.9	61.1	57.9	55.3	53.4	53.2
	50.3	48.1	47.6	46.8	43.4	42.7	38.9	32.8	27.6	22.4	13.9	9.4
1649	36.4	55.8	67.8	81.4	88.2	86.5	82.8	75.8	65.8	62.2	62.4	63.3
	63.5	70.0	75.9	76.7	71.8	68.9	63.6	54.6	46.4	37.8	22.4	15.5
2449	42.1	63.6	74.7	86.1	86.1	84.4	76.8	69.0	60.2	56.3	56.8	57.9
	58.9	61.6	66.6	67.9	61.7	62.1	58.5	51.2	47.4	40.2	25.2	18.3
3249	46.2	66.3	79.2	88.6	89.0	82.5	75.7	69.3	58.9	55.3	57.0	57.5
	58.4	61.1	64.5	64.4	59.1	58.3	56.2	51.2	46.9	41.1	25.6	18.9
4049	39.3	61.5	74.8	89.0	91.8	90.1	83.0	77.4	68.4	61.4	62.6	63.6
	66.1	71.4	78.6	82.8	77.0	74.4	69.0	61.1	51.9	43.6	26.8	18.1
4849	27.4	42.3	52.0	64.8	72.4	75.9	77.4	77.9	73.2	67.4	66.0	64.3
	62.4	61.9	63.5	62.8	55.3	53.8	50.0	43.0	36.2	30.6	18.5	13.5
1657	13.7	20.4	25.9	34.9	43.4	50.0	53.2	52.5	50.3	48.1	48.7	48.2
	46.8	46.3	45.3	45.2	39.3	38.2	35.2	29.6	24.6	19.9	11.8	7.3
2457	21.5	31.8	39.0	47.6	52.2	53.0	54.5	55.3	53.3	53.4	58.3	64.4
	64.5	64.4	62.3	60.1	53.3	50.8	46.9	38.3	32.6	26.3	16.1	11.1
3257	22.5	33.9	39.9	48.2	52.6	53.1	52.8	53.0	51.4	52.9	60.9	68.8
	70.7	71.5	68.8	66.4	57.8	55.4	50.3	42.3	35.1	28.8	17.5	11.8
4057	22.1	34.2	42.4	55.4	65.4	70.9	72.3	72.2	65.4	61.8	62.0	61.9
	60.5	59.7	58.1	57.2	49.4	48.9	46.0	38.1	31.6	25.8	15.3	10.0

CYCLE 1 DATA

DATASET 09, OCTOBER 4, 1974

Reactor Conditions

Core Average Exposure, 2920 MWd/t
Core Thermal Power, 2856 MWT
Dome Pressure, P, 1016 psia
Core Flow, 78.7 Mlb/hr
Inlet Subcooling at P, 31.2 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	20.	48.	14.	48.	20.	48.	48.	48.	48.	48.
48.	48.	48.	48.	40.	48.	44.	48.	44.	48.	40.	48.	48.	48.	48.
48.	48.	48.	14.	48.	18.	48.	8.	48.	18.	48.	14.	48.	48.	48.
48.	48.	40.	48.	48.	48.	38.	48.	38.	48.	48.	48.	40.	48.	48.
48.	20.	48.	18.	48.	4.	48.	22.	48.	4.	48.	18.	48.	20.	48.
48.	48.	44.	48.	38.	48.	36.	48.	36.	48.	38.	48.	44.	48.	48.
48.	14.	48.	8.	48.	22.	48.	8.	48.	22.	48.	8.	48.	14.	48.
48.	48.	44.	48.	38.	48.	36.	48.	36.	48.	38.	48.	44.	48.	48.
48.	20.	48.	18.	48.	4.	48.	22.	48.	4.	48.	18.	48.	20.	48.
48.	48.	40.	48.	48.	48.	38.	48.	38.	48.	48.	48.	40.	48.	48.
48.	48.	48.	14.	48.	18.	48.	8.	48.	18.	48.	14.	48.	48.	48.
48.	48.	48.	48.	40.	48.	44.	48.	44.	48.	40.	48.	48.	48.	48.
48.	48.	48.	48.	48.	20.	48.	14.	48.	20.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

1609	55.0	79.8	97.6	117.3	122.5	115.5	108.2	97.6	85.4	76.5	75.4	76.5
	72.3	75.8	79.6	80.3	78.3	78.4	74.4	63.9	56.3	45.2	28.2	19.8
2409	57.8	86.6	108.6	125.6	126.9	114.5	106.7	95.0	83.8	77.8	78.3	81.2
	83.6	98.6	107.6	111.2	108.1	108.1	102.9	87.9	76.1	59.1	36.6	29.0
3209	56.0	89.2	113.9	132.4	136.3	125.8	114.6	105.3	90.9	83.1	84.4	84.0
	86.1	91.8	98.5	104.0	104.7	109.8	107.5	93.2	83.0	67.3	41.5	27.5
4009	55.6	81.0	106.8	131.2	138.6	130.4	124.9	110.1	96.8	87.9	89.6	92.2
	95.0	107.6	117.7	119.5	114.6	113.7	105.8	89.2	76.8	58.4	35.0	27.9
4809	50.7	74.1	90.0	104.6	109.1	102.4	94.6	87.7	78.7	71.0	70.8	69.8
	67.2	68.3	69.0	70.9	65.5	67.1	63.4	53.8	45.4	36.4	22.0	14.8
0817	51.9	78.9	98.1	123.6	131.2	127.7	120.2	110.8	97.0	86.3	84.7	84.8
	83.2	86.5	90.2	94.6	88.7	89.7	86.9	75.1	63.9	54.5	33.4	21.8
1617	67.1	100.7	120.9	143.0	143.1	134.2	120.1	106.6	90.7	79.5	78.2	77.3
	76.0	82.6	91.2	99.3	101.8	107.4	105.4	93.8	82.5	68.5	42.4	30.8
2417	56.3	84.4	106.3	129.2	141.5	136.9	127.3	111.3	98.4	86.2	86.7	87.3
	89.0	100.4	114.6	120.3	118.6	119.4	114.4	99.8	88.2	72.2	45.4	33.0
3217	52.8	79.7	102.6	125.5	140.0	134.7	130.6	114.2	97.0	87.9	87.3	88.2
	89.1	102.8	108.3	110.8	105.9	108.7	107.0	95.3	87.7	69.9	43.4	35.6
4017	72.2	110.4	132.0	154.1	150.4	143.2	132.1	120.8	99.4	89.4	86.1	86.7
	87.1	96.2	109.9	122.1	119.3	122.1	116.9	103.0	90.1	74.3	45.6	31.8
4817	54.2	85.2	109.5	140.3	148.4	141.9	130.7	114.8	98.3	85.4	83.4	82.1
	80.4	87.3	95.0	102.1	102.2	108.8	103.7	92.3	78.5	66.3	40.0	26.3
5617	36.4	52.5	64.6	79.1	83.5	83.7	82.4	78.9	69.6	66.0	64.8	65.7
	65.0	66.7	67.7	67.4	62.3	62.4	57.3	48.0	41.1	32.7	19.2	13.1
0825	52.1	86.1	110.2	133.0	136.3	126.5	114.7	105.6	94.2	83.8	83.8	84.8
	88.8	98.5	107.3	117.3	112.8	112.5	106.9	95.1	80.0	68.5	42.9	29.1
1625	52.5	78.6	100.0	123.0	132.7	131.8	123.0	109.5	94.8	86.9	85.8	87.1

	88.0	99.0	111.9	119.2	118.8	123.4	116.2	103.9	91.5	72.4	44.9	33.5
2425	44.5	66.9	86.7	110.6	125.6	132.8	135.9	124.3	108.3	100.9	103.1	107.1
	110.6	125.6	131.4	135.0	128.3	128.3	119.5	104.4	91.6	75.6	48.5	36.6
3225	43.1	66.1	88.1	111.5	126.7	135.0	136.0	123.3	107.7	100.8	101.2	105.9
	111.7	129.9	140.8	140.6	131.8	130.9	123.3	108.3	95.9	77.0	46.2	37.7
4025	49.0	77.3	100.3	125.7	141.6	148.3	139.7	123.7	103.4	94.0	91.1	92.1
	93.0	104.2	115.9	120.0	117.0	117.5	111.0	99.1	88.0	75.6	48.5	33.8
4825	52.4	87.9	113.5	144.2	149.6	139.9	130.1	111.9	96.4	85.1	83.2	80.4
	83.1	93.4	109.6	120.2	118.4	121.0	117.1	104.2	92.3	77.6	46.7	31.4
5625	36.0	53.8	65.7	80.1	87.8	86.2	85.1	81.8	74.0	71.7	72.8	75.0
	77.7	88.6	99.1	104.9	99.3	99.4	92.3	78.5	66.2	52.6	30.9	19.7
0833	58.1	91.7	114.9	134.8	134.6	123.5	113.2	102.5	90.0	81.9	82.2	82.2
	82.0	90.3	96.4	103.8	106.4	109.3	104.9	93.4	79.5	64.5	39.8	28.4
1633	45.3	70.6	90.1	114.7	125.8	129.3	123.4	109.0	93.0	85.3	82.8	84.1
	86.8	96.0	105.4	109.0	105.6	107.7	105.1	96.4	87.9	71.0	45.0	32.7
2433	34.9	54.9	72.0	95.8	111.2	121.2	125.3	120.0	103.4	95.1	95.6	101.6
	105.8	121.4	132.8	134.9	129.2	130.2	125.5	110.6	96.4	81.2	50.5	36.5
3233	36.9	58.0	76.4	101.8	117.0	129.7	133.0	123.8	109.2	97.8	99.5	99.6
	102.1	115.4	123.7	126.3	122.5	124.2	120.5	110.5	99.7	83.0	52.4	37.5
4033	42.1	66.1	85.9	113.4	133.1	137.5	136.3	123.5	109.3	98.2	96.0	98.2
	102.1	116.2	128.3	134.5	129.6	128.7	122.6	107.5	94.9	78.7	48.9	35.3
4833	58.8	93.6	121.2	146.9	145.9	136.3	126.7	111.3	94.4	85.4	87.0	85.8
	86.4	96.4	102.7	109.4	108.4	110.8	107.4	99.5	91.5	73.6	45.9	34.0
5633	37.5	55.4	67.2	85.0	89.4	88.4	86.5	81.9	74.5	69.4	70.1	73.0
	72.0	74.6	77.9	83.4	84.9	91.6	86.5	75.3	65.6	54.0	33.1	21.4
0841	47.2	71.4	94.7	121.1	130.9	129.4	120.3	110.1	97.7	86.9	85.2	88.2
	88.1	98.9	112.0	116.8	109.5	114.6	106.5	91.9	78.9	63.9	38.9	26.0
1641	63.5	96.5	117.8	141.0	143.9	137.7	124.4	113.1	95.2	86.2	83.8	84.1
	85.1	91.9	107.1	120.3	116.6	121.2	117.5	104.0	90.8	77.9	48.8	34.5
2441	42.2	65.5	84.7	108.5	120.3	123.7	120.3	106.2	91.1	82.7	81.9	84.2
	83.8	93.9	100.9	108.1	101.9	104.1	99.9	89.0	78.8	66.0	43.5	32.6
3241	40.0	63.0	82.7	108.7	127.1	133.1	125.8	115.0	98.4	90.8	92.1	95.1
	99.7	114.2	130.5	134.4	129.3	130.5	124.7	110.4	94.3	80.9	49.8	36.9
4041	64.7	102.2	123.0	146.9	148.6	143.5	128.7	116.7	98.7	88.9	85.7	85.9
	86.8	96.3	107.6	115.0	113.4	111.7	109.1	96.7	85.2	69.7	48.6	36.0
4841	50.3	79.9	106.0	138.3	147.2	144.5	134.3	117.3	101.2	91.6	88.5	86.4
	88.1	96.2	110.3	122.2	117.4	119.5	119.1	98.6	85.3	70.4	43.7	31.0
5641	35.2	52.6	63.3	79.5	87.0	88.1	89.6	83.8	75.7	69.7	69.8	69.2
	72.2	79.7	84.0	87.2	81.9	81.3	75.1	63.2	55.1	45.5	28.1	19.1
0849	50.6	69.9	84.3	96.2	100.8	94.8	89.6	82.3	71.6	64.8	63.7	63.4
	62.2	63.0	64.2	65.6	63.1	65.0	60.7	51.7	44.8	35.8	21.4	14.5
1649	54.5	81.0	105.7	128.9	131.9	128.3	117.9	106.0	92.1	83.8	83.3	82.0
	81.4	91.0	99.6	105.1	107.0	112.5	108.0	94.5	82.0	65.9	39.8	27.3
2449	52.0	82.9	108.3	128.6	131.4	124.2	115.1	99.4	86.0	77.5	79.2	80.0
	83.0	95.1	108.2	118.6	117.2	120.1	115.0	101.4	89.7	72.7	45.6	31.9
3249	51.0	81.8	106.9	131.5	136.5	127.2	116.7	107.8	92.0	81.7	78.8	82.2
	81.8	89.5	97.7	102.4	100.7	103.3	102.7	95.1	88.7	76.5	47.7	33.4
4049	52.6	81.0	106.3	133.1	143.0	140.1	126.4	114.1	99.2	90.9	90.9	92.2
	93.3	107.7	122.1	132.8	130.8	133.3	127.9	112.2	96.4	79.2	48.4	33.7
4849	45.7	71.7	88.6	110.9	117.6	117.5	108.5	100.1	87.6	77.0	73.9	73.9
	70.6	73.1	76.8	81.9	81.5	87.0	85.3	74.5	65.4	56.3	34.6	23.7
1657	32.2	45.6	56.3	66.9	72.5	71.3	72.1	69.6	64.6	60.0	60.0	62.1
	61.3	65.1	67.1	67.1	64.7	63.5	58.3	49.7	42.5	33.3	19.3	13.2
2457	32.1	47.3	57.9	71.3	76.6	77.3	76.9	73.3	67.7	65.2	66.3	69.3
	72.8	81.7	90.1	94.9	88.7	89.0	83.7	69.2	61.0	49.7	30.4	19.4
3257	36.4	52.2	63.2	76.9	80.8	81.0	81.0	74.7	72.5	66.9	70.1	73.4
	72.0	78.2	81.7	84.3	88.4	92.7	90.3	76.3	66.6	53.6	30.8	21.2
4057	36.4	52.0	63.5	79.0	85.4	86.5	87.1	82.1	74.7	71.3	72.0	74.4
	76.1	86.9	91.7	95.9	89.0	88.5	79.7	68.4	58.2	46.7	27.9	18.6

CYCLE 1 DATA

DATASET 10, NOVEMBER 21, 1974

Reactor Conditions

Core Average Exposure, 3542 MWd/t
Core Thermal Power, 3271 MWT
Dome Pressure, P, 1035 psia
Core Flow, 103.8 Mlb/hr
Inlet Subcooling at P, 24.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	14.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	14.	48.	12.	48.	8.	48.	12.	48.	14.	48.	48.	48.
48.	48.	36.	48.	36.	48.	38.	48.	38.	48.	36.	48.	36.	48.	48.
48.	30.	48.	12.	48.	6.	48.	12.	48.	6.	48.	12.	48.	30.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	14.	48.	8.	48.	12.	48.	10.	48.	12.	48.	8.	48.	14.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	30.	48.	12.	48.	6.	48.	12.	48.	6.	48.	12.	48.	30.	48.
48.	48.	36.	48.	36.	48.	38.	48.	38.	48.	36.	48.	36.	48.	48.
48.	48.	48.	14.	48.	12.	48.	8.	48.	12.	48.	14.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	48.	48.	30.	48.	14.	48.	30.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	26.7	42.8	51.8	63.8	70.1	75.6	77.7	77.1	71.3	67.3	64.2	63.3
	59.7	55.8	56.6	55.2	50.8	50.5	47.8	43.3	37.0	31.9	20.7	12.1
24 9	23.6	36.5	48.3	65.2	78.0	85.4	85.0	86.8	83.9	80.9	79.9	80.4
	76.9	74.6	75.1	73.9	68.3	68.8	64.5	57.3	49.7	40.9	26.8	16.9
32 9	21.6	35.9	49.5	67.6	82.5	90.9	89.9	89.3	81.4	76.8	74.1	74.7
	70.0	67.5	68.1	71.4	69.4	71.6	69.5	62.1	54.3	46.3	30.6	17.7
40 9	24.4	38.4	51.1	67.0	79.3	88.1	91.8	95.1	92.4	91.3	89.4	89.1
	83.8	82.0	78.7	78.7	72.1	71.0	65.9	57.9	49.5	39.8	25.2	16.3
48 9	24.4	40.6	51.1	63.8	69.5	71.1	70.6	69.8	62.5	57.0	54.5	53.2
	52.7	49.0	49.0	49.0	45.6	44.3	41.9	36.8	31.0	26.7	17.7	10.0
817	24.9	42.2	55.4	71.5	81.2	85.9	88.2	90.3	85.5	77.7	75.5	73.5
	70.3	65.1	66.2	66.2	61.2	59.6	56.8	50.9	42.8	37.3	24.8	15.0
1617	20.7	35.9	49.6	66.4	80.8	89.3	91.7	93.1	82.8	74.0	67.9	65.7
	62.3	59.9	64.4	67.3	66.2	70.2	70.8	66.9	56.9	50.0	33.4	21.1
2417	23.6	39.7	54.3	74.4	90.3	97.2	97.7	91.8	80.5	71.2	67.6	63.9
	60.3	60.5	63.2	66.6	65.7	70.1	71.1	67.3	60.4	52.9	34.6	21.6
3217	25.1	40.9	56.0	77.6	92.1	97.0	95.3	89.9	75.6	69.1	65.3	63.1
	59.9	60.8	64.1	65.7	63.1	65.6	67.3	62.9	58.7	50.6	32.4	21.6
4017	21.1	37.5	50.8	68.0	81.3	92.0	94.8	96.4	87.4	77.1	72.8	68.6
	65.7	64.1	66.9	70.5	69.2	73.4	75.3	71.1	62.3	55.2	37.4	21.9
4817	21.7	37.7	50.3	68.1	81.3	88.9	92.2	90.9	82.6	75.2	70.7	69.5
	65.7	62.4	66.5	68.0	68.0	69.1	69.2	63.3	53.7	46.5	30.4	17.0
5617	17.1	27.8	34.7	44.7	51.6	56.1	59.4	60.7	58.2	55.1	54.9	54.6
	51.9	48.4	47.5	46.1	41.5	40.4	37.2	32.3	26.9	23.0	14.4	8.3
825	21.1	36.3	49.3	68.5	83.6	94.4	95.0	96.2	93.2	92.7	91.2	88.7
	86.2	80.1	79.3	80.7	73.6	72.1	69.6	62.7	53.1	46.3	31.2	18.6
1625	23.2	37.4	52.4	72.7	87.3	96.0	93.5	90.3	81.4	73.3	67.7	65.0

	62.3	62.4	65.4	68.9	67.0	72.5	75.1	70.1	62.6	55.1	35.5	22.4
2425	22.9	37.6	51.2	68.0	79.4	87.7	91.9	91.6	82.4	74.6	71.8	70.6
	68.0	70.5	74.8	76.6	75.4	77.8	78.2	72.8	66.7	59.1	39.2	24.8
3225	22.6	37.6	51.3	67.5	77.7	83.8	88.3	88.2	78.5	70.4	67.2	64.9
	62.7	65.0	69.4	72.6	71.7	78.2	80.5	74.8	68.1	58.2	37.9	24.3
4025	21.2	36.4	51.3	71.3	89.1	97.1	96.0	94.1	81.8	73.6	67.6	64.7
	62.3	61.8	65.5	69.4	67.4	69.6	71.1	67.2	61.7	57.7	38.9	24.6
4825	18.7	33.2	47.5	66.2	85.7	97.1	97.1	96.8	84.9	77.6	72.8	71.0
	67.5	65.3	67.7	71.3	69.5	72.2	74.1	70.2	61.2	54.1	37.1	21.5
5625	15.1	25.4	33.1	44.6	52.7	58.4	64.7	68.7	70.5	73.2	76.4	76.6
	73.4	69.0	67.9	66.6	61.4	59.6	56.2	49.1	40.5	35.2	22.4	13.1
833	22.4	37.6	50.3	68.9	83.4	92.1	91.8	90.9	84.1	79.2	75.2	72.9
	71.3	67.9	70.4	71.2	70.2	71.9	70.0	62.5	53.7	46.8	30.7	18.2
1633	21.0	36.1	50.4	70.8	86.5	95.8	94.1	88.6	79.0	69.4	63.8	61.6
	58.7	59.1	63.5	65.4	62.6	65.7	66.7	64.6	59.8	52.2	34.2	21.0
2433	18.1	31.2	43.4	58.1	69.7	77.5	83.0	84.9	77.6	70.5	65.6	65.0
	62.8	60.9	67.0	71.0	70.7	76.9	80.1	77.1	69.9	62.1	41.1	26.0
3233	19.5	33.2	44.9	60.8	72.1	78.9	85.8	86.8	78.5	70.3	66.3	64.1
	61.9	62.2	67.3	71.2	70.6	76.4	81.1	78.2	71.2	62.7	41.7	25.8
4033	19.8	34.2	48.1	67.9	84.0	94.5	93.2	91.8	81.3	72.3	68.0	64.2
	61.5	59.3	64.1	67.8	67.1	73.2	76.9	73.7	65.1	58.6	40.1	23.7
4833	20.8	35.8	50.6	70.2	88.3	96.0	95.5	92.6	83.0	75.3	72.5	69.5
	65.0	65.6	68.3	70.4	67.7	69.6	69.5	67.0	60.1	53.9	35.1	20.6
5633	16.2	26.5	36.0	47.2	57.1	62.3	65.1	66.6	62.6	60.0	59.7	60.3
	57.7	54.9	54.6	56.1	52.2	56.2	55.0	49.5	41.5	35.4	23.4	13.8
841	21.0	35.1	46.6	62.1	74.7	85.5	91.0	94.6	91.8	90.2	89.1	87.1
	83.1	78.2	79.4	79.4	74.1	71.4	67.3	60.2	50.9	43.9	27.8	16.9
1641	19.1	33.5	47.5	65.2	80.3	88.9	95.2	96.7	84.4	76.8	70.3	68.4
	65.7	62.2	66.6	69.1	68.4	71.9	74.6	71.7	62.7	55.7	38.8	23.1
2441	19.0	33.4	46.6	64.9	82.3	91.1	89.7	85.9	75.2	66.8	62.6	60.9
	58.1	57.1	62.8	66.4	62.1	65.4	66.6	62.8	57.7	52.6	36.2	22.1
3241	20.4	35.5	50.1	67.8	83.7	92.8	91.9	87.8	78.4	69.5	65.8	63.2
	60.9	60.7	65.3	70.9	70.0	74.3	79.2	74.9	66.4	59.0	40.1	24.4
4041	19.2	34.6	49.3	67.1	80.6	93.3	96.5	97.2	85.7	75.1	68.7	67.1
	65.6	64.6	69.1	73.4	72.0	73.1	73.8	70.3	62.8	58.0	41.4	25.4
4841	19.6	33.7	46.9	63.3	78.0	91.5	97.5	99.4	89.8	83.3	79.8	76.6
	72.5	69.0	71.0	73.2	70.2	72.6	72.5	66.6	58.0	50.7	33.5	20.7
5641	17.1	28.7	36.9	47.6	55.5	61.3	65.6	69.6	71.2	71.0	71.4	68.2
	64.6	60.8	59.5	58.8	51.6	49.0	46.4	40.7	34.1	29.2	19.3	10.6
849	26.8	40.3	49.7	61.0	67.5	67.8	66.2	64.0	57.3	52.6	51.4	50.7
	47.8	45.9	44.9	44.7	42.4	42.4	40.0	35.4	29.7	24.9	15.5	9.1
1649	23.8	37.9	50.6	65.0	75.6	82.3	86.9	84.7	76.9	71.6	69.2	67.9
	64.8	65.8	67.5	70.1	68.6	71.8	70.9	62.5	53.9	45.6	28.7	16.9
2449	20.2	33.5	46.4	63.6	78.5	88.0	88.1	85.4	77.4	71.0	68.6	67.0
	65.8	64.5	67.6	70.4	67.9	71.4	72.8	67.5	60.3	51.0	32.6	20.8
3249	19.1	33.8	47.1	65.7	82.5	92.2	95.0	92.7	81.1	73.2	69.1	68.3
	66.6	64.5	68.1	69.6	66.6	68.0	69.9	66.7	61.1	54.2	36.2	22.8
4049	20.3	33.5	45.7	62.4	76.9	86.9	91.8	92.5	85.6	82.2	78.8	75.9
	74.0	72.1	75.4	78.6	76.3	79.5	80.1	74.0	64.3	55.2	36.1	20.9
4849	20.6	35.7	47.6	61.3	72.3	76.4	76.2	77.0	70.6	63.6	60.3	57.5
	55.2	51.7	53.7	55.0	55.3	56.4	56.8	51.5	44.0	38.6	25.9	15.5
1657	15.9	24.8	31.0	39.1	45.4	48.6	51.8	54.5	53.5	51.6	51.6	50.9
	49.8	47.4	47.0	46.0	41.6	41.2	38.6	32.8	27.7	23.2	14.6	8.2
2457	14.8	23.4	29.9	39.3	46.8	52.4	57.8	62.0	65.3	68.2	69.8	68.9
	65.9	62.9	60.7	59.9	55.1	53.9	50.4	44.0	37.4	31.9	20.5	12.0
3257	16.1	25.3	33.0	43.4	51.8	56.2	58.8	61.6	60.6	56.5	58.4	58.6
	57.3	55.1	54.9	56.3	54.2	57.1	56.2	49.2	42.7	35.8	22.5	13.0
4057	17.2	27.5	35.8	45.3	54.2	59.2	65.9	70.8	72.0	72.8	74.8	73.0
	69.6	64.3	62.4	61.8	55.6	53.9	50.1	43.8	36.4	31.2	19.8	11.4

CYCLE 1 DATA

DATASET 11, JANUARY 6, 1975

Reactor Conditions

Core Average Exposure, 4364 MWd/t
Core Thermal Power, 3280 MWT
Dome Pressure, P, 1027 psia
Core Flow, 104.1 Mlb/hr
Inlet Subcooling at P, 23.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	16.	48.	6.	48.	16.	48.	36.	48.	48.	48.
48.	48.	48.	48.	30.	48.	38.	48.	38.	48.	30.	48.	48.	48.	48.
48.	36.	48.	8.	48.	6.	48.	16.	48.	6.	48.	8.	48.	36.	48.
48.	48.	24.	48.	36.	48.	34.	48.	34.	48.	36.	48.	24.	48.	48.
48.	32.	48.	6.	48.	10.	48.	12.	48.	10.	48.	6.	48.	32.	48.
48.	48.	10.	48.	36.	48.	36.	48.	36.	48.	36.	48.	10.	48.	48.
48.	32.	48.	6.	48.	10.	48.	12.	48.	10.	48.	6.	48.	32.	48.
48.	48.	24.	48.	36.	48.	34.	48.	34.	48.	36.	48.	24.	48.	48.
48.	36.	48.	8.	48.	6.	48.	16.	48.	6.	48.	8.	48.	36.	48.
48.	48.	48.	48.	30.	48.	38.	48.	38.	48.	30.	48.	48.	48.	48.
48.	48.	48.	36.	48.	16.	48.	6.	48.	16.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	17.3	29.3	39.4	55.0	69.8	81.8	89.0	89.8	84.8	79.2	75.0	72.5
	67.1	62.3	61.7	61.3	54.2	52.5	49.1	41.9	35.7	30.3	19.5	11.3
24 9	22.8	36.1	47.7	62.7	70.7	71.6	73.6	74.2	71.4	71.8	75.9	76.9
	74.4	73.5	74.2	77.5	73.9	73.2	68.7	58.1	49.1	40.5	26.0	17.2
32 9	21.4	36.1	47.7	63.1	72.0	74.3	75.4	77.6	73.2	76.4	80.9	83.7
	82.1	79.2	78.9	78.4	71.5	69.7	64.5	56.5	49.4	43.0	28.8	17.0
40 9	23.4	37.9	50.7	70.6	84.4	91.6	94.6	96.2	91.5	87.0	85.0	84.3
	81.0	80.2	80.2	82.4	76.9	75.9	70.7	59.5	49.6	39.7	24.5	15.8
48 9	16.6	28.7	38.1	51.5	63.6	75.0	79.6	82.6	78.1	73.0	68.9	66.5
	62.4	57.7	57.3	54.8	48.3	46.2	42.8	36.7	30.0	25.3	16.9	9.0
817	26.8	45.7	59.5	74.6	84.7	91.0	90.0	94.2	88.9	84.9	80.3	77.8
	75.4	68.9	68.4	66.8	59.7	55.7	52.1	46.0	38.1	33.1	22.5	13.0
1617	22.0	38.7	53.3	67.4	77.2	82.4	82.4	86.3	83.9	85.2	83.5	81.1
	77.7	71.7	71.6	72.6	65.7	63.1	60.3	56.2	49.5	45.0	31.1	19.8
2417	22.2	37.7	51.6	70.4	84.4	93.2	94.9	96.2	89.4	81.4	78.5	77.6
	73.5	72.2	76.2	78.3	72.9	73.7	71.3	64.3	56.4	50.2	33.3	21.3
3217	24.4	40.1	54.3	73.6	88.1	95.5	96.3	93.8	84.7	77.5	76.2	75.2
	71.3	72.6	77.7	82.9	81.6	81.9	78.7	70.0	59.1	49.1	31.8	21.9
4017	20.1	36.5	50.0	65.1	76.4	82.2	84.9	89.5	88.2	87.2	87.4	86.5
	82.7	78.5	80.9	82.1	76.2	73.6	70.4	64.9	56.8	51.4	35.7	21.2
4817	29.5	51.9	68.1	84.8	92.7	95.5	91.8	91.4	87.4	81.2	78.2	77.0
	73.6	69.8	71.4	69.9	63.0	60.2	56.3	52.0	46.1	40.6	28.1	15.8
5617	13.0	21.7	28.4	37.4	46.9	56.2	63.9	67.8	64.8	62.1	61.4	59.5
	55.9	52.2	50.0	47.3	41.2	39.3	35.7	30.3	25.2	21.5	13.5	7.7
825	20.6	35.6	48.2	62.6	73.1	78.7	82.0	90.2	90.5	90.0	87.7	91.3
	92.7	87.9	87.3	85.5	76.5	70.7	66.9	57.9	48.2	41.6	28.9	16.5
1625	21.4	35.4	48.2	64.2	75.5	85.6	87.7	91.7	84.7	78.8	74.0	72.4

