

The product was fairly olefinic, with the C<sub>4</sub>'s more than 60 percent olefins (Fig. 4), but only scantily isomerized, as shown by the pentane isomer levels (Fig. 3). While the carbon number product distributions (Figs. 11-21) appear to show a cut-off in the early samples, there is no such evidence in the later ones, suggesting instead a build-up of wax in the reactor during the early samples.

This catalyst, while less stable than Catalyst 6 from the Third Annual Report, is equal in stability to other catalysts with different levels of cobalt and without physically mixed UCC-101. This result is consistent with the notion that it is the X<sub>4</sub> which is responsible for their stability.

# RUN 11723-10

1:1 H<sub>2</sub>:CO  
300 PSIG  
260°C

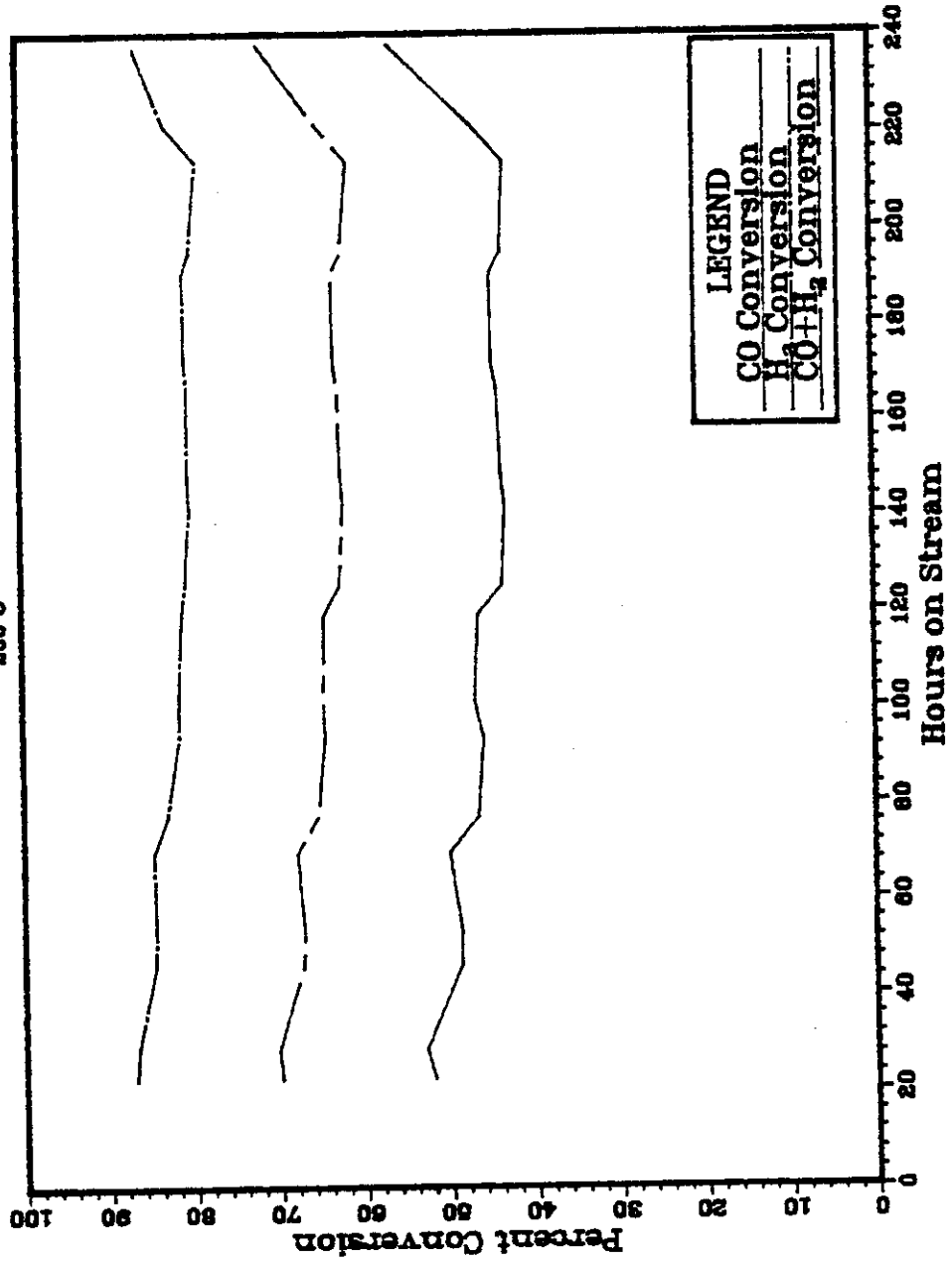


Fig. 1

# RUN 11723-10

111 H<sub>2</sub>O  
300 PSIG  
280°C

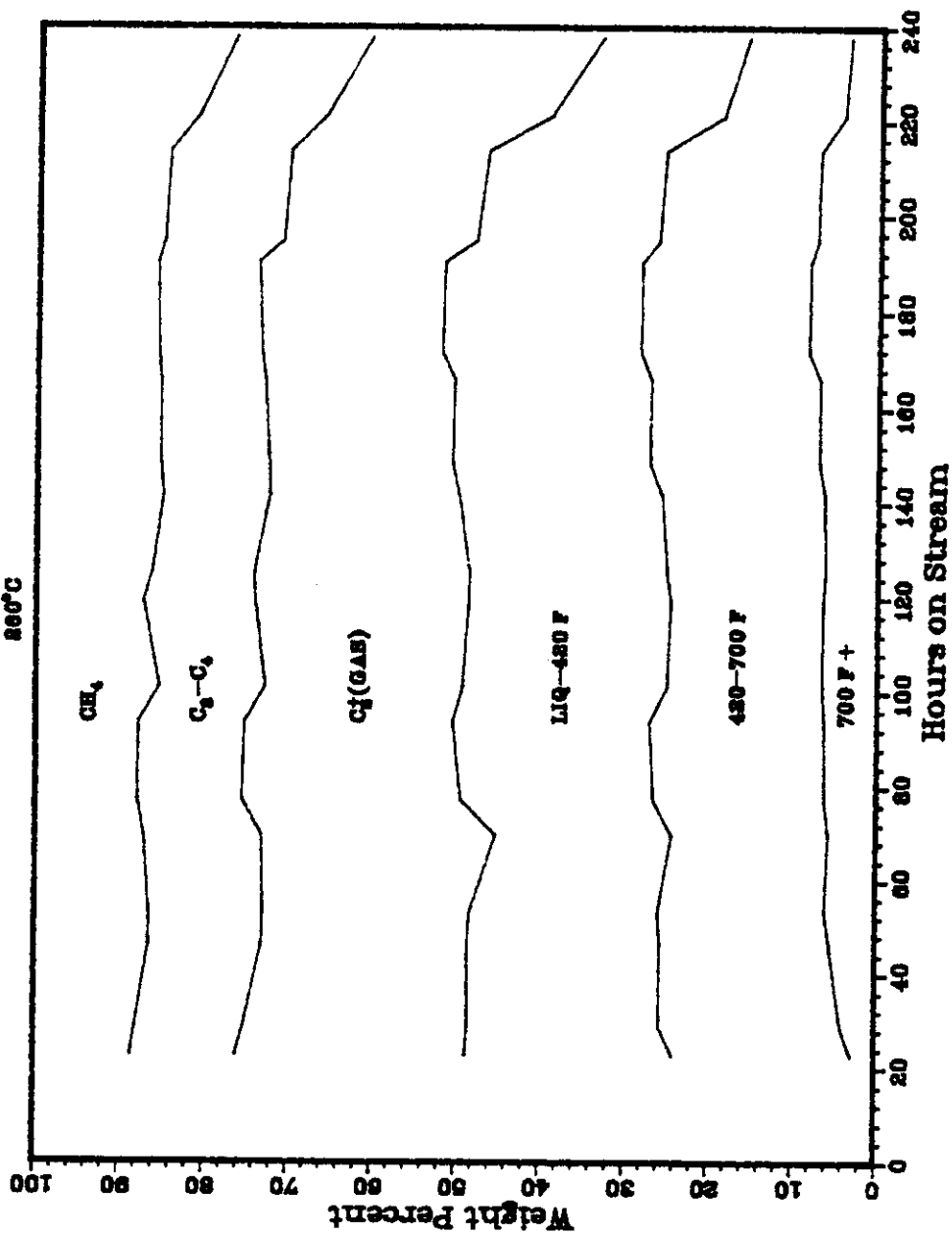


Fig. 2

Fig. 3

RUN 11723--10

111 H<sub>2</sub>O  
300 PSIG  
