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C. D. Lingenfelter

May 20, 1958

C. C. Bigelow

cc: E. R. Dytko

PWAR-11 Data for Performance Analysis

CNLM 781

The following data are submitted as the current design numbers for the PWAR-11, Columbium-Lithium, Intermediate Reactor for the purpose of a preliminary performance study.

General Reactor Operating Conditions

Reactor power
Reactor life at full power
Coolant inlet temperature
Coolant exit temperature
Coolant inlet pressure
Coolant outlet pressure
Radiator inlet pressure
Radiator outlet pressure
Coolant flow rate
Total pumping power

| | |
|-------|------|
| 350 | MW |
| 150 | hrs. |
| 1600° | F |
| 2000° | F |
| 260 | psia |
| 110 | psia |
| 105 | psia |
| 30 | psia |
| 850 | lbs |
| 1890 | HP |

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E. F. Carroll

Chief, Declassification Branch *cc*

Reactor and Shield Configuration and Weight

Core size
Reflector size, side and top
Pressure shell
Shield-transverse diameter
Maximum radius
Height
Shield weight-crew compartment
Reactor shield
Reactor weight
Total weight-reactor plus shield

18 in.l. x 18 in.d. cyl.
7 in. thick
48.4 in.l. x 33.8 in.d.
70.8 in.
52 in.
86.1 in.
11,090 lbs.
18,110 lbs.
4,470 lbs.
33,670 lbs.

C. C. Bigelow

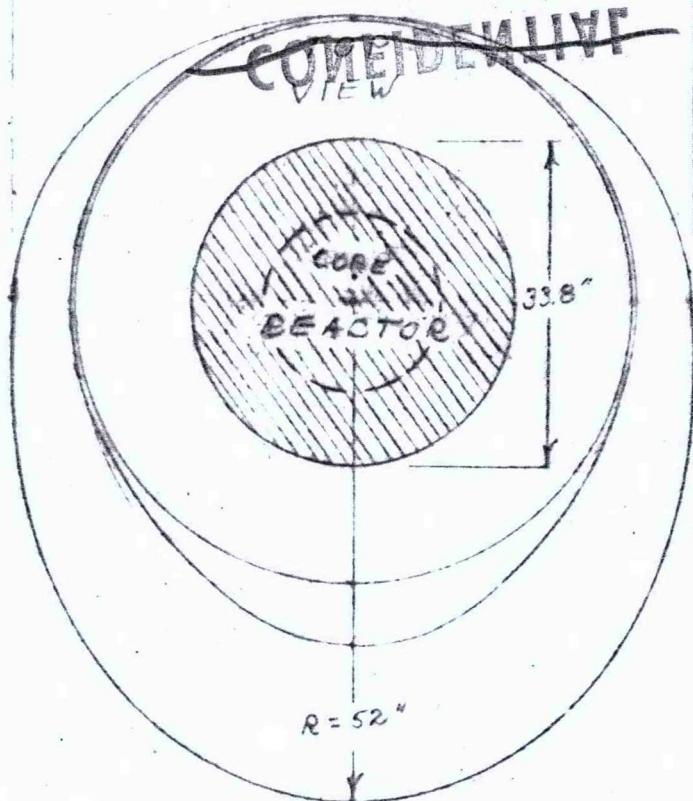
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REAL SIZE

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70.8"

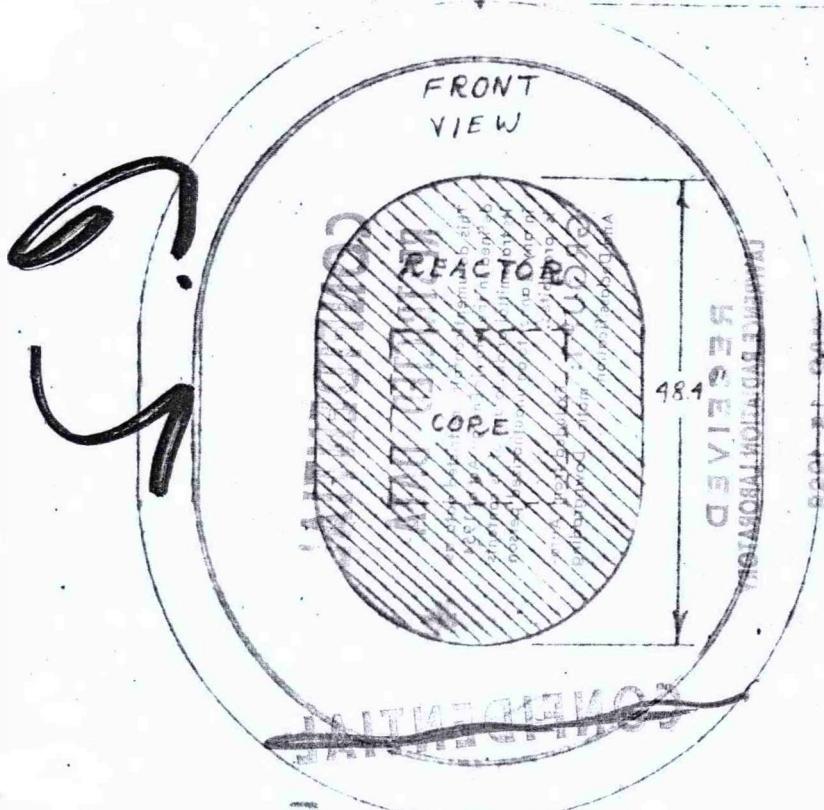


FRONT
VIEW

86.1"

86.1" 1000
MILS 25.4MM
1000 MILS 25.4MM

IN
ONE
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