	69.5	68.7	69.1	70.2	65.5	65.0	63.6	59.7	53.4	47.8	31.5	20.2
2425	21.7	36.2	48.8	65.0	76.8	86.1	93.4	97.8	93.5	86.1	84.3	82.0
	78.1	77.5	80.3	82.6	78.7	81.1	81.8	77.6	68.5	58.5	38.0	25.1
3225	22.4	37.4	50.4	67.3	79.1	87.9	92.9	97.6	91.3	83.5	80.5	77.6
	73.9	74.1	77.8	81.1	78.6	84.2	85.8	78.9	68.9	58.7	37.2	25.1
4025	19.1	34.1	48.2	64.9	79.0	89.8	96.7	99.2	90.6	84.2	79.2	76.8
	73.2	70.2	72.8	74.5	71.7	71.6	73.3	71.6	64.5	57.4	39.7	23.4
4825	16.8	30.3	42.2	55.8	68.2	73.7	75.4	76.5	72.0	68.1	67.4	71.7
	73.8	74.0	76.6	76.2	70.0	67.4	64.6	60.1	52.4	47.9	34.2	19.2
5625	14.2	24.0	31.4	41.8	51.7	59.8	66.6	77.2	80.6	83.2	82.8	82.0
	78.2	73.1	71.0	68.5	60.6	57.4	53.7	45.5	37.5	32.4	20.6	11.2
833	21.2	35.6	47.3	60.9	68.2	72.9	76.5	84.3	84.3	83.5	84.8	84.3
	79.2	74.4	74.4	71.8	63.9	63.0	60.3	55.1	47.8	41.6	27.7	16.2
1633	19.4	33.1	45.0	61.1	72.9	82.0	87.5	89.1	80.7	73.3	70.5	67.0
	64.5	61.7	64.6	65.4	60.8	61.0	60.5	56.2	51.3	45.8	30.7	19.8
2433	18.5	32.2	44.8	60.9	74.3	85.9	92.6	96.4	89.2	82.8	77.5	74.4
	70.3	67.3	70.4	73.6	71.5	74.8	77.1	75.2	67.9	60.1	40.4	23.7
3233	19.7	34.0	47.4	64.5	79.0	92.0	97.9	99.3	91.0	82.2	76.7	73.9
	68.8	68.3	71.3	75.7	75.7	82.6	85.2	81.8	71.6	62.4	40.7	26.2
4033	18.6	32.8	45.6	61.5	75.1	87.2	94.2	98.2	91.4	83.9	79.5	75.1
	70.8	67.1	69.4	72.2	68.7	71.1	73.1	71.1	63.6	57.0	39.1	22.4
4833	18.2	31.0	42.1	56.0	65.1	71.4	74.1	75.1	69.9	67.1	65.9	65.0
	64.2	63.2	64.5	65.2	59.8	60.6	61.6	58.5	54.4	50.4	34.5	19.3
5633	14.6	24.8	33.3	43.5	53.0	58.5	65.8	76.2	78.9	77.5	78.9	78.6
	74.8	66.9	65.4	62.8	55.0	52.9	49.7	42.6	36.1	31.0	20.5	11.5
841	22.8	37.8	51.4	66.7	78.0	87.0	90.0	94.2	90.5	85.8	84.0	87.2
	86.8	83.2	83.6	83.3	73.2	69.0	64.1	55.6	46.1	38.8	25.1	14.5
1641	19.2	33.3	47.2	63.3	75.2	85.7	91.8	94.5	88.6	82.1	78.3	77.5
	75.0	70.5	72.6	72.8	67.1	65.5	64.2	60.9	54.4	49.8	34.6	21.0
2441	18.3	32.1	44.2	58.9	71.1	78.3	84.9	88.5	84.7	77.4	73.0	73.0
	68.1	66.6	70.2	72.9	69.1	70.1	69.2	63.9	57.4	51.5	35.4	21.5
3241	19.2	33.3	46.2	61.0	72.4	79.3	85.3	90.8	88.7	81.6	77.1	75.8
	73.8	73.6	79.4	86.7	86.8	90.4	88.0	79.1	67.2	58.1	39.4	23.9
4041	18.1	32.4	45.9	58.8	74.0	84.0	91.0	95.5	89.2	83.2	80.1	78.1
	75.6	72.6	76.0	77.5	73.2	72.0	70.2	65.6	57.9	54.1	38.9	23.4
4841	19.4	34.2	47.4	62.2	72.2	78.5	77.9	80.3	74.4	71.5	70.0	73.6
	74.0	73.2	74.9	74.5	66.4	63.8	61.1	55.4	49.2	44.4	30.7	18.5
5641	15.9	26.8	34.6	46.3	58.0	70.2	79.8	84.3	80.8	75.4	71.2	68.4
	66.0	59.9	59.0	56.5	49.4	47.7	43.9	37.7	31.2	26.7	17.8	10.2
849	28.7	44.9	56.1	70.4	75.0	76.5	75.2	72.7	67.3	60.7	58.6	56.0
	52.3	49.5	48.4	47.3	41.3	40.3	38.1	32.4	27.1	22.9	14.4	8.3
1649	23.1	37.4	50.0	66.0	77.6	87.5	93.9	97.0	97.5	93.5	94.4	93.0
	88.3	84.9	84.2	83.6	76.4	73.0	67.3	59.4	49.4	40.7	25.7	15.8
2449	21.1	34.7	47.3	65.0	79.1	85.7	87.0	84.8	81.0	75.8	75.3	75.6
	73.2	73.1	77.3	84.1	80.4	81.3	77.0	67.6	58.4	48.8	31.6	19.3
3249	18.4	32.1	45.2	63.7	79.4	90.7	91.1	93.3	84.7	78.8	75.7	76.6
	73.5	72.5	76.8	79.1	73.5	73.4	70.8	64.5	57.1	50.7	34.1	20.4
4049	20.6	34.4	47.2	63.3	74.9	79.9	84.2	88.8	87.9	89.9	91.7	89.6
	86.3	83.9	87.8	91.8	88.1	87.7	83.4	73.3	61.9	51.9	33.7	20.2
4849	22.1	38.6	51.3	66.3	77.6	85.4	89.2	92.3	87.5	81.5	77.4	76.1
	71.4	65.0	65.3	63.5	56.6	53.7	50.9	44.5	37.3	32.5	21.9	12.6
1657	9.6	15.6	21.9	31.4	43.4	54.0	60.4	64.7	63.1	58.4	57.7	56.6
	53.3	50.9	49.8	47.7	43.5	42.9	38.9	32.5	27.9	23.3	14.5	8.0
2457	14.2	22.9	29.6	40.1	47.6	53.5	58.3	62.7	63.3	67.0	72.1	73.7
	70.9	67.5	66.5	65.9	58.4	56.4	52.9	44.7	37.2	31.3	20.3	11.6
3257	15.5	25.2	32.9	42.8	50.2	55.5	59.8	62.6	63.0	66.8	76.1	78.3
	76.3	72.9	71.9	69.3	61.1	59.2	55.4	47.2	39.0	33.5	21.6	12.2
4057	16.0	26.7	36.4	51.8	66.8	77.0	81.3	85.0	79.3	74.6	73.2	71.8
	68.1	64.7	62.0	61.2	55.6	55.4	51.4	43.6	35.9	30.6	19.2	11.0

CYCLE 1 DATA

DATASET 12, FEBRUARY 3, 1975

Reactor Conditions

Core Average Exposure, 4697 MWd/t
Core Thermal Power, 3277 MWT
Dome Pressure, P, 1029 psia
Core Flow, 104.0 Mlb/hr
Inlet Subcooling at P, 23.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	12.	48.	10.	48.	6.	48.	10.	48.	12.	48.	48.	48.
48.	48.	36.	48.	32.	48.	34.	48.	34.	48.	32.	48.	36.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	38.	48.	34.	48.	34.	48.	34.	48.	34.	48.	38.	48.	48.
48.	14.	48.	6.	48.	10.	48.	10.	48.	10.	48.	6.	48.	14.	48.
48.	48.	38.	48.	34.	48.	34.	48.	34.	48.	34.	48.	38.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	36.	48.	32.	48.	34.	48.	34.	48.	32.	48.	36.	48.	48.
48.	48.	48.	12.	48.	10.	48.	6.	48.	10.	48.	12.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom to Top of Core
See Figure 22

16 9	27.9	45.4	55.6	69.8	73.1	76.8	75.1	77.5	72.3	65.4	63.6	62.1
	59.5	55.8	55.6	55.3	50.1	48.1	46.1	40.2	34.7	29.4	19.2	11.5
24 9	24.7	39.3	51.5	68.3	78.4	86.1	85.6	85.1	78.7	74.3	75.6	77.6
	76.7	75.6	76.4	74.9	68.7	67.2	63.0	55.3	46.1	38.6	24.6	16.7
32 9	23.0	38.2	53.0	70.7	83.1	90.7	92.3	92.5	84.9	78.0	78.3	76.2
	73.3	69.3	70.6	72.4	69.3	69.6	67.7	59.4	50.7	42.9	28.0	16.6
40 9	25.9	41.5	53.5	69.4	78.8	86.1	89.9	91.0	86.9	81.6	83.2	86.7
	85.7	83.6	82.0	80.8	72.6	71.0	66.3	56.4	48.1	38.7	24.2	16.2
48 9	26.4	43.2	54.8	68.9	72.6	74.0	70.9	68.5	63.1	58.6	57.9	56.1
	52.9	47.8	47.7	48.1	43.4	42.0	39.7	34.8	29.6	25.2	17.0	9.2
817	26.2	45.6	59.1	73.3	81.2	84.5	84.1	87.5	82.7	77.2	72.7	72.7
	70.5	65.6	66.1	65.2	59.9	57.6	54.9	49.1	41.1	35.5	24.1	13.8
1617	20.4	36.0	48.5	62.7	72.2	78.6	81.7	88.8	88.6	85.0	81.3	78.6
	74.0	68.4	68.7	68.2	64.0	64.8	66.0	62.0	53.8	47.0	31.3	18.8
2417	22.2	37.4	50.4	64.9	75.8	83.3	92.0	97.4	92.9	85.4	83.4	80.0
	75.0	70.7	70.6	71.2	65.3	65.0	65.1	61.6	55.0	48.0	31.4	20.3
3217	23.4	38.5	52.1	67.2	77.6	83.8	92.9	97.2	92.4	86.1	82.9	79.1
	74.0	71.3	70.6	70.2	64.1	63.4	61.8	55.8	51.1	43.9	28.8	20.6
4017	19.2	35.0	46.7	60.8	70.2	78.9	83.1	91.4	92.9	91.6	88.6	85.9
	80.4	74.6	75.4	75.4	70.2	69.4	70.0	67.1	58.8	52.1	36.2	20.8
4817	21.8	38.2	51.7	66.9	76.5	83.9	89.7	93.4	88.8	82.5	78.7	77.2
	72.9	68.5	68.5	69.0	64.6	65.8	65.4	60.3	51.0	44.0	29.4	16.8
5617	17.8	29.5	37.7	48.3	55.0	58.8	59.9	60.7	56.5	53.5	52.6	53.0
	50.2	48.4	47.5	46.4	41.3	40.1	36.6	31.5	26.2	22.4	14.2	7.9
825	22.0	38.9	53.2	70.1	85.1	93.0	94.0	95.5	87.2	83.2	82.6	83.8
	84.7	82.6	83.9	83.7	76.7	73.7	69.7	61.7	51.1	44.1	29.5	17.9
1625	22.0	35.9	48.3	62.3	71.4	78.7	84.2	90.7	88.1	84.8	82.9	79.8

	74.1	71.0	71.7	70.7	66.0	67.7	68.2	63.4	56.4	48.8	31.8	20.5
2425	21.4	34.9	47.0	62.5	73.1	83.0	91.2	99.3	96.9	92.2	90.7	87.9
	82.9	79.2	78.8	78.6	73.2	72.0	70.0	64.2	58.8	51.3	34.1	22.7
3225	21.8	36.4	49.1	64.5	76.0	83.4	91.0	98.3	94.0	89.3	86.8	81.2
	75.2	72.7	74.5	73.7	68.4	70.3	70.5	65.6	59.2	51.3	32.9	22.9
4025	18.3	32.7	45.2	60.4	71.2	81.0	87.1	96.3	93.8	89.5	85.2	81.1
	76.8	72.1	73.6	74.1	69.1	68.0	66.9	63.0	56.2	51.9	36.1	22.6
4825	17.7	32.6	47.1	65.0	80.3	92.6	93.9	97.2	88.8	84.5	82.4	78.4
	74.4	70.8	72.4	73.0	69.4	69.6	69.0	65.2	57.0	50.3	34.2	19.7
5625	15.5	26.4	35.2	46.6	54.7	61.0	64.1	65.7	62.6	61.0	61.0	63.9
	67.3	68.0	67.8	67.7	62.1	60.6	56.7	48.9	40.5	34.4	22.2	12.3
833	23.2	39.9	53.9	70.5	82.1	91.3	91.1	92.4	85.8	80.2	77.6	76.6
	74.0	70.8	71.4	73.4	70.4	71.7	68.0	59.9	50.6	43.1	28.5	17.0
1633	19.7	34.0	46.2	61.6	70.3	78.3	85.7	91.0	87.4	82.1	78.2	74.3
	71.3	68.2	68.4	68.1	63.6	62.9	61.3	56.4	51.2	44.7	29.7	19.5
2433	17.3	29.9	41.4	56.0	65.9	74.2	82.9	92.5	91.3	87.4	81.5	79.3
	74.2	70.1	70.4	71.4	67.3	67.7	68.6	66.5	59.6	53.8	36.2	21.7
3233	18.5	32.1	44.1	59.8	71.0	81.0	90.0	96.9	91.8	87.6	83.4	79.0
	74.9	70.1	70.8	72.9	67.9	70.0	71.6	69.1	62.0	56.1	37.0	22.9
4033	18.0	31.4	43.7	57.7	69.0	77.0	86.0	96.3	95.3	88.5	85.9	81.4
	75.7	70.5	71.3	72.3	67.8	68.4	68.7	65.6	59.1	52.6	35.9	21.3
4833	20.4	35.3	49.4	67.9	82.5	92.5	96.1	96.5	91.0	83.2	80.8	78.0
	74.3	71.7	73.0	74.3	68.2	68.2	65.9	59.8	53.2	47.1	31.6	18.7
5633	16.6	28.5	37.9	49.5	58.3	62.7	63.5	64.8	61.3	57.5	56.6	56.0
	55.0	53.1	52.6	55.2	52.3	55.0	53.6	47.1	39.5	33.8	22.5	12.8
841	22.5	38.7	51.4	67.1	77.3	84.6	88.3	92.3	87.1	82.5	81.1	83.4
	83.2	80.2	82.3	82.2	75.7	71.7	67.7	59.5	50.2	41.8	26.8	15.9
1641	18.6	32.3	45.1	59.9	72.1	78.8	82.8	90.4	89.7	88.7	85.1	83.1
	77.8	72.5	73.4	73.8	69.3	67.7	68.5	66.1	58.3	52.3	35.8	21.8
2441	17.8	31.1	43.2	56.4	66.3	75.7	82.5	89.8	87.9	82.4	78.8	75.7
	70.6	66.9	67.8	68.1	61.5	62.3	61.1	57.1	51.4	46.9	32.3	19.9
3241	18.2	31.8	44.1	58.4	69.6	77.5	85.4	92.9	92.4	86.2	82.4	80.4
	76.3	71.7	73.3	72.8	68.2	68.0	69.4	65.9	58.3	51.6	35.4	21.5
4041	17.2	30.9	42.9	56.1	66.8	76.1	80.8	89.8	91.3	88.6	85.4	82.4
	79.3	74.9	76.6	76.8	72.0	70.6	68.8	63.9	58.1	52.6	37.3	22.3
4841	18.9	33.2	46.0	60.5	74.3	84.9	91.7	96.2	90.9	87.1	84.6	80.9
	77.8	73.0	74.3	75.0	68.0	67.4	67.4	62.7	54.0	47.3	31.8	19.8
5641	18.2	30.3	39.6	50.9	59.4	64.4	65.7	66.1	62.2	58.8	59.9	60.7
	61.2	59.1	59.1	57.0	50.9	48.8	45.5	39.9	33.5	28.9	19.4	11.1
849	29.4	44.9	55.3	65.6	70.2	68.4	66.9	64.6	59.9	55.2	53.1	50.5
	46.7	44.8	44.3	42.7	40.7	40.3	38.5	33.2	28.8	23.9	14.8	8.7
1649	24.7	39.7	51.8	68.0	77.1	82.6	86.6	87.9	83.5	78.5	77.7	75.1
	70.9	68.8	68.3	68.9	63.9	65.9	66.1	59.3	50.5	42.7	26.9	16.2
2449	20.7	34.6	46.9	63.6	77.2	86.6	89.5	89.8	83.6	77.4	76.8	74.6
	71.8	69.3	70.7	71.4	65.8	66.6	66.7	60.7	54.3	46.6	30.2	18.6
3249	18.8	32.7	45.9	64.3	81.7	91.4	93.8	97.4	89.4	83.4	79.9	75.9
	71.4	69.5	70.4	70.8	65.4	64.2	63.4	58.2	51.3	46.3	31.8	19.7
4049	20.5	34.5	46.7	62.5	75.1	87.0	92.7	96.9	93.1	89.3	86.7	85.6
	81.8	78.7	79.3	81.1	74.8	74.6	73.8	68.7	59.8	51.1	33.2	19.9
4849	21.6	37.4	49.5	62.9	70.3	74.0	74.9	74.6	69.5	65.3	61.7	60.7
	57.0	52.5	52.5	53.3	49.3	50.6	51.1	47.2	40.1	35.5	24.0	13.6
1657	17.2	26.8	34.1	42.2	49.2	53.1	53.9	55.4	53.6	51.0	50.5	49.9
	47.7	46.0	46.2	46.7	41.9	39.6	37.0	32.0	26.9	22.6	14.2	7.9
2457	15.8	25.1	32.9	42.9	51.3	55.7	59.0	60.4	58.6	56.0	57.8	61.2
	62.2	61.7	62.8	62.2	55.2	54.5	51.3	43.8	36.4	30.7	20.1	11.1
3257	17.2	27.9	36.8	48.5	57.1	60.7	64.6	64.3	60.5	56.4	57.4	57.8
	56.5	54.7	55.1	56.0	53.9	56.0	55.3	47.7	41.2	34.4	21.9	12.6
4057	18.5	29.8	38.9	50.5	59.6	64.0	66.9	67.0	63.6	59.6	61.3	63.3
	64.3	64.0	63.9	62.7	55.4	54.2	51.4	43.6	35.6	30.3	18.9	10.7

CYCLE 1 DATA

DATASET 13, MARCH 13, 1975

Reactor Conditions

Core Average Exposure, 5262 MWd/t
Core Thermal Power, 3293 MWT
Dome Pressure, P, 1033 psia
Core Flow, 103.1 Mlb/hr
Inlet Subcooling at P, 24.2 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	12.	48.	10.	48.	8.	48.	10.	48.	12.	48.	48.	48.
48.	48.	36.	48.	34.	48.	38.	48.	38.	48.	34.	48.	36.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	14.	48.	8.	48.	10.	48.	12.	48.	10.	48.	8.	48.	14.	48.
48.	48.	38.	48.	38.	48.	34.	48.	34.	48.	38.	48.	38.	48.	48.
48.	24.	48.	10.	48.	6.	48.	10.	48.	6.	48.	10.	48.	24.	48.
48.	48.	36.	48.	34.	48.	38.	48.	38.	48.	34.	48.	36.	48.	48.
48.	48.	48.	12.	48.	10.	48.	8.	48.	10.	48.	12.	48.	48.	48.
48.	48.	48.	48.	36.	48.	38.	48.	38.	48.	36.	48.	48.	48.	48.
48.	48.	48.	48.	48.	24.	48.	14.	48.	24.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	27.7	44.7	54.5	65.3	69.0	71.4	71.1	73.0	69.3	64.4	62.1	61.7
	59.6	54.6	55.2	53.7	48.7	48.4	45.3	39.3	34.0	29.5	19.2	10.9
24 9	25.3	39.3	51.1	67.1	76.9	82.1	81.6	81.9	77.1	74.0	74.0	75.8
	75.3	73.0	73.5	72.9	66.9	65.5	61.3	54.2	46.2	38.2	25.1	16.2
32 9	23.3	39.8	52.7	67.7	80.5	87.2	87.1	90.8	84.5	79.4	75.8	74.7
	71.0	67.6	68.4	70.2	66.4	67.8	66.5	59.4	50.8	43.0	28.8	16.8
40 9	25.7	40.9	52.5	65.1	73.5	80.7	84.1	87.3	84.6	80.4	81.4	84.5
	83.5	79.7	79.5	78.7	70.9	68.9	64.8	56.0	46.5	38.3	23.7	15.8
48 9	25.1	41.9	52.1	64.6	69.7	70.0	66.3	64.8	61.5	58.3	57.1	55.6
	51.4	47.2	46.7	46.8	42.0	41.5	40.0	35.0	29.4	25.3	17.0	9.2
817	26.3	44.4	56.5	68.6	75.4	78.5	79.1	82.4	78.8	75.1	72.3	70.9
	69.7	63.0	63.8	64.1	59.1	56.1	54.0	47.9	40.4	34.5	23.3	13.4
1617	20.3	35.1	47.5	61.1	69.9	77.4	82.1	90.9	89.0	83.0	80.9	77.5
	72.4	66.1	66.0	65.4	61.3	62.9	63.2	59.5	51.1	45.2	30.5	18.7
2417	23.6	40.1	54.0	70.0	82.8	93.1	94.7	97.8	93.3	86.9	82.1	78.8
	72.2	69.4	68.8	67.8	62.3	62.9	63.0	59.8	53.6	46.9	30.9	19.6
3217	24.6	40.8	55.0	73.1	86.5	94.0	96.9	99.3	91.6	84.8	81.5	76.5
	72.0	67.7	66.6	65.3	60.8	60.0	59.8	55.6	51.1	44.5	29.3	20.2
4017	19.6	35.2	47.6	61.2	70.9	79.0	86.7	97.3	96.7	91.3	88.0	86.0
	80.5	73.2	72.3	71.1	67.0	67.2	67.2	64.7	56.8	50.8	35.1	20.5
4817	21.2	37.4	49.4	62.3	72.7	79.2	84.7	90.7	88.7	82.9	80.4	77.1
	72.6	68.1	68.9	69.1	64.1	65.3	65.6	59.7	50.8	43.9	29.6	17.3
5617	17.3	28.8	37.2	46.8	53.3	55.8	57.7	58.5	56.0	52.1	52.0	51.8
	49.2	47.0	46.6	45.4	40.5	39.4	36.0	31.3	26.2	22.3	14.3	8.1
825	21.9	38.3	53.0	69.7	80.7	88.5	90.0	91.4	87.0	82.2	79.5	82.3
	84.3	81.1	81.0	81.3	75.0	71.8	68.3	60.8	51.1	43.5	29.6	17.7
1625	23.1	37.5	50.5	66.4	76.7	84.6	87.7	91.5	88.4	83.5	79.6	76.9

	71.2	68.3	67.3	67.0	62.3	64.2	64.9	61.3	55.0	47.6	31.3	19.6
2425	22.9	37.3	50.7	65.9	75.1	83.6	90.0	97.4	97.6	92.9	90.3	85.5
	80.9	76.6	75.9	74.3	68.7	68.6	66.8	60.7	55.1	48.5	32.4	21.9
3225	23.1	38.5	51.9	66.0	75.3	82.6	90.3	95.8	93.9	88.4	86.6	82.6
	75.3	71.8	71.4	71.3	65.4	67.1	67.7	62.9	56.6	49.4	31.9	21.5
4025	19.7	35.1	48.8	66.9	80.6	91.2	94.0	97.9	93.5	89.8	84.1	80.8
	75.8	69.9	70.7	70.5	66.0	64.3	63.3	60.3	54.2	49.9	35.0	21.6
4825	18.4	33.7	47.5	64.4	79.6	89.1	90.4	93.8	90.5	83.5	78.7	77.6
	73.7	68.9	70.6	71.3	68.0	66.5	67.8	64.3	56.1	49.3	33.5	19.2
5625	15.3	26.2	33.9	45.8	53.1	58.8	61.6	60.7	59.4	58.1	59.4	61.2
	65.5	64.6	65.6	65.9	61.2	57.8	55.1	48.6	39.4	33.8	22.1	12.5
833	23.3	39.4	51.9	67.9	78.5	86.4	85.7	87.2	83.3	79.0	76.6	75.5
	72.5	69.1	69.1	71.8	68.7	70.0	67.4	60.4	51.0	43.4	28.2	17.7
1633	20.9	36.2	49.6	66.2	79.4	87.4	88.9	89.8	84.0	77.6	75.1	72.5
	67.8	64.0	64.6	64.7	59.6	59.3	59.6	56.6	51.4	45.0	29.6	18.9
2433	18.6	32.2	44.2	57.0	67.5	75.1	81.2	89.8	89.7	86.4	81.8	78.8
	73.8	68.5	67.2	68.2	63.8	65.4	65.7	63.3	56.7	50.9	34.4	20.8
3233	21.7	36.1	47.8	62.0	71.6	79.8	88.9	94.1	92.2	87.2	84.5	79.6
	73.7	69.6	69.7	70.0	66.5	70.3	72.4	67.7	59.1	50.7	33.0	21.8
4033	19.6	34.8	48.1	64.8	79.7	89.0	92.2	97.3	92.4	88.5	82.8	79.9
	73.7	67.6	66.8	67.6	63.4	63.8	64.5	62.1	55.5	50.4	34.7	20.8
4833	20.8	36.1	50.4	68.0	81.6	91.1	92.4	93.9	90.0	84.7	81.5	77.7
	73.7	70.7	70.2	71.7	66.6	66.5	65.6	61.7	55.0	48.4	32.3	18.8
5633	17.0	28.8	38.3	49.6	59.3	62.6	63.7	63.0	60.2	55.0	54.6	54.4
	53.2	50.8	52.0	53.4	51.1	53.6	52.1	45.8	39.5	33.5	22.7	13.0
841	22.5	38.1	49.8	63.5	73.2	79.0	82.2	85.5	81.1	79.3	78.2	79.6
	81.4	78.1	78.9	79.5	72.8	70.6	66.3	58.6	49.0	41.6	26.2	16.4
1641	19.1	33.3	46.0	59.8	72.3	79.0	84.7	95.4	92.5	88.7	83.8	81.9
	76.8	70.2	70.2	69.6	65.2	64.8	65.0	61.6	55.6	49.4	34.5	21.2
2441	18.7	32.7	45.6	61.7	73.8	83.0	86.3	88.4	84.3	78.3	76.0	72.0
	66.9	62.0	62.0	61.6	57.5	56.7	57.1	52.5	47.8	43.8	30.4	19.0
3241	20.3	35.6	49.5	65.6	79.1	89.5	92.1	95.4	90.5	85.4	81.5	78.0
	73.2	68.7	68.7	68.8	64.0	64.6	65.3	61.9	55.6	49.3	33.7	20.6
4041	18.2	33.0	46.4	59.9	71.4	81.0	86.6	95.8	95.2	90.7	84.9	82.6
	78.0	72.3	72.4	73.5	67.8	67.0	64.6	60.9	54.3	50.1	35.2	21.5
4841	18.9	32.9	45.3	59.0	70.5	79.4	86.9	93.5	89.1	83.0	83.0	80.3
	77.1	71.3	72.3	70.6	65.2	65.9	64.1	59.5	51.7	45.2	30.5	18.3
5641	18.3	30.5	39.2	49.3	57.8	63.0	63.3	63.7	58.6	56.1	55.5	58.6
	59.8	57.3	57.4	55.5	49.9	47.1	45.4	38.8	32.8	28.4	18.6	11.1
849	28.5	42.8	52.1	63.1	67.1	65.4	62.3	61.2	56.3	51.0	50.7	48.9
	46.2	44.2	43.2	42.6	39.7	39.2	37.3	32.3	27.8	23.1	14.6	8.4
1649	24.3	38.9	51.4	64.1	72.5	77.1	81.8	85.9	81.1	77.9	77.2	75.4
	69.8	66.3	66.3	66.7	62.6	63.9	63.2	57.2	49.8	41.6	26.0	16.2
2449	21.4	34.9	47.3	63.1	76.8	84.1	85.2	87.7	82.1	77.2	76.2	73.7
	69.6	68.0	67.7	68.2	63.4	64.0	63.1	59.2	52.6	45.5	29.7	18.3
3249	19.1	33.4	47.4	64.2	78.4	88.1	90.4	93.5	87.5	82.5	77.3	73.6
	69.5	65.5	67.4	67.1	61.8	62.0	61.7	58.5	52.8	46.7	31.7	19.5
4049	20.4	34.7	46.8	61.6	71.3	82.9	90.2	94.9	91.3	88.0	86.4	83.9
	80.5	77.2	76.5	76.9	72.6	72.7	72.6	67.3	58.5	50.3	32.9	19.7
4849	20.9	36.3	47.8	60.1	67.5	70.3	68.9	69.8	68.0	64.0	59.9	58.9
	55.4	50.5	51.5	51.9	48.0	50.0	49.9	45.7	39.3	34.4	23.4	13.4
1657	16.6	26.0	33.5	41.8	47.8	50.7	52.5	53.4	52.1	49.4	48.7	50.0
	48.0	45.9	45.3	45.0	40.4	38.7	36.4	31.8	26.2	22.0	14.0	7.9
2457	15.7	25.1	32.4	42.7	49.9	53.6	56.7	59.5	56.4	54.1	55.1	57.9
	59.4	59.1	58.0	58.2	52.3	51.7	48.9	41.9	35.4	30.6	19.7	11.1
3257	17.5	28.4	36.9	48.0	56.5	60.6	62.2	62.8	58.8	56.1	55.3	54.9
	53.2	51.3	52.7	52.6	50.9	53.9	53.6	46.5	39.7	34.2	21.4	12.6
4057	18.6	30.3	38.7	49.6	58.3	63.2	62.9	65.2	62.5	59.1	59.8	61.2
	63.6	62.1	61.5	60.3	53.9	52.7	49.2	41.8	35.0	29.7	18.9	10.7

CYCLE 1 DATA

DATASET 14, APRIL 2, 1975

Reactor Conditions

Core Average Exposure, 5640 MWd/t
Core Thermal Power, 3283 MWT
Dome Pressure, P, 1028 psia
Core Flow, 106.1 Mlb/hr
Inlet Subcooling at P, 23.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	36.	48.	8.	48.	8.	48.	18.	48.	8.	48.	8.	48.	36.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	10.	48.	38.	48.	36.	48.	36.	48.	38.	48.	10.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	36.	48.	8.	48.	8.	48.	18.	48.	8.	48.	8.	48.	36.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	16.8	27.9	36.9	49.8	60.8	70.3	76.1	80.4	77.1	72.3	72.4	71.0
	66.5	62.0	60.5	59.5	53.1	52.3	49.0	42.3	35.8	30.2	19.7	11.6
24 9	23.3	36.4	46.7	60.4	65.7	68.2	69.7	73.6	74.2	74.6	76.8	78.4
	76.3	71.7	70.7	71.5	68.4	70.7	67.4	59.7	49.8	42.1	27.5	17.9
32 9	22.1	36.4	47.9	59.7	66.7	71.2	71.5	73.6	74.5	77.6	83.5	84.2
	81.7	77.2	76.8	76.3	68.7	68.0	65.1	60.4	51.9	46.2	30.9	18.8
40 9	22.4	36.4	48.3	63.3	75.5	83.3	85.3	89.1	87.5	83.7	86.4	84.9
	79.3	77.0	75.8	77.4	73.8	74.3	71.2	61.3	51.3	41.9	25.8	16.9
48 9	15.7	26.4	35.2	46.8	56.3	66.7	72.1	76.1	74.2	70.0	67.4	65.8
	62.2	59.8	57.4	55.3	48.6	46.6	43.1	36.9	30.6	26.2	17.5	9.6
817	25.7	43.7	55.3	67.8	74.6	79.2	81.2	84.2	83.2	79.8	77.1	77.7
	74.0	67.0	67.4	67.6	61.1	57.9	54.7	48.0	40.2	34.2	23.0	13.6
1617	20.4	35.9	47.1	58.5	67.4	70.9	73.1	78.6	79.7	81.5	83.9	87.7
	82.2	76.7	75.6	73.5	66.6	64.0	62.2	57.7	50.8	46.2	31.8	18.9
2417	21.3	35.6	46.1	60.3	73.0	83.0	88.3	95.5	92.5	88.6	89.6	86.8
	80.4	78.4	78.7	78.9	72.9	72.5	71.2	66.0	58.3	50.9	33.2	22.2
3217	22.6	36.8	49.3	64.7	77.2	85.0	91.8	95.8	92.8	86.9	85.5	84.4
	81.2	80.0	84.9	87.6	82.7	82.8	78.2	69.1	60.4	49.8	32.1	22.3
4017	18.4	33.0	44.2	56.4	66.0	71.4	75.7	82.6	84.3	85.4	90.8	93.7
	89.4	83.8	82.7	81.8	75.9	74.1	72.0	67.8	60.8	54.2	37.7	22.3
4817	27.4	47.8	61.3	74.3	80.3	82.0	82.6	87.2	85.5	82.0	82.3	80.2
	79.0	72.3	73.2	72.9	66.2	63.1	59.6	55.0	47.8	42.4	29.2	16.8
5617	12.3	20.4	26.6	35.0	43.2	51.1	58.2	63.3	62.9	60.8	59.0	57.2
	54.3	50.1	49.2	47.7	42.6	40.5	37.2	31.9	26.0	22.4	14.2	7.9
825	20.2	35.2	47.1	57.8	65.8	71.2	73.4	79.5	81.3	82.4	87.6	86.4
	84.8	80.7	84.2	85.0	77.9	73.6	69.9	61.8	51.2	43.9	30.0	17.6
1625	20.2	33.0	43.3	55.5	65.3	73.3	79.2	86.7	84.8	82.4	80.3	79.4

