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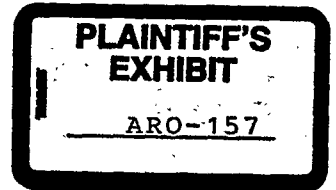
June 17, 1966

H. L. Osborne
~~Mid. Wks.~~

To: K. R. Haley, Supt. Blast Furnace,
Middletown Works

From: S. A. Bell

Subject: Under-Hearth Cooler - Middletown Blast Furnace



The attached two curves summarize the data through March 1966.

Figure 1 is the temperature distribution across the furnace. Note that the maximum temperature on top of the plenum, and at its edge, was 270° F. This is well within the design limit used. The scatter of points beyond the plenum edge probably is due to the proximity of a given thermocouple to an 8" outlet pipe. The influence of hearth jacket cooling is apparent beyond the 10 foot radius.

Figure 2 shows the trend of each of the 18 thermocouples with time. I plan to up date this chart periodically.

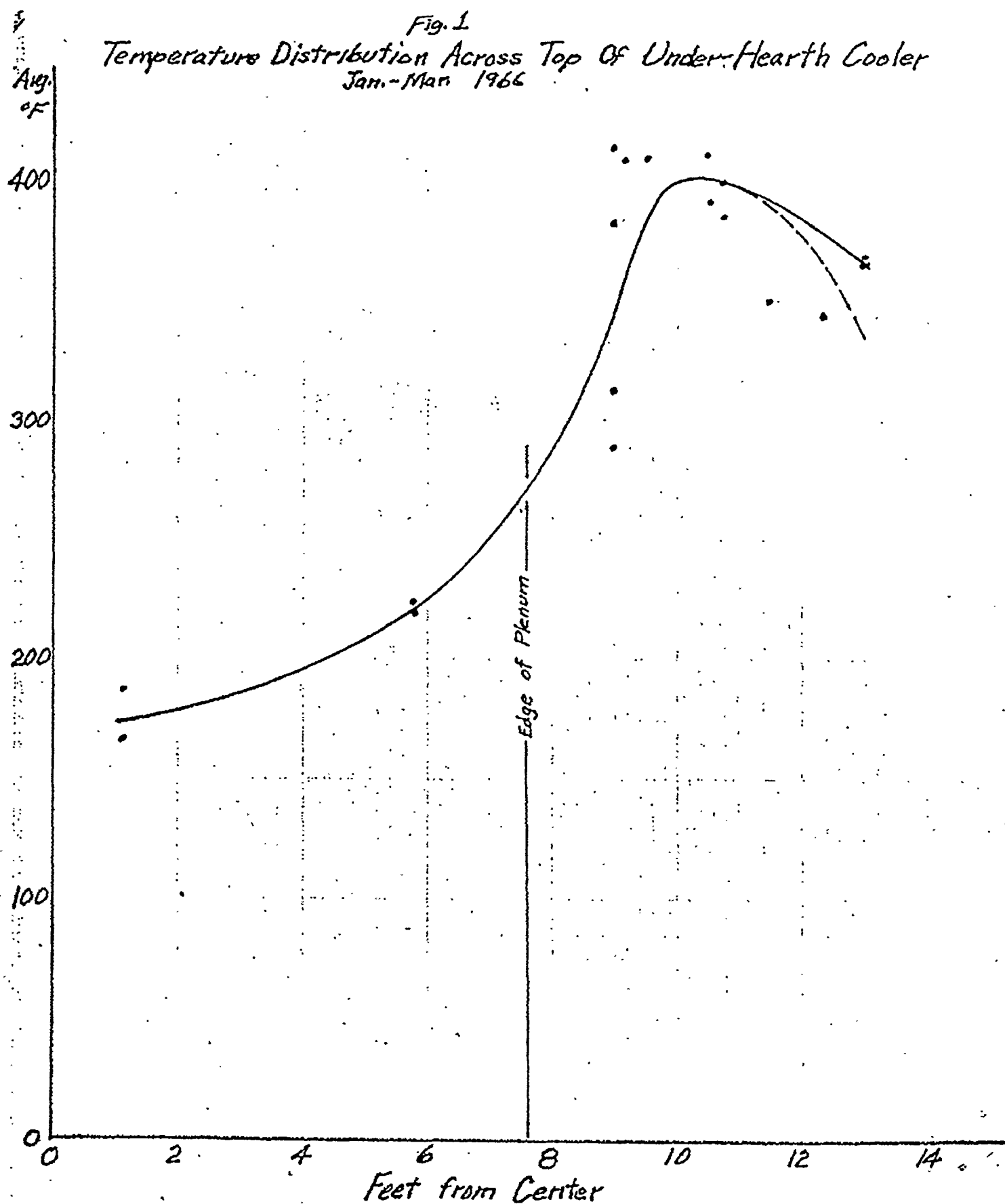
Figure 3 shows the approximate location of each thermocouple.