260°C

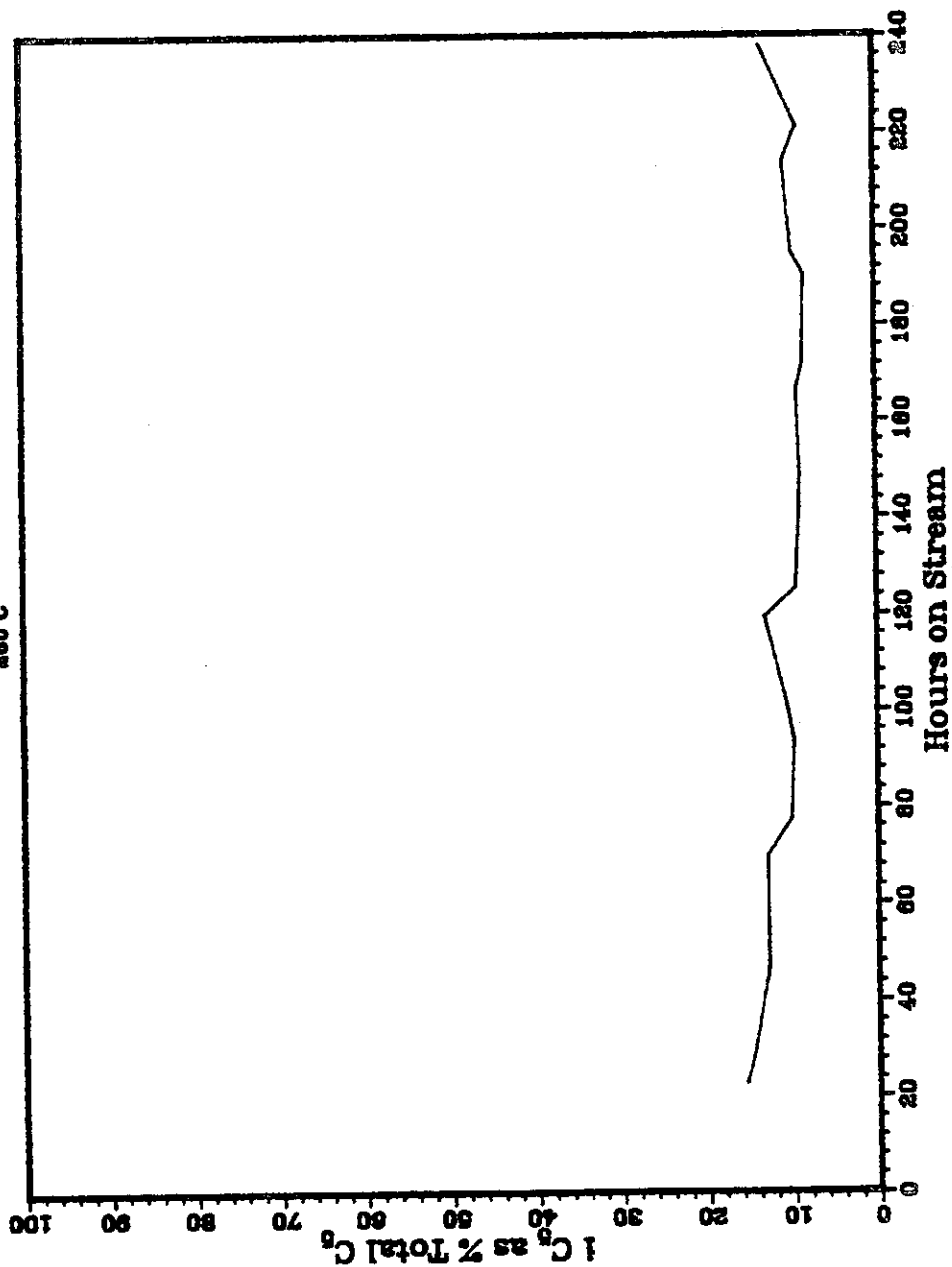


Fig. 4

RUN 11723-10

111 E<sub>2</sub>100  
300 P<sub>2</sub>10  
260°C

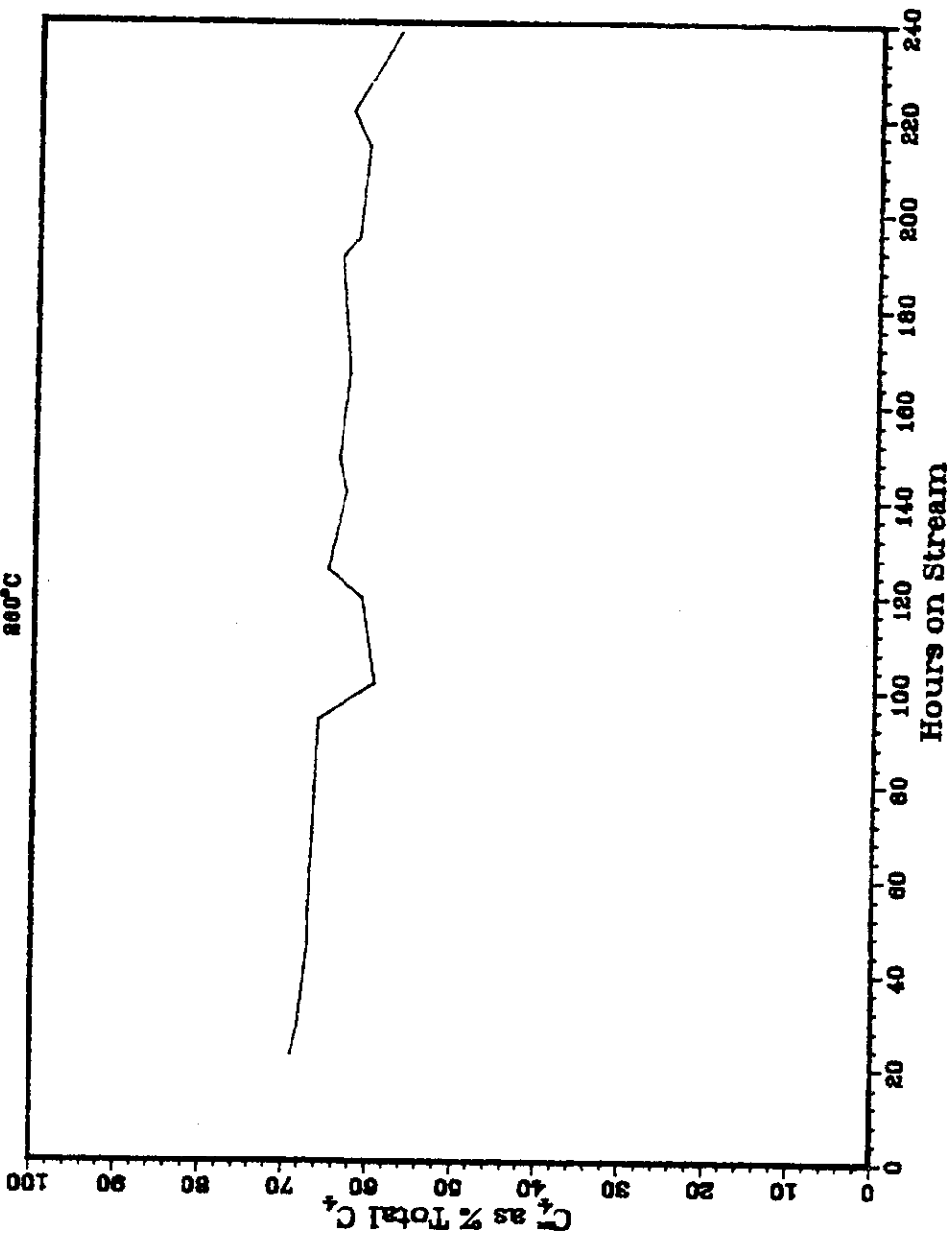


Fig. 5