	75.1	70.9	69.9	70.7	64.9	64.9	63.2	57.6	52.9	47.7	31.8	20.4
2425	20.5	33.7	44.5	59.4	69.0	78.3	89.7	98.5	98.9	97.5	96.2	92.5
	87.5	83.9	83.6	81.6	75.1	75.0	73.0	67.9	61.5	53.6	35.7	23.4
3225	21.4	36.0	47.9	61.6	72.0	81.7	92.0	98.7	98.9	96.3	94.5	89.6
	84.4	80.1	81.2	82.1	76.8	79.5	80.1	72.4	63.5	55.1	35.6	23.6
4025	18.3	32.7	45.0	58.9	70.5	82.2	88.4	97.9	95.7	92.6	88.6	85.8
	81.2	75.7	76.2	76.3	70.4	69.2	67.6	64.9	58.4	54.1	37.0	22.7
4825	16.1	29.2	39.4	50.4	58.9	63.2	65.5	67.9	68.9	69.5	68.2	67.7
	66.9	66.9	72.0	75.8	71.5	70.8	70.0	64.4	56.4	51.3	36.1	20.7
5625	13.6	23.0	30.7	39.7	48.1	54.9	59.8	64.2	68.5	72.1	75.1	74.7
	70.9	67.6	67.2	67.5	61.7	58.9	55.2	48.5	39.8	33.9	22.4	12.4
833	21.2	35.5	45.3	56.5	60.9	64.6	65.7	71.3	77.3	79.5	82.7	83.0
	79.4	73.5	73.6	72.2	65.8	64.3	61.9	57.4	49.4	43.0	28.5	16.6
1633	19.1	32.3	43.7	58.3	69.1	78.1	83.2	85.8	81.7	77.6	76.4	73.8
	68.0	64.6	65.0	64.0	58.6	58.7	56.5	52.3	47.9	43.3	28.8	19.1
2433	18.0	30.8	42.8	57.1	69.0	78.6	85.8	93.4	94.0	90.2	88.1	84.0
	79.2	72.8	72.2	71.4	66.6	67.2	66.3	63.6	58.0	52.8	36.5	22.0
3233	19.1	32.4	44.3	59.6	71.5	83.2	91.8	99.3	96.0	91.1	86.7	83.3
	78.7	73.0	73.3	74.5	71.6	75.0	76.8	72.3	64.0	57.5	37.4	23.3
4033	18.3	32.4	44.5	59.9	74.0	84.2	90.6	98.0	94.7	90.1	86.5	83.9
	78.1	71.0	71.0	70.3	65.1	63.8	63.6	60.4	55.4	50.5	35.6	21.5
4833	17.9	29.7	39.9	52.0	59.3	64.4	67.4	70.3	70.4	69.4	69.9	68.5
	65.8	62.7	63.7	64.4	59.5	59.9	60.6	57.8	53.7	48.7	32.7	19.3
5633	15.4	26.1	34.4	44.4	52.8	57.9	61.1	67.0	71.0	73.7	76.8	76.2
	74.4	69.3	66.4	64.7	58.3	55.7	52.5	46.0	38.5	33.2	21.9	13.0
841	21.5	36.8	48.8	61.2	69.3	76.1	80.7	86.1	83.8	80.2	80.6	80.5
	76.5	75.7	79.7	81.4	75.7	73.8	70.1	61.0	51.7	43.3	27.8	16.3
1641	18.2	31.5	43.6	56.1	67.5	76.5	84.0	89.8	87.8	85.7	84.4	83.8
	79.6	74.3	74.6	73.9	67.4	65.8	64.9	61.3	54.9	50.3	35.0	21.4
2441	17.3	30.1	41.3	52.9	62.4	70.5	78.2	87.3	87.0	83.5	81.5	79.9
	75.0	69.9	71.9	72.0	67.5	67.1	66.3	62.3	56.9	49.8	33.7	20.7
3241	18.2	31.6	42.4	54.6	63.6	70.7	79.7	90.6	90.0	89.5	87.2	86.1
	82.6	79.3	85.5	91.3	86.7	86.2	83.0	75.1	64.3	54.9	36.9	22.9
4041	16.5	30.2	41.3	53.2	64.0	74.7	82.7	92.5	91.6	88.3	85.8	86.0
	82.3	77.7	78.2	77.8	71.6	69.4	68.9	65.5	58.8	54.0	38.5	23.3
4841	19.2	33.8	45.3	56.6	64.8	69.2	71.5	77.4	75.7	72.7	73.4	73.0
	70.2	69.3	74.3	75.6	69.4	66.8	64.4	58.7	51.2	46.3	31.6	18.5
5641	15.9	26.8	35.6	46.5	57.1	67.4	72.9	77.4	74.5	71.6	68.0	66.7
	63.4	58.7	57.4	56.3	50.6	47.8	45.3	38.5	32.5	27.9	18.8	10.8
849	27.7	43.6	53.5	64.1	67.7	67.8	67.9	67.9	63.3	58.2	58.1	56.4
	52.0	48.5	47.3	46.8	43.1	42.0	38.7	32.8	28.1	23.4	14.6	8.5
1649	22.1	35.2	45.2	59.5	67.5	77.0	85.1	90.5	89.2	93.3	97.1	97.0
	92.8	87.4	85.6	84.5	77.0	74.4	68.8	60.4	51.4	42.2	26.7	16.6
2449	20.5	33.6	44.9	58.7	70.8	78.5	81.8	85.6	82.5	81.3	81.8	81.0
	76.8	74.6	75.5	78.7	76.5	78.1	76.7	68.5	59.2	50.2	32.3	20.2
3249	17.6	30.3	42.3	56.6	71.1	82.0	85.7	91.1	89.2	84.3	83.3	81.9
	77.8	74.9	76.9	76.6	72.3	72.1	71.5	66.6	59.6	52.7	35.7	21.0
4049	19.8	33.1	43.7	56.6	66.3	71.6	75.8	81.8	83.2	88.2	93.5	95.0
	90.8	87.3	87.1	89.0	84.6	85.9	83.9	75.7	64.1	54.6	35.0	21.4
4849	21.5	37.5	48.6	59.9	67.8	74.1	78.7	83.1	82.6	80.0	77.9	78.3
	72.8	66.6	66.1	65.5	59.5	56.1	52.5	46.5	39.2	34.4	23.2	13.8
1657	9.4	15.5	20.9	30.7	42.1	52.2	58.5	63.7	61.0	58.6	58.0	57.6
	54.0	50.4	49.2	48.2	42.9	42.6	39.2	32.6	27.9	23.3	14.8	8.0
2457	14.9	23.7	31.3	41.8	50.4	55.4	59.4	62.7	64.8	66.7	71.1	70.5
	66.1	63.6	61.8	60.5	54.9	53.7	50.8	43.9	37.4	31.7	20.9	12.0
3257	16.6	26.9	34.7	44.9	52.4	56.0	60.4	63.4	64.4	66.0	72.0	74.8
	71.2	67.8	66.2	64.9	58.5	57.0	53.9	46.6	40.2	34.2	22.1	13.0
4057	16.6	28.0	37.8	52.5	65.9	76.5	80.8	80.8	76.6	72.9	71.0	70.5
	64.4	60.7	59.2	58.7	53.6	52.4	49.5	42.5	35.8	30.5	19.1	11.1

CYCLE 1 DATA

DATASET 15, APRIL 24, 1975

Reactor Conditions

Core Average Exposure, 6106 MWd/t
Core Thermal Power, 3215 MWT
Dome Pressure, P, 1025 psia
Core Flow, 106.1 Mlb/hr
Inlet Subcooling at P, 22.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	36.	48.	10.	48.	8.	48.	18.	48.	8.	48.	10.	48.	36.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	12.	48.	38.	48.	36.	48.	36.	48.	38.	48.	12.	48.	48.
48.	30.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	30.	48.
48.	48.	20.	48.	36.	48.	34.	48.	34.	48.	36.	48.	20.	48.	48.
48.	36.	48.	10.	48.	8.	48.	18.	48.	8.	48.	10.	48.	36.	48.
48.	48.	48.	48.	28.	48.	38.	48.	38.	48.	28.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	28.	48.	28.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	16.5	27.8	35.4	46.1	57.9	68.8	73.5	78.2	77.4	75.2	75.0	72.9
	69.5	63.1	61.9	61.2	55.0	54.0	51.5	44.1	37.5	32.3	20.8	13.1
24 9	22.9	35.0	45.5	57.4	64.7	64.5	68.6	72.9	72.9	73.5	78.3	80.4
	75.8	72.7	71.9	71.8	69.5	70.9	69.1	60.2	51.2	42.6	27.9	18.8
32 9	21.2	35.3	45.4	56.8	62.7	66.7	69.4	74.1	75.9	77.8	83.5	85.3
	82.5	77.5	76.3	76.4	69.8	68.9	66.4	61.2	54.2	47.1	31.5	18.2
40 9	21.6	34.5	45.2	60.3	70.3	79.8	85.1	88.1	87.6	86.2	85.5	85.5
	80.9	77.0	77.6	77.9	74.8	76.3	72.3	63.1	53.1	42.8	26.4	18.0
48 9	14.6	25.1	32.8	43.6	52.9	62.8	69.4	73.2	73.8	70.6	68.1	66.3
	63.9	59.3	57.5	55.7	50.8	48.7	45.7	39.6	32.5	27.7	18.4	10.6
817	24.4	41.0	52.5	62.5	69.1	73.0	76.3	83.8	82.4	80.3	79.2	78.8
	74.8	69.8	70.3	69.9	63.9	61.4	58.2	52.2	43.6	37.7	25.6	15.0
1617	19.3	32.9	43.6	54.3	61.3	68.0	72.2	76.3	79.5	83.1	87.2	88.0
	85.9	79.4	78.1	77.5	68.9	68.8	67.6	64.4	56.2	50.3	34.3	20.4
2417	19.7	33.6	43.5	56.6	68.3	77.2	86.1	93.5	91.2	90.5	89.0	89.0
	83.8	80.7	80.0	81.1	74.7	74.2	72.3	66.7	60.4	52.5	34.7	22.0
3217	21.0	34.6	45.5	60.7	72.3	80.4	88.0	95.5	91.9	89.6	88.8	88.5
	83.5	82.6	86.8	88.3	83.5	82.8	79.7	69.6	61.3	50.8	32.5	23.7
4017	17.2	30.7	40.5	51.5	59.8	66.5	73.1	80.0	82.9	87.0	92.8	96.6
	92.8	85.1	85.5	83.6	77.6	76.2	75.0	70.7	63.1	56.5	39.4	22.9
4817	25.4	44.3	56.2	68.3	74.2	76.8	78.1	82.0	84.3	83.4	83.4	83.4
	80.5	75.7	76.4	76.2	68.9	68.4	66.1	61.3	53.4	46.4	31.6	17.9
5617	11.5	19.5	25.0	32.8	41.1	49.4	56.9	61.3	60.9	60.4	59.9	58.2
	54.0	51.5	50.4	49.5	44.1	42.6	39.4	34.1	28.1	24.3	15.5	8.7
825	19.4	33.8	44.6	55.1	62.3	67.2	69.8	76.6	81.2	82.8	87.2	89.1
	86.4	82.2	87.3	88.2	81.5	78.8	74.6	64.7	55.3	47.2	31.7	18.8
1625	19.1	31.7	41.0	52.2	62.4	72.2	77.3	87.8	86.7	85.3	85.3	82.1

	78.1	74.4	73.7	74.0	67.8	66.7	66.4	60.1	55.0	49.8	33.1	21.0
2425	19.3	31.6	41.8	53.9	64.4	74.1	85.8	97.6	99.3	98.2	99.0	97.3
	90.6	86.1	84.4	83.0	76.0	76.2	73.4	69.0	62.6	54.9	36.0	23.7
3225	20.2	33.3	44.2	56.3	66.6	76.5	87.5	96.1	97.5	97.5	95.9	93.8
	87.0	83.5	82.7	82.2	76.8	80.0	79.3	72.2	64.0	54.7	35.1	22.4
4025	17.1	30.4	41.6	55.4	65.2	76.2	85.8	95.1	95.4	94.9	92.3	91.3
	83.8	78.2	78.5	77.8	72.0	70.9	70.4	66.5	60.0	55.1	37.4	23.1
4825	15.3	27.2	36.9	47.2	54.0	59.4	62.5	67.7	69.1	68.5	68.4	68.8
	68.7	69.1	73.5	77.8	73.1	72.2	70.2	64.5	58.2	53.1	37.4	21.9
5625	12.9	22.3	29.6	38.8	45.4	51.9	57.9	62.7	66.9	70.1	75.0	75.0
	71.2	67.9	68.1	68.7	62.0	60.4	56.4	49.4	40.9	35.0	22.9	12.5
833	20.3	34.0	43.3	53.1	58.2	60.5	63.8	70.9	75.8	81.2	82.5	83.8
	80.3	75.2	76.0	75.5	70.7	71.1	70.3	63.1	53.5	46.2	30.6	17.9
1633	18.0	30.5	40.0	53.0	64.6	74.0	80.4	84.3	81.5	77.7	77.5	74.7
	71.9	66.8	66.9	66.4	61.7	60.8	59.6	55.1	50.5	45.5	30.8	19.6
2433	16.9	29.9	40.2	52.8	64.0	74.4	84.5	93.2	93.8	92.1	91.6	88.6
	81.8	75.7	74.7	74.1	68.5	68.0	68.1	64.6	59.5	54.1	36.8	22.9
3233	16.4	29.2	40.6	53.4	65.7	77.7	86.8	96.4	95.7	94.6	91.7	89.4
	83.1	76.0	75.4	75.5	71.9	73.9	75.7	73.4	64.0	57.6	40.2	24.0
4033	17.2	30.6	41.7	55.9	67.5	79.9	87.6	94.2	94.0	91.8	91.2	87.6
	79.8	72.9	73.7	71.7	66.8	65.6	65.8	62.1	56.8	52.2	35.9	21.7
4833	17.1	28.4	37.3	47.9	55.6	61.1	65.3	69.4	70.6	69.7	71.8	71.4
	67.9	65.3	67.1	67.2	64.6	68.4	67.4	63.3	56.8	51.3	34.1	20.5
5633	14.2	23.9	31.9	41.4	48.3	54.6	58.2	64.2	67.8	70.6	75.6	75.8
	73.6	68.3	66.8	64.8	58.5	57.8	54.9	46.7	40.1	34.2	22.6	12.9
841	21.3	35.8	46.6	58.2	65.9	74.5	79.1	83.3	82.9	81.5	81.3	81.4
	78.4	78.5	81.2	84.0	77.0	76.3	71.7	63.5	53.4	44.6	28.5	17.1
1641	17.1	29.7	40.9	52.4	62.9	71.4	79.6	87.8	88.6	87.5	86.4	86.8
	83.5	77.2	77.2	76.8	71.4	70.3	70.6	68.0	59.9	54.5	37.3	23.2
2441	16.4	28.4	37.4	48.7	57.9	66.7	74.5	84.9	85.0	84.0	83.0	81.3
	76.4	72.7	72.0	71.9	67.3	68.4	66.6	63.7	57.4	51.2	34.6	21.1
3241	16.9	29.4	39.1	51.1	59.6	68.0	77.7	89.8	91.9	91.3	89.4	90.4
	85.6	82.1	86.4	90.9	87.7	86.7	84.6	75.4	65.6	56.0	37.5	23.5
4041	15.8	27.9	38.4	48.4	59.2	69.9	79.4	88.2	92.8	91.7	91.3	89.2
	85.9	79.9	79.7	79.2	74.0	72.5	72.0	69.0	61.6	55.8	39.5	23.4
4841	18.4	31.5	41.3	51.6	58.2	63.3	67.1	71.3	72.6	72.9	72.8	72.7
	70.9	70.3	74.4	75.9	70.5	70.8	70.1	64.4	55.9	49.3	33.2	19.5
5641	15.6	26.0	34.1	44.8	55.2	65.5	69.7	76.8	73.4	68.9	67.1	66.7
	61.9	57.5	57.3	56.4	50.6	49.7	46.7	40.4	34.0	28.7	19.1	11.4
849	26.3	40.3	49.9	60.6	63.8	65.5	65.7	67.8	63.0	58.6	58.8	56.7
	53.4	50.2	49.8	48.9	44.7	44.0	41.0	35.2	29.7	24.8	15.6	9.1
1649	20.7	33.8	42.9	53.9	62.9	72.2	79.4	89.0	90.5	92.7	98.4	98.2
	93.1	90.0	88.8	86.0	78.2	77.0	72.8	63.1	53.8	44.2	27.9	17.7
2449	19.5	31.7	42.5	55.8	67.0	74.2	79.0	84.3	82.8	81.7	83.5	82.6
	78.9	76.9	77.5	79.9	76.9	79.1	77.6	70.0	60.5	51.4	33.3	21.2
3249	16.6	29.0	39.4	53.2	65.9	75.5	81.4	87.7	87.5	85.9	84.6	83.2
	79.2	75.4	76.4	77.1	72.5	71.7	71.0	67.2	60.1	52.4	35.3	21.2
4049	18.8	31.1	41.4	53.1	62.0	68.5	74.1	79.7	83.3	88.2	95.6	95.7
	93.7	87.6	88.6	89.8	85.5	88.2	85.6	77.0	65.5	55.4	35.9	21.8
4849	19.4	33.7	44.2	54.0	62.4	67.7	73.1	78.6	78.8	75.8	76.4	77.2
	74.2	68.0	68.1	65.3	59.7	57.9	55.3	49.5	40.9	35.7	24.6	14.5
1657	9.1	15.0	20.5	29.8	40.8	50.7	58.3	61.9	61.0	58.6	59.2	56.8
	53.4	51.2	50.6	48.7	43.6	42.9	39.8	34.7	28.9	23.9	15.2	8.4
2457	14.5	23.4	30.5	40.9	49.7	54.0	58.3	61.2	63.0	65.7	70.2	69.1
	65.6	61.8	60.8	59.9	54.8	54.3	51.6	44.7	38.0	32.7	21.4	12.1
3257	16.2	26.1	34.0	44.4	51.6	56.2	58.2	61.9	62.6	66.3	71.1	73.0
	70.7	67.5	64.8	64.9	57.7	56.7	54.6	47.4	40.5	34.7	22.4	13.3
4057	16.4	27.3	37.4	51.6	64.9	73.0	79.2	81.3	77.9	72.1	71.1	69.6
	64.8	60.9	60.8	59.3	54.0	54.2	51.3	44.4	37.3	31.6	19.9	11.7

CYCLE 1 DATA

DATASET 16, MAY 13, 1975

Reactor Conditions

Core Average Exposure, 6470 MWd/t
Core Thermal Power, 3172 MWT
Dome Pressure, P, 1025 psia
Core Flow, 105.4 Mlb/hr
Inlet Subcooling at P, 22.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	38.	48.	30.	48.	30.	48.	38.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	32.	48.	38.	48.	38.	48.	32.	48.	48.	48.	48.
48.	36.	48.	12.	48.	8.	48.	20.	48.	8.	48.	12.	48.	36.	48.
48.	48.	20.	48.	36.	48.	36.	48.	36.	48.	36.	48.	20.	48.	48.
48.	32.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	32.	48.
48.	48.	14.	48.	40.	48.	36.	48.	36.	48.	40.	48.	14.	48.	48.
48.	32.	48.	6.	48.	8.	48.	12.	48.	8.	48.	6.	48.	32.	48.
48.	48.	20.	48.	36.	48.	36.	48.	36.	48.	36.	48.	20.	48.	48.
48.	36.	48.	12.	48.	8.	48.	20.	48.	8.	48.	12.	48.	36.	48.
48.	48.	48.	48.	32.	48.	38.	48.	38.	48.	32.	48.	48.	48.	48.
48.	48.	48.	36.	48.	14.	48.	8.	48.	14.	48.	36.	48.	48.	48.
48.	48.	48.	48.	38.	48.	30.	48.	30.	48.	38.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	15.7	26.4	34.3	45.9	56.5	66.9	73.0	80.1	77.4	75.0	74.5	71.2
	66.0	61.3	59.6	59.8	54.0	52.9	50.8	44.0	37.2	31.4	20.7	12.4
24 9	21.9	34.1	43.8	55.2	62.4	64.9	67.1	72.4	76.2	78.5	79.2	78.2
	72.2	68.0	67.9	68.0	65.3	67.7	65.8	57.9	49.2	41.1	26.7	18.6
32 9	20.8	34.2	43.9	55.4	61.6	64.6	68.9	77.0	82.4	85.2	85.6	85.5
	78.7	73.8	72.9	72.6	66.9	65.7	62.9	58.6	52.4	45.7	30.2	18.8
40 9	21.1	34.3	44.1	57.5	68.4	78.7	83.6	89.6	88.9	85.7	86.3	84.3
	79.1	75.1	74.3	75.7	71.8	73.7	71.2	62.0	51.7	41.7	25.8	18.1
48 9	14.2	24.0	31.6	42.2	51.4	61.1	66.6	71.2	71.3	69.6	68.6	67.0
	63.9	58.9	57.5	54.2	50.2	48.6	45.9	39.5	32.8	28.0	18.4	9.6
817	22.9	39.1	49.1	59.0	64.2	69.8	75.1	81.5	80.2	78.0	76.6	76.7
	72.5	68.6	68.6	68.8	64.0	61.7	59.4	52.9	43.6	38.0	25.8	14.6
1617	18.4	31.9	41.4	51.8	59.2	66.3	72.0	79.5	87.4	88.2	87.6	87.1
	82.0	75.7	75.3	72.7	69.0	70.1	70.0	64.9	55.6	49.0	32.8	20.0
2417	19.4	32.2	41.6	53.8	65.6	76.6	81.9	92.1	92.8	89.9	91.6	86.1
	83.0	80.1	79.2	78.6	72.7	72.0	70.3	64.1	57.8	50.9	33.2	22.3
3217	20.7	33.0	43.5	58.2	70.1	79.1	85.1	91.6	92.2	90.2	89.5	87.1
	85.0	85.6	88.1	88.4	81.4	79.5	75.0	66.7	57.7	48.6	31.0	23.0
4017	16.5	29.9	39.6	50.2	57.8	66.1	74.0	85.6	93.4	95.8	95.8	95.0
	90.7	83.2	81.7	81.1	76.3	75.4	74.2	69.5	62.2	55.6	38.6	21.7
4817	25.0	42.2	54.2	64.2	70.0	75.7	78.1	83.0	84.2	84.7	83.7	83.8
	80.3	75.0	75.7	76.1	71.7	72.6	70.7	65.6	55.3	47.7	31.8	17.7
5617	11.4	18.7	24.1	31.7	40.3	48.1	55.1	60.4	61.6	59.7	58.9	57.7
	55.6	51.8	50.3	49.2	43.7	42.5	39.8	34.6	28.3	24.4	15.7	8.6
825	18.7	32.3	43.0	52.8	59.8	65.1	69.7	79.2	84.2	84.1	83.8	85.3
	83.4	79.7	82.9	84.7	80.5	77.1	74.4	65.9	55.0	47.2	31.6	18.3
1625	19.0	31.4	40.2	50.8	59.7	67.5	75.1	82.6	84.1	83.0	83.0	80.9

	76.4	72.8	72.0	72.5	66.7	66.9	65.9	60.3	55.0	49.2	32.6	20.5
2425	19.2	31.6	41.5	53.8	64.7	77.1	86.7	96.8	96.9	95.4	96.0	93.3
	89.7	83.9	82.2	80.1	74.2	73.0	71.3	66.1	60.0	52.4	34.6	23.2
3225	19.9	33.0	43.9	57.0	68.8	78.9	89.6	95.0	95.2	92.4	95.0	91.7
	85.7	82.5	80.4	80.8	74.8	77.6	76.3	69.2	61.6	52.6	33.6	23.0
4025	17.3	30.8	41.8	54.7	65.7	75.6	84.6	93.6	94.3	93.2	91.8	89.6
	84.8	78.8	78.4	77.3	72.3	69.8	69.6	66.0	59.9	54.8	37.3	22.1
4825	15.0	27.0	36.4	45.9	51.8	57.3	61.4	66.5	68.7	68.6	68.5	68.1
	68.4	68.4	72.6	77.0	74.0	74.3	72.4	66.6	59.0	53.1	36.9	21.0
5625	13.1	22.4	30.0	38.9	46.7	53.2	59.3	67.0	71.7	71.2	72.9	71.0
	68.2	65.7	66.3	66.9	61.9	60.4	56.9	48.5	40.8	35.1	23.1	12.8
833	19.5	32.6	42.3	50.8	55.8	61.1	65.4	75.3	79.3	81.4	80.9	81.8
	77.6	72.1	73.8	74.7	72.5	73.7	71.7	62.7	53.8	46.2	30.4	18.5
1633	18.3	31.4	42.3	56.6	66.9	72.5	75.2	78.7	77.0	75.1	74.5	73.9
	68.7	66.1	65.1	65.0	60.2	59.8	59.3	54.1	49.4	44.3	29.9	19.3
2433	17.1	29.8	40.3	52.5	63.1	72.9	79.6	89.7	89.8	89.7	88.4	86.8
	81.1	73.7	73.2	72.1	66.6	65.6	65.3	62.5	57.7	52.3	35.9	21.7
3233	17.8	31.3	41.8	54.3	66.5	77.7	87.2	94.6	94.9	92.3	90.9	88.4
	82.1	75.2	74.3	73.5	69.3	71.5	73.3	69.2	61.4	54.2	35.7	23.0
4033	17.8	32.2	44.6	60.3	72.3	79.1	83.4	89.4	92.0	89.2	88.4	85.3
	79.1	72.0	70.9	71.5	65.8	65.0	64.0	60.5	55.3	51.2	35.5	21.0
4833	17.2	28.9	38.3	49.0	54.4	59.6	63.5	70.7	70.1	69.3	70.7	69.7
	67.0	65.2	66.5	70.1	68.3	71.4	71.2	63.9	57.2	50.9	34.3	20.1
5633	14.6	24.5	32.6	42.7	50.1	55.4	60.6	67.7	71.9	72.5	74.0	72.3
	68.9	64.2	64.0	63.5	57.6	55.9	53.9	47.5	39.5	34.3	22.6	13.0
841	20.6	34.6	43.9	55.9	63.7	69.9	76.6	81.7	80.5	80.0	79.8	79.5
	77.1	75.6	79.1	83.3	77.6	76.3	73.3	64.4	53.8	45.4	28.8	16.9
1641	16.8	29.3	39.6	50.7	60.4	69.1	77.6	86.3	88.0	86.4	87.5	85.9
	81.9	75.7	76.8	76.2	72.0	73.4	74.6	70.4	61.4	54.4	37.7	22.9
2441	15.9	27.6	37.1	48.0	57.8	68.7	77.2	84.3	83.7	81.4	82.3	79.5
	75.4	70.4	70.7	70.5	65.3	65.3	63.6	59.9	54.8	48.6	33.0	20.5
3241	16.8	29.1	39.7	51.1	60.0	69.9	80.4	89.3	89.9	88.8	89.3	88.7
	86.4	85.5	88.0	91.3	84.9	83.3	79.5	72.0	61.4	53.7	35.7	22.2
4041	15.6	27.4	36.7	47.7	57.2	68.5	77.9	86.8	89.2	88.6	88.5	87.6
	83.5	78.5	77.3	76.7	71.8	71.8	70.3	66.5	59.8	54.6	38.3	22.6
4841	17.7	30.4	39.2	49.0	55.3	61.4	64.9	68.9	70.7	71.0	71.6	71.0
	69.6	68.0	72.1	75.2	72.0	73.9	74.5	66.7	57.3	49.6	33.1	19.3
5641	15.2	25.5	33.7	44.1	53.8	62.5	69.7	75.5	71.4	68.9	64.6	63.4
	61.7	56.4	55.7	56.7	51.3	49.6	48.0	41.6	34.9	29.9	20.2	11.2
849	25.5	39.1	47.1	56.7	60.7	62.7	63.2	63.9	61.3	57.9	57.0	56.0
	52.1	50.2	48.4	48.0	44.5	44.6	41.8	36.0	30.3	25.5	16.1	9.3
1649	19.9	32.4	41.3	52.3	62.0	70.9	84.6	94.5	99.2	99.3	99.2	98.0
	91.4	86.4	83.7	84.3	76.2	75.6	71.9	62.4	53.1	43.9	27.5	17.1
2449	19.1	31.3	41.5	54.7	64.4	72.8	78.8	84.6	83.6	83.8	84.0	83.3
	78.3	75.1	74.8	76.5	73.6	76.7	75.2	67.1	58.7	49.7	32.4	20.5
3249	16.5	28.0	38.7	51.7	64.1	74.2	79.7	87.2	87.3	86.0	94.9	83.4
	78.6	76.1	75.1	75.9	70.2	70.8	68.8	64.7	57.7	50.8	33.7	20.1
4049	18.6	30.7	40.8	51.9	60.4	67.8	76.3	88.0	94.1	97.3	98.4	96.0
	91.0	85.7	84.0	86.7	82.6	85.0	82.3	74.6	63.5	54.4	35.0	21.0
4849	19.0	33.0	43.4	51.9	59.2	67.8	71.5	78.6	78.8	78.4	77.1	75.2
	70.4	65.1	64.9	64.4	59.3	56.9	55.3	48.8	41.1	35.6	23.7	13.8
1657	9.0	14.8	20.2	29.3	40.2	49.0	56.2	59.7	59.9	59.2	57.9	55.3
	53.6	49.5	48.6	48.1	43.9	42.4	40.2	34.3	28.8	23.5	15.3	8.5
2457	14.6	23.3	30.4	41.4	50.0	56.0	59.9	64.7	67.7	68.6	70.5	68.3
	62.3	58.7	57.8	56.7	51.5	52.3	49.0	42.9	36.9	31.1	20.4	12.1
3257	16.4	26.3	34.7	45.0	52.3	57.1	60.6	64.8	68.0	71.4	73.1	71.6
	67.6	63.3	61.6	60.4	55.4	54.1	51.1	45.6	39.0	33.7	21.5	12.8
4057	16.3	27.4	37.3	51.8	64.6	73.8	76.7	78.2	77.1	73.3	71.3	68.4
	63.8	59.5	59.0	56.9	52.1	52.1	50.0	43.9	36.5	30.6	19.3	11.3

CYCLE 1 DATA

DATASET 17, JULY 25, 1975

Reactor Conditions

Core Average Exposure, 7000 MWd/t
Core Thermal Power, 1649 MWT
Dome Pressure, P, 986 psia
Core Flow, 50.1 Mlb/hr
Inlet Subcooling at P, 29.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	12	48	12	48	12	48	48	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	8	48	8	48	4	48	8	48	8	48	48	48
48	48	40	48	44	48	40	48	40	48	44	48	40	48	48
48	12	48	8	48	0	48	4	48	0	48	8	48	12	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	12	48	4	48	4	48	6	48	4	48	4	48	12	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	12	48	8	48	0	48	4	48	0	48	8	48	12	48
48	48	40	48	44	48	40	48	40	48	44	48	40	48	48
48	48	48	8	48	8	48	4	48	8	48	8	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	48	48	12	48	12	48	12	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,
No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 18, AUGUST 16, 1975

Reactor Conditions

Core Average Exposure, 7300 MWd/t
Core Thermal Power, 1855 MWT
Dome Pressure, P, 995 psia
Core Flow, 39.9 Mlb/hr
Inlet Subcooling at P, 41.5 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	16	48	22	48	16	48	48	48	48	48
48	48	48	48	42	48	44	48	44	48	42	48	48	48	48
48	48	48	20	48	10	48	6	48	10	48	20	48	48	48
48	48	42	48	44	48	40	48	40	48	44	48	42	48	48
48	16	48	10	48	8	48	12	48	8	48	10	48	16	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	22	48	6	48	12	48	16	48	12	48	6	48	22	48
48	48	44	48	40	48	40	48	40	48	40	48	44	48	48
48	16	48	10	48	8	48	12	48	8	48	10	48	16	48
48	48	42	48	44	48	40	48	40	48	44	48	42	48	48
48	48	48	20	48	10	48	6	48	10	48	20	48	48	48
48	48	48	48	42	48	44	48	44	48	42	48	48	48	48
48	48	48	48	48	16	48	22	48	16	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,
No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 19, SEPTEMBER 27, 1975

Reactor Conditions

Core Average Exposure, 7712 MWd/t
Core Thermal Power, 1882 MWT
Dome Pressure, P, 1014 psia
Core Flow, 40.4 Mlb/hr
Inlet Subcooling at P, 42.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	18	48	26	48	18	48	48	48	48	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	48	48	28	48	10	48	10	48	10	48	28	48	48	48
48	48	44	48	44	48	44	48	44	48	44	48	44	48	48
48	18	48	10	48	8	48	12	48	8	48	10	48	18	48
48	48	44	48	44	48	42	48	42	48	44	48	44	48	48
48	26	48	10	48	12	48	22	48	12	48	10	48	26	48
48	48	44	48	44	48	42	48	42	48	44	48	44	48	48
48	18	48	10	48	8	48	12	48	8	48	10	48	18	48
48	48	44	48	44	48	44	48	44	48	44	48	44	48	48
48	48	48	28	48	10	48	10	48	10	48	28	48	48	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	48	48	48	48	18	48	26	48	18	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,
No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 20, OCTOBER 31, 1975

Reactor Conditions

Core Average Exposure, 8100 MWd/t
Core Thermal Power, 1858 MWT
Dome Pressure, P, 1001 psia
Core Flow, 40.9 Mlb/hr
Inlet Subcooling at P, 40.9 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	38.	48.	38.	48.	48.	48.	48.	48.	48.
48.	48.	48.	34.	48.	24.	48.	10.	48.	24.	48.	34.	48.	48.	48.
48.	48.	48.	48.	46.	48.	48.	48.	48.	48.	46.	48.	48.	48.	48.
48.	34.	48.	12.	48.	12.	48.	10.	48.	12.	48.	12.	48.	34.	48.
48.	48.	48.	48.	42.	48.	42.	48.	42.	48.	42.	48.	48.	48.	48.
48.	24.	48.	8.	48.	16.	48.	10.	48.	16.	48.	8.	48.	24.	48.
48.	48.	48.	48.	48.	48.	44.	48.	44.	48.	48.	48.	48.	48.	48.
48.	24.	48.	8.	48.	16.	48.	10.	48.	16.	48.	8.	48.	24.	48.
48.	48.	48.	48.	42.	48.	42.	48.	42.	48.	42.	48.	48.	48.	48.
48.	34.	48.	12.	48.	12.	48.	10.	48.	12.	48.	12.	48.	34.	48.
48.	48.	48.	48.	46.	48.	48.	48.	48.	48.	46.	48.	48.	48.	48.
48.	48.	48.	34.	48.	24.	48.	10.	48.	24.	48.	34.	48.	48.	48.
48.	48.	48.	48.	48.	48.	38.	48.	38.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	49.4	70.9	76.3	77.9	72.5	69.8	70.0	71.9	70.4	69.0	70.0	68.8
	66.7	65.0	63.9	61.9	57.7	56.9	53.5	46.8	41.1	34.3	22.4	14.3
24 9	49.3	68.5	74.6	81.2	83.6	83.5	81.2	82.0	77.4	74.6	75.2	76.9
	76.0	75.5	74.3	72.9	68.1	67.3	63.3	56.1	49.8	42.4	27.7	21.7
32 9	43.2	64.1	72.4	82.1	86.4	88.2	89.2	90.1	86.0	82.0	80.1	77.5
	74.6	71.5	70.0	69.9	65.2	67.2	65.1	61.5	55.9	48.3	32.2	21.6
40 9	61.3	84.3	90.9	94.6	89.3	83.1	79.9	80.4	78.7	79.2	83.2	85.7
	87.2	87.7	86.0	84.4	78.4	76.8	71.7	62.9	54.2	44.2	27.3	21.1
48 9	27.5	41.8	48.6	54.0	56.3	57.5	61.2	67.3	68.9	68.7	68.8	67.5
	64.4	61.9	58.9	57.4	53.6	51.2	48.0	41.9	35.9	30.3	19.8	11.3
817	38.8	59.2	66.5	70.4	70.7	68.2	68.9	76.2	78.2	78.2	78.7	77.3
	74.5	71.4	70.3	69.3	65.3	64.6	61.5	55.3	47.6	41.5	27.4	16.0
1617	46.9	75.0	86.4	92.5	90.2	84.4	78.7	79.7	77.4	77.4	78.4	77.4
	75.4	71.1	69.9	69.5	67.9	70.4	71.2	66.1	59.3	52.6	35.2	22.5
2417	60.9	89.7	95.4	98.6	90.3	84.0	78.1	79.3	76.9	76.2	78.6	78.3
	75.7	75.1	73.7	73.7	71.8	76.6	75.2	70.5	63.3	55.2	36.7	25.9
3217	62.7	85.7	92.3	94.3	87.5	81.1	77.0	78.5	75.5	76.0	77.3	75.7
	72.1	70.3	68.9	68.8	66.6	69.4	70.1	66.9	62.7	52.8	34.8	26.8
4017	47.8	78.8	89.7	94.4	90.6	85.9	81.2	83.5	80.6	80.7	81.7	82.6
	80.9	78.8	78.7	79.0	77.3	79.8	80.4	74.7	67.3	59.4	40.3	24.7
4817	46.8	73.2	81.0	85.2	82.3	79.1	76.5	78.5	77.7	78.9	79.5	79.5
	76.4	73.3	73.2	73.0	69.0	72.4	71.4	67.0	59.2	51.5	34.1	20.3
5617	19.0	29.4	34.8	40.7	44.3	46.9	52.6	58.8	60.0	60.2	61.1	59.6
	56.2	54.7	52.0	51.3	46.8	45.7	41.4	36.0	31.2	25.8	16.4	9.7
825	53.4	83.3	93.6	97.0	92.7	86.2	79.8	81.0	78.8	77.7	79.5	83.8
	85.5	84.5	82.9	81.5	76.5	75.3	70.1	63.8	55.6	49.1	33.6	19.8
1625	48.4	72.2	82.7	90.8	87.2	79.8	75.6	75.1	73.2	73.3	74.6	74.7
	72.2	70.7	69.2	70.7	69.4	72.4	71.9	68.1	64.0	56.5	37.5	24.6