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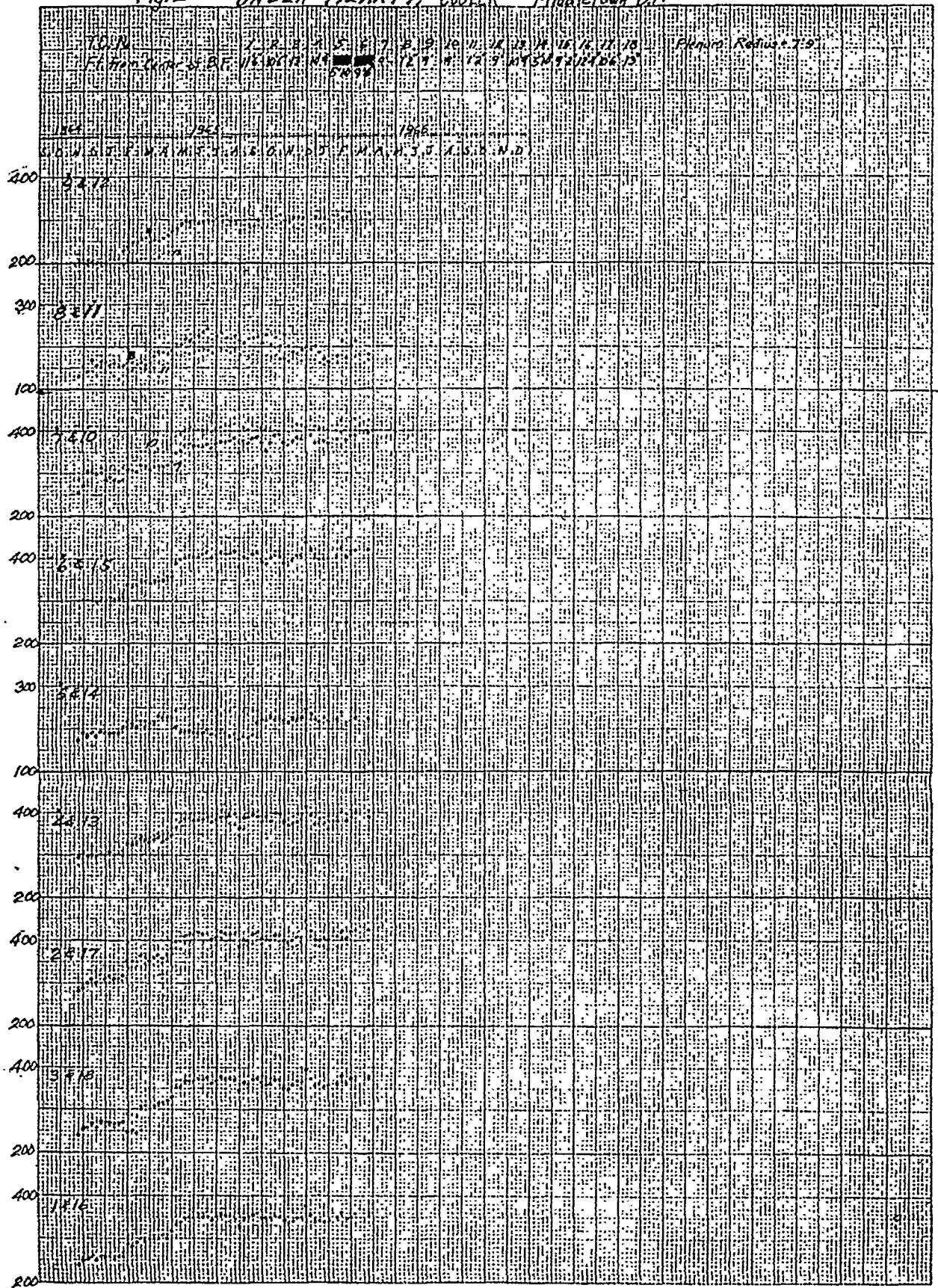
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Fig. 1
Temperature Distribution Across Top Of Under-Hearth Cooler
Jan.-Mar 1966



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Fig. 2 UNDER-HEARTH COOLER Middletown B.F.