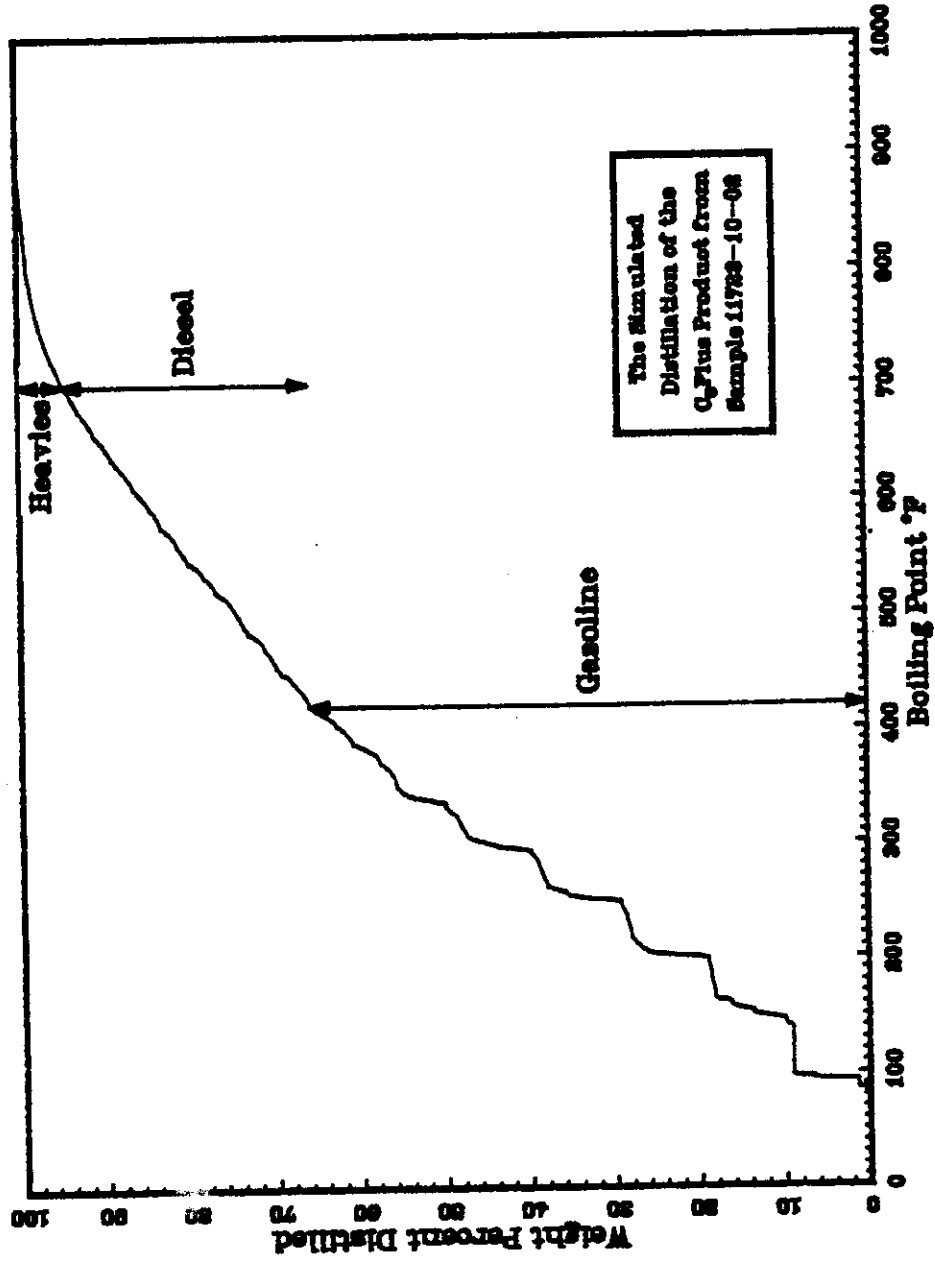


Fig. 6

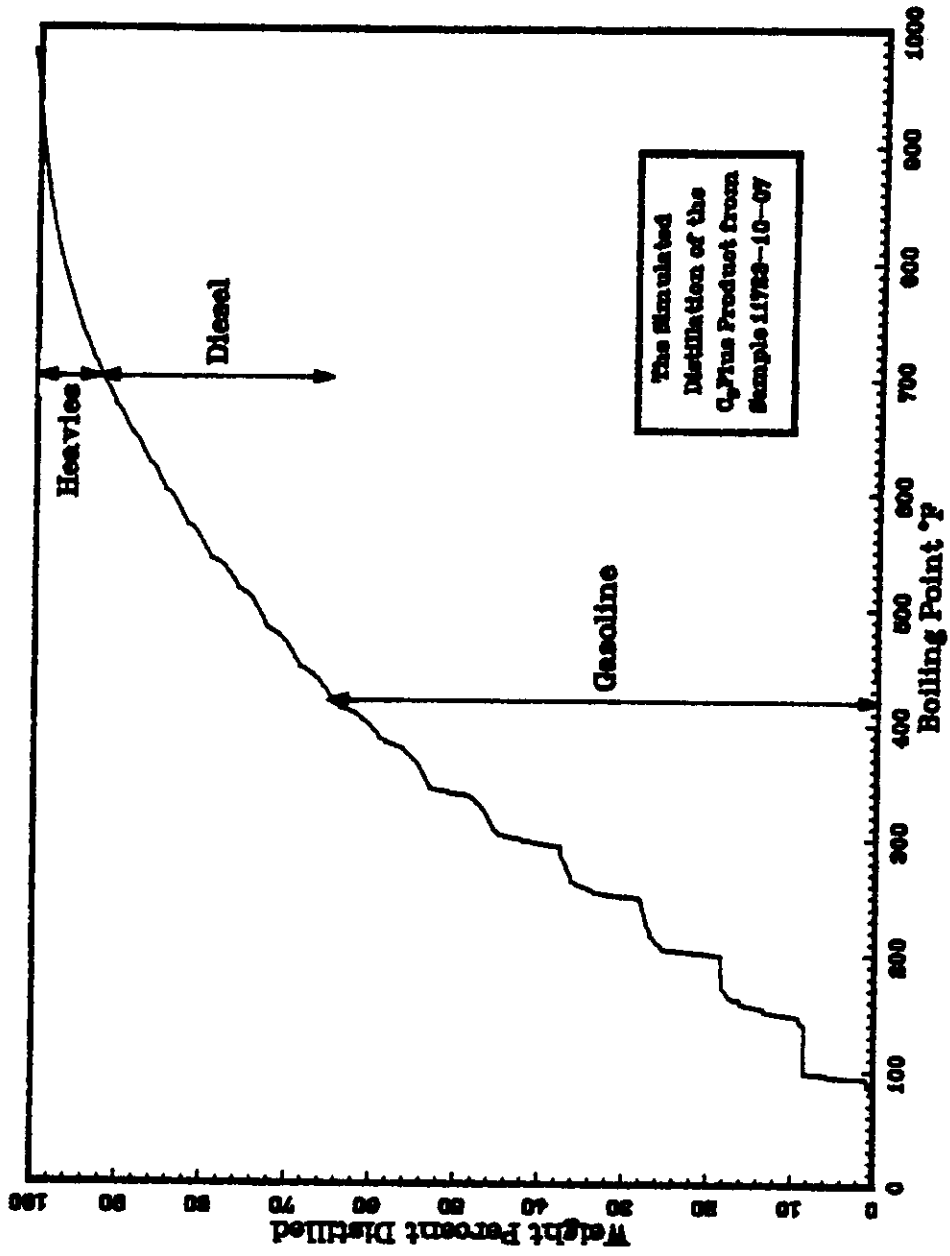


Fig. 7

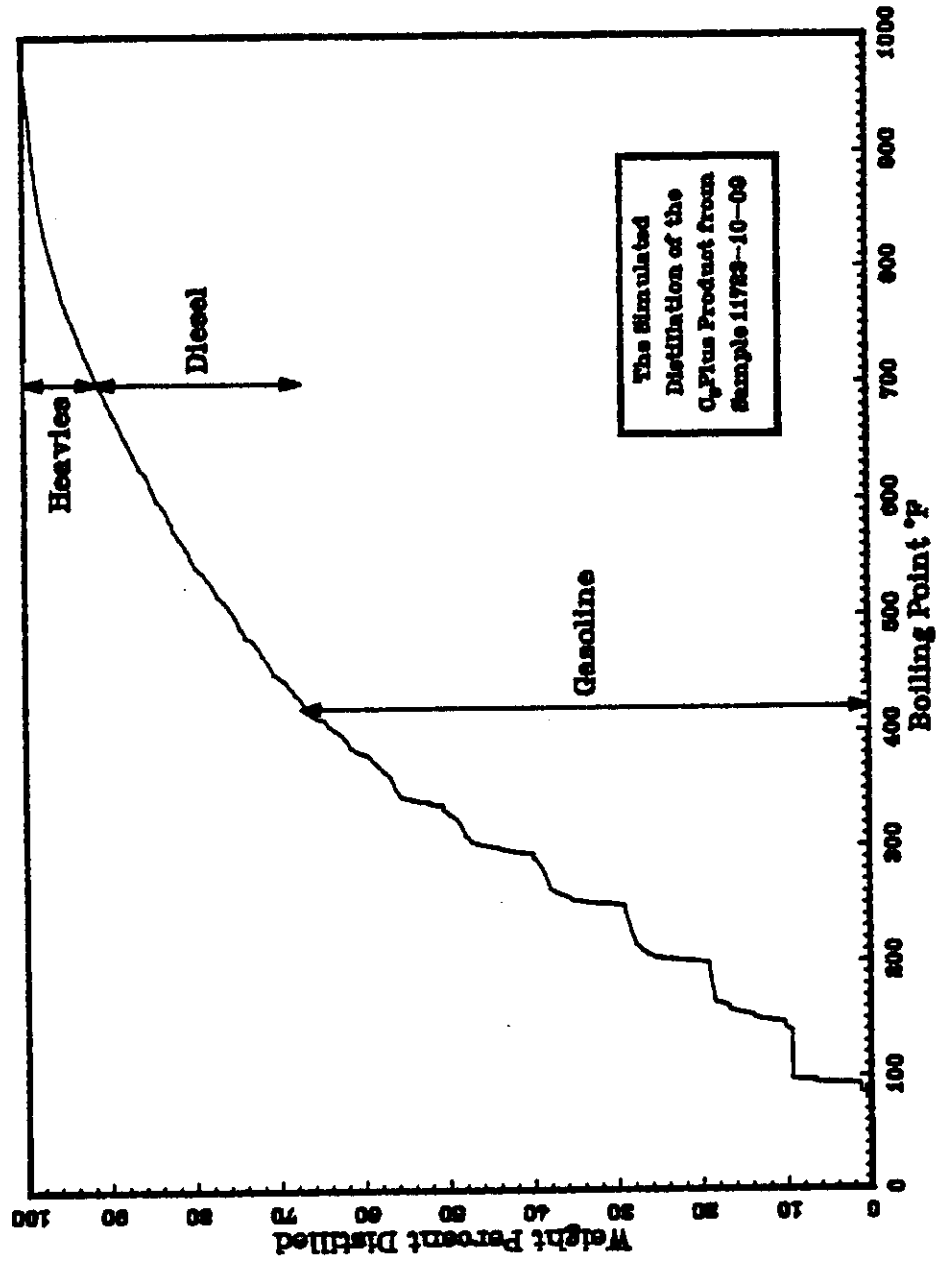




Fig. 8

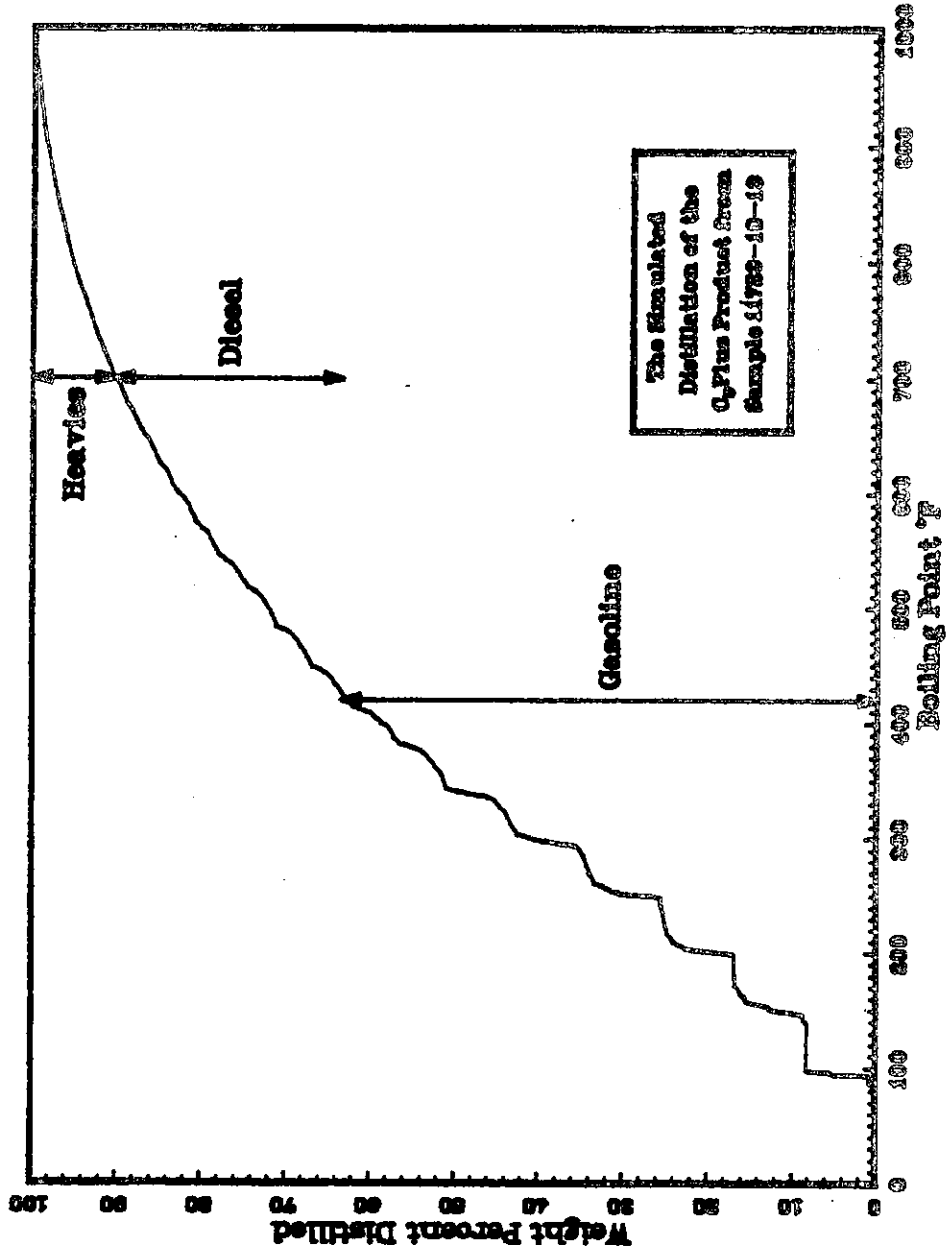


Fig. 9