2425	44.7	68.8	83.4	94.9	94.1	88.8	84.4	81.6	79.6	79.7	82.3	82.7
	81.5	81.7	82.0	89.3	90.9	93.8	90.4	82.2	72.7	61.1	39.6	29.2
3225	44.9	70.5	85.8	98.3	94.8	88.3	83.3	79.9	78.0	78.0	77.8	77.0
	74.7	73.9	73.4	75.3	72.8	75.1	75.6	73.4	68.0	58.6	38.3	28.7
4025	42.5	68.5	84.1	95.8	93.9	87.3	80.9	79.8	77.2	76.6	79.1	78.8
	76.5	75.1	78.4	84.3	85.3	88.7	86.6	80.0	71.5	63.4	42.0	27.7
4825	53.3	83.9	95.2	99.2	92.1	83.4	76.1	74.2	71.4	70.2	70.7	71.2
	70.2	67.7	68.7	69.4	67.6	68.4	67.6	65.7	60.7	55.0	37.6	23.7
5625	31.0	48.3	56.6	63.7	64.1	62.6	59.8	59.5	56.7	56.5	59.9	63.5
	66.4	67.5	67.3	67.5	63.4	62.1	57.3	49.8	43.3	36.9	23.8	14.1
833	57.9	85.9	93.8	95.0	88.3	82.5	74.9	75.7	72.2	72.4	76.7	80.7
	83.9	84.1	82.3	82.2	77.0	76.2	71.1	63.5	55.7	49.0	32.1	20.4
1633	57.2	84.0	89.4	93.5	85.3	79.2	72.0	70.0	67.0	67.2	69.0	69.2
	67.3	66.9	66.7	67.5	65.9	67.0	66.3	62.9	59.4	51.9	34.9	23.3
2433	45.0	73.4	88.4	96.4	92.1	83.9	75.7	75.3	72.8	73.6	74.2	74.2
	72.8	72.4	74.1	79.5	82.2	85.4	83.6	77.9	69.7	62.5	42.1	26.1
3233	45.3	73.7	89.6	99.3	95.3	88.1	81.6	79.5	75.9	75.3	76.1	75.4
	72.3	71.2	71.3	73.2	72.2	74.8	76.9	74.0	68.6	61.6	40.6	26.2
4033	56.1	86.1	96.3	99.3	92.6	82.7	76.3	75.3	73.7	74.3	75.1	74.0
	72.2	71.7	73.1	79.9	83.3	86.6	83.2	77.0	68.2	60.2	40.5	25.8
4833	63.1	91.5	97.3	98.3	90.0	82.0	77.5	76.8	75.1	75.1	76.9	77.8
	76.8	76.0	75.1	74.8	70.4	70.9	68.2	64.3	60.2	53.3	34.9	23.7
5633	33.6	53.1	63.5	69.7	68.8	64.9	60.2	59.2	56.0	55.6	58.8	63.3
	66.3	67.2	66.8	65.9	61.6	60.9	56.5	50.5	43.2	36.7	23.9	14.7
841	52.2	78.0	84.6	89.1	86.2	83.6	82.1	86.3	84.9	84.7	86.0	85.0
	83.5	80.5	79.9	79.7	75.3	74.8	71.6	64.7	56.4	47.9	30.5	18.7
1641	39.6	64.1	80.3	92.0	92.7	89.4	82.3	80.7	78.7	77.6	78.5	79.3
	77.8	74.1	73.6	74.7	73.6	76.7	78.4	74.4	66.3	59.7	41.2	25.2
2441	37.8	61.5	75.0	85.6	85.4	79.5	73.5	72.2	69.5	67.5	68.3	67.3
	66.0	63.6	64.2	66.0	65.8	70.2	72.2	69.1	62.4	55.2	37.0	23.1
3241	39.6	63.5	77.1	87.6	86.2	81.0	75.9	74.9	73.3	72.4	74.2	73.2
	71.5	69.8	69.2	70.7	68.9	72.8	73.5	71.2	65.9	58.9	40.2	26.7
4041	38.6	64.0	79.3	90.2	90.9	85.8	79.4	78.6	75.8	75.0	75.8	77.3
	75.7	74.1	74.1	76.3	75.8	81.2	82.5	77.9	69.9	62.5	42.7	26.9
4841	51.0	79.3	88.8	91.9	87.6	81.5	76.1	77.2	75.2	75.5	77.1	75.7
	74.0	70.1	69.1	68.4	66.1	70.2	68.8	64.9	57.6	50.6	34.4	20.9
5641	30.7	48.0	57.0	63.8	64.2	64.5	64.8	67.6	67.6	65.1	64.8	62.8
	60.8	58.8	56.5	56.3	52.2	51.0	47.1	41.5	35.7	30.4	20.3	12.1
849	38.9	54.2	59.5	63.9	63.4	61.6	61.9	62.1	60.2	60.1	60.3	58.1
	55.5	53.3	51.9	51.1	48.9	48.6	45.0	39.4	33.9	27.9	17.5	10.8
1649	51.6	76.5	84.4	89.4	85.3	82.5	82.2	86.3	88.4	87.0	90.0	89.9
	88.0	86.7	84.9	83.4	78.7	78.4	74.1	65.7	57.2	48.3	30.5	18.9
2449	61.0	86.3	89.8	92.1	83.9	78.0	73.7	72.3	70.3	70.4	75.2	78.5
	79.5	81.2	80.0	79.7	75.5	76.9	73.0	65.8	58.6	50.4	32.8	22.9
3249	52.9	79.6	87.9	90.4	84.2	78.2	73.9	74.3	71.8	71.2	71.8	71.6
	70.3	67.8	66.9	67.8	64.7	67.9	68.2	65.7	60.1	53.3	35.7	22.4
4049	53.4	82.5	90.9	96.2	90.1	83.6	78.7	79.5	79.5	80.7	84.9	89.1
	92.9	93.4	92.2	93.7	88.1	88.0	83.6	75.7	65.9	56.9	37.0	22.8
4849	35.8	57.4	64.1	67.4	66.3	65.0	64.3	69.7	71.2	70.0	70.0	69.4
	66.9	64.0	63.2	61.9	59.2	58.6	55.5	50.6	44.7	38.3	25.7	15.2
1657	29.9	45.5	53.7	60.0	61.3	59.2	56.9	56.0	54.4	53.4	53.6	53.1
	51.2	49.5	48.6	48.8	45.4	44.5	41.0	35.7	30.6	25.6	16.5	9.7
2457	34.3	51.8	62.6	75.4	81.0	81.6	79.1	77.3	71.4	66.4	64.2	62.3
	58.3	57.2	55.9	55.1	51.9	51.2	47.4	42.0	37.4	31.3	20.4	13.2
3257	33.9	54.1	66.0	78.8	84.2	85.4	83.2	81.3	73.9	67.6	65.0	61.8
	58.4	55.8	55.0	55.1	51.1	51.7	49.2	44.6	39.6	34.1	22.2	14.0
4057	50.1	76.0	86.2	93.4	87.8	81.2	76.0	73.1	69.5	65.7	64.6	63.0
	60.7	59.5	57.7	57.8	54.0	53.4	49.6	43.5	37.7	31.7	20.2	12.2

CYCLE 1 DATA

DATASET 21, DECEMBER 24, 1975

Reactor Conditions

Core Average Exposure, 8430 MWd/t
Core Thermal Power, 3285 MWT
Dome Pressure, P, 1023 psia
Core Flow, 107.1 Mlb/hr
Inlet Subcooling at P, 22.0 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	48	38	48	38	48	48	48	48	48	48
48	48	48	38	48	32	48	20	48	32	48	38	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	36	48	30	48	12	48	32	48	12	48	30	48	36	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	32	48	12	48	20	48	18	48	20	48	12	48	32	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	32	48	12	48	20	48	18	48	20	48	12	48	32	48
48	48	48	48	44	48	44	48	44	48	44	48	48	48	48
48	36	48	30	48	12	48	32	48	12	48	30	48	36	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	38	48	32	48	20	48	32	48	38	48	48	48
48	48	48	48	48	48	38	48	38	48	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution,

No TIP data taken for this Data Set.

CYCLE 1 DATA

DATASET 22, JANUARY 15, 1976

Reactor Conditions

Core Average Exposure, 8766 MWd/t
Core Thermal Power, 3292 MWT
Dome Pressure, P, 1024 psia
Core Flow, 101.2 Mlb/hr
Inlet Subcooling at P, 24.6 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	44.	48.	44.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	34.	48.	36.	48.	42.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	42.	48.	38.	48.	18.	48.	40.	48.	18.	48.	38.	48.	42.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	20.	48.	34.	48.	18.	48.	34.	48.	20.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	38.	48.	20.	48.	34.	48.	18.	48.	34.	48.	20.	48.	38.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	42.	48.	38.	48.	18.	48.	40.	48.	18.	48.	38.	48.	42.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	34.	48.	36.	48.	42.	48.	48.	48.
48.	48.	48.	48.	48.	48.	44.	48.	44.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

```
1609 69.3104.8117.5128.7124.8119.5109.2106.2103.1 99.8 97.7 93.0
      88.1 81.6 80.3 76.2 67.2 65.8 62.0 53.8 46.5 39.6 26.5 16.8
2409 76.5112.6131.4141.1141.4138.5139.4140.5132.1125.1120.1113.5
     103.3 93.8 89.9 87.6 75.4 72.9 68.0 59.1 50.6 43.7 29.3 23.3
3209 70.3109.8129.9143.5139.3137.5137.4144.7140.5133.9125.9120.4
     109.6 98.9 94.0 91.0 78.8 74.4 70.1 60.6 52.0 45.3 30.5 21.4
4009 83.8118.6125.8135.8134.4133.8135.0135.5128.8119.4118.6113.9
     103.7 96.0 92.5 88.2 77.8 74.1 70.1 59.9 51.6 43.6 28.4 22.9
4809 39.8 64.4 80.9 99.3105.4105.8101.4101.2 98.0 95.1 95.3 91.2
      85.7 79.6 76.5 73.8 66.0 64.2 59.2 51.6 43.3 37.3 24.7 13.3
0817 55.9 89.1107.3125.2130.8128.7120.3119.3112.8110.4105.6103.2
     100.1 90.3 89.6 86.8 77.3 74.1 71.6 62.7 53.6 47.8 32.6 19.0
1617 72.6112.6127.0138.2146.3147.8141.9142.5138.7135.1131.4128.0
     121.7109.8108.9106.2 93.3 88.1 82.0 71.5 59.1 52.6 36.4 23.5
2417 84.9121.6130.7135.6129.1124.1122.1126.1123.0117.1116.0114.6
     109.1104.6107.4107.5 96.5 92.6 85.9 74.0 63.1 54.7 37.0 26.7
3217 88.9122.1134.2146.1145.8140.8138.0139.2137.2131.3130.9129.3
     118.5110.7106.1102.1 89.7 85.5 78.8 67.7 58.5 50.0 33.1 29.0
4017 72.2112.2125.6132.3130.1126.4123.4125.5122.3117.6115.2114.8
     109.4102.2105.1107.2 97.1 91.3 84.4 74.6 61.6 55.1 38.8 25.3
4817 63.2100.6117.2130.3138.2143.5143.0142.0137.1129.8128.5126.5
     117.2107.0103.6100.3 87.6 83.1 77.3 68.4 57.1 50.6 35.4 21.5
5617 30.2 50.6 68.5 85.4 92.8 92.8 89.7 90.3 84.1 79.0 80.8 78.4
      72.9 67.9 65.0 63.1 57.1 55.1 50.6 44.3 37.6 32.3 20.6 11.5
0825 67.7104.8122.4135.5143.4145.2139.7144.6130.9127.3120.3118.8
     107.8 99.9100.2 97.8 87.3 81.1 77.8 68.4 57.6 51.2 36.9 22.7
1625 80.9114.6123.5129.5124.4117.0113.1117.0115.9115.0118.7118.4
     115.8114.3115.8115.3102.6 98.0 92.6 79.1 65.8 56.9 38.1 26.4
```

2425 87.4123.0131.1136.7132.2128.5129.1139.7142.5139.8142.1141.8
133.8125.2121.2118.5104.5 99.6 91.5 77.6 66.1 57.3 39.1 29.4
3225 90.3128.9137.5142.5136.2128.7122.4123.8122.4120.1123.4123.5
117.4114.4117.6118.0103.7 98.9 89.9 76.6 65.7 56.2 37.7 30.2
4025 76.4117.9129.7134.6130.0125.4124.3136.1135.7140.3139.9139.9
133.4123.7122.9122.1109.3101.9 94.1 81.8 68.6 60.3 41.3 27.3
4825 71.4113.8131.1138.3136.1128.7122.6123.9116.5112.5111.7112.2
108.8106.3111.5113.7103.0 96.6 90.8 79.2 66.5 57.8 40.2 24.8
5625 41.8 66.9 82.7 98.6106.5113.2109.0111.2100.9 93.4 89.8 87.5
80.0 74.4 73.9 73.3 65.2 63.8 60.7 53.1 43.9 40.5 27.1 15.2
0833 71.7105.3117.4133.0135.8136.4129.3132.9127.3118.2114.7112.7
107.2 98.6 98.0 96.4 86.5 82.6 78.2 67.7 57.1 50.3 34.1 22.9
1633 73.1104.6110.6114.9107.8103.3 98.6103.5101.7100.0103.8104.3
102.5102.7108.4109.3 96.9 92.4 86.1 74.5 62.4 53.7 37.9 26.0
2433 75.3112.8126.2131.1124.4119.7116.8128.9134.9134.1137.9136.5
129.5118.1116.8114.1100.2 94.8 89.0 77.3 65.3 57.6 40.5 27.2
3233 78.7116.1124.7131.8124.2116.7111.8115.3113.9114.5117.2117.9
112.2108.5111.6115.5104.5 99.3 91.7 78.7 66.6 59.0 41.4 28.4
4033 77.5116.9126.0131.1125.1120.7125.9137.5141.9143.7144.6143.0
136.1124.8123.7121.6107.6 99.9 92.3 79.0 66.8 58.2 40.7 26.5
4833 76.8110.6121.6127.3121.9116.0109.8112.5111.7107.9108.6109.4
108.3107.8113.8113.2101.6 96.3 88.6 75.9 63.4 54.1 37.0 25.9
5633 46.2 74.6 91.4108.4117.4124.6121.5120.3113.3103.8 99.7 96.4
92.2 83.8 81.6 77.2 68.8 67.5 63.2 55.4 46.9 41.3 28.4 16.5
0841 74.1114.1138.3157.6161.4152.6142.4138.2130.2123.3121.0117.5
112.0101.3101.0 98.5 88.7 85.1 80.2 70.8 60.4 52.7 34.8 21.9
1641 70.2108.0126.1136.4139.4143.0138.6139.5133.4130.0125.1126.6
121.3112.1112.6109.7100.2 94.9 87.9 77.0 64.4 57.0 40.8 26.3
2441 74.1112.5123.3129.0123.6114.7108.1110.4108.6105.8105.7105.5
101.6 96.1 99.1101.7 91.7 89.5 83.5 73.5 62.1 54.4 37.9 24.5
3241 78.5117.0131.0143.9142.8138.7127.7129.9129.8124.6124.7125.7
120.5111.8109.5107.7 96.6 90.5 83.3 73.4 61.4 54.7 39.0 26.6
4041 71.4111.5126.5132.3129.6124.8117.9122.3118.5117.6119.9119.4
116.4109.9112.9117.6107.5102.4 94.8 82.5 68.6 60.4 42.3 27.1
4841 72.7111.1125.3136.5142.2139.9132.4133.0128.3123.4122.0117.9
112.2101.6100.7 98.7 87.7 83.9 78.9 69.4 59.1 52.5 36.5 23.0
5641 48.0 79.1100.4121.6126.7122.6111.9110.9102.8 95.6 89.9 88.7
81.6 75.3 73.3 71.6 63.2 61.3 58.0 50.4 43.1 37.5 25.5 14.8
0849 53.9 80.7 92.0102.4102.5 98.6 95.5 96.2 91.2 87.2 86.2 84.6
78.5 74.2 72.1 69.7 62.8 61.7 56.3 48.8 41.7 34.5 22.3 12.5
1649 78.2116.7135.0150.0149.1141.0133.2131.2124.2118.5118.4115.8
107.2 99.9 98.4 94.7 82.5 79.8 73.3 64.1 55.1 47.2 31.5 21.2
2449 82.9120.1130.3137.0135.2132.5131.0137.3132.3124.5122.6121.4
112.2101.7 98.9 96.7 86.3 82.8 77.5 66.9 57.0 49.7 33.6 22.7
3249 77.5114.4129.0138.6136.6132.7133.2144.1143.0137.8136.7133.0
122.2109.4106.0102.0 89.6 85.5 80.3 69.8 59.9 51.7 35.4 23.0
4049 79.7119.2131.9141.0138.9139.8142.1144.2139.1134.1130.7128.2
120.5110.0109.0107.3 94.8 88.7 83.0 73.8 62.8 53.9 37.2 24.0
4849 54.5 89.5109.6125.0128.3123.5114.5114.7109.4104.8103.1102.6
97.3 88.6 86.8 84.9 76.2 72.0 68.8 61.5 51.3 45.3 31.4 19.6
1657 43.8 68.1 79.9 90.1 93.3 90.2 84.9 83.7 80.7 76.5 76.0 73.6
68.8 64.4 62.4 61.0 55.0 53.9 49.7 43.4 36.2 31.0 20.1 10.9
2457 59.3 95.4117.7133.1131.0122.2111.1106.8 99.4 91.9 88.1 84.9
76.8 70.3 66.8 64.6 57.5 55.2 53.4 46.2 39.7 35.1 23.9 14.4
3257 66.2108.6127.8143.8134.6122.2111.6109.2102.7 94.4 90.8 86.6
78.5 71.9 69.2 67.7 58.9 57.5 55.5 48.1 41.5 36.2 24.2 15.1
4057 73.0112.6129.2140.1134.0124.6113.2114.7108.0100.9 97.5 95.3
87.8 80.3 77.5 75.4 66.0 64.8 60.1 52.1 43.6 38.0 24.9 14.1

CYCLE 1 DATA

DATASET 23, FEBRUARY 14, 1976

Reactor Conditions

Core Average Exposure, 9295 MWd/t
Core Thermal Power, 3255 MWT
Dome Pressure, P, 1025 psia
Core Flow, 106.7 Mlb/hr
Inlet Subcooling at P, 22.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	36	48	36	48	36	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	38	48	36	48	32	48	20	48	32	48	36	48	38	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	38	48	36	48	20	48	26	48	20	48	36	48	38	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	38	48	36	48	32	48	20	48	32	48	36	48	38	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	40	48	36	48	36	48	36	48	40	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	43.9	63.3	68.6	73.3	73.2	70.3	68.0	69.3	67.3	64.8	63.7	63.0
	58.8	53.3	51.4	50.5	43.7	41.4	39.5	34.9	30.2	26.6	17.4	10.7
24 9	45.2	62.8	70.7	79.5	84.0	88.7	88.7	93.1	88.3	80.6	78.9	74.5
	67.7	61.1	58.3	55.5	48.6	46.8	43.6	37.4	32.8	28.4	19.1	14.9
32 9	40.0	59.2	67.3	76.9	84.3	91.4	93.1	97.2	92.2	88.2	84.4	79.1
	70.6	64.3	60.8	58.7	50.8	48.2	44.6	38.9	33.2	29.8	20.2	13.4
40 9	42.8	60.0	67.0	76.4	80.8	85.7	88.5	89.1	85.4	81.1	79.1	76.2
	69.1	63.8	60.9	57.0	49.7	48.6	45.4	38.9	33.6	28.5	19.1	14.2
48 9	29.0	45.2	52.3	58.2	61.0	60.9	60.2	62.0	61.1	59.8	60.1	57.6
	55.2	50.7	49.3	46.9	42.8	40.6	38.2	33.1	28.4	24.2	16.0	8.6
817	37.5	57.1	64.5	70.7	72.9	74.0	72.0	74.1	71.9	70.6	69.1	69.1
	65.8	59.1	57.4	54.4	49.6	47.0	45.4	40.2	34.1	30.3	21.0	12.3
1617	38.0	58.1	68.9	80.2	90.2	93.3	93.3	97.1	95.9	93.0	92.4	90.8
	85.0	75.0	72.8	69.0	59.9	54.5	50.1	44.1	36.6	32.2	22.9	14.7
2417	41.5	58.7	64.7	71.3	74.6	82.4	88.8	96.5	95.5	92.6	93.5	90.7
	83.1	76.3	72.2	68.9	59.0	56.4	51.4	43.9	37.4	32.7	22.2	16.4
3217	42.0	57.7	62.9	69.6	73.4	78.9	86.6	93.5	94.5	91.5	92.1	88.4
	81.5	75.3	71.8	67.2	57.6	54.8	50.6	43.4	37.0	32.0	21.6	17.2
4017	36.8	56.8	66.5	73.6	77.6	83.6	91.3	98.1	97.6	94.9	94.1	91.5
	86.0	75.6	72.3	68.2	59.3	54.4	50.4	43.8	36.8	33.1	23.5	15.1
4817	36.1	56.8	66.3	78.0	85.1	86.2	87.8	92.1	88.8	88.3	85.9	82.9
	79.2	69.5	66.4	63.7	55.1	51.5	48.7	42.7	35.8	31.9	22.5	13.8
5617	23.0	35.8	42.7	48.6	51.9	52.3	51.4	53.5	51.8	51.8	51.8	49.9
	46.5	43.8	41.8	40.2	35.9	35.0	32.8	28.2	24.2	20.5	13.3	7.4
825	35.0	52.5	61.8	72.4	82.6	90.6	91.6	96.7	94.1	87.9	86.3	83.8
	76.9	67.5	65.0	62.4	54.5	49.8	46.6	41.3	35.2	31.7	22.6	14.1
1625	41.7	60.1	66.0	71.9	75.9	80.5	89.2	95.3	95.4	95.2	96.7	94.1
	85.3	77.3	72.7	68.8	59.8	56.9	53.0	45.7	38.2	32.9	22.0	15.6

2425	43.1	61.3	66.1	71.1	70.7	71.3	76.5	86.7	91.6	94.6	98.5	98.0
	92.7	87.0	82.5	78.1	68.3	63.7	58.0	48.9	41.8	36.2	25.1	18.3
3225	44.1	62.4	66.7	70.1	70.3	68.9	70.7	74.9	77.4	80.8	85.8	87.1
	84.4	83.6	83.7	80.5	68.1	63.9	58.1	48.2	41.1	36.0	24.3	18.2
4025	39.0	59.5	67.0	72.9	73.5	73.7	77.3	88.3	93.4	97.7	99.1	98.4
	93.4	84.0	82.6	79.1	68.1	62.9	58.1	50.2	42.1	36.7	25.3	17.1
4825	37.3	58.9	68.5	75.6	82.7	88.7	93.2	99.4	98.2	95.3	91.9	89.5
	84.4	75.4	71.6	67.7	60.1	55.4	52.2	45.8	38.3	34.1	23.9	14.9
5625	22.8	36.2	43.4	53.5	60.1	66.6	69.6	71.2	65.9	61.8	60.2	58.1
	54.4	49.3	47.8	47.4	41.2	39.8	38.0	33.2	28.4	24.9	17.3	9.8
833	38.1	56.5	64.4	75.1	83.6	89.2	91.9	93.0	91.2	86.4	84.2	81.4
	75.2	66.6	63.4	61.8	53.6	50.6	46.8	40.8	34.5	30.3	21.0	13.7
1633	37.2	53.4	59.4	65.4	68.7	74.3	79.7	86.4	86.3	85.9	85.5	83.8
	77.2	68.9	68.0	64.9	56.2	53.7	49.8	42.5	36.1	31.3	21.9	15.6
2433	37.9	57.1	64.0	67.1	66.2	64.8	63.7	68.2	71.8	74.6	78.6	82.2
	80.8	77.9	79.0	77.4	67.0	63.9	58.9	50.9	42.6	37.8	26.7	17.7
3233	39.8	58.5	64.5	68.5	67.2	65.9	65.5	69.3	72.4	76.6	86.5	92.0
	90.8	85.1	83.7	80.4	68.2	64.6	58.2	50.2	42.4	37.0	26.5	17.6
4033	40.0	61.1	68.1	71.2	71.5	71.7	75.1	81.0	84.5	84.5	86.7	86.6
	85.0	80.6	80.8	80.5	70.4	65.1	59.4	51.3	42.7	37.4	25.9	16.5
4833	41.2	59.8	66.9	74.8	78.2	86.5	91.8	96.2	97.1	94.1	93.2	91.0
	84.8	74.8	72.1	67.7	57.9	54.2	49.8	43.1	36.0	31.0	21.3	14.9
5633	25.5	41.4	51.4	61.0	69.8	76.3	78.2	81.7	75.5	71.9	69.2	66.2
	61.7	54.4	53.0	50.3	43.5	41.7	39.3	34.3	28.8	25.8	17.7	10.1
841	37.1	56.9	65.3	75.0	84.4	89.8	90.7	91.8	88.9	86.1	84.7	81.4
	75.5	68.1	66.1	63.5	56.0	52.7	50.3	44.3	37.5	33.3	22.7	13.8
1641	36.5	56.8	66.9	73.5	79.7	85.4	91.0	98.3	97.7	96.7	95.2	93.7
	87.5	78.5	75.1	70.9	62.8	57.9	53.9	47.4	39.4	34.7	25.1	16.9
2441	36.9	56.0	61.1	65.9	66.6	67.6	69.9	77.1	82.5	84.0	86.0	84.6
	79.5	71.3	69.1	67.2	57.8	54.3	51.0	44.4	37.5	33.1	23.2	14.9
3241	37.9	56.3	63.0	66.7	67.2	67.5	68.9	74.1	76.0	77.1	79.5	80.9
	79.1	75.8	77.2	75.3	65.8	61.3	55.8	47.5	39.7	35.9	25.7	17.0
4041	36.4	57.1	65.4	71.7	74.9	76.7	79.7	90.7	95.6	97.8	99.2	98.8
	93.5	83.5	79.4	75.6	65.7	60.4	55.8	48.0	39.9	35.3	25.0	16.7
4841	38.0	58.4	66.8	74.2	79.3	82.9	88.3	93.2	90.5	89.4	87.6	84.3
	78.8	68.3	65.4	63.4	54.8	52.1	49.0	42.6	36.4	32.1	23.0	14.9
5641	25.7	41.0	49.6	58.3	66.6	70.3	73.5	72.5	69.1	66.0	63.1	61.6
	56.2	51.1	49.2	47.4	41.9	40.2	38.0	32.9	27.9	24.9	17.1	9.6
849	31.8	45.3	51.0	56.8	57.8	59.8	59.0	61.0	59.4	58.0	58.2	55.6
	51.6	48.2	46.8	45.4	41.5	40.2	37.3	31.7	26.8	22.8	14.8	8.1
1649	43.1	62.9	71.4	82.4	88.1	87.4	86.9	86.1	84.5	81.3	81.5	79.7
	74.6	67.9	65.2	62.0	53.7	50.9	47.3	41.5	35.2	31.0	20.7	13.1
2449	45.0	63.9	69.4	76.4	78.9	83.3	89.2	94.5	91.8	88.6	87.5	84.6
	77.5	70.5	66.7	64.6	55.5	52.8	48.8	42.1	35.8	31.0	21.2	14.9
3249	39.5	59.4	67.4	75.4	79.5	85.0	89.9	97.1	96.5	92.6	90.3	87.9
	80.5	71.9	68.6	65.5	57.3	54.1	50.6	44.3	37.8	33.1	22.9	14.8
4049	40.8	60.9	69.4	77.2	82.2	87.8	93.1	97.2	98.3	94.2	91.2	89.5
	84.4	75.5	72.0	69.6	60.0	55.9	52.8	46.4	38.8	34.3	23.7	15.3
4849	29.3	47.4	57.3	65.0	70.9	73.5	71.9	73.8	71.6	69.9	69.0	69.6
	65.1	59.0	57.1	54.7	49.2	46.8	44.1	38.9	33.1	29.6	20.8	11.7
1657	23.7	36.1	42.5	49.1	51.8	52.2	51.9	53.9	52.5	51.2	52.0	49.9
	46.4	42.6	42.0	40.7	36.5	35.1	32.8	28.7	24.4	20.9	13.6	7.2
2457	25.1	39.4	47.9	58.8	66.3	70.7	71.1	74.7	70.6	66.1	63.1	58.9
	53.6	48.2	46.3	44.8	39.7	38.6	36.2	31.8	27.3	24.1	16.4	9.3
3257	29.0	45.1	53.4	61.7	67.0	72.5	75.2	75.6	72.1	65.1	63.2	60.2
	55.1	49.9	47.7	45.3	40.5	39.4	37.5	32.9	28.5	24.9	16.5	10.1
4057	28.9	44.3	52.2	61.0	67.2	72.1	76.9	79.5	76.6	71.6	70.4	67.2
	62.2	56.5	54.6	52.3	45.9	44.2	41.5	35.7	30.3	25.8	16.8	9.9

CYCLE 1 DATA

DATASET 24, MARCH 26, 1976

Reactor Conditions

Core Average Exposure, 10100 MWd/t
Core Thermal Power, 3001 MWT
Dome Pressure, P, 1014 psia
Core Flow, 108.4 Mlb/hr
Inlet Subcooling at P, 24.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	40.	48.	40.	48.	40.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	40.	48.	36.	48.	42.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	36.	48.	36.	48.	26.	48.	36.	48.	36.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	40.	48.	26.	48.	32.	48.	26.	48.	40.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	40.	48.	36.	48.	36.	48.	26.	48.	36.	48.	36.	48.	40.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	42.	48.	36.	48.	40.	48.	36.	48.	42.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	40.	48.	40.	48.	40.	48.	48.	48.	48.	48.
48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.	48.