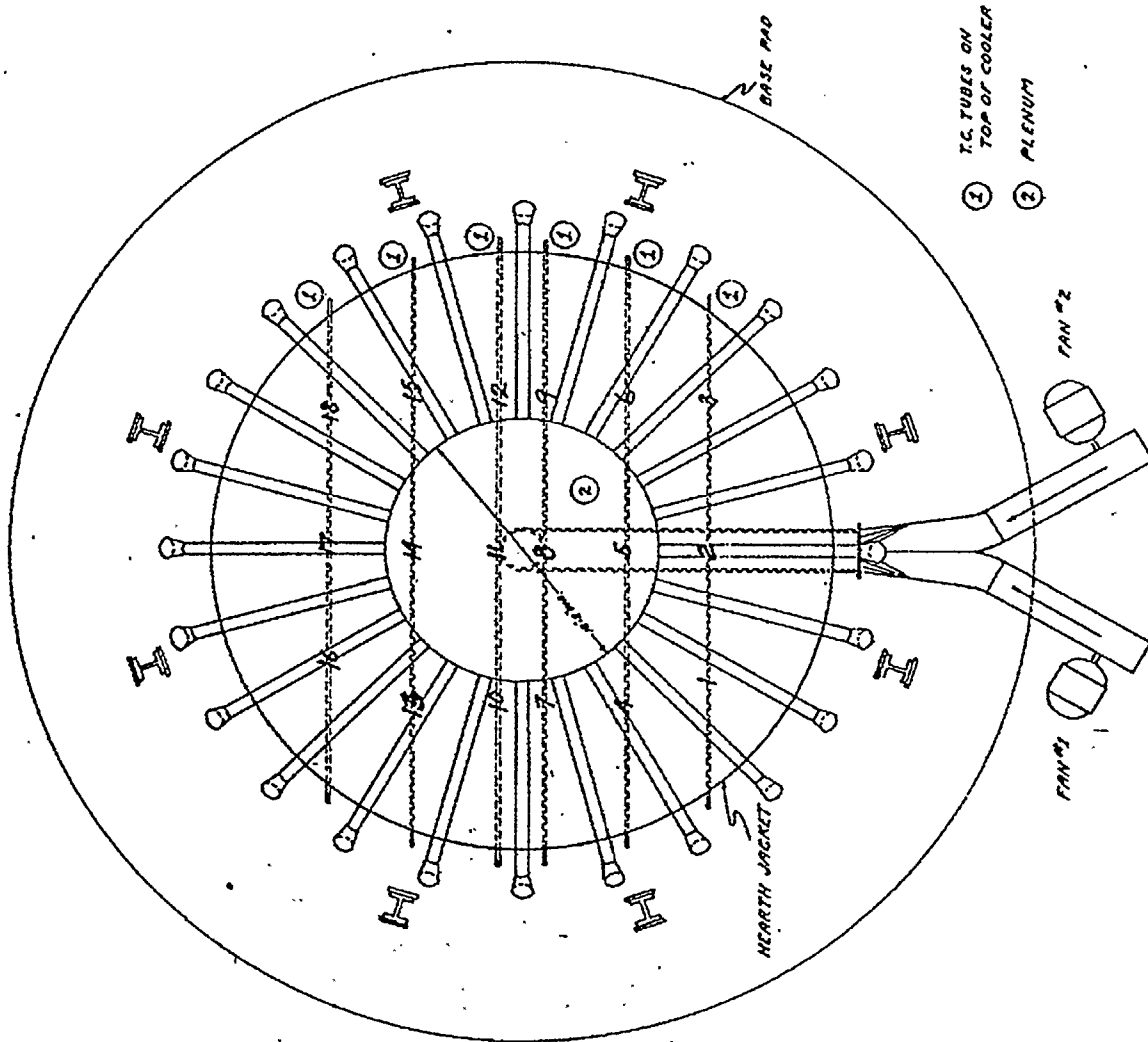


FIG. 3
PLAN VIEW
UNDER-HEARTH COOLER
Numbers = approximate T.C. locations