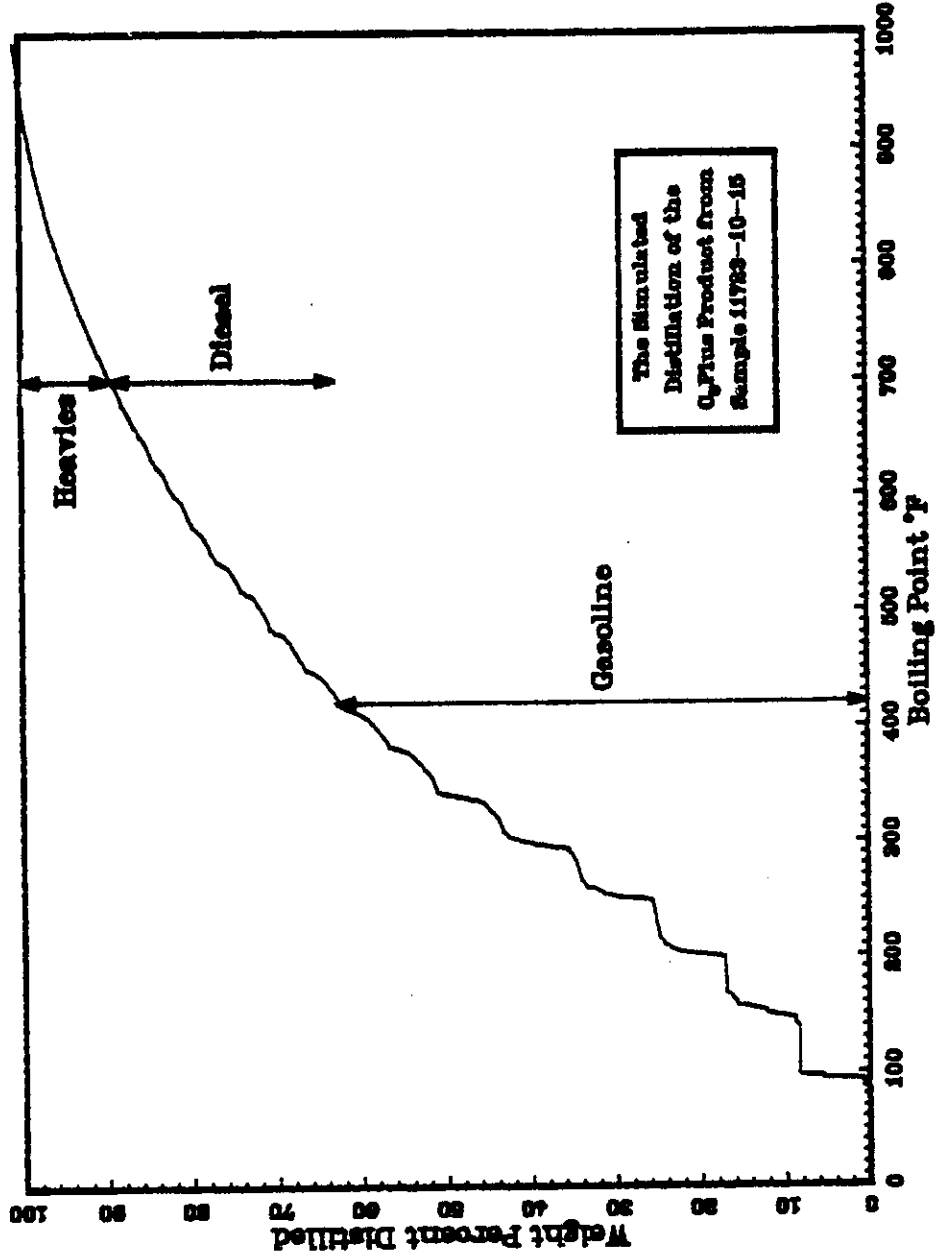


Fig. 10

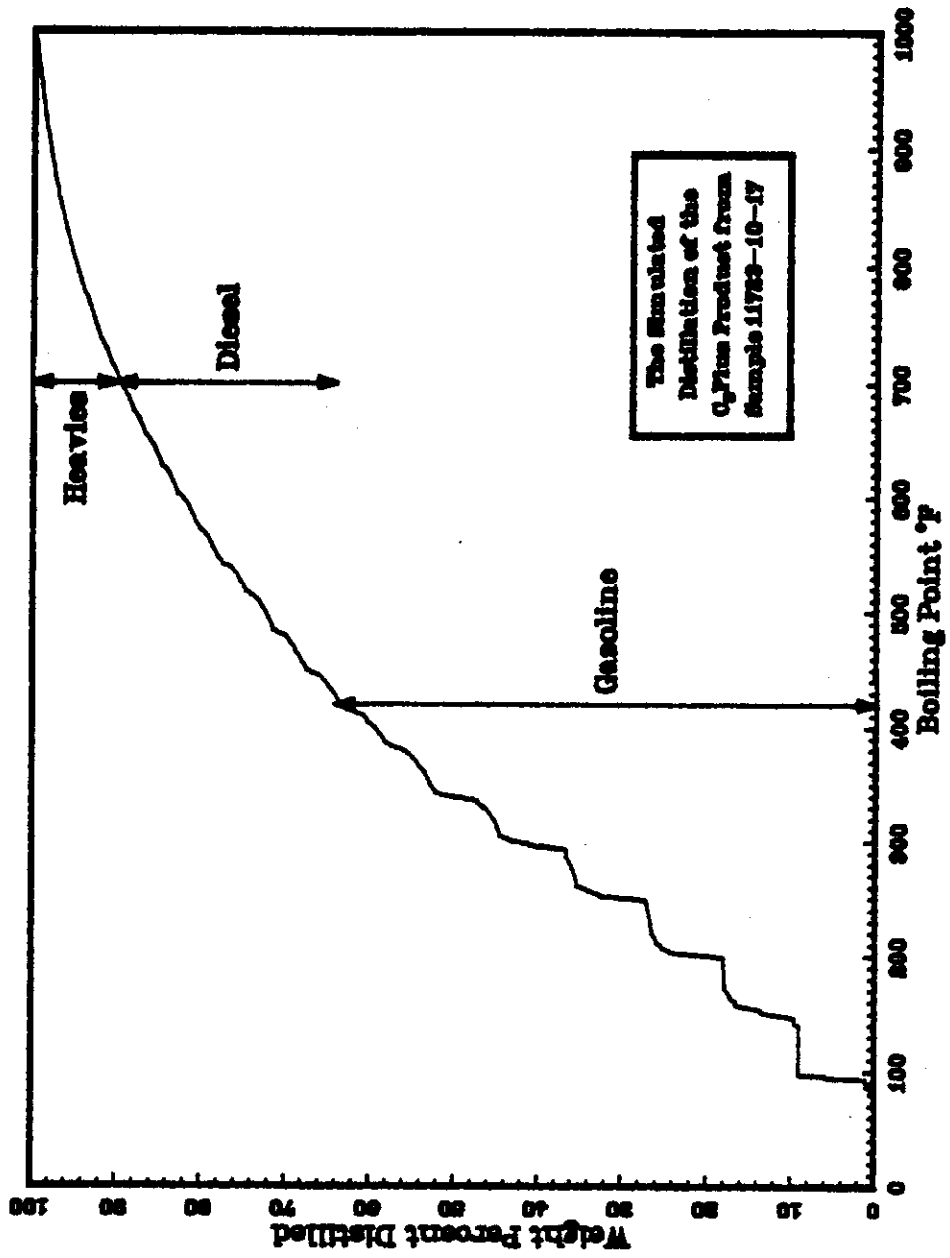


Fig. 11

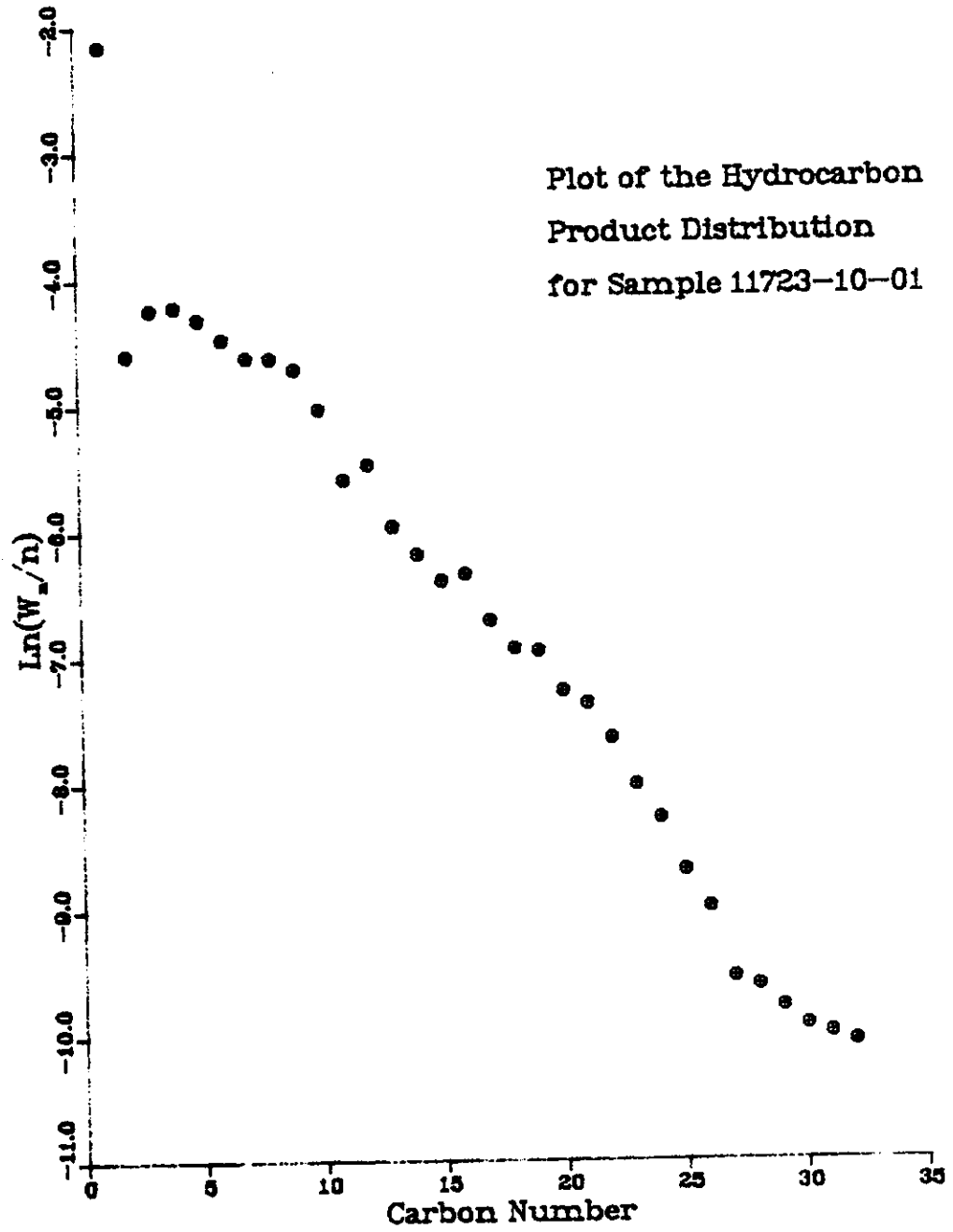


Fig. 12

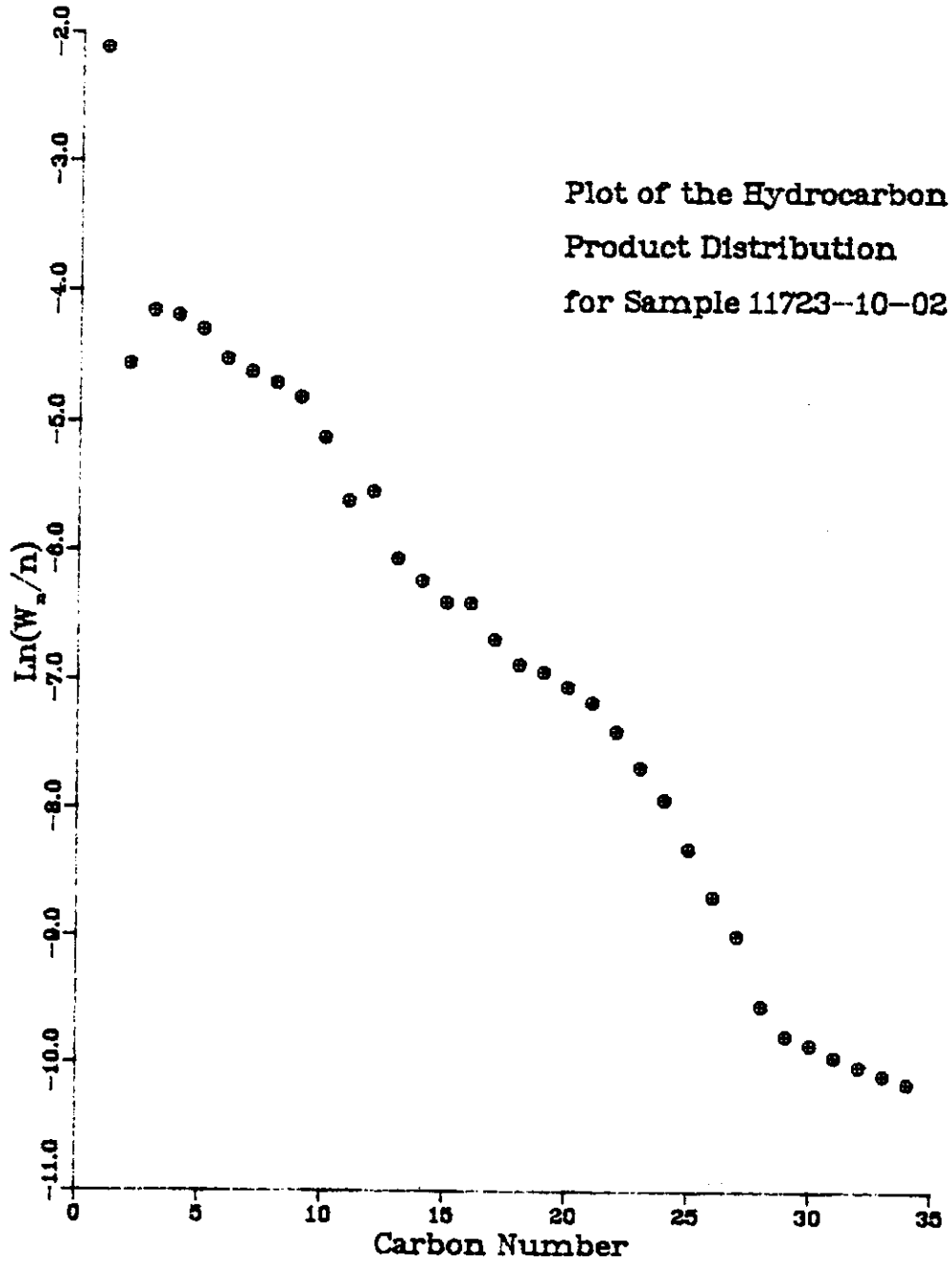


Fig. 13