Axial TIP Distribution, Bottom To top of Core
See Figure 22

16 9	34.0	48.7	53.4	57.7	59.7	59.3	59.6	60.9	60.8	60.0	59.7	59.6
	56.4	52.5	51.5	50.1	43.8	43.0	41.3	36.6	32.0	27.9	18.7	11.2
24 9	35.5	50.6	58.2	68.7	74.8	77.9	80.4	80.9	78.3	73.8	73.5	69.9
	64.5	58.0	57.4	55.9	49.0	48.2	44.7	38.7	33.7	29.4	20.1	15.5
32 9	32.6	48.1	56.4	67.2	76.6	80.8	84.2	89.7	83.9	79.8	79.2	74.6
	68.8	62.2	60.6	58.8	50.5	48.6	45.4	40.4	34.7	30.8	21.3	14.1
40 9	32.5	45.9	52.1	61.3	67.9	71.8	76.3	78.8	76.7	73.4	72.8	70.8
	65.5	62.0	59.2	55.9	49.3	48.6	46.1	40.3	35.0	29.9	19.5	15.1
48 9	22.5	34.9	39.9	45.3	48.1	49.0	49.9	53.1	54.9	55.7	58.0	57.2
	54.0	50.8	48.9	48.4	42.9	42.0	39.9	34.7	29.9	26.1	17.1	9.2
817	28.9	43.9	50.4	54.8	58.4	59.1	60.0	63.8	64.8	63.5	64.0	64.9
	62.6	58.0	56.6	54.5	50.1	48.9	46.5	41.7	36.3	32.8	22.2	13.1
1617	29.3	46.4	55.9	64.4	72.4	77.7	79.6	85.7	85.6	83.8	85.8	84.7
	80.1	71.3	70.8	67.6	59.4	55.5	51.6	44.9	37.9	34.3	24.0	15.3
2417	31.7	45.8	50.3	56.1	61.5	71.2	79.2	88.5	88.6	88.0	88.3	87.0
	80.9	72.5	71.3	66.6	58.4	55.5	51.2	43.9	38.2	34.0	22.6	16.6
3217	33.0	46.7	52.8	62.8	69.4	73.1	80.0	85.9	85.5	85.8	87.8	86.2
	77.9	73.2	69.9	66.2	56.3	54.3	49.5	42.9	37.6	32.2	21.6	18.2
4017	27.9	44.3	50.8	57.1	62.6	71.1	79.8	88.9	89.4	88.5	88.7	87.5
	82.5	73.9	72.1	68.2	59.7	55.9	52.4	46.1	38.5	34.8	24.7	15.7
4817	28.6	45.5	54.1	63.9	68.8	71.9	75.3	81.0	80.6	79.0	80.3	80.0
	76.4	68.8	66.6	64.6	57.2	54.5	51.3	44.5	38.3	34.5	24.3	14.1
5617	18.4	29.0	34.5	39.0	41.2	42.4	42.9	45.4	45.3	45.9	47.5	47.6
	45.6	43.3	42.0	41.6	38.0	36.9	34.4	30.2	25.9	22.4	14.6	7.9
825	26.9	41.8	50.3	60.3	70.0	75.3	79.6	84.1	82.9	80.3	79.9	78.0
	71.3	64.9	63.3	61.4	55.0	51.5	48.2	43.4	36.9	33.7	24.6	15.0
1625	32.0	46.1	51.3	57.0	63.0	69.9	78.8	86.8	88.6	87.9	89.7	87.6
	82.0	74.5	70.5	66.9	58.9	55.6	52.3	45.5	38.5	33.4	23.1	15.7

2425	32.8	46.1	51.2	56.8	61.5	69.1	78.8	88.0	90.0	92.4	99.4	96.9
	92.2	85.4	79.7	75.2	65.2	61.8	56.3	47.1	40.5	35.2	24.1	18.2
3225	33.0	46.6	51.0	55.6	58.1	61.0	66.6	74.4	79.3	85.4	94.1	97.3
	91.9	86.6	82.0	74.3	63.1	59.3	53.4	45.5	39.4	33.9	23.2	18.2
4025	30.1	46.0	52.4	57.8	62.8	70.0	78.8	88.3	91.4	93.9	96.7	96.4
	91.7	83.4	81.4	77.3	66.9	62.8	57.9	50.1	42.2	37.3	25.5	16.8
4825	29.5	46.5	54.5	61.5	68.4	76.1	82.0	88.4	89.4	86.7	89.5	85.5
	80.9	71.5	69.6	68.3	60.0	56.2	53.3	47.1	39.6	34.7	24.5	14.8
5625	19.5	31.0	38.4	47.3	54.1	58.2	59.8	61.6	59.0	57.2	56.3	54.3
	51.0	48.4	48.5	46.7	42.8	40.9	39.7	34.5	29.5	26.7	18.0	9.9
833	30.1	45.6	54.5	65.7	74.2	79.8	80.4	84.2	80.2	78.1	77.9	76.9
	72.0	65.2	63.4	61.2	54.1	51.2	48.2	42.3	35.8	32.1	22.1	14.1
1633	29.0	42.9	49.3	57.7	65.4	70.2	74.1	79.2	80.0	77.9	79.8	79.0
	74.3	67.1	65.5	62.8	54.7	52.4	49.0	43.1	36.4	31.7	22.4	15.4
2433	28.2	42.2	48.0	51.6	53.9	56.1	59.5	67.5	72.0	77.0	85.3	88.7
	87.2	80.8	76.5	71.4	61.6	57.8	53.6	46.2	39.3	34.7	24.7	16.1
3233	28.5	43.6	49.5	52.8	55.2	58.8	64.4	75.3	84.0	89.9	96.4	97.8
	93.7	84.3	80.1	76.8	65.5	60.7	55.4	48.3	40.2	36.3	26.2	17.0
4033	30.8	47.2	53.1	57.7	61.1	63.8	68.9	77.0	81.6	86.5	93.9	96.8
	94.1	85.6	83.6	78.8	68.3	62.4	58.2	49.7	41.9	37.1	26.0	17.0
4833	33.1	48.8	57.5	67.8	75.1	79.5	81.4	88.2	87.2	86.6	85.5	85.7
	79.5	72.8	69.3	66.7	57.7	54.2	50.6	43.5	37.2	32.3	22.1	15.3
5633	21.5	34.6	43.5	53.0	61.7	66.1	67.5	69.1	66.0	64.9	64.3	61.2
	57.3	52.3	50.7	49.8	44.4	42.5	40.3	35.8	30.4	27.4	19.2	11.5
1641	28.3	43.5	51.0	57.9	63.9	70.1	78.2	87.9	88.5	87.9	87.5	87.3
	84.1	75.5	72.3	70.4	61.4	57.2	54.0	47.8	40.3	36.3	26.4	16.6
2441	28.3	43.6	49.1	53.8	58.0	64.7	71.8	79.4	81.6	81.8	83.4	82.9
	77.3	70.3	67.7	64.9	55.3	52.9	49.8	43.4	37.5	33.0	23.4	15.5
3241	29.3	43.7	49.1	54.5	57.4	59.5	63.3	70.7	74.9	77.6	85.5	89.8
	86.9	79.0	76.8	72.9	63.3	59.1	53.4	46.3	39.5	35.3	25.4	16.6
4041	27.9	43.4	50.6	55.3	61.1	69.7	78.0	87.7	91.1	91.7	92.7	93.5
	88.6	80.3	77.6	72.5	63.9	59.3	55.5	47.7	40.2	35.9	26.4	16.4
4841	29.8	45.9	52.5	58.4	63.9	69.2	75.5	82.4	83.2	82.3	82.9	80.5
	75.0	67.1	65.6	62.9	55.2	52.7	49.8	44.1	38.1	34.8	24.2	15.1
5641	21.3	34.1	41.8	50.6	57.1	61.0	62.4	64.4	62.0	60.6	59.6	58.2
	54.6	49.9	48.8	47.8	42.5	41.5	39.1	34.9	30.2	26.9	18.7	10.5
849	24.6	35.7	40.1	44.6	46.7	48.6	50.1	52.5	52.8	53.6	55.3	53.5
	50.9	48.2	46.8	46.0	42.1	41.7	38.7	33.8	29.1	24.6	15.8	8.6
1649	33.7	50.5	58.6	67.9	71.7	73.0	75.2	78.6	77.1	76.4	76.2	76.0
	71.4	65.9	64.0	62.0	54.4	52.8	50.1	43.1	37.6	32.9	22.3	14.3
2449	34.9	49.8	56.0	62.2	66.7	72.9	79.9	84.8	84.8	81.3	83.0	80.4
	73.7	69.3	66.4	63.7	55.8	54.0	50.0	42.8	37.0	32.6	22.2	15.4
3249	32.2	48.4	56.5	66.6	76.0	80.1	83.0	88.6	88.2	84.3	84.0	82.8
	76.6	69.4	67.8	65.3	56.7	54.4	51.2	44.9	38.5	34.2	24.0	15.0
4049	32.0	48.4	54.7	61.7	66.6	73.9	81.7	89.0	86.5	85.6	85.7	84.0
	80.4	73.1	70.9	68.5	59.9	56.8	54.3	47.5	40.6	35.9	25.1	15.7
4849	23.6	38.4	46.9	53.7	57.8	59.1	60.8	64.1	64.4	64.2	64.9	65.4
	62.2	57.9	57.3	55.5	49.5	48.1	46.3	40.7	34.6	31.3	22.3	13.3
841	28.3	44.1	52.0	61.4	70.6	75.5	76.6	80.9	79.2	77.7	76.2	75.3
	71.9	65.5	64.3	62.8	56.1	53.9	51.0	45.8	39.4	34.6	23.5	14.2
1657	19.4	29.8	35.2	40.0	42.7	43.0	44.5	46.1	46.8	46.7	48.6	48.5
	45.3	42.7	42.5	41.1	38.0	37.0	34.9	30.3	26.1	22.4	14.5	7.9
2457	21.9	34.6	43.1	53.8	61.3	64.1	64.4	64.7	61.6	59.3	58.9	55.2
	52.4	48.7	46.3	44.5	39.9	39.1	37.7	33.1	29.0	25.8	17.7	10.3
3257	25.3	39.5	47.1	56.3	61.9	64.0	65.2	66.4	63.5	59.3	57.7	56.2
	52.2	48.2	46.4	45.3	40.1	40.3	38.4	33.8	29.8	26.5	17.7	10.6
4057	22.8	35.6	43.3	52.3	58.6	61.4	64.0	66.5	65.6	64.0	63.8	62.5
	58.5	54.0	52.6	50.6	45.0	44.7	41.5	36.8	31.4	27.2	17.8	9.9

CYCLE 2 DATA

DATASET 25, JUNE 28, 1976

Reactor Conditions

Core Average Exposure, 8025 MWd/t
Core Thermal Power, 2650 MWT
Dome Pressure, P, 1017 psia
Core Flow, 88.4 Mlb/hr
Inlet Subcooling at P, 24.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	40	48	40	48	40	48	48	48	48	48
48	48	48	48	20	48	12	48	12	48	20	48	48	48	48
48	48	48	42	48	38	48	36	48	38	48	42	48	48	48
48	48	20	48	10	48	8	48	8	48	10	48	20	48	48
48	40	48	38	48	44	48	48	48	44	48	38	48	40	48
48	48	12	48	8	48	6	48	6	48	8	48	12	48	48
48	40	48	36	48	48	48	32	48	48	48	36	48	40	48
48	48	12	48	8	48	6	48	6	48	8	48	12	48	48
48	40	48	38	48	44	48	48	48	44	48	38	48	40	48
48	48	20	48	10	48	8	48	8	48	10	48	20	48	48
48	48	48	42	48	38	48	36	48	38	48	42	48	48	48
48	48	48	48	20	48	12	48	12	48	20	48	48	48	48
48	48	48	48	48	40	48	40	48	40	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 46.6 74.1 90.7106.0109.5107.8104.0104.5 98.1 94.9 94.3 97.3
      98.7 99.6108.7113.0106.5108.6107.3 96.7 82.7 66.3 51.1 27.9
2409 43.1 67.1 85.6108.2123.5127.8125.9131.5121.7112.6109.6108.1
     105.3 99.8102.2106.3100.6109.0113.3105.9 94.5 77.7 60.7 35.8
3209 44.5 70.7 86.6109.6128.1135.5136.3136.7130.4126.0125.7122.9
     114.3108.7113.5114.5110.8119.9122.7113.7103.4 92.1 61.6 39.5
4009 31.2 58.1 80.0101.3122.4127.3127.2131.2131.0120.1117.4117.3
     116.6115.8125.3132.6132.4128.0129.8124.4106.7 90.1 69.7 48.1
4809 55.3 86.9102.1116.2123.4120.6115.0115.1109.3108.3108.8112.9
     108.7106.9110.0112.7106.1106.3 97.9 85.6 72.5 62.3 40.9 23.1
0817 42.4 71.5 90.6105.2115.5114.6111.9111.4108.9106.2105.9107.4
     108.8108.4118.7125.4120.5122.2118.0109.4 91.9 75.6 56.9 33.7
1617 45.5 70.5 89.7112.5124.4126.0127.8131.3124.8125.1123.4124.2
     124.1120.8125.6132.9124.9131.1133.1124.6112.3 91.1 69.2 43.3
2417 47.5 69.0 81.3 95.3107.2122.9128.6130.8125.5122.7126.9122.1
     114.0110.4109.6110.3108.2111.5117.4113.4110.1101.6 69.0 51.1
3217 49.9 69.2 78.6 90.2 99.3108.3119.9129.1124.1122.5122.4120.0
     111.3110.4107.9110.3105.8115.1119.2117.0114.3101.5 67.9 51.0
4017 36.0 61.2 76.2 91.6107.6121.0124.6136.1131.4127.0124.1126.0
     122.8114.0116.7118.8115.5118.1125.4125.8115.2 99.9 77.8 48.7
4817 48.1 81.6101.1126.6136.1142.0145.3143.1135.2130.6132.7132.1
     129.4131.9138.7144.6135.2138.0134.3122.9107.6 96.3 67.6 40.2
5617 45.7 71.3 85.8 99.0106.5104.5102.4101.9 95.3 91.4 91.9 90.1
      87.2 84.3 87.2 89.9 82.6 83.9 78.7 69.3 60.3 53.2 35.1 20.9
0825 40.2 66.2 85.2109.7130.3144.8146.2149.2139.3132.0132.6131.2
     123.4115.7118.3117.5115.2122.5129.1121.8108.2 98.8 69.4 42.2
1625 42.8 64.7 76.6 91.2105.3115.7125.8133.8134.1130.1131.3130.2
     120.9115.8116.6118.5112.9118.2120.7116.3108.1 89.8 70.3 45.5
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2425 59.4 89.5104.9114.6117.1114.5113.1115.5111.3110.3111.5109.4
103.9 99.6 98.7 99.1 92.8 99.8100.1 95.1 94.1 79.5 61.7 46.2
3225 73.2102.5111.4119.6120.0117.3115.4118.3116.0114.6114.6111.4
104.5104.2101.4100.9 95.2 99.0 99.5 94.9 94.0 88.7 61.2 48.5
4025 42.5 73.8 95.9110.6117.5117.4115.6121.1116.6111.1111.1110.2
106.2 99.6100.9101.1 97.0 99.9104.2103.2100.5 92.6 74.7 48.0
4825 37.9 62.3 78.2 92.5110.9126.4135.8141.0139.8133.5135.8131.6
125.3119.2122.0123.3121.0128.3136.3131.8117.8 94.2 74.6 42.0
5625 37.9 67.9 91.6121.2141.2146.7140.3145.3131.5126.6121.0118.3
114.5105.9108.3107.6100.5102.5 99.8 91.9 78.5 64.2 47.7 28.9
0833 43.2 69.6 88.6110.0129.2136.0139.1140.1133.6122.6121.8119.1
113.5108.9108.4112.0106.5117.2123.1113.8102.3 93.3 63.2 40.4
1633 39.8 60.0 69.4 80.0 90.4102.8115.3124.2124.3121.5121.0115.3
107.7102.7102.0104.1 98.7105.9109.0107.3102.2 86.6 68.1 44.6
2433 56.9 91.1105.7114.8113.7112.0109.2110.0108.2106.0106.9106.1
101.8 94.9 93.9 94.5 88.9 92.5 93.6 91.7 88.6 78.9 65.6 41.6
3233 53.2 81.5 90.4 98.2100.5101.3104.6116.6123.1124.4129.3127.9
121.5110.5109.7106.8 98.0 99.6101.3 97.5 94.9 93.8 70.2 45.6
4033 57.3 93.7110.6120.6127.6127.8124.7130.4126.7124.9125.8125.2
119.6111.2109.6109.5103.9105.0107.1108.3105.2 93.9 77.3 49.3
4833 37.4 59.8 74.7 86.7 99.4114.1126.8137.3132.9132.7133.4125.1
114.9111.2109.8110.3107.2115.3124.9122.0112.1 95.9 76.4 46.2
5633 42.3 71.8 93.7119.2140.9140.4133.7133.9125.5115.2109.8108.5
99.8 94.5 96.1 96.2 90.5 91.6 90.1 82.4 73.4 60.0 44.8 26.0
0841 45.9 73.5 91.4115.6134.0142.1143.4143.1135.9128.8130.5127.4
126.8127.2137.7142.9136.8138.9134.2119.9103.2 90.1 61.4 37.2
1641 49.1 70.2 83.7101.6116.7124.2132.8131.5127.0125.2127.9123.2
117.3115.7116.7115.6115.4121.4123.4115.9109.9 87.3 65.9 49.1
2441 46.8 77.1 97.0112.7120.5121.3120.9122.6119.0118.7119.1118.1
111.6103.6104.4106.0102.2105.6110.1109.3104.8 90.8 72.2 46.0
3241 61.1 94.3108.1116.8118.5116.7113.5118.0119.1115.4117.2116.9
113.9105.8105.7106.3 99.8102.9107.9107.1104.8101.5 75.7 47.7
4041 50.4 79.5 97.5114.7121.3123.2125.0127.7122.3119.8118.9116.2
111.8109.2106.6109.1103.7112.3119.0114.8107.3 88.5 68.4 46.4
4841 45.0 69.6 86.2104.4119.5128.9135.4136.1131.5127.5124.1123.3
125.5128.3137.9141.4139.1142.6138.2127.3114.9 91.1 68.3 40.5
5641 43.7 74.1 98.0123.8146.8156.1152.8152.6144.9128.4126.7122.2
121.4114.1116.6117.4109.7110.8106.7 95.8 80.4 70.4 48.2 27.1
0849 66.0 92.6107.6119.8120.9116.6117.5113.2108.5104.8106.9104.6
101.5104.2105.4103.6 99.3 98.1 90.5 76.6 64.8 49.5 34.0 22.4
1649 57.6 84.3103.2118.9123.2123.0117.2117.4110.8109.0109.9111.0
110.0120.2128.4131.3127.5128.1123.8108.8 96.8 76.1 56.8 40.1
2449 45.0 65.9 78.4 95.4110.7118.4127.1127.2124.4120.5119.8118.0
112.1112.0115.4118.0115.7124.2125.8117.6106.2 85.4 64.1 44.7
3249 38.9 61.9 73.8 85.9 97.4110.1122.7132.7133.6129.3127.9126.7
119.7112.8116.5118.9115.5127.8137.0137.7124.9116.7 81.6 50.7
4049 53.1 75.4 88.9106.9120.1124.7128.8129.4120.5114.9118.7120.0
114.9123.2125.2129.7124.9129.7128.4115.7103.1 80.1 59.5 44.1
4849 54.7 91.1114.9136.3143.9138.7124.6122.4114.1105.7106.7110.6
110.1105.5111.7117.1110.8110.5108.1 98.6 84.3 71.5 54.1 32.8
1657 50.7 74.9 87.2 98.3103.7102.9 97.9 96.5 90.8 86.2 87.2 85.6
82.8 84.9 84.7 87.2 82.2 82.8 78.2 67.6 59.6 50.3 31.7 18.3
2457 50.7 78.4100.2127.7139.1138.6137.7134.4123.4117.1115.2112.7
104.4103.0101.1101.4 96.0 98.4 95.5 83.2 73.5 55.2 39.5 23.6
3257 52.4 81.5101.1126.9136.0135.7129.7126.0120.1111.9110.1103.1
97.8 93.7 92.5 95.3 89.8 93.7 91.2 83.0 73.6 64.7 41.5 26.5
4057 52.0 80.4101.5129.1142.0143.5139.7139.5130.9126.1126.0123.5
118.8117.5118.7119.3112.9113.1108.0 92.4 79.5 66.9 41.0 23.9

CYCLE 2 DATA

DATASET 26, JULY 14, 1976

Reactor Conditions

Core Average Exposure, 8264 MWd/t
Core Thermal Power, 3262 MWT
Dome Pressure, P, 1013 psia
Core Flow, 101.2 Mlb/hr
Inlet Subcooling at P, 23.91 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	48	34	48	34	48	48	48	48	48	48
48	48	48	38	48	38	48	42	48	38	48	38	48	48	48
48	48	48	48	22	48	12	48	12	48	22	48	48	48	48
48	38	48	38	48	38	48	40	48	38	48	38	48	38	48
48	48	22	48	10	48	10	48	10	48	10	48	22	48	48
48	40	48	40	48	48	48	44	48	48	48	40	48	40	48
48	48	22	48	14	48	14	48	14	48	14	48	22	48	48
48	40	48	40	48	48	48	44	48	48	48	40	48	40	48
48	48	22	48	10	48	10	48	10	48	10	48	22	48	48
48	38	48	38	48	38	48	40	48	38	48	38	48	38	48
48	48	48	48	22	48	12	48	12	48	22	48	48	48	48
48	48	48	38	48	38	48	42	48	38	48	38	48	48	48
48	48	48	48	48	48	34	48	34	48	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 41.7 67.3 81.9 96.2104.9112.6111.9115.6113.2106.5107.0106.1
     102.1 95.0 95.4 94.5 85.8 85.6 81.9 72.2 62.4 49.9 38.6 21.8
2409 39.8 63.0 77.1 91.9104.7117.6126.1140.7138.3130.3125.5124.1
     115.2103.4104.4104.8 95.6 93.9 91.7 83.1 72.1 57.7 45.5 30.4
3209 43.3 66.3 85.6103.9117.1127.1139.2151.7147.4143.8143.7138.6
     128.4119.1118.4117.1104.9105.2100.6 89.8 78.0 68.2 46.5 31.0
4009 38.4 69.7 92.9106.4123.7136.5136.7139.7138.7133.5124.6127.9
     123.8115.0117.3114.0111.4102.1 99.7 94.2 80.1 66.4 51.3 35.4
4809 34.1 54.8 66.5 82.8 97.8110.3115.4120.7115.0112.5115.1112.9
     106.9100.9101.0 98.0 88.5 86.2 79.5 68.7 58.5 49.2 32.4 17.8
0817 34.3 57.5 74.4 89.1104.8116.1118.1126.8121.3117.6119.2118.7
     114.6107.1110.8111.9103.1 99.3 95.8 86.6 74.3 58.8 44.2 27.4
1617 36.5 55.5 66.0 81.5 99.2108.3117.6127.4122.8122.8122.2129.0
     133.8133.7138.2139.3127.0125.8120.2105.8 92.3 72.5 55.0 36.8
2417 36.3 54.0 65.7 81.2 96.0107.0114.4119.1117.9114.9117.7117.2
     109.3106.1105.1106.4103.4113.5116.2106.1 99.8 89.2 59.9 42.4
3217 39.6 58.7 71.9 88.8100.1106.8114.5115.4114.7110.6113.9109.6
     101.9100.5101.5102.5102.4114.5116.7109.5102.1 85.6 58.1 46.1
4017 30.4 50.1 61.3 75.3 91.5102.7111.3123.1122.4119.8122.1123.4
     127.9125.7125.1128.1120.7121.5120.8110.5 96.8 81.3 62.4 39.4
4817 48.1 76.9 91.6110.3129.1141.4147.7150.5148.3138.5138.7140.5
     135.1128.6129.4126.7115.5113.2108.2 96.8 83.3 73.6 50.9 31.1
5617 27.3 42.3 52.8 67.1 80.8 92.3 97.0101.4 98.4 94.1 94.7 90.9
      87.2 82.4 80.4 80.6 73.4 71.5 67.2 58.3 48.8 42.8 27.9 16.0
0825 34.2 55.6 72.6 93.1112.0123.6126.6131.6124.3123.2126.2128.8
     131.8130.9135.0135.2124.9122.9118.4105.4 90.4 80.7 56.2 35.1
1625 37.5 57.9 70.9 85.8 97.9105.8113.3122.0118.9116.9123.1123.1
     117.4117.3118.1120.4114.2118.6119.3111.3 99.5 78.6 60.9 39.4
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2425 53.0 76.2 85.4 93.3 96.1 97.9 99.3 99.3 97.9 97.0 98.9 97.5
95.0 93.8 95.4 99.0 97.3105.6111.8107.2 99.5 79.8 60.6 43.6
3225 50.7 77.2 89.5102.7104.1103.8106.2105.3101.3100.6103.7100.6
95.8 94.6 97.0101.3 98.4109.2114.5107.8101.5 89.8 60.3 47.8
4025 43.2 70.1 82.8 92.4 98.0100.2 99.5101.7101.7 98.4101.0 98.8
96.0 93.2 95.8 99.3 97.3102.2108.5107.9 98.0 85.5 66.8 43.8
4825 33.8 55.6 70.7 88.5104.2114.3116.1125.6121.7120.1122.2128.3
132.7135.3141.5140.6130.9129.6125.2112.8 98.0 77.9 60.0 36.0
5625 31.1 54.8 73.9 97.0117.0125.1121.9128.3119.7112.8111.5111.0
111.0105.4105.8107.9 97.7 94.0 90.4 79.4 65.7 53.0 39.7 22.7
0833 37.8 59.9 76.8 97.6114.1118.7121.7123.7119.5111.8115.9121.2
126.0129.4131.5135.9123.2121.6115.1100.9 85.7 74.5 50.8 32.0
1633 37.1 56.5 67.6 81.8 96.3103.8106.2109.0103.9105.8106.1106.4
103.6100.7106.6113.2109.8116.1116.5106.9 94.5 76.8 60.1 38.5
2433 52.9 83.0 95.4104.5105.2 99.7 97.4 97.0 95.4 91.6 93.4 94.0
92.3 86.5 92.5 98.8 99.7111.7116.9111.8100.1 83.0 64.8 40.8
3233 50.9 82.0 98.0111.1113.1109.6107.7110.9106.8104.5105.8103.8
102.1 97.1100.5105.8108.8118.9123.4118.1107.1 97.7 70.8 46.0
4033 50.7 81.3 97.6104.6108.4108.3105.7110.4109.2108.4109.7109.7
108.1104.2106.7113.2116.0123.9125.4119.0106.3 91.2 71.9 45.8
4833 34.2 56.7 71.4 86.6102.3111.2113.9116.3117.3114.7115.9121.7
126.7125.1129.6131.8123.5122.0120.0111.0 92.6 77.1 60.8 39.1
5633 35.4 59.8 78.3 99.0113.9120.8115.9116.9111.2102.9105.3103.2
100.9 95.8 99.0 99.6 90.5 88.1 83.3 73.7 62.9 50.0 38.4 21.5
0841 39.7 64.0 79.6 99.2115.5129.1133.5137.5133.9129.0128.4130.1
132.9133.2137.3136.2127.3122.8115.5100.0 83.7 73.3 49.2 28.6
1641 40.4 58.2 70.4 85.6101.4110.6121.9122.6121.8118.7120.5118.4
113.8114.5113.8114.8106.9110.2111.8101.9 92.3 71.9 54.6 41.6
2441 33.3 52.3 64.8 76.2 87.9100.3104.9111.9109.7109.4110.6107.3
104.6100.3102.6104.7101.4107.0113.8111.0101.9 85.4 67.3 43.0
3241 35.5 56.6 69.5 82.7 95.5101.1107.7112.8111.2109.9110.3111.8
107.6102.0104.2106.2101.2108.0115.1113.1104.8 97.5 71.8 46.2
4041 36.2 54.1 63.4 76.5 88.8100.8109.3117.7115.9114.0114.9116.3
112.7108.4109.7110.3104.0109.4113.5106.6 98.4 80.0 61.2 41.5
4841 37.2 58.3 68.9 85.7102.5115.6124.3131.2125.3120.6122.8124.6
128.6130.5135.5135.7125.8126.5122.1109.4 94.7 73.9 57.3 34.4
5641 31.4 53.8 71.9 91.5112.6125.9134.7138.5134.7124.0121.7118.8
118.9110.3111.4110.5101.4 97.8 92.8 80.7 68.4 58.4 40.1 22.2
0849 52.7 75.7 88.9102.5107.8111.9117.0115.4108.1108.1108.6105.2
100.4 96.7 93.4 91.5 83.5 81.2 73.0 61.6 51.7 39.2 27.0 17.6
1649 48.0 69.1 78.4 92.0106.6115.1118.5118.5113.5112.4116.3116.1
113.4118.7118.0119.4106.8108.1102.8 89.7 76.5 59.8 43.7 30.7
2449 43.1 62.1 75.0 93.2107.1115.4124.7128.3122.1117.2118.4114.5
109.6108.0107.1108.7101.3106.5106.9 96.2 86.2 67.0 50.8 37.2
3249 37.4 62.0 79.5 99.1113.0119.6124.0129.9128.8125.2123.6122.3
116.5108.6109.8110.9106.0111.3119.8113.5100.3 91.9 65.3 40.6
4049 46.7 66.8 80.0 96.6110.4118.9130.6129.2123.8116.7119.4121.7
118.4120.2118.6119.5110.2112.1106.7 94.2 81.9 63.9 48.0 35.9
4849 41.7 65.9 83.4 98.1111.4120.8121.4126.3120.7116.6113.4111.9
109.8103.0101.8104.0 96.5 92.7 90.0 80.4 68.1 55.9 43.6 25.7
1657 49.1 71.5 83.8 95.5100.0 97.8 96.6 97.3 92.5 88.8 87.9 85.7
80.2 77.8 76.4 73.7 67.6 66.7 62.4 53.2 45.2 38.2 24.3 15.0
2457 50.6 74.5 88.8104.9109.8113.8121.8128.9123.9118.1118.7113.4
104.3 98.4 96.0 93.1 84.6 83.4 78.3 66.3 57.2 42.6 31.0 18.6
3257 46.6 70.3 82.9 95.2102.0107.1113.8122.2120.1113.0117.3110.3
99.3 93.2 93.3 89.9 81.8 80.2 77.1 67.9 57.6 49.7 32.3 20.4
4057 62.2 93.4109.2130.6130.6135.1129.1133.0131.0124.1121.7118.9
110.6106.2105.5103.6 93.4 91.2 84.6 72.3 61.3 50.4 31.6 19.5

CYCLE 2 DATA

DATASET 27, SEPTEMBER 1, 1976

Reactor Conditions

Core Average Exposure, 9035 MWd/t
Core Thermal Power, 3276 MWT
Dome Pressure, P, 1027 psia
Core Flow, 104.5 Mlb/hr
Inlet Subcooling at P, 23.59 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	28	48	20	48	20	48	28	48	48	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	28	48	10	48	10	48	10	48	10	48	28	48	48
48	38	48	40	48	48	48	48	48	48	48	40	48	38	48
48	48	20	48	10	48	14	48	14	48	10	48	20	48	48
48	40	48	38	48	48	48	42	48	48	48	38	48	40	48
48	48	20	48	10	48	14	48	14	48	10	48	20	48	48
48	38	48	40	48	48	48	48	48	48	48	40	48	38	48
48	48	28	48	10	48	10	48	10	48	10	48	28	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	48	48	28	48	20	48	20	48	28	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 38.3 62.3 74.6 89.1 98.1 98.2 97.2101.5104.5107.5112.8117.0
     116.1105.0104.7104.1 92.3 90.1 85.8 77.5 66.7 53.4 40.6 23.2
2409 35.2 56.1 69.6 84.8100.2112.4111.7120.7117.1114.2112.4111.9
     110.1109.5115.5118.3108.5106.9102.9 93.5 78.9 63.5 49.9 31.2
3209 37.2 56.8 70.9 92.0109.0115.8123.9125.3121.3117.3121.4117.0
     117.0122.2130.5135.3122.2120.0116.0 99.5 85.6 75.6 51.1 35.0
4009 26.0 46.7 63.4 76.7 93.8109.1116.0122.1125.8124.6129.7138.6
     140.0130.3129.4128.8123.4113.8111.7103.0 86.1 73.6 55.7 39.0
4809 44.7 69.5 82.3 96.6 98.4100.5 99.9106.7108.4107.3110.9113.0
     108.7101.5100.2 97.5 88.6 86.2 79.5 69.2 58.3 50.2 34.5 20.3
0817 35.2 58.7 74.7 88.5 99.1102.4104.9113.4113.2116.9128.4132.8
     128.8119.7117.6116.6105.8102.7 98.9 89.5 75.1 60.8 45.4 27.6
1617 36.7 56.1 69.1 86.4102.4113.9120.3126.8130.4128.0134.6136.3
     129.1123.2123.4122.9112.0114.3112.7103.9 93.4 74.2 56.7 37.6
2417 41.2 60.1 72.4 88.9100.5109.2112.4116.8115.7115.1117.4116.6
     113.4109.2111.2110.9105.2110.1113.8107.7 98.9 89.5 60.8 46.3
3217 42.0 59.0 67.6 79.2 90.2 98.4107.6110.4111.3110.0113.5112.2
     105.9108.1111.1110.8108.5115.7119.2111.3105.1 91.4 62.0 45.8
4017 35.0 54.6 67.9 82.3 95.8104.3109.5119.1117.7117.7122.2122.3
     116.4110.6109.4108.7102.3104.9108.7106.2 97.1 83.0 66.9 44.1
4817 41.0 63.0 75.7 96.3112.3120.5125.4134.0133.1141.2150.7150.8
     144.6134.0130.9126.4115.2111.4107.7 96.9 84.9 76.9 54.8 35.9
5617 40.2 59.7 71.7 83.2 89.2 91.5 95.5 95.6 93.8 91.4 91.7 90.1
      87.6 82.3 79.6 78.9 70.9 69.7 65.2 56.8 48.9 43.0 29.0 18.9
0825 33.1 52.4 66.8 82.9102.5118.4124.0134.7131.4131.0132.5131.7
     130.5127.4133.1137.0126.3122.9117.2105.5 90.7 79.8 56.9 34.1
1625 37.8 56.0 68.5 82.0 95.4103.1110.4119.0117.7118.1123.8122.2
     117.9115.3115.1114.8108.9114.9115.8108.4 97.8 78.8 60.8 41.0
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2425 59.4 83.1 89.8 96.2 97.7 96.0 95.6 97.0 94.4 94.8 97.7 97.2
93.5 93.1 97.6101.8104.2116.2120.0109.8101.6 80.5 60.5 44.7
3225 63.4 88.2 96.0103.9102.3101.2102.7101.2100.8 99.6102.8101.1
97.2 99.2103.8110.5114.3123.6127.3114.4105.2 92.1 61.7 51.9
4025 47.1 72.6 84.2 92.4 95.5 96.9 97.5 98.2 96.4 95.7 96.2 99.2
96.3 91.6 94.0 96.1 94.6100.3105.6105.5 98.4 86.8 70.3 45.9
4825 33.9 53.9 67.3 84.0100.0110.8118.2125.2126.6127.9128.5130.9
128.1128.1134.0135.9127.5127.2123.7111.5 99.1 79.8 62.7 41.8
5625 35.9 58.8 78.1 96.5115.8128.1130.6130.5123.6116.2115.1114.8
110.9103.0106.7105.0 97.0 92.8 89.3 79.7 65.8 54.2 41.1 25.8
0833 35.9 56.5 72.5 92.5109.1116.3122.2126.1118.6115.8117.7119.4
117.2120.7128.0132.1122.7122.6116.5100.4 86.8 75.8 51.9 33.2
1633 33.6 50.3 58.9 70.7 81.0 92.5100.7110.2106.9104.7105.1105.0
100.7 97.4100.8105.7101.0105.7107.4102.1 93.7 77.9 60.7 40.1
2433 50.0 77.2 91.2 97.3 98.4 95.9 91.1 95.4 92.1 91.4 91.4 92.5
92.2 88.4 92.0 99.7102.9113.8119.4113.6101.3 85.1 66.6 41.5
3233 47.6 74.0 88.2 98.8105.8105.7103.5107.3104.5103.9105.9105.4
104.4100.8104.4112.4114.7126.5131.0122.1109.4102.0 73.5 48.6
4033 49.2 76.3 88.6 95.3 98.6100.2101.4103.8103.6103.0106.5108.7
105.0101.2104.0107.8105.1110.4114.4114.7104.8 90.2 73.7 50.1
4833 32.6 51.5 61.4 74.0 86.3 98.8108.3113.4116.7113.5116.2116.1
115.8114.3121.5126.5120.9119.4117.1107.9 93.5 80.0 64.6 43.2
5633 36.7 61.4 81.7104.6120.9125.7119.8119.8118.2107.4103.1103.1
99.2 93.0 98.0 97.0 90.5 90.3 85.2 75.5 64.5 51.2 38.8 23.6
0841 37.5 60.1 72.9 88.5106.6122.9129.9136.8139.3143.8150.2156.5
151.0139.5139.3138.9124.3120.9115.7100.5 83.7 72.5 49.2 30.6
1641 42.2 61.4 74.4 91.4105.8110.0119.3120.8120.7119.5123.3120.4
111.9112.2109.5108.8102.7108.8108.9100.6 92.6 74.1 55.8 44.8
2441 48.8 75.7 87.6 96.3101.6100.0 98.8100.1100.0101.0102.5103.6
99.5 95.6 99.4101.8100.6107.7113.5111.4102.7 85.2 67.8 43.0
3241 53.8 83.3 94.5 99.0101.0102.6100.6102.4103.8104.0106.8109.9
108.8103.0105.6113.0110.1114.9122.3122.4109.8100.8 75.3 50.2
4041 52.6 76.5 87.7 97.6102.0105.3106.9109.2108.1108.4110.9109.7
103.1103.1100.8103.6 99.5106.0110.5104.7 97.5 79.1 60.9 41.6
4841 36.5 57.0 71.9 90.8104.4116.0122.7127.9130.9132.9142.9144.2
140.5133.0134.5134.2122.1122.1119.3107.0 93.1 73.2 56.3 35.5
5641 36.4 60.6 81.1101.1120.1130.4138.4138.7138.5128.1125.8124.8
121.7114.1112.2110.5100.8 97.5 93.8 82.5 69.1 59.4 40.4 24.0
0849 55.6 78.3 91.6105.4108.4109.7113.1114.9114.9113.2116.4113.8
104.9104.3100.3 95.3 87.4 84.8 76.7 63.6 54.2 40.7 27.8 18.7
1649 45.5 65.5 80.2 95.9105.1107.7113.6120.4119.8122.0132.8132.9
124.3120.5120.8117.3107.7106.6102.4 90.3 78.4 61.3 45.4 34.3
2449 39.1 57.7 70.3 89.1102.2107.1115.8119.4114.4118.1118.7119.8
117.8124.5130.2131.3120.2121.4115.4103.5 90.5 70.5 53.3 39.8
3249 32.6 51.7 63.7 74.6 87.9100.2108.9118.3115.8115.1116.5119.2
121.2123.4134.3141.1133.6134.5132.7121.8106.0 96.2 68.5 43.5
4049 42.5 61.9 75.7 95.9107.2114.2119.5122.0122.0130.2135.1139.3
128.1124.9121.7121.8112.1112.7109.0 95.0 84.3 65.0 49.5 38.0
4849 42.7 69.6 89.2106.2119.5115.7116.7121.7117.6114.2114.8116.7
114.2103.6103.4103.6 96.6 93.1 88.8 81.0 68.4 57.0 43.7 27.0
1657 42.9 63.7 75.6 88.0 92.8 93.3 94.7 94.9 93.6 90.6 93.5 93.2
88.3 84.0 82.6 82.0 74.1 72.8 67.2 58.1 49.1 41.1 26.2 16.2
2457 44.8 70.1 84.3106.8119.5126.0128.5126.4119.7113.8113.2109.7
103.4102.0100.7 99.7 91.6 90.7 83.8 71.6 62.2 45.7 32.4 21.7
3257 46.1 72.3 89.9111.4123.0125.1122.9118.8110.3104.2102.4100.1
95.9 94.4 94.7 95.3 88.2 87.3 83.2 73.0 63.4 54.0 34.3 22.3
4057 43.9 68.3 82.9105.1120.5130.1133.2138.2134.0129.2129.9124.2
119.4115.4114.4112.4102.7100.6 93.8 78.7 65.9 54.9 34.1 21.0

CYCLE 2 DATA

DATASET 28, OCTOBER 8, 1976

Reactor Conditions

Core Average Exposure, 9730 MWd/t
Core Thermal Power, 3275 MWT
Dome Pressure, P, 1022 psia
Core Flow, 101.5 Mlb/hr
Inlet Subcooling at P, 24.3 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	28	48	18	48	18	48	28	48	48	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	28	48	10	48	14	48	14	48	10	48	28	48	48
48	38	48	40	48	48	48	48	48	48	48	40	48	38	48
48	48	18	48	14	48	18	48	18	48	14	48	18	48	48
48	40	48	38	48	48	48	42	48	48	48	38	48	40	48
48	48	18	48	14	48	18	48	18	48	14	48	18	48	48
48	38	48	40	48	48	48	48	48	48	48	40	48	38	48
48	48	28	48	10	48	14	48	14	48	10	48	28	48	48
48	48	48	40	48	40	48	38	48	40	48	40	48	48	48
48	48	48	48	28	48	18	48	18	48	28	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 38.6 62.7 75.1 90.7 97.2 96.3 94.4 99.6100.6100.5109.8112.2
     108.5100.2 99.6 96.8 88.1 86.2 82.9 74.6 64.0 51.3 39.5 23.3
2409 35.3 54.0 68.0 85.5 96.4106.3113.2117.4111.7106.3106.4106.2
     100.5 97.8103.3108.9103.7102.6 99.3 89.4 77.7 62.4 48.6 30.3
3209 37.7 58.0 70.8 90.2104.6116.4119.9121.3116.4111.5110.5110.0
     108.2107.5114.5126.2117.4116.9111.6 97.3 84.4 72.6 50.1 35.4
4009 26.7 48.2 64.0 77.7 95.5109.0115.2124.7122.9123.2128.3132.7
     130.9121.8124.2121.8115.8107.9104.7 99.0 82.6 69.6 54.0 38.4
4809 52.7 79.4 91.3105.0107.8105.0108.9111.8109.5111.6112.5112.2
     106.4102.7 98.8 95.9 86.9 82.5 75.9 65.0 55.3 45.2 28.6 20.1
0817 35.6 60.4 76.0 88.9 99.5105.1103.1108.4110.1110.8118.8124.5
     121.7111.8111.8110.8102.4 96.8 94.8 83.8 70.8 58.4 43.3 26.0
1617 34.5 52.9 64.0 81.5 97.5107.5111.5121.8119.3119.4125.5126.4
     122.0115.8117.3117.4107.4108.3108.6 99.9 90.3 70.7 54.1 36.6
2417 37.1 54.5 64.7 79.5 92.4 99.4105.7111.6108.1108.4113.2110.4
     106.4105.3108.4112.9114.0122.0122.0108.2 96.5 88.2 58.6 43.3
3217 37.9 53.6 61.1 70.9 82.5 90.2 99.6106.1103.7103.6110.5108.0
     104.7106.9110.8118.7121.9130.0129.9114.6103.8 86.9 58.5 47.7
4017 34.2 53.4 64.1 80.6 95.1102.9106.7114.9114.7113.4119.0119.3
     112.9108.1108.4108.7102.3107.4109.7102.0 93.8 76.2 59.1 41.1
4817 43.3 66.7 82.1 99.6114.6122.7129.0130.7133.0136.7143.9140.5
     134.7129.2124.1120.5109.1109.0104.0 90.8 80.6 69.9 46.7 35.0
5617 45.1 67.1 77.8 88.6 95.4 95.1 95.9 94.6 93.5 89.9 89.9 87.5
      82.9 78.9 76.6 74.4 67.5 66.1 61.4 53.3 45.9 38.5 24.1 17.6
0825 32.6 51.7 65.5 82.0100.5113.8122.0130.8127.0121.8122.2122.6
     118.9113.9118.7123.7118.5118.0114.8101.4 86.7 76.7 54.8 32.9
1625 33.8 50.7 62.0 75.0 87.1 94.5102.4108.8110.0111.5115.9115.9
     112.0109.9113.3119.5117.4127.6124.1110.2 95.9 77.9 59.8 39.9
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2425 51.5 71.8 79.2 84.6 86.5 85.8 87.9 91.4 91.4 90.9 96.3 98.6
98.1105.3115.4123.6123.1128.0124.9109.8 99.1 77.8 58.7 44.7
3225 54.5 75.7 81.5 88.6 90.9 89.4 93.0 94.2 96.4 96.6101.1100.9
103.0114.9123.2134.1129.3135.8131.6113.3101.0 86.4 57.9 47.1
4025 45.9 68.4 77.3 86.0 87.1 87.9 90.5 94.7 92.4 91.4 94.9 96.8
95.6 94.3 99.9107.2110.1118.7119.3108.3 98.1 79.7 62.2 41.7
4825 34.7 53.4 65.4 83.3 96.5106.5115.0119.3120.5119.1120.8119.5
114.3116.1123.3129.5123.4125.9120.4105.7 93.5 72.6 55.2 39.7
5625 40.5 69.9 89.8108.9123.5128.3127.1125.4119.0113.0109.5106.1
103.7 97.7 97.7100.1 90.5 89.8 83.5 71.9 62.8 47.8 34.8 21.0
0833 35.4 56.1 71.0 88.7105.3110.6115.5117.1115.6109.0108.5108.4
105.7105.8111.9120.7114.9117.0112.4 97.4 83.2 73.4 50.0 32.5
1633 29.6 44.3 52.4 62.0 74.2 83.8 92.3 97.1 96.1 95.8 98.9 98.8
96.4 95.2101.1108.3108.9118.0118.3106.1 92.6 75.9 59.9 38.1
2433 42.9 66.7 76.2 83.7 85.3 85.3 81.9 88.2 86.5 88.2 91.2 95.7
96.8 97.6109.2122.7122.9128.1126.0114.0 98.5 80.6 63.8 39.2
3233 46.4 67.5 78.1 87.0 91.7 93.0 96.1 99.3 99.3102.1107.2111.3
111.4117.9129.4138.5134.5136.3130.7116.3102.9 91.1 62.7 49.0
4033 48.4 70.9 79.5 87.0 90.9 92.2 94.6101.4101.9103.7106.9108.4
107.6109.5117.5123.9124.3133.1131.2118.6103.9 84.6 66.1 46.8
4833 33.6 50.3 60.0 72.9 83.9 93.1100.9107.3106.5107.7109.6106.2
103.2103.2113.2118.8117.2119.5118.6103.4 91.6 73.7 56.9 42.8
5633 39.0 65.7 86.3107.2122.0124.8120.0118.8108.1 99.8 97.1 97.8
89.3 84.5 87.9 90.8 83.7 83.6 80.5 71.1 61.3 49.2 37.2 22.6
0841 37.5 59.4 74.4 90.2106.6119.7124.7131.4130.5134.7143.1145.4
138.0130.6130.5128.4116.4115.1109.9 93.3 79.8 69.5 47.3 30.3
1641 39.1 55.9 68.2 85.4 96.3102.1109.5113.3115.3115.3116.7115.5
109.2106.8107.9107.5101.0108.9108.6 98.5 90.9 71.7 53.8 42.9
2441 43.0 66.2 76.7 85.1 89.8 90.3 90.9 94.7 94.9 95.3 99.5102.1
100.3 99.6104.0112.9114.5122.9126.6116.7101.3 83.6 65.1 39.7
3241 44.5 68.1 77.9 84.1 87.2 87.7 90.5 95.2 95.5 99.3101.2104.3
107.7106.3112.3121.8124.1132.7134.7122.6104.7 95.9 70.1 46.0
4041 46.5 68.7 77.9 87.9 93.5 95.5 98.8102.3102.4102.8107.1105.9
103.2101.9103.8109.1104.6111.0113.4103.9 95.8 76.8 58.7 40.3
4841 35.7 55.6 68.9 86.9102.3113.5117.9124.6124.7126.8135.0137.1
132.2127.6126.2128.1119.2119.6116.6103.1 90.2 71.2 54.2 33.7
5641 37.4 66.2 85.4105.6125.0135.4136.5139.7131.9120.0120.9119.1
113.3103.9103.5102.8 95.1 92.1 87.9 76.3 64.1 55.4 37.8 21.1
0849 57.0 80.4 91.8104.4106.5107.8110.6111.4109.4106.8109.9106.4
99.7 98.1 94.5 89.8 83.2 78.8 70.1 60.1 51.0 39.1 26.9 18.1
1649 44.3 64.8 76.0 93.2103.0104.0106.3110.8113.0117.0123.9125.5
118.1115.3112.6110.9101.8101.8 97.1 85.5 75.4 58.6 43.2 32.9
2449 36.7 53.4 64.6 82.5 95.0101.8106.0109.3107.5109.7110.4112.5
110.3109.9116.5122.5115.4117.9114.5 99.0 87.0 68.4 51.0 38.3
3249 29.9 47.5 58.1 68.4 81.2 92.1 98.4107.8109.1107.8109.3109.3
110.5110.6119.1130.3129.0132.6132.3121.9103.7 93.2 66.8 39.5
4049 41.3 60.5 73.1 91.3106.7113.0115.2117.0120.5123.3130.9129.9
119.4116.6116.8114.2106.3107.5102.5 90.8 80.3 62.4 47.6 38.6
4849 45.3 73.3 94.1110.6124.7119.8115.9117.6115.3112.2109.4111.0
105.1 99.9 98.5 97.7 90.2 87.8 83.7 76.1 64.4 53.7 42.4 26.2
1657 44.9 65.9 78.6 90.4 92.0 93.2 92.2 92.8 90.4 88.1 90.2 88.9
81.3 80.2 77.5 76.6 70.2 68.1 62.9 53.7 46.3 39.5 25.3 15.7
2457 47.6 71.7 88.0109.2120.8123.7124.4121.2112.0105.7104.1102.5
94.2 92.9 91.2 90.6 83.6 84.3 80.2 67.8 58.1 43.0 31.5 19.6
3257 49.0 74.6 91.6115.2122.6119.5116.5113.7108.0 96.8 95.5 90.7
86.2 82.9 85.4 86.2 79.7 80.6 78.1 68.2 58.7 51.0 32.5 21.9
4057 46.1 71.7 88.3111.1125.4131.1128.4130.9128.9122.4120.2117.1
112.0106.9105.2105.0 94.4 93.4 87.0 73.0 61.7 51.1 32.3 20.0

CYCLE 2 DATA

DATASET 29, OCTOBER 28, 1976

Reactor Conditions

Core Average Exposure, 10050 MWd/t
Core Thermal Power, 3293 MWT
Dome Pressure, P, 1023 psia
Core Flow, 99.9 Mlb/hr
Inlet Subcooling at P, 24.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	42	48	36	48	36	48	42	48	48	48	48
48	48	48	34	48	26	48	12	48	26	48	34	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	36	48	18	48	12	48	32	48	12	48	18	48	36	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	32	48	10	48	30	48	12	48	30	48	10	48	32	48
48	48	48	48	44	48	48	48	48	48	44	48	48	48	48
48	32	48	10	48	30	48	12	48	30	48	10	48	32	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	36	48	18	48	12	48	32	48	12	48	18	48	36	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	34	48	26	48	12	48	26	48	34	48	48	48
48	48	48	48	42	48	36	48	36	48	42	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 38.4 63.1 80.5100.3110.0112.9116.2121.1121.2116.5115.4113.8
     109.2 99.4 98.0 96.0 84.7 84.2 80.4 72.0 62.0 49.6 38.1 21.6
2409 47.2 73.0 84.9 95.2102.4107.0112.2117.4118.7114.1118.3119.9
     117.2111.8109.8106.6 96.4 95.3 91.0 83.0 72.1 58.3 45.6 28.4
3209 51.4 74.7 83.2 90.8 98.4105.3115.4122.2116.8118.1119.1117.0
     112.1105.9104.0103.8 97.1101.0 99.5 89.1 78.4 68.4 47.0 32.2
4009 37.1 65.7 90.6106.8122.2125.3122.5124.4124.9122.5124.0131.2
     132.8123.0121.7119.3111.4103.7 99.8 92.4 77.5 65.6 51.4 34.6
4809 40.7 61.7 72.0 84.9 92.4 97.2111.4118.9122.8120.3121.0116.8
     108.8103.4 98.5 97.5 87.6 83.6 76.6 65.6 55.9 45.6 28.7 18.8
0817 42.7 72.3 91.5105.2118.2122.0127.9136.7130.9124.5121.0121.0
     114.3103.6103.7105.7 97.1 93.9 89.9 80.6 67.5 55.0 41.2 25.7
1617 72.1102.0111.8121.5120.8118.7112.7118.7116.2111.1114.4116.7
     111.9111.4114.6123.8117.0117.6111.8 98.7 84.8 66.8 51.0 33.5
2417 80.3110.2116.9124.2119.5112.3107.3111.2110.1110.4116.7117.8
     110.9107.5106.1105.9100.2105.8105.9 95.3 86.2 78.3 51.8 40.5
3217 82.8110.6114.1117.4111.2105.4107.7117.1123.8123.0128.4126.4
     118.8115.6114.7113.5105.4108.4105.7 95.5 85.7 72.3 48.8 41.4
4017 73.5108.1114.7121.6121.3116.1110.7113.2110.8109.1113.8113.5
     109.9104.1104.9104.5 99.9105.4106.5 95.8 85.8 67.8 53.3 36.8
4817 71.2103.5115.5127.0129.1131.0129.8129.7127.7119.9118.2117.1
     110.4108.9112.2116.2107.9108.6104.7 88.9 78.7 67.4 45.3 33.7
5617 36.5 55.0 64.7 77.0 89.6 99.2107.6111.0107.3103.1 98.8 92.0
      83.7 81.5 76.1 73.2 67.2 65.9 60.5 51.8 45.9 38.3 23.6 16.8
0825 44.2 68.3 86.0105.0120.3129.5136.6148.6150.5152.2149.4142.3
     135.5121.5118.7114.5102.9100.9 97.9 87.9 76.0 67.9 49.1 29.7
1625 63.9 95.0104.9112.2113.2110.6109.8114.3112.5113.7116.0116.8
     112.7105.3105.1105.3 98.5100.7 99.8 92.3 84.3 67.8 52.9 34.0
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2425 68.1 94.0101.0105.7102.5 97.7 98.5104.8111.0116.7123.6124.8
119.4114.4113.9111.9104.0104.6101.9 90.3 80.8 65.2 50.2 37.9
3225 75.5102.3107.3111.3106.6104.4104.0110.0110.5112.4118.1115.0
110.9109.1107.9107.7101.5106.9106.5 96.8 86.8 76.3 51.5 40.3
4025 64.2 93.7102.0106.6105.6103.0101.4105.9110.2115.7119.5118.2
114.4107.7108.9110.5102.5102.7100.4 91.2 80.5 66.4 52.5 35.8
4825 55.2 82.3 95.6109.6122.2125.1128.3130.6127.7124.5124.5120.9
113.1107.9105.6104.6 95.6 99.0 99.5 92.6 83.2 66.0 49.5 34.8
5625 46.3 75.5 94.6111.8118.5119.1120.9126.2127.7122.9123.8120.9
112.4103.0101.9 95.1 86.4 83.1 78.1 67.7 56.8 44.3 32.6 19.0
0833 63.3 94.6106.0119.6123.2122.3122.4132.2135.1132.4131.9131.6
122.9112.9109.8106.7 96.9 94.9 91.3 81.4 69.4 61.7 43.3 27.4
1633 51.3 79.6 93.8103.8106.6104.2102.8106.3104.1103.8103.2102.1
99.6 91.8 90.4 93.0 84.8 86.7 88.8 84.0 78.0 64.8 51.2 33.1
2433 58.1 88.6 99.9104.8104.8102.7 97.6104.3109.5118.8124.0127.5
122.5114.0114.5113.0104.5104.3103.0 92.9 81.2 66.9 53.3 34.3
3233 69.0101.4109.8113.0110.4106.4104.7110.2110.3112.5117.7119.3
115.2106.0106.8107.3 99.7103.2106.0100.0 89.5 83.2 59.2 39.5
4033 56.0 87.1100.0108.8112.7110.7113.5121.5128.1132.4142.5141.0
137.6127.7124.9122.6114.3112.8107.0 94.9 84.8 68.6 54.2 40.5
4833 67.6 96.4107.0115.1114.0112.9111.5114.4115.0112.3114.1110.0
102.3 96.5 93.6 91.7 84.4 87.6 89.3 83.2 76.4 62.8 49.5 38.5
5633 47.5 76.5 93.3106.2110.7108.9107.2112.3117.0116.0111.8110.1
101.2 92.2 91.1 88.4 78.2 77.1 73.0 64.0 55.0 44.0 33.3 19.9
0841 50.1 78.2 97.6118.1139.0153.1158.8163.0156.2150.5145.0142.6
132.1119.9119.0118.1106.5102.8 98.4 84.9 71.5 62.7 43.3 26.7
1641 75.1102.7112.0121.0119.9115.4112.6111.1108.9106.2108.4105.7
99.2102.1106.7111.1104.2106.3103.0 90.6 80.3 64.3 48.8 39.1
2441 63.2 94.1104.6110.3108.2103.5 99.2102.2103.8105.5109.2110.6
108.0103.3103.4104.9 99.5103.6107.0 98.1 86.1 71.9 56.0 36.0
3241 68.0100.3109.0112.3109.2104.7102.7113.8120.7127.1130.4131.6
128.8120.7121.7120.2111.6110.4107.4 98.5 85.4 77.9 58.2 38.1
4041 73.3104.2111.6118.1116.0110.4109.1108.7109.2107.9111.7110.6
106.5103.5104.6105.2 99.9104.7105.2 95.7 83.9 68.8 52.8 37.8
4841 51.8 78.7 94.0113.9125.1130.4129.5132.1126.2118.6117.9114.4
112.1106.9112.0118.6110.3112.0109.4 97.2 82.4 66.2 51.9 32.3
5641 40.3 67.9 90.1109.9125.6136.0141.9146.3144.1132.4131.3123.6
115.0103.8101.1101.1 88.8 85.9 81.5 72.2 59.2 51.4 35.3 20.6
0849 62.4 88.5100.8113.5116.6117.5118.5119.9115.7111.9109.4105.7
95.9 93.8 90.8 87.5 79.3 76.7 69.3 58.5 49.7 38.1 26.3 17.3
1649 76.0105.7113.6121.1117.8115.1114.6120.3121.9118.5117.4120.3
112.1108.5109.3109.8100.1 99.2 94.9 82.2 72.3 55.8 41.8 30.5
2449 78.3105.4110.8118.7117.0110.0106.9108.7110.8111.2117.9124.3
120.0117.9118.3114.6103.0103.1100.0 87.2 77.4 61.0 46.0 35.0
3249 66.7 98.8110.4111.4108.0106.1103.1110.3108.2110.2114.5115.8
114.6107.3108.8110.7103.7107.2111.0103.1 89.9 83.1 59.9 36.8
4049 84.5114.3124.5131.7129.4117.8118.9118.6114.8116.3124.6126.1
118.1117.9114.6113.2104.6104.2 97.7 86.5 76.5 59.4 44.4 36.3
4849 55.1 88.6106.2115.0119.1116.6115.2121.2120.1113.6109.5111.0
103.5 94.9 95.1 95.0 88.5 85.2 83.4 74.9 63.7 52.5 40.5 25.8
1657 35.5 57.8 75.7 94.4102.1104.6104.6106.7101.5 94.4 94.9 91.8
85.5 80.7 79.4 77.5 69.6 67.9 62.9 53.0 45.5 38.4 24.7 14.9
2457 54.5 82.4 98.2117.9121.4122.4122.2125.0117.5111.7109.9108.2
98.2 93.7 91.1 88.9 80.2 79.3 74.0 63.7 55.2 41.5 30.5 19.1
3257 55.8 82.2 95.7110.6113.0114.7119.2121.2110.0101.9101.3 99.5
89.9 84.4 84.4 83.2 73.8 74.4 72.5 63.0 54.9 48.2 30.7 20.4
4057 54.1 87.3112.4140.7143.2139.5137.2138.0128.8123.1121.9121.0
113.3106.8104.9104.9 92.0 89.6 82.8 69.4 59.5 49.8 31.2 18.5

CYCLE 2 DATA

DATASET 30, DECEMBER 16, 1976

Reactor Conditions

Core Average Exposure, 10730 MWd/t
Core Thermal Power, 3256 MWT
Dome Pressure, P, 1021 psia
Core Flow, 102.3 Mlb/hr
Inlet Subcooling at P, 23.7 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28	48
48	48	44	48	48	48	48	48	48	48	48	48	44	48	48
48	36	48	10	48	28	48	14	48	28	48	10	48	36	48
48	48	44	48	48	48	48	48	48	48	48	48	44	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 49.5 80.6 99.7118.1128.1128.8117.9117.1113.2105.6102.7101.6
     95.9 87.5 85.7 83.8 75.9 73.4 72.1 64.7 55.6 45.6 35.3 21.3
2409 49.3 81.8101.0114.0117.8116.2109.6112.4110.4112.3115.3115.6
    109.4100.1 98.0 96.0 86.9 85.2 82.5 75.4 64.6 53.1 42.2 26.4
3209 56.5 86.4104.0120.1123.8126.3133.2134.7128.1127.3128.2122.4
    114.9107.0107.5104.1 92.5 92.1 87.8 77.2 68.1 61.3 41.6 28.1
4009 34.9 62.9 85.1 99.1116.3124.4118.0119.9120.2118.1118.2123.4
    119.6110.3108.4106.3102.6 92.8 91.1 85.6 71.6 62.1 48.6 34.6
4809 65.5 97.1109.5123.2122.6119.0116.6116.2111.8107.3105.2104.8
     96.7 90.9 88.2 85.2 75.1 73.9 68.5 59.1 50.5 42.3 26.5 17.3
0817 45.9 75.6 97.4119.3135.4133.5123.8124.4121.0115.2111.4114.1
    108.2 97.9 98.2 99.2 89.8 86.2 83.3 74.4 61.5 51.2 38.9 24.5
1617 62.0 89.7101.7113.8121.8127.3128.6136.3132.7128.9128.0128.0
    123.4111.9112.0111.8102.5100.9 97.0 87.2 75.1 59.2 45.6 31.0
2417 68.3 97.1104.5114.0112.4108.9107.7108.7107.1107.8111.6111.4
    106.4100.8 98.6 96.4 92.0 96.6 97.6 88.9 80.4 70.6 49.2 34.7
3217 70.3 95.5103.6109.9107.3101.9102.2104.2102.9104.0107.6106.7
    101.7 99.1 96.9 96.0 89.6 92.8 94.1 86.2 80.5 70.6 47.7 38.9
4017 61.7 92.0102.5113.1114.7114.6113.9115.5112.7110.9114.9114.2
    109.3100.2 99.5 99.7 91.7 96.8 98.1 89.9 80.1 64.5 51.2 33.6
4817 59.2 88.7104.7125.8138.7144.4148.1150.3141.7132.5131.7127.7
    119.0112.1109.0104.4 96.0 95.3 90.8 80.4 71.8 62.6 41.9 30.8
5617 57.8 85.9 97.1105.7106.0102.6 97.3 96.9 90.4 86.4 84.9 81.9
     75.0 71.8 69.9 66.6 60.7 59.6 55.8 47.6 41.7 35.7 22.5 16.4
0825 48.1 77.4 99.4114.9123.9123.5120.1124.7120.6124.4128.9131.7
    126.3113.8112.4108.3 99.1 97.0 94.7 84.7 72.4 66.6 48.6 28.0
1625 63.5 92.6102.1109.5108.5105.8106.0109.5108.6110.3116.0115.9
    108.6105.0101.7101.6 94.5 99.0 98.6 88.7 79.2 63.8 50.0 35.3
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2425 63.6 88.5 95.3 99.5 96.8 95.1 92.9101.9104.7113.8125.7131.1
126.6123.1120.1116.9104.6103.7 98.1 86.0 75.4 61.3 47.6 34.9
3225 68.8 94.5100.8106.2102.9100.4102.1106.4111.7120.0132.1136.5
130.6130.2125.6124.2110.6107.7102.6 89.4 78.6 69.2 45.9 38.0
4025 61.6 91.3 98.1105.1101.3 98.2 97.0101.0103.1108.8119.0123.8
119.3112.6112.7112.1101.7101.0 97.1 87.1 76.9 64.7 50.2 33.3
4825 58.0 90.5109.3123.1123.7121.1119.7120.3113.8113.2114.9114.1
105.5101.1100.3 98.4 91.2 97.9 98.1 88.8 81.1 63.1 48.9 33.9
5625 53.5 87.4107.3121.9122.8114.6105.7106.0101.7101.9110.2112.0
105.2 99.4 98.2 95.2 84.1 80.4 75.4 66.3 56.6 43.9 32.1 18.7
0833 53.6 87.0104.6122.0128.9133.1133.1134.7131.9122.8123.3122.8
114.6105.4102.6101.2 92.2 91.4 86.6 77.3 66.7 60.3 42.0 27.7
1633 58.8 84.9 94.1 99.4 99.7 97.3 95.4 98.2 97.3 98.4 98.7 98.6
96.9 91.7 90.2 90.3 83.0 84.7 85.4 81.9 74.0 61.8 48.8 32.1
2433 55.2 83.6 94.5 99.7 99.5 95.7 92.2 95.5101.0108.2119.2126.2
125.2118.9117.9116.6105.9103.4100.3 90.0 77.6 62.6 49.7 32.0
3233 64.4 95.2103.8107.1105.1103.1100.9107.3110.0113.3121.7125.4
123.4114.9117.6116.1109.0109.5106.8 96.2 83.0 76.2 54.9 35.6
4033 65.6 94.4102.1109.4108.2105.5105.1111.6116.3122.4136.4139.9
135.8129.8126.5126.2115.4111.4105.5 92.4 81.6 66.5 52.5 38.3
4833 58.8 88.3102.7114.3117.0115.2111.5113.7108.8107.1107.7106.0
99.7 92.7 93.4 89.6 83.5 85.5 87.4 80.6 73.6 60.8 48.2 35.7
5633 50.4 84.2103.2117.2117.5118.3112.9113.5111.3104.1100.9 98.1
95.0 84.8 86.1 82.5 75.1 72.4 67.9 60.5 52.3 42.5 32.0 19.9
0841 51.2 80.2 98.9118.6130.8135.5132.0134.1128.9129.0135.1134.8
126.7116.6113.9111.1 99.8 97.9 92.8 80.2 69.1 61.0 41.9 25.9
1641 72.5 98.0108.1117.2118.1116.6116.2115.8113.3111.2113.4109.2
102.6100.0 97.5 97.1 90.3 95.8 94.2 84.1 74.8 60.3 46.0 37.2
2441 59.9 90.1100.1106.3105.8101.7 98.3 99.0103.6110.0121.4128.5
125.7117.7117.8117.7108.1106.1102.2 92.5 79.8 65.9 51.8 33.7
3241 61.6 91.3102.3106.4104.1 99.1 97.0102.0107.0114.6126.4134.8
134.4124.5124.5122.9111.9107.9104.2 93.6 80.7 74.5 54.9 35.8
4041 68.3 97.6106.9113.1110.1108.7108.6108.6109.5115.4125.4128.1
122.1116.1115.5113.5102.2102.3 97.7 85.6 76.0 62.3 47.8 33.1
4841 52.4 81.0 97.8116.9127.6128.4128.6130.7121.4117.7119.8115.4
108.7101.5101.8101.4 96.0 99.3 98.7 90.6 80.8 63.4 48.6 31.7
5641 48.1 81.0100.0118.3123.6120.1112.8109.7107.7108.2112.8116.3
110.4101.5101.3 97.2 87.5 83.7 80.4 68.9 58.0 50.9 35.1 20.1
0849 72.3 98.9110.7121.9121.6119.5115.1114.3107.9103.3101.9 98.5
90.8 87.1 83.7 78.6 70.8 68.7 62.5 52.2 45.3 35.1 23.8 17.2
1649 62.4 85.5 99.2115.9122.3125.7128.4126.9121.6114.8113.9112.0
102.4 96.9 97.2 95.5 86.0 87.7 84.6 73.1 65.3 50.7 37.9 28.9
2449 61.2 89.7105.4118.0118.7112.1106.7108.2105.6101.5104.3102.4
97.0 94.3 94.1 93.1 85.8 90.9 91.1 82.3 73.9 58.2 44.0 33.8
3249 53.2 86.1103.9112.7114.1114.4112.4113.7110.9108.2108.4108.4
104.5 97.3 98.1 97.9 91.3 92.0 95.7 92.6 82.8 77.0 56.2 35.7
4049 63.7 90.4103.8120.3125.7126.0121.5121.0115.7107.3109.6106.2
99.4 93.8 92.1 90.5 86.1 89.0 90.0 79.5 71.3 56.7 42.6 33.5
4849 58.4 94.3115.4127.7133.5133.3125.5125.4117.1109.8104.4103.7
99.4 89.0 87.1 87.1 79.6 77.4 74.7 67.7 57.4 48.4 37.7 25.8
1657 57.4 82.8 96.1104.0102.8 98.2 93.9 91.0 87.5 83.6 84.6 83.2
77.5 73.8 71.3 70.0 62.7 60.5 57.0 48.4 41.8 35.8 23.0 13.9
2457 62.7 92.3104.1116.6116.4107.1104.0100.5 97.3 98.2104.1105.8
95.1 91.4 89.3 85.5 75.9 73.2 69.6 60.5 52.0 38.7 28.5 18.4
3257 63.3 93.9105.3118.3117.7115.2112.1111.1104.9 99.3 98.4 94.6
87.2 82.4 80.5 77.8 69.9 69.2 65.3 58.0 50.8 43.7 28.4 18.6
4057 59.9 91.2106.7121.6118.5111.0108.2108.5106.7107.4117.2118.5
109.3105.7103.2 99.3 89.1 85.9 79.3 66.8 56.2 47.8 29.7 18.3

CYCLE 2 DATA

DATASET 31, DECEMBER 28, 1976

Reactor Conditions

Core Average Exposure, 11030 MWd/t
Core Thermal Power, 3285 MWT
Dome Pressure, P, 1018 psia
Core Flow, 106.5 Mlb/hr
Inlet Subcooling at P, 23.1 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28	48
48	48	44	48	48	48	48	48	48	48	48	48	44	48	48
48	36	48	10	48	28	48	14	48	28	48	10	48	36	48
48	48	44	48	48	48	48	48	48	48	48	48	44	48	48
48	28	48	12	48	28	48	28	48	28	48	12	48	28	48
48	48	40	48	48	48	48	48	48	48	48	48	40	48	48
48	48	48	36	48	12	48	10	48	12	48	36	48	48	48
48	48	48	48	40	48	44	48	44	48	40	48	48	48	48
48	48	48	48	48	28	48	36	48	28	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 49.4 82.1100.6119.2126.6123.4117.4116.5112.8106.4102.9102.5
      97.5 87.8 86.7 85.6 77.0 75.1 73.9 66.8 56.9 46.9 36.4 21.4
2409 49.5 81.0 99.2113.6118.1117.2110.0113.3111.3111.8115.1117.7
     112.3101.3 99.4 97.3 87.9 86.4 84.5 77.1 66.6 54.8 43.2 27.0
3209 55.7 86.3104.7118.2122.4127.7130.7132.7127.6126.2126.7124.2
     117.3108.8107.3106.2 93.3 93.0 88.6 78.2 68.5 61.0 41.9 28.8
4009 34.5 62.7 85.2 98.1116.3122.3119.3117.3117.5116.6116.5122.1
     122.0110.8108.3107.7103.6 94.5 92.8 86.9 74.1 63.5 50.2 36.0
4809 65.5 95.2107.3123.3122.7118.1115.4112.5110.6107.9106.3104.6
      97.0 91.6 90.1 86.7 76.8 75.5 69.5 59.6 51.7 42.9 27.2 17.7
0817 46.8 77.9 98.1118.7134.1135.4126.0128.5123.3117.2112.1116.1
     111.7101.9101.9101.3 92.9 89.7 86.2 76.3 65.6 53.0 40.2 24.7
1617 62.6 91.3103.0115.4119.8127.0129.5139.4135.1132.0132.8132.7
     124.0115.3114.3115.3105.1103.9 99.9 88.0 77.1 60.6 46.8 32.2
2417 66.9 96.1106.1112.3112.2108.4110.0111.9109.6108.4112.7114.7
     108.6102.6101.3101.8 95.1 98.9100.9 91.1 80.8 72.7 50.1 35.0
3217 68.3 93.7101.5107.9104.7100.9102.2101.6103.2102.3108.9109.1
     101.8 97.5 96.9 95.4 89.0 91.7 93.5 86.9 80.5 71.6 47.9 38.8
4017 59.9 89.7 98.6111.0112.6113.1113.6117.4114.4112.3114.2114.9
     109.1101.2100.3 99.5 93.2 96.5 98.3 89.8 80.4 65.5 51.2 34.6
4817 58.4 87.2101.7122.5135.0142.0147.2146.4140.2133.6133.5128.8
     119.2112.8111.4106.7 96.7 96.8 93.6 82.6 73.3 64.3 43.0 30.8
5617 58.5 84.8 95.7104.8105.0 97.7 97.6 95.3 90.5 84.3 85.1 82.6
      75.8 73.3 70.6 68.8 61.2 60.7 57.5 48.9 43.1 37.1 23.8 16.3
0825 48.6 78.4 97.7116.0122.9123.5118.0123.0124.7124.0128.8130.8
     127.0116.6112.3109.8100.4 97.9 96.1 86.9 74.0 67.1 48.8 29.2
1625 62.2 89.4 98.9107.3107.2105.2105.0109.2110.0111.8114.2116.7
     111.8104.7104.2104.0 95.8 99.5100.4 90.9 80.3 65.7 51.0 33.3
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2425 60.7 86.0 92.2 97.3 95.9 94.2 93.4101.7107.2116.5126.5132.6
128.7124.1122.7117.2106.2104.4 99.1 86.7 77.3 61.6 48.0 34.0
3225 67.5 91.9 98.0104.7102.7 99.9101.7108.0113.3124.6136.0138.7
131.7130.7128.3124.9111.2110.1104.3 90.6 79.3 69.3 47.4 37.0
4025 60.2 88.0 97.4101.5100.1 98.3 97.6101.9103.5109.1118.4122.6
120.7115.6114.6112.5103.7103.0 98.5 89.3 79.2 65.4 51.4 34.3
4825 56.8 89.7107.1121.1123.0119.9120.4122.2117.8115.7115.0116.0
107.5102.1100.6100.7 93.4 97.0 98.7 89.8 82.4 65.3 49.9 34.6
5625 54.5 89.6111.4123.9120.1111.7104.9108.8 99.3103.8109.1113.4
107.0 99.2 99.1 96.8 84.9 82.5 78.4 67.1 58.0 45.6 32.8 19.0
0833 50.9 82.9106.3121.6127.3134.2131.8135.7130.2125.7123.2123.6
115.7105.8104.9104.3 93.5 92.0 90.0 78.3 67.9 61.4 42.9 27.2
1633 57.0 82.5 92.0 97.3 98.5 98.1 97.0100.2 99.4 98.4101.0100.1
96.8 92.2 90.8 91.1 83.9 86.3 86.4 81.5 74.9 62.3 49.1 31.7
2433 54.2 82.9 93.5 98.1 98.7 95.6 93.3 98.6103.1111.0120.0130.3
128.9120.3121.1117.3107.7105.3101.5 90.2 77.7 63.2 50.2 32.1
3233 62.1 90.7100.2103.8103.8101.2102.0107.3110.3114.9121.5127.9
123.7116.2119.6115.9109.4111.2108.8 96.5 83.9 76.6 54.8 37.7
4033 62.8 89.8 98.8104.0104.7103.9103.4110.1114.0122.5134.0137.9
134.8129.2126.9123.1113.6110.3104.4 92.5 80.9 65.8 52.0 37.9
4833 56.4 88.3101.4112.3115.5114.3113.4114.1111.3110.0110.8106.8
102.3 94.8 92.5 92.0 86.1 86.4 88.1 82.8 74.4 62.4 49.6 34.7
5633 51.3 86.2104.2119.6120.2117.2112.3115.4109.7108.2101.9101.4
97.5 85.1 86.0 83.7 76.8 74.7 70.5 63.5 53.5 44.4 33.5 20.0
0841 50.9 79.2 95.9115.6129.2134.5130.5132.0125.5128.3135.0133.1
127.2116.3116.2111.9100.6 96.8 93.4 83.4 70.8 63.0 43.8 26.7
1641 68.4 94.8104.3115.2117.9114.2114.8117.3113.1111.5112.9110.1
104.5 98.1 97.8 96.0 91.3 95.4 95.4 85.9 77.0 61.4 47.3 36.9
2441 58.7 87.3 98.0104.7104.8102.1 97.9102.3104.8111.6123.5127.2
126.6118.7119.2118.1108.3107.0103.8 93.8 80.5 67.4 53.4 33.7
3241 59.9 89.0 99.0104.6103.1 99.8 98.9104.1108.4117.8128.2136.8
134.9126.0125.5125.4112.9109.1106.2 95.2 81.4 75.4 56.0 36.5
4041 65.9 93.4103.4111.0109.6106.8105.5109.2111.2114.2128.7130.8
123.6118.6115.2116.3104.2103.1 99.5 88.4 77.5 63.6 48.5 32.8
4841 52.9 80.2 96.0114.2124.7128.7127.3128.0124.2116.2116.8116.6
111.0101.5103.2102.7 95.9 99.8101.5 92.1 82.3 66.3 50.1 32.3
5641 48.4 82.3101.0120.4124.5119.5111.9108.6107.6109.7115.1117.5
115.0104.8104.3100.0 89.5 87.8 82.1 72.1 58.9 53.3 36.8 21.3
0849 70.1 96.2109.8120.0119.0118.2114.1113.8107.6103.2102.3 99.6
92.0 87.7 84.5 80.5 72.9 69.5 63.5 54.7 47.3 36.1 25.6 16.7
1649 59.6 85.1 98.5115.9124.3125.4127.8126.5121.9115.4117.1111.5
105.8 99.3 97.6 95.8 88.3 88.6 85.4 76.0 66.5 52.1 39.8 28.8
2449 58.3 87.0103.4117.8117.6113.1111.6111.9106.4102.9105.5104.8
99.4 94.6 93.0 94.1 87.0 90.5 92.5 82.9 75.4 60.4 46.3 32.1
3249 51.8 83.9100.7111.4116.3111.5107.6111.9110.7109.0110.4109.0
106.1 99.8 99.7100.4 93.3 94.8 96.6 94.5 84.7 79.1 58.3 36.6
4049 60.5 86.3101.3120.2125.1123.2122.9119.2113.4107.5111.5106.4
98.9 93.8 93.7 92.7 85.9 90.6 92.6 81.8 73.1 58.3 44.2 34.5
4849 59.1 94.1114.7127.2130.4130.9122.3123.2117.2110.3105.7104.3
97.8 88.6 87.7 87.9 79.9 77.3 75.2 68.7 58.1 48.7 38.6 24.4
1657 55.9 81.6 94.2106.3103.4 99.2 94.1 94.3 89.8 84.2 85.0 84.8
78.5 74.5 73.1 70.8 64.4 61.9 58.4 50.3 43.1 37.4 24.4 14.3
2457 61.7 92.8105.7118.8114.9107.1102.2100.6 98.3 97.4105.2106.1
98.9 93.7 90.1 85.1 76.3 75.8 71.3 61.3 53.2 40.7 29.5 18.7
3257 62.5 95.9106.8118.1116.4116.7112.5114.2105.8 98.9 99.4 96.3
90.1 83.8 81.1 78.9 70.9 70.5 67.2 58.7 51.6 44.6 29.1 18.1
4057 57.6 88.4105.0116.1116.4111.4109.1108.7108.1108.9118.8119.5
113.0106.8104.4101.6 90.6 87.7 81.2 69.1 59.5 49.5 31.9 18.5

CYCLE 2 DATA

DATASET 32, JANUARY 19, 1977

Reactor Conditions

Core Average Exposure, 11260 MWd/t
Core Thermal Power, 3276 MWT
Dome Pressure, P, 1019 psia
Core Flow, 101.1 Mlb/hr
Inlet Subcooling at P, 24.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	36	48	6	48	6	48	36	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 45.9 77.8102.0121.2131.7130.6127.6131.1127.4117.2113.9114.1
     106.3 96.4 95.2 94.0 88.0 84.4 83.0 74.4 63.4 52.1 40.6 23.3
2409 57.4 95.9116.4133.3134.8130.4126.1132.0139.3136.7136.2136.2
     128.5117.7115.9114.2102.6 99.4 94.7 83.1 71.1 57.4 45.7 29.1
3209 63.8 97.0116.1128.9130.3126.2129.2138.6146.7148.5152.1153.2
     145.7134.3133.2129.8113.7108.5101.3 87.9 75.2 65.5 45.0 31.5
4009 42.9 79.5111.5129.0143.0145.6138.7148.5146.4137.7136.0136.8
     130.9120.8119.3117.0111.4103.4101.6 94.3 79.0 67.5 52.9 36.5
4809 50.6 82.6103.4121.3127.5129.0126.9125.4120.4116.8116.0113.3
     105.8101.3 98.3 94.4 86.0 84.2 79.1 66.8 58.1 48.3 30.5 20.4
0817 35.1 61.5 83.4109.2137.0150.2146.0150.6146.3136.5133.8134.0
     126.9114.5117.0114.1103.2 98.8 94.3 84.6 68.9 56.8 42.8 26.4
1617 58.4 92.7112.6128.7133.8132.3128.4132.3128.2125.4126.6124.5
     118.0114.5116.1122.0114.2115.0110.2 97.3 84.6 66.1 51.4 33.8
2417 64.3 96.9114.8128.4132.1131.3128.6132.4130.3130.9140.6148.6
     143.4134.7134.2129.6117.2115.4107.6 94.0 81.2 73.1 49.3 37.0
3217 76.6105.2119.7125.6125.2122.8124.5127.8125.9132.3144.2147.4
     138.4135.5132.4127.2114.1110.8105.0 91.1 80.6 68.5 46.2 39.0
4017 56.4 91.8110.7125.9128.5125.9124.1126.4122.5122.4124.9125.3
     118.9112.3111.9115.8109.2112.2108.1 96.2 85.2 68.5 53.8 35.8
4817 62.3100.1123.1145.5155.5158.6155.7152.9148.2140.8142.4139.4
     130.0124.3120.3119.2107.0106.2100.7 88.5 77.8 68.0 45.3 33.8
5617 39.8 61.6 79.5103.1115.7121.1120.9117.0111.7102.2101.8 98.6
      88.1 83.5 80.6 77.9 69.6 68.7 63.3 53.6 46.8 40.0 24.8 18.3
0825 49.1 77.1 93.7112.1126.8133.3138.3147.1145.6147.6155.2158.7
     153.2139.4132.4129.4114.5107.9104.8 92.6 76.7 68.9 49.2 30.2
1625 71.6105.1116.8126.6126.6125.5127.7132.2132.2132.6138.6133.9
     127.9118.2115.5112.8100.0 98.6 92.9 84.6 76.3 63.6 49.8 33.4
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2425 66.8 95.4105.0115.5120.1127.5131.8140.3135.5131.5134.2131.0
121.4113.7112.4108.7 95.4 94.1 89.3 78.8 71.9 58.7 46.0 32.9
3225 76.3106.2115.8127.2133.3139.5147.2149.8147.5143.6145.0139.2
129.4124.3120.3115.2101.8 99.0 92.4 80.4 72.7 64.1 44.0 35.8
4025 65.5 98.0110.0117.6119.6120.0120.4125.9123.7119.0120.1117.1
110.8103.9101.0101.0 90.5 89.3 87.1 81.1 74.8 64.4 50.7 35.8
4825 74.5108.5120.4130.9133.7130.8133.3137.1139.3146.8154.4153.1
146.0137.6131.7129.1112.8110.0105.9 90.5 79.2 61.8 47.9 35.1
5625 56.8 95.2117.3137.8149.1150.5146.3140.1134.7128.0125.6125.3
118.4110.3107.6104.5 91.6 86.8 81.4 70.4 60.2 45.9 33.5 20.6
0833 53.3 80.0 93.3107.2119.5128.0131.9137.7136.9140.9150.3152.6
147.0132.7130.2126.0111.4107.1 98.4 85.0 71.3 66.4 44.0 29.2
1633 67.9 96.6105.8113.5117.8124.4130.6139.5137.4133.2134.6132.8
124.0113.8110.8108.7 97.0 94.5 89.2 79.3 69.8 57.1 45.4 31.1
2433 61.5 94.0106.1115.3117.7118.1114.6119.6119.3114.9114.7115.1
108.7100.0 97.3 94.3 86.3 84.1 81.2 73.8 67.7 58.4 49.6 30.5
3233 69.9102.1113.4120 5122.7125.0125.1129.0126.9126.8126.3124.1
117.5107.4104.5100.5 90.4 87.3 83.4 75.3 69.3 68.9 51.0 33.4
4033 69.7100.1111.6118.7125.0133.3143.0152.5149.6145.4147.0144.5
138.1126.4123.1117.8107.1102.1 96.3 85.4 75.8 63.0 49.9 36.1
4833 74.0103.6112.4120.1120.9122.1124.4129.4131.5139.4149.8150.3
141.3130.9123.9119.4105.9102.8 96.5 84.9 73.1 59.3 46.9 35.9
5633 55.2 91.0111.5131.2138.6139.7135.3135.1129.5122.3119.2116.3
112.2101.2100.0 98.0 86.4 82.8 76.8 66.9 57.1 45.5 34.9 20.6
0841 55.6 90.1109.2132.9148.2155.9151.6153.4150.5148.6156.2153.9
146.0134.1131.4128.7113.9106.3101.5 86.5 73.4 64.4 44.5 27.3
1641 69.9102.6119.7134.4135.4130.6129.4128.4123.5119.8123.4119.9
111.6107.7106.0102.9 94.3 95.5 91.0 83.9 77.8 62.6 47.5 39.0
2441 54.4 86.7106.7122.1129.9135.9138.1144.2146.3144.5146.5143.4
139.2127.1126.6125.7113.4109.2104.1 93.9 80.1 66.7 52.9 32.6
3241 64.3 96.6110.6120.2124.1129.1136.4148.3148.5151.0150.8152.6
148.5136.8134.7131.3121.5111.0105.2 92.9 78.6 71.7 52.8 35.2
4041 58.2 88.7106.3120.7124.8127.3125.5129.9128.0123.3126.6123.3
116.6112.1109.3108.2 97.3 96.4 93.3 85.3 77.9 64.6 50.0 34.9
4841 57.1 92.1115.0133.1141.9140.0136.7139.3135.4138.6145.2147.1
140.7131.2128.9127.5115.1112.9108.7 94.2 81.8 66.5 50.6 31.8
5641 49.7 86.6116.1142.7162.6162.4153.4151.5143.9133.7131.0128.3
121.0110.5107.0106.3 94.5 90.0 83.1 73.8 60.5 52.3 36.8 20.5
0849 49.0 70.4 85.4107.1122.5131.3135.1135.0126.8120.0119.8114.3
104.9100.3 96.3 92.2 82.4 79.2 72.4 60.8 52.8 40.3 27.5 19.6
1649 70.6104.7120.7134.1132.9126.8123.8118.6115.6110.8112.2109.5
103.1100.0102.4106.6102.0102.9 99.3 86.5 74.2 59.6 43.8 32.7
2449 75.5108.9124.6141.0137.4129.1121.9124.6126.8126.9135.4142.2
137.2133.8132.2128.6114.2109.9102.5 88.9 77.0 59.8 44.5 34.9
3249 61.0 97.3116.3126.8127.1124.4121.2127.9130.3133.4143.1153.1
153.6145.7145.4140.5127.3120.4113.6103.2 87.6 79.8 57.3 36.1
4049 75.9110.8130.1140.6139.8132.8130.6129.9122.8117.2120.2118.3
109.1105.7108.4111.1104.6105.2100.2 87.3 76.5 60.6 45.2 36.8
4849 46.7 82.6109.7130.6140.9141.3137.6139.8126.9121.1113.7113.6
107.1 95.8 97.1 98.6 91.9 88.6 86.0 77.5 65.7 56.4 43.6 28.5
1657 41.5 62.8 74.3 87.2 96.0103.4112.7118.4110.2103.7103.3 99.3
90.0 86.3 82.9 81.9 72.3 70.3 66.0 55.8 48.3 41.2 26.4 16.7
2457 73.4107.1120.9130.2123.1117.7118.2124.6129.6122.3125.0121.8
110.2103.6100.4 95.4 84.7 81.5 77.2 66.1 56.0 42.1 30.4 20.4
3257 75.3109.6123.0132.0123.6115.1111.7117.6120.3116.7118.3116.4
106.6 98.9 95.9 92.9 81.6 80.0 75.7 65.2 56.7 48.5 31.2 21.0
4057 65.8101.0119.4139.6143.3144.9145.3149.9146.2136.9136.9131.1
121.8114.3113.8110.2 98.2 94.8 86.1 74.1 62.8 51.6 33.2 20.6

CYCLE 2 DATA

DATASET 33, JANUARY 26, 1977

Reactor Conditions

Core Average Exposure, 11420 MWd/t
Core Thermal Power, 3273 MWT
Dome Pressure, P, 1019 psia
Core Flow, 104.0 Mlb/hr
Inlet Subcooling at P, 23.6 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	36	48	6	48	6	48	36	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 44.7 78.3102.4118.7129.2130.5128.0129.0126.9117.9115.8114.0
     106.7 98.3 97.5 97.6 87.7 87.1 85.7 76.6 65.7 53.9 41.7 25.0
2409 56.8 94.5115.2130.3133.1126.7127.0136.3141.7140.9139.0139.0
     132.1119.8118.7116.3104.3101.3 95.7 85.7 72.9 59.4 47.0 29.2
3209 61.3 96.4115.6132.2127.5131.4130.8141.9146.5145.6151.6151.2
     147.0137.8137.0131.0116.7109.6104.0 90.5 76.9 68.1 45.9 31.5
4009 41.6 79.6110.7127.7140.1142.5143.9144.6145.1142.2135.3136.7
     133.7122.3119.1119.8114.5104.7103.3 96.3 81.7 69.3 54.2 38.7
4809 48.3 80.4100.4119.5124.8126.8124.9125.4122.8118.1116.9113.4
     107.4104.0 99.2 97.2 88.9 86.4 80.3 68.8 59.8 49.5 31.1 20.0
0817 34.6 60.9 81.6106.8132.3144.9146.5149.6139.7136.2134.0134.8
     129.0118.0117.5117.5106.2100.9 96.9 86.7 71.7 58.7 44.5 27.5
1617 56.8 89.2107.9128.3131.8130.9128.2133.0128.3124.0124.9126.5
     121.2117.5119.7124.3117.7117.7112.5 99.8 86.7 67.7 52.8 34.8
2417 62.4 94.7111.5125.9129.6130.7130.1132.6131.7133.9141.9152.3
     145.3135.7138.1131.8118.5117.9110.7 96.4 83.7 73.7 50.6 37.5
3217 74.3103.5113.4124.7124.9122.7123.7127.1127.5137.2144.1151.2
     144.3136.6133.7129.4116.1113.3107.1 93.0 81.5 70.0 47.2 40.1
4017 55.0 90.4106.5121.7126.6124.7123.3125.3125.3121.4123.8125.0
     121.6113.6113.6118.6111.1114.1109.9 97.3 86.0 70.3 54.8 35.4
4817 60.3 97.3120.3143.3153.7155.4154.0153.9149.5142.3145.3142.8
     131.8124.9123.6121.7110.1108.1102.8 91.2 79.6 69.9 47.0 35.5
5617 38.6 59.2 78.2 99.7113.4117.6118.0115.6110.3104.0103.0 98.2
      90.9 85.6 81.6 79.3 71.5 68.5 64.4 54.8 48.7 40.8 25.9 18.4
0825 48.1 75.9 91.9111.0123.8133.9138.8145.5145.5148.9159.2162.8
     153.4139.8138.4131.5118.5113.0107.1 94.2 80.8 72.3 51.7 31.8
1625 68.4100.2113.0120.3125.8123.7125.1130.8135.9133.1135.6135.2
     131.5120.6117.1114.2100.6 99.4 94.7 87.3 78.7 64.9 51.3 33.6
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2425 65.5 92.7103.2113.2118.9126.3130.5138.3138.8134.4134.9131.7
123.4116.7115.1110.3 97.7 96.5 92.3 81.6 73.2 60.1 47.3 34.7
3225 74.0102.1111.8123.8130.4136.3144.7152.0150.8142.0143.1140.3
130.0123.8120.9115.3101.9100.2 94.0 82.3 73.1 65.0 44.8 35.8
4025 63.5 94.5105.9115.9118.4119.5119.5124.1122.1120.6120.1118.5
111.5105.2103.5100.4 91.2 90.3 88.1 82.6 75.7 64.7 51.2 35.4
4825 70.8102.5114.6125.6128.9128.5132.7135.4140.4143.3154.9154.5
146.8135.5132.5128.7112.9111.9105.1 92.5 82.0 63.7 49.2 34.9
5625 56.3 94.1118.9135.3144.2148.4139.9138.7136.6127.6125.8124.5
117.7109.6108.2104.5 93.6 88.1 83.4 70.5 61.8 48.0 34.8 19.4
0833 52.3 78.3 91.8105.3118.1126.0131.4137.8139.3143.4152.4155.8
149.1137.3132.2128.2113.8109.4102.1 86.8 74.2 66.4 45.8 29.8
1633 65.2 94.2103.6112.4116.8123.4132.4140.4139.0136.7136.0135.3
124.3116.2113.2110.3 98.7 96.1 91.6 81.0 71.3 58.1 46.4 32.0
2433 58.8 91.5104.1111.6115.1114.6114.8118.4117.1116.2117.4116.7
108.9100.7 98.4 96.8 87.8 85.6 82.0 75.7 68.9 59.8 49.0 31.3
3233 66.9 98.6109.5117.9120.8122.5122.2127.6127.0127.5128.1125.5
118.1109.2106.6102.5 92.0 88.8 84.1 77.0 70.8 69.6 52.6 34.4
4033 66.5 96.5106.9115.9123.2130.5138.4150.0150.2146.5147.3143.2
138.5126.5123.4120.2107.6104.4 97.6 85.9 76.7 64.2 50.2 37.0
4833 70.0 98.5106.4115.9117.9117.0120.2128.5130.5138.7147.2146.6
139.6130.0124.5120.2105.7104.5 97.1 85.1 74.6 60.7 47.8 36.2
5633 53.2 89.1110.2126.0134.9136.8133.6135.5128.1121.9118.6118.2
110.5101.8102.1 99.0 86.6 83.5 78.2 67.7 59.2 46.7 36.0 21.6
0841 54.0 87.8107.3130.4144.8151.3150.4153.6149.6149.1157.6158.0
148.9137.2134.1131.4116.3111.8103.5 90.0 75.7 66.5 46.3 27.7
1641 65.2 95.4113.1129.7131.6127.8126.8127.8124.6120.8124.5121.1
114.4108.9106.7104.7 96.5 97.2 94.5 86.0 79.6 64.7 49.6 38.5
2441 51.8 83.0102.6116.3125.6130.5134.2144.6144.0142.6143.5145.2
138.6128.8127.0125.3112.7109.3104.2 93.4 80.4 66.5 52.7 33.9
3241 61.2 94.1107.4117.0122.4128.1135.1149.6150.8148.6149.9153.3
149.0137.1136.8134.9117.7111.6105.4 93.5 79.4 72.9 54.1 35.1
4041 55.6 88.1103.6117.8124.1124.0126.7129.6126.4124.8126.5125.4
118.4112.6110.7110.4 98.7 97.2 95.5 87.3 79.5 65.9 51.8 34.8
4841 55.4 89.1110.2129.8138.2137.9136.9136.7135.9138.2145.4146.6
140.1132.8130.7130.6116.7114.4109.2 97.0 83.4 65.5 51.6 33.6
5641 48.7 84.4109.8138.6159.1157.8153.0147.8142.7132.4133.4128.3
120.7112.7108.3106.5 95.7 91.6 86.3 74.2 62.0 54.2 37.4 21.4
0849 45.3 66.9 81.9101.4116.4124.9131.7130.5124.7121.0119.1114.0
105.1100.8 98.1 93.7 83.2 81.5 74.4 62.5 54.3 41.4 29.1 19.3
1649 66.2 99.5116.0129.7128.8126.4118.3119.2116.0111.8112.3110.4
103.4102.0104.2108.1103.6106.2101.8 89.0 78.1 61.3 46.0 32.4
2449 68.7102.2119.9135.0131.5124.3121.3124.7127.2127.8136.2141.5
137.8135.5131.6130.1114.3110.5104.9 90.1 78.7 61.8 47.2 33.5
3249 58.5 93.8110.7123.0122.9120.5120.0127.7130.4132.8143.1155.3
153.7145.6144.5141.4126.7121.0115.2104.5 87.2 79.4 57.4 36.5
4049 71.3108.5126.0143.2140.3132.1129.7128.9123.1115.3123.1120.6
111.5108.8110.8114.6107.6109.8104.1 90.6 79.2 61.4 48.1 36.5
4849 46.2 79.1107.0128.3141.3141.3137.0138.1125.6121.4114.5111.8
107.2 98.5 98.0 99.2 92.8 90.5 86.4 78.9 67.3 55.9 44.0 28.6
1657 39.6 60.5 73.1 84.9 92.1102.0110.6113.9109.4105.0102.6 99.8
91.4 87.3 84.4 82.0 73.2 71.8 67.3 57.9 49.5 42.7 27.4 16.9
2457 68.8102.1117.9129.7127.6120.5116.9124.7125.9123.6124.4121.3
111.2104.6102.3 97.9 86.7 84.1 79.0 68.3 58.7 44.2 32.8 19.3
3257 72.3105.6119.1129.9126.0117.3111.0118.5119.1117.7116.5116.3
108.8100.1 97.7 93.9 82.3 81.8 76.5 67.4 58.1 49.9 32.8 20.2
4057 63.4 99.8118.9134.9140.3142.4145.2150.8143.3139.2134.6129.6
121.8115.2112.4110.8 98.8 95.3 89.0 74.0 63.5 53.0 33.6 20.3

CYCLE 2 DATA

DATASET 34, FEBRUARY 2, 1977

Reactor Conditions

Core Average Exposure, 11570 MWd/t
Core Thermal Power, 3260 MWT
Dome Pressure, P, 1018 psia
Core Flow, 106.0 Mlb/hr
Inlet Subcooling at P, 23.0 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	36	48	6	48	6	48	36	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	8	48	36	48	36	48	8	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	26	48	26	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 44.5 77.8100.1116.2126.7127.2124.3130.1122.2118.1114.2113.9
     106.5 99.0 97.3 95.3 88.9 87.2 85.6 77.6 66.6 54.2 42.0 24.3
2409 57.0 92.0114.1129.7131.4128.2126.4135.6137.6138.5139.9137.9
     131.6120.4117.5117.5103.4100.3 96.4 86.4 73.7 59.8 47.0 30.1
3209 61.5 95.2112.2127.3129.6125.3130.5139.8145.8150.3153.4152.3
     146.0137.6135.3132.8115.2112.8103.6 90.6 77.3 68.0 46.7 31.3
4009 41.1 77.6107.8124.3137.9141.6138.8142.8144.5142.2134.9136.6
     133.2121.5120.6120.2116.7105.1103.6 95.8 82.2 69.3 55.0 39.8
4809 48.1 78.4 99.3118.2125.1124.8123.5124.9118.8119.7120.1114.2
     107.1104.5101.2 96.3 88.3 88.6 81.2 70.0 60.8 50.3 32.0 21.1
0817 33.8 59.6 81.2103.7125.6142.1144.1147.5139.3138.4132.8132.7
     130.5118.1118.1118.7107.4102.3 98.6 86.8 72.6 60.4 45.5 29.7
1617 55.3 89.7106.9123.8132.0129.2125.9130.1127.6122.9127.5125.1
     122.1117.2120.0125.7118.5119.1114.3101.3 87.3 68.6 52.3 36.4
2417 61.4 93.3111.6124.3127.9126.9129.0134.6133.7134.6144.0149.7
     144.8139.1134.5133.0119.5117.8110.9 95.9 83.7 74.4 50.5 38.1
3217 73.6101.4111.3121.8123.4122.2126.4128.8130.2134.0146.1151.9
     142.3137.8135.0130.5114.9114.5107.7 93.1 83.1 70.9 47.9 39.1
4017 54.8 87.1103.8119.0122.9122.7121.9124.7123.6120.6126.0125.7
     119.8113.2113.9116.1110.9113.8108.7 97.0 86.7 69.9 54.3 37.0
4817 58.5 94.3118.4139.0148.8154.2155.3152.5146.6142.8145.3141.2
     133.3125.5123.6122.4109.8108.9104.1 91.1 80.9 70.9 47.6 35.5
5617 38.1 58.9 75.0 95.7112.7113.4117.1113.2110.0104.8100.5 98.4
      88.5 85.6 83.4 78.8 71.3 70.6 65.4 55.6 48.9 41.6 26.3 19.0
0825 47.8 74.3 90.6106.5121.0132.6135.5147.1146.9147.6160.0160.7
     154.9142.7138.1131.7119.0114.7108.6 95.1 80.9 72.1 52.8 32.6
1625 68.3 99.4110.3121.4122.6124.8128.3135.0130.8134.5138.6139.1
     130.5122.2117.8116.8102.4100.5 96.6 87.1 79.7 66.2 51.3 34.7
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2425 63.3 90.5100.7111.5116.3125.8132.9138.2136.2134.8135.4133.5
124.1116.6114.3109.8 97.1 96.2 92.1 81.4 73.2 60.2 47.4 34.7
3225 72.4100.9108.8122.5130.6135.8145.6151.5147.6144.6147.0139.7
131.1124.7121.8117.8103.2 99.7 95.3 82.3 73.3 65.5 45.1 36.2
4025 61.4 91.8103.9113.0117.1117.0119.8123.2121.6117.0119.8118.9
113.2104.9104.5101.4 92.3 90.7 88.3 81.6 75.8 65.1 52.3 35.7
4825 69.2101.1113.0124.1126.3125.9128.7134.4135.8143.7154.2152.3
144.7138.2134.1127.8114.9112.3103.9 92.3 79.5 64.1 48.9 36.2
5625 54.9 91.9113.7132.8141.7143.1139.5140.3131.0128.5127.1125.0
118.5110.3109.5106.8 92.5 89.8 83.3 73.4 61.4 47.9 35.7 19.9
0833 52.0 77.0 90.5100.4114.6127.4130.3136.1135.9144.4150.1153.9
150.1137.4133.7130.1114.2109.2101.8 88.6 74.7 66.5 46.0 29.5
1633 63.4 92.2101.3110.6116.1121.7131.3141.0140.3134.8137.5134.1
128.4116.9112.8111.1 98.3 96.8 92.3 81.3 72.4 59.2 47.0 31.6
2433 58.2 88.1101.4109.1113.6114.5114.1121.2119.9114.7115.1115.3
110.8101.6100.0 97.2 87.6 86.2 84.1 75.7 69.8 60.0 49.1 31.6
3233 65.5 97.4107.5114.6117.8120.6122.4128.3127.6126.7129.1127.9
119.3110.7107.2102.9 92.9 90.1 84.3 77.4 72.3 69.9 53.0 34.5
4033 65.2 94.3104.6114.6121.1128.4140.5150.8150.1148.0146.0144.1
138.9129.9124.6121.2109.4104.5 98.5 86.7 77.3 64.5 51.4 37.0
4833 68.5 96.2104.0112.9116.8117.9120.9125.8128.5138.3145.7146.5
141.3129.5125.7120.3107.0102.3 98.3 85.3 74.7 60.6 48.4 37.4
5633 53.9 88.2108.9123.7133.6133.2133.2136.3130.5122.4119.1116.8
113.3104.0103.0100.0 88.5 85.6 80.7 69.7 59.2 48.0 36.9 22.2
0841 53.8 85.0105.7127.6142.3147.4148.1153.8147.7149.2157.8159.3
149.2138.1136.9131.6117.7113.3104.0 90.6 77.0 68.4 46.9 29.3
1641 64.4 94.9111.9127.4131.4127.4128.3127.3123.5123.8126.2123.1
114.5110.4109.3107.0 97.8 98.0 94.6 86.4 81.3 65.4 50.6 39.7
2441 50.8 81.5100.1115.1124.1131.1135.4144.7145.5143.5146.2146.1
140.3129.3129.1126.6112.9109.7106.0 94.6 81.0 68.1 53.3 35.0
3241 61.3 92.6104.9114.7121.5127.0134.0146.4147.4149.1150.3156.0
151.0141.1138.2132.5118.3112.6107.0 94.7 80.5 73.6 54.9 35.8
4041 54.9 84.9102.7115.9120.8123.8128.2130.4129.3127.3127.1125.8
119.8114.3111.9111.0100.2 99.0 96.1 87.2 80.5 67.2 52.0 36.9
4841 55.1 87.8109.0127.4134.4136.6133.1137.4135.8138.4148.0148.1
143.8133.1133.7130.2118.3117.5110.6 99.3 86.2 67.0 52.6 32.3
5641 48.2 83.7110.2137.2155.4159.2152.3153.6145.1133.9132.7130.6
123.8111.6111.1109.0 97.2 93.9 87.6 76.5 63.5 56.5 39.3 22.6
0849 44.6 66.1 80.4 99.3115.6125.5131.4129.8125.4122.0120.9115.4
107.0103.1 99.8 93.4 85.0 82.0 76.7 65.1 56.0 43.1 29.9 19.5
1649 64.3 97.5113.1125.4126.3122.5118.5121.4115.0111.3112.7111.7
104.6102.8104.4109.2104.4108.6105.0 89.3 79.3 62.0 47.0 32.8
2449 68.7101.9118.7134.3132.4125.7123.1127.2127.1128.5138.6144.7
140.5133.8134.2131.4116.4114.6106.5 93.0 80.3 63.2 48.1 34.6
3249 58.2 90.4109.7120.2124.1119.3119.6126.6130.1133.8143.8155.0
156.8147.0144.9143.4128.4121.6116.3105.7 90.5 80.7 58.5 36.8
4049 71.4108.7124.1135.4137.7133.3129.5130.8123.5120.1120.7118.4
111.4109.3111.8115.2110.2110.3105.6 90.7 80.0 64.6 48.7 38.2
4849 45.5 78.4105.8124.9137.4139.6138.1137.5128.9120.4114.4115.2
108.8100.3101.7100.0 93.6 91.4 88.6 81.1 68.9 58.1 45.1 28.7
1657 38.9 59.5 71.4 83.6 90.7101.5109.3113.9109.8105.3103.2100.3
92.1 88.1 86.8 83.8 74.1 73.3 68.3 58.6 51.3 44.0 28.1 17.0
2457 69.1102.7117.0127.7125.1119.6119.1126.7128.7124.4123.8121.8
113.5105.4103.1 98.8 87.3 84.9 80.1 69.5 59.7 45.0 33.3 20.3
3257 71.7106.8119.1129.7123.1114.6110.5117.9121.1116.6120.6116.7
109.0101.9 98.1 93.7 84.5 82.6 78.0 67.4 58.9 51.2 33.1 21.0
4057 65.0100.1118.2131.7137.7138.9145.3148.6143.0135.9134.8135.2
122.9116.8113.7110.9 98.9 97.4 89.2 76.0 64.3 53.9 33.9 20.5

CYCLE 2 DATA

DATASET 35, FEBRUARY 23, 1977

Reactor Conditions

Core Average Exposure, 11910 MWd/t
Core Thermal Power, 3258 MWT
Dome Pressure, P, 1026 psia
Core Flow, 105.1 Mlb/hr
Inlet Subcooling at P, 23.4 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	38	48	16	48	28	48	28	48	16	48	38	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	28	48	10	48	36	48	36	48	10	48	28	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	34	48	36	48	12	48	12	48	36	48	34	48	48
48	38	48	48	48	48	48	48	48	48	48	48	48	38	48
48	48	28	48	10	48	36	48	36	48	10	48	28	48	48
48	40	48	44	48	44	48	48	48	44	48	44	48	40	48
48	48	38	48	16	48	28	48	28	48	16	48	38	48	48
48	48	48	44	48	44	48	44	48	44	48	44	48	48	48
48	48	48	48	36	48	32	48	32	48	36	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 41.3 72.4 91.5104.5113.3116.2118.8118.8116.2112.7109.1108.8
     102.0 93.5 93.9 93.5 87.1 86.5 83.9 76.0 66.4 53.7 41.9 24.4
2409 51.4 85.6104.4117.1120.4119.0117.5126.0131.2134.1133.7133.0
     125.1116.3114.1111.5 99.8 97.2 94.4 84.1 71.7 58.7 46.8 29.1
3209 57.2 86.9102.9117.7115.8120.5121.2131.6136.6141.3147.5144.8
     140.3129.4128.5126.1111.0108.2100.9 88.3 75.4 66.9 45.3 31.3
4009 37.6 72.3 99.3114.3126.7127.4128.4133.5135.6131.0127.1128.7
     127.4116.8116.5115.3111.5101.9101.9 95.4 80.6 69.2 54.7 38.0
4809 43.8 72.2 89.9106.6113.0116.1116.6115.6114.4110.3112.6109.1
     104.3 99.0 98.6 97.7 86.9 86.6 81.9 70.0 61.4 51.6 32.3 21.6
0817 31.4 54.0 74.4 93.4116.6128.6130.8137.8128.1124.7126.6128.9
     122.4113.3114.2114.0104.7100.6 97.0 85.4 71.5 59.0 45.1 28.0
1617 51.2 80.3 97.1114.5117.8118.6118.1122.8117.7118.8121.5120.6
     118.4112.4117.1121.4115.3115.9112.7 99.6 86.4 68.8 51.7 35.3
2417 56.1 85.4102.8115.7120.4121.9125.0130.0131.2137.5145.8150.3
     142.4133.9129.6128.4116.4114.2106.7 94.6 82.3 73.2 49.7 36.7
3217 67.6 94.1102.5114.3115.3115.9118.8128.5131.3136.3145.4147.6
     138.2132.5128.1122.4111.7111.2104.4 91.8 81.0 70.6 46.9 40.9
4017 50.4 80.3 96.0109.8116.9115.6113.6120.2119.8116.6121.2120.5
     115.6109.4110.6113.5108.6111.9108.7 97.8 86.9 69.9 54.2 36.6
4817 54.4 87.5105.5126.5136.8141.7142.9144.7139.4133.8137.7136.1
     128.4122.5121.0118.4109.5109.1104.5 92.1 81.6 71.7 48.2 37.9
5617 35.6 54.3 69.6 90.1100.8104.8104.3106.9101.5 98.0 98.2 94.9
      87.0 83.9 80.8 78.5 70.4 70.1 65.6 56.6 49.8 42.5 26.8 18.9
0825 44.4 68.8 84.1100.2113.0123.9127.5138.2138.3141.0150.8153.0
     144.8129.9129.2125.5111.4108.6104.9 91.0 79.2 70.8 51.1 32.6
1625 62.7 92.2102.6112.2115.9119.7121.2128.2129.7127.8130.3129.6
     123.3115.1111.8111.5100.1101.5100.5 90.2 81.8 65.8 52.2 34.5
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2425 59.3 84.6 92.5103.9109.4114.7126.5133.5130.4126.4131.2126.5
119.8113.3112.2109.1 98.7 99.7 97.3 86.1 78.0 63.0 49.2 36.8
3225 67.1 93.6103.2114.3120.6127.2134.0140.6138.3137.4135.3135.1
126.7121.1119.2116.3104.3104.2100.5 88.0 78.5 68.4 47.2 39.6
4025 57.9 87.6 98.6107.5111.1110.9115.3121.7117.5114.2116.5113.9
109.3102.1101.9100.3 93.1 93.9 94.4 89.1 81.7 67.8 53.8 36.2
4825 65.6 93.9106.1119.0121.2122.7124.7135.5137.7139.6150.7146.6
138.2130.5128.2123.8112.0109.0104.4 92.8 81.9 64.6 49.4 35.3
5625 52.7 87.4107.5125.5132.4136.1130.9133.3127.6117.7116.5116.9
112.6107.0103.2102.9 90.5 88.1 83.2 71.6 59.9 47.8 35.2 20.8
0833 48.6 71.3 83.4 98.6112.2126.3141.5154.0156.5150.5147.7147.6
137.1125.9121.3119.5106.9103.9 97.1 84.6 72.7 64.1 44.5 30.4
1633 58.2 84.7 93.4101.9110.0118.4129.8137.5136.3132.2130.6127.4
120.9109.2108.9105.5 95.1 94.6 92.5 80.9 71.7 58.6 47.6 31.8
2433 53.6 81.2 94.2101.1105.6107.3107.8113.9113.5111.3110.1109.2
105.4 98.5 98.1 97.6 91.6 96.3 99.3 92.8 81.9 67.0 53.7 34.2
3233 61.5 89.4 99.5107.5110.2112.2115.8122.3120.4120.4122.7120.1
115.8108.1106.0105.6 98.1100.4104.0 97.2 86.1 80.5 58.3 37.9
4033 60.7 88.0 97.3107.6115.0125.3133.1145.0142.2142.3142.4138.7
132.1125.3122.3120.2111.6108.1104.3 94.1 83.2 67.4 53.8 39.2
4833 62.9 88.3 95.5108.3112.7118.6130.8141.4144.3140.2142.7141.4
131.4120.8117.6113.7101.9 99.4 96.2 84.0 72.9 60.6 47.9 35.6
5633 51.3 84.3101.2116.3123.4128.6129.0132.9125.7119.8114.1112.3
104.9 98.4 96.4 94.8 84.8 81.3 77.1 67.9 58.2 46.5 35.2 21.9
0841 50.0 79.3 96.9115.7130.6135.6136.8141.0138.5140.9147.0148.6
141.2132.1126.5125.2113.6110.0103.5 89.7 75.7 67.4 46.5 28.5
1641 59.7 88.4103.3119.1121.1119.1120.3120.7120.9117.7121.3117.7
108.7105.7106.1104.6 96.0 99.4101.9 92.0 84.5 68.3 51.7 38.2
2441 47.4 75.4 92.9106.9115.8123.0131.7141.5138.7137.1142.3141.0
136.2125.4124.0123.9112.7110.4106.0 95.9 82.8 68.0 54.1 35.2
3241 56.6 84.5 96.8104.7112.8120.8127.9141.9142.7145.0148.3148.8
144.9133.1132.2130.2115.6110.9106.0 94.8 81.2 74.2 54.6 36.6
4041 52.0 79.5 95.5108.6113.4116.3119.9123.1121.1119.3123.6122.1
113.6110.7107.9108.0 99.8101.3100.3 91.1 84.2 67.0 52.1 36.5
4841 52.1 82.8101.9117.3124.6125.5126.7129.4127.6131.9135.3140.4
136.5128.6126.0125.7114.6114.9108.7 99.8 85.8 68.1 52.7 32.8
5641 45.8 79.8102.4126.0144.0148.6140.9141.3133.7127.0125.2123.3
117.3107.9106.7104.8 95.4 92.3 86.9 77.0 63.3 56.7 39.2 21.5
0849 40.5 59.9 71.7 87.9102.2113.3118.4120.0116.0113.3114.9109.5
102.6100.5 96.5 92.0 83.8 82.1 75.1 64.5 55.9 43.0 29.5 19.6
1649 58.7 87.9104.1116.4115.9112.6111.1113.5109.8106.0108.3109.3
102.2 99.5103.4107.5102.7106.9102.0 89.8 80.2 62.5 46.3 34.8
2449 66.1 97.5109.1121.9121.7117.2113.4121.0124.8131.0138.7141.6
134.1129.7129.8124.0111.6109.7103.4 90.0 78.8 61.0 46.4 36.5
3249 52.1 82.9100.1112.7116.1113.2116.1125.6129.1138.0150.4154.0
148.7139.0139.8135.9122.1117.0112.2100.6 86.1 78.9 56.9 36.6
4049 66.0 96.4115.5127.5129.0121.7119.6122.4120.1117.3118.6117.5
108.1105.0108.6111.6106.1108.1104.5 91.1 79.1 63.7 47.9 38.5
4849 41.8 71.5 94.7112.4126.1129.6125.9125.0118.4112.9111.8111.0
107.1 96.2 97.4 98.5 91.2 90.3 87.8 80.4 69.2 57.8 45.4 27.5
1657 36.3 54.6 64.8 76.3 82.6 91.4101.7106.4102.0 99.1 96.9 95.1
91.0 85.2 83.6 81.4 73.5 72.6 67.7 58.4 50.5 44.0 28.6 16.7
2457 65.6 97.1107.2115.0114.2108.6109.0116.3117.0116.7116.7116.4
108.0102.5100.2 95.8 85.6 83.4 79.5 67.9 58.7 44.3 32.8 20.9
3257 68.6100.4111.7119.8112.2105.9103.7111.8114.0111.1113.0113.1
103.1 98.4 95.8 93.5 82.1 80.9 76.4 66.4 58.6 50.2 32.5 21.7
4057 59.5 90.6106.2122.5127.3129.9132.4139.3135.2127.3131.3127.7
118.3114.0110.8108.1 98.7 96.2 89.9 77.0 64.3 54.1 35.1 20.6

CYCLE 2 DATA

DATASET 36, MARCH 11, 1977

Reactor Conditions

Core Average Exposure, 12190 MWd/t
Core Thermal Power, 2858 MWT
Dome Pressure, P, 1026 psia
Core Flow, 78.8 Mlb/hr
Inlet Subcooling at P, 29.8 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	32	48	34	48	34	48	32	48	48	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	32	48	36	48	14	48	14	48	36	48	32	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	34	48	14	48	24	48	24	48	14	48	34	48	48
48	40	48	48	48	48	48	48	48	48	48	48	48	40	48
48	48	34	48	14	48	24	48	24	48	14	48	34	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	32	48	36	48	14	48	14	48	36	48	32	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	48	48	32	48	34	48	34	48	32	48	48	48	48
48	48	48	48	48	38	48	40	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 54.8 86.7100.7108.8110.3105.9102.7107.8111.9109.8111.3106.9
     101.2 92.2 90.6 87.5 80.2 78.4 75.7 67.8 58.7 47.7 36.6 21.9
2409 49.0 75.5 90.2104.2113.4122.7128.7134.9134.9131.1125.8120.6
     113.8102.8102.4100.6 90.2 87.7 84.6 76.1 65.4 54.3 42.9 26.2
3209 52.6 78.5 92.5109.5121.4127.3135.9145.0139.6138.4133.1127.8
     122.0113.9111.0109.3 98.6 96.0 90.7 79.9 68.8 60.9 41.6 29.1
4009 35.1 63.3 81.4 90.8103.4111.7116.8129.0133.8134.5130.5127.6
     123.5112.9111.5109.1104.2 95.1 93.5 85.5 72.2 62.5 49.4 34.6
4809 66.1 96.8106.3115.3109.9104.5103.8103.5104.5104.0104.7102.2
      97.0 93.0 90.2 88.4 78.2 77.1 72.0 61.6 53.6 44.3 28.3 18.6
0817 50.3 85.0102.4111.4117.3112.7105.5111.7117.2116.3117.6116.9
     112.8104.3105.3101.5 93.4 90.1 85.4 75.5 63.0 53.1 40.6 25.7
1617 53.2 80.3 97.2117.7129.1133.4141.4150.6151.7145.8142.5142.9
     134.3126.0124.1120.5109.0106.7100.0 86.9 76.0 59.0 45.3 33.0
2417 59.3 88.0103.8117.5119.7120.9124.5126.3125.6120.7121.6117.2
     111.4105.6103.8105.5100.5104.4102.4 89.7 78.3 69.6 47.3 36.4
3217 68.9 93.1100.6107.8107.2105.3106.4109.2106.9103.8108.0104.6
      99.3 96.2 98.0100.7 99.0106.4104.5 92.6 82.6 71.5 47.7 41.0
4017 50.2 81.6 96.7111.4119.8123.4131.7139.8138.4133.3135.3131.6
     124.6113.2112.1109.6101.0100.7 97.1 86.0 76.1 61.7 48.7 34.2
4817 59.4 89.8105.2122.2125.3125.5129.1136.7139.9134.8138.2136.2
     126.2119.9115.2113.1101.4 99.6 95.0 83.0 73.4 63.5 43.3 32.7
5617 60.4 86.2 95.3101.9 99.1 94.0 93.0 93.8 88.4 86.4 86.2 81.8
      76.6 72.6 71.1 68.6 62.5 62.2 56.9 49.5 44.1 37.5 23.8 17.0
0825 45.6 69.1 83.9 97.7110.2122.7135.0146.2145.5141.4139.0132.3
     124.1114.8113.2107.1 98.3 95.8 93.1 82.9 71.7 64.3 47.4 29.4
1625 52.8 80.6 96.2108.5112.7112.7117.7123.1123.1120.1122.4119.1
     111.9107.2105.2107.4103.3106.5101.8 89.9 79.1 63.6 49.5 34.9
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2425 58.4 82.4 89.4 94.0 93.6 92.5 92.7 94.9 93.9 95.8103.9110.6
113.9117.6118.3117.0108.9108.0103.8 90.5 81.3 64.4 49.4 37.6
3225 64.2 87.3 92.8 97.8 97.1 94.7 94.8 98.2 96.7101.1111.1120.1
124.8128.2128.7127.5116.7117.3109.0 94.6 83.9 72.7 49.8 40.2
4025 56.5 84.3 93.9101.8103.0103.6103.4106.2103.5100.7106.4105.7
103.9100.7101.1104.6101.5106.7102.8 93.2 82.0 67.6 52.5 35.0
4825 55.1 85.8102.4114.1121.3124.9134.3146.1148.1141.4139.5138.1
126.2119.2116.5113.4103.7103.5 99.2 87.3 76.2 59.7 46.0 33.7
5625 57.7 92.3109.9127.2131.2132.5126.0126.2119.5113.5111.0108.3
100.9 94.5 93.5 91.7 81.8 80.2 74.9 65.0 55.6 43.6 32.1 19.6
0833 50.4 76.8 90.7107.5124.8130.8135.0143.8139.2133.7132.4128.5
120.0111.3110.3108.0 96.9 95.1 90.9 78.2 68.0 60.6 41.8 27.9
1633 55.8 81.2 90.2 97.3 99.9100.4103.0106.3103.6100.2102.1101.5
97.0 90.5 92.2 95.1 94.1 98.9 96.3 86.5 76.8 62.3 48.3 32.8
2433 49.9 75.1 86.0 91.7 91.6 88.8 85.8 90.1 91.0 91.7100.4107.8
114.6116.4119.0119.3111.7111.2107.0 95.4 81.9 68.2 53.6 35.6
3233 55.8 81.7 89.5 93.1 93.1 91.3 90.4 95.0 98.6103.4116.7127.3
133.8134.1137.9136.2123.7119.7112.8100.4 86.5 80.3 59.5 39.0
4033 57.3 82.9 92.6 98.3100.1 97.9 97.2103.1102.6105.6109.2112.0
110.8110.9110.6115.9112.7117.3113.9100.7 89.5 72.1 55.9 40.3
4833 60.3 86.2 95.3105.3112.1114.2121.5133.9132.5129.4131.3125.6
114.8108.1107.1104.7 95.5 95.8 92.7 82.4 72.5 58.7 45.9 35.7
5633 52.5 86.6108.1122.3128.9130.3116.2121.3114.2107.3102.8100.5
94.4 87.1 86.5 84.3 75.7 73.3 70.2 61.9 53.7 44.5 34.0 20.9
0841 51.0 79.2 92.9104.6114.1123.7130.1139.2141.7141.6142.2138.2
127.4118.5116.4114.2102.7 99.6 92.3 80.6 68.7 61.1 41.8 26.9
1641 56.7 82.8 99.4116.6120.9126.6138.0142.6138.1132.8134.3127.9
120.1112.8111.2108.9 99.9100.4 93.9 83.2 73.2 58.3 45.0 35.9
2441 52.2 81.5 94.5103.0107.8106.0105.0107.3106.4107.0107.1110.6
109.6104.2106.9108.4106.8110.7108.8 99.9 86.2 71.9 56.7 36.2
3241 53.0 79.2 89.8 93.8 94.2 93.1 92.6 97.4 96.5 98.1102.9106.0
107.7105.3107.3111.8109.9113.8112.5101.8 87.7 80.3 60.8 39.6
4041 59.9 88.5102.8112.9117.8122.8130.8135.4132.2125.9128.7125.1
119.1114.2114.4112.4103.7103.1 99.3 87.6 76.6 62.9 48.3 32.8
4841 51.2 83.9102.2118.7124.2125.0127.7136.8140.0137.9136.6133.7
126.1117.8117.5114.5105.1103.9 99.8 88.3 76.0 61.5 48.6 29.6
5641 49.0 83.7104.7118.2127.4132.4129.3133.4124.4117.9114.5111.4
107.5 95.7 93.8 90.8 84.0 79.9 76.7 68.2 57.2 50.6 36.1 21.7
0849 70.3 97.0104.8111.7107.6103.1101.8104.7103.7103.0101.8100.3
93.0 91.4 86.6 82.8 74.5 72.9 66.2 56.7 49.6 37.8 26.6 17.8
1649 59.9 86.2 98.2111.6112.6111.8114.2122.0125.3125.1125.8124.2
115.6110.7107.1104.5 93.2 94.0 87.8 77.1 68.1 53.5 40.7 30.9
2449 60.3 87.4103.2118.5121.0121.6128.9138.6138.0134.3130.8127.2
119.7115.6112.2110.6 99.0 96.9 92.9 80.7 71.8 55.8 43.0 33.7
3249 54.9 85.7 99.3106.4109.2112.2118.0132.2137.1134.2129.8128.7
123.0114.4115.4112.9106.1103.0102.7 94.2 81.3 74.5 54.9 36.0
4049 63.5 94.4109.4121.7126.7125.1130.6136.4134.7129.0133.3127.6
115.7110.9109.0104.9 94.3 95.5 89.5 77.6 68.4 54.7 41.4 33.5
4849 59.4 98.1120.6131.2129.6124.8113.8112.9110.1103.2100.7101.6
96.9 90.8 89.8 89.1 82.1 79.4 76.3 69.1 58.8 49.9 40.0 26.7
1657 58.2 84.0 94.6102.8100.1 96.6 94.7 94.1 91.0 88.8 86.9 85.7
80.3 76.9 74.7 72.9 65.5 63.7 59.0 51.5 44.8 38.2 24.5 15.2
2457 66.8 99.9111.8126.0130.4126.7124.5124.4115.1108.6106.4103.7
94.7 89.9 87.5 83.9 75.7 74.2 70.1 60.7 52.2 39.8 29.2 19.3
3257 71.2102.7119.5135.5137.7128.5119.0115.7109.9100.2 98.3 94.4
87.8 82.0 80.8 78.4 70.8 70.9 67.6 58.4 51.4 44.6 28.8 20.1
4057 63.1 94.2108.7125.9130.5131.9130.4131.1127.6120.6120.6114.8
106.8100.3 98.2 96.9 88.3 84.4 77.8 67.0 57.0 48.5 30.8 18.9

CYCLE 2 DATA

DATASET 37, APRIL 3, 1977

Reactor Conditions

Core Average Exposure, 12530 MWd/t
Core Thermal Power, 3247 MWT
Dome Pressure, P, 1023 psia
Core Flow, 104.2 Mlb/hr
Inlet Subcooling at P, 23.5 Btu/lb

Control Configuration

Legend: 48, Full Out; O, Full In.

48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	34	48	34	48	34	48	34	48	48	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	34	48	36	48	18	48	18	48	36	48	34	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	34	48	18	48	36	48	36	48	18	48	34	48	48
48	40	48	48	48	48	48	48	48	48	48	48	48	40	48
48	48	34	48	18	48	36	48	36	48	18	48	34	48	48
48	38	48	44	48	48	48	48	48	48	48	44	48	38	48
48	48	34	48	36	48	18	48	18	48	36	48	34	48	48
48	48	48	42	48	44	48	48	48	44	48	42	48	48	48
48	48	48	48	34	48	34	48	34	48	34	48	48	48	48
48	48	48	48	48	38	48	38	48	38	48	48	48	48	48
48	48	48	48	48	48	48	48	48	48	48	48	48	48	48

Axial TIP Distribution, Bottom To top of Core
See Figure 22

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1609 44.0 70.5 82.2 90.1 94.4 94.2 97.1104.5104.7104.1101.5 99.1
     92.6 84.8 84.3 83.2 75.7 74.2 72.0 64.5 56.2 46.5 35.7 21.7
2409 38.5 59.9 70.6 82.3 93.8104.4110.6124.1122.7120.8117.0113.7
    108.3 97.6 95.5 95.7 84.4 83.2 80.8 71.7 61.2 50.9 40.6 26.0
3209 42.0 61.1 71.2 83.1 95.1108.0120.0132.5128.0126.9127.5124.3
    117.2109.1109.1107.5 95.1 92.5 87.6 76.7 66.6 59.2 40.2 27.6
4009 28.7 51.7 67.9 76.6 87.9 99.7107.6122.7127.7124.8119.2120.3
    116.4108.8104.9104.0 98.3 89.0 88.7 81.8 69.4 59.9 47.4 33.9
4809 54.5 78.9 86.5 95.4 95.1 95.3 95.8 99.4 97.7 95.9 98.8 98.8
     91.8 88.2 89.2 83.3 76.4 74.8 70.1 60.6 52.7 44.1 28.0 18.8
0817 40.6 69.0 83.1 92.2 96.7 97.6 98.2110.8113.9113.0111.3108.0
    107.2 99.0100.0 99.7 91.6 87.9 84.7 76.4 63.1 52.3 39.7 25.4
1617 43.7 65.8 81.5100.3111.4120.1126.3141.9137.5134.5134.5132.6
    124.3118.4117.8115.1104.3100.8 95.0 83.2 71.5 55.7 43.0 29.7
2417 48.3 72.9 85.6 99.3104.1108.4112.0118.6115.0111.4114.1112.6
    107.8106.1107.8111.1103.4103.0 96.7 84.7 72.7 64.9 44.4 32.3
3217 57.3 78.4 86.8 93.9 95.9 95.3 98.8103.8103.7103.3101.3102.4
     99.1100.1106.0111.8102.5103.2 98.3 85.0 76.5 65.5 43.9 36.9
4017 41.8 68.0 81.9 97.1104.9114.2122.6129.5129.0125.5127.3126.7
    118.6109.9108.6107.2 99.0 96.2 93.5 82.8 72.3 58.2 45.8 31.2
4817 48.5 73.7 88.8104.7110.2113.7124.5133.6132.2127.5129.6127.0
    119.9113.9110.5106.7 97.4 95.5 91.8 79.8 70.4 62.5 41.6 31.6
5617 49.2 71.4 79.8 84.9 85.3 84.7 86.4 86.3 83.4 81.9 79.6 77.9
     73.4 69.0 67.0 66.1 61.8 60.0 56.2 49.3 43.7 37.0 23.7 16.7
0825 37.9 57.0 69.4 82.1 92.2105.2118.9130.5135.9129.9128.8126.8
    121.9109.6107.1107.9 96.3 95.2 91.0 81.0 70.8 63.9 45.6 28.3
1625 44.4 67.9 81.2 93.3 98.3102.9105.3114.0113.6111.3114.6114.6
    108.3106.0110.3113.6105.9104.6 98.0 85.6 72.8 59.2 45.7 29.9
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2425 52.6 74.2 82.2 90.1 96.5102.7111.6118.9116.6112.4113.8114.0
109.1106.4107.2107.6 96.3 96.2 90.9 80.1 70.2 56.5 43.9 32.3
3225 57.7 80.2 88.9 99.5106.5114.5122.4129.5127.5124.1124.5122.7
116.8113.7112.5112.8100.8 99.5 93.8 81.4 70.8 61.9 42.0 34.4
4025 49.7 74.5 85.7 94.3 97.2100.1102.3106.6105.0102.3102.8102.4
100.9 98.6103.8109.0102.1101.0 97.2 84.7 74.2 60.3 48.3 32.3
4825 45.1 71.4 85.8 99.6106.3113.5122.5137.0135.6130.3131.8130.8
121.9115.9114.9113.9101.5 99.4 95.7 84.4 72.9 57.6 44.6 31.3
5625 48.9 79.0 94.2106.0113.1118.0113.2112.5107.1105.4105.1102.5
96.8 89.7 89.5 89.4 79.2 77.4 74.0 64.7 55.9 42.9 31.7 19.1
0833 41.6 62.2 75.3 90.8104.6111.2119.0127.3126.4123.2123.1122.8
114.4105.9104.8103.1 94.2 91.5 86.2 75.0 63.8 57.7 40.5 26.4
1633 46.3 68.6 76.9 84.2 88.7 89.8 92.4 97.1 96.5 94.7 96.1 96.7
92.2 91.4 96.4103.0 95.5 95.9 90.5 80.2 69.2 56.1 44.4 29.6
2433 45.6 70.6 81.9 90.7 98.1105.7110.4119.8119.0114.8114.4114.7
111.2103.6105.0105.3 97.0 94.6 90.8 81.3 69.7 56.5 44.7 30.0
3233 51.5 76.7 87.5 97.1106.5115.6126.6135.2134.3133.3133.3132.8
127.5116.5114.5113.0102.4 98.5 94.4 84.0 72.2 65.6 48.3 32.4
4033 51.3 74.8 84.7 92.6 95.6 99.3103.7108.1109.7108.9110.4111.3
110.3108.2114.9121.8113.5111.2104.5 91.2 79.5 63.6 50.4 35.0
4833 50.1 73.2 79.0 89.0 94.5100.5107.8120.8119.3120.4122.4117.7
111.6106.4106.9104.8 94.1 95.1 89.4 78.6 68.6 56.2 43.8 33.6
5633 43.1 71.7 89.0101.0109.9112.2108.0110.7108.1101.2 95.7 94.9
89.5 82.3 82.8 81.8 75.5 72.4 68.2 61.8 52.4 43.5 33.5 20.6
0841 41.7 65.6 77.7 86.9 99.6112.0123.8138.8136.2133.3133.9128.9
123.0115.5111.8110.5 98.6 96.0 90.1 79.6 67.4 60.6 41.4 26.2
1641 47.4 71.0 85.9 98.4109.3118.8128.2135.3130.9129.0128.3124.2
116.4110.2110.9109.3 97.3 96.4 91.9 79.4 69.5 55.4 42.7 33.3
2441 45.3 70.9 84.1 94.2 99.3102.8102.5108.7109.7106.8106.8109.8
107.9103.4109.6114.4109.9109.5104.1 92.4 78.3 65.5 51.2 33.3
3241 46.0 70.8 80.7 86.4 90.3 91.8 94.5101.6102.3105.4104.7104.7
105.4102.6110.3116.1111.4108.4104.9 93.8 79.2 71.3 55.2 36.6
4041 51.1 77.9 88.4100.1106.4114.6120.9128.3125.0123.3123.0121.6
116.4110.2111.7112.3101.1 99.2 93.6 82.0 71.6 57.9 45.2 29.9
4841 42.5 69.2 86.7 98.8109.1113.8122.1134.8133.3129.6130.3126.4
120.8112.8113.1113.4101.8101.4 98.1 86.7 73.6 60.4 47.6 29.9
5641 40.0 68.9 85.8 99.0109.8118.4119.0120.9118.6111.7106.1108.5
102.4 93.0 92.9 88.9 84.1 79.7 75.8 67.5 57.5 50.7 36.9 20.8
0849 59.6 80.1 87.8 93.8 92.1 92.4 95.9 95.6 96.4 95.8 95.4 93.3
88.2 85.1 81.3 79.1 71.5 69.2 64.3 54.4 47.6 36.2 25.2 18.0
1649 48.5 70.2 82.0 95.5100.4103.7109.3117.1118.2114.4117.2116.6
107.2103.6102.4 99.3 89.5 89.4 84.6 74.0 65.2 51.0 38.9 28.2
2449 49.0 71.4 84.7 98.3104.0107.6116.1129.0129.0123.1123.1120.8
113.3110.1111.7107.2 95.4 92.2 88.9 76.9 66.7 52.6 39.9 32.3
3249 45.4 70.1 80.2 87.9 94.3 99.2104.8122.4124.9126.5123.5125.0
120.5113.9113.4113.2105.7102.1 99.2 91.4 77.5 70.1 52.8 33.1
4049 51.9 77.8 90.0104.2110.7116.4124.7133.1130.0120.4121.4116.7
110.3103.1101.1 99.8 90.2 88.7 34.9 74.0 64.2 51.2 39.6 32.3
4849 48.4 81.1 98.6107.8116.3111.0103.9106.8103.5100.4 96.0 98.5
93.1 86.2 86.5 85.7 79.5 75.9 74.5 68.6 57.9 49.2 39.9 26.0
1657 46.5 67.5 76.0 84.8 86.0 86.3 83.7 86.1 85.4 81.1 81.0 80.6
74.8 70.9 69.8 69.1 62.4 61.4 56.9 49.5 42.8 37.1 24.3 14.7
2457 56.0 79.1 89.5103.5110.5111.6112.6113.3108.4100.7100.8 98.0
89.1 85.7 84.1 80.7 72.4 72.3 67.4 58.1 50.9 38.0 28.0 18.6
3257 55.8 81.4 92.2104.9109.0108.5109.0110.3104.8 96.6 95.9 91.9
84.9 80.0 77.7 77.2 69.2 69.0 65.8 57.4 50.6 43.5 28.3 20.2
4057 50.3 77.2 89.0103.8113.6117.9121.9122.4121.6111.9111.7110.3
101.1 97.5 95.6 92.8 83.9 81.9 78.1 65.7 55.8 46.9 30.3 18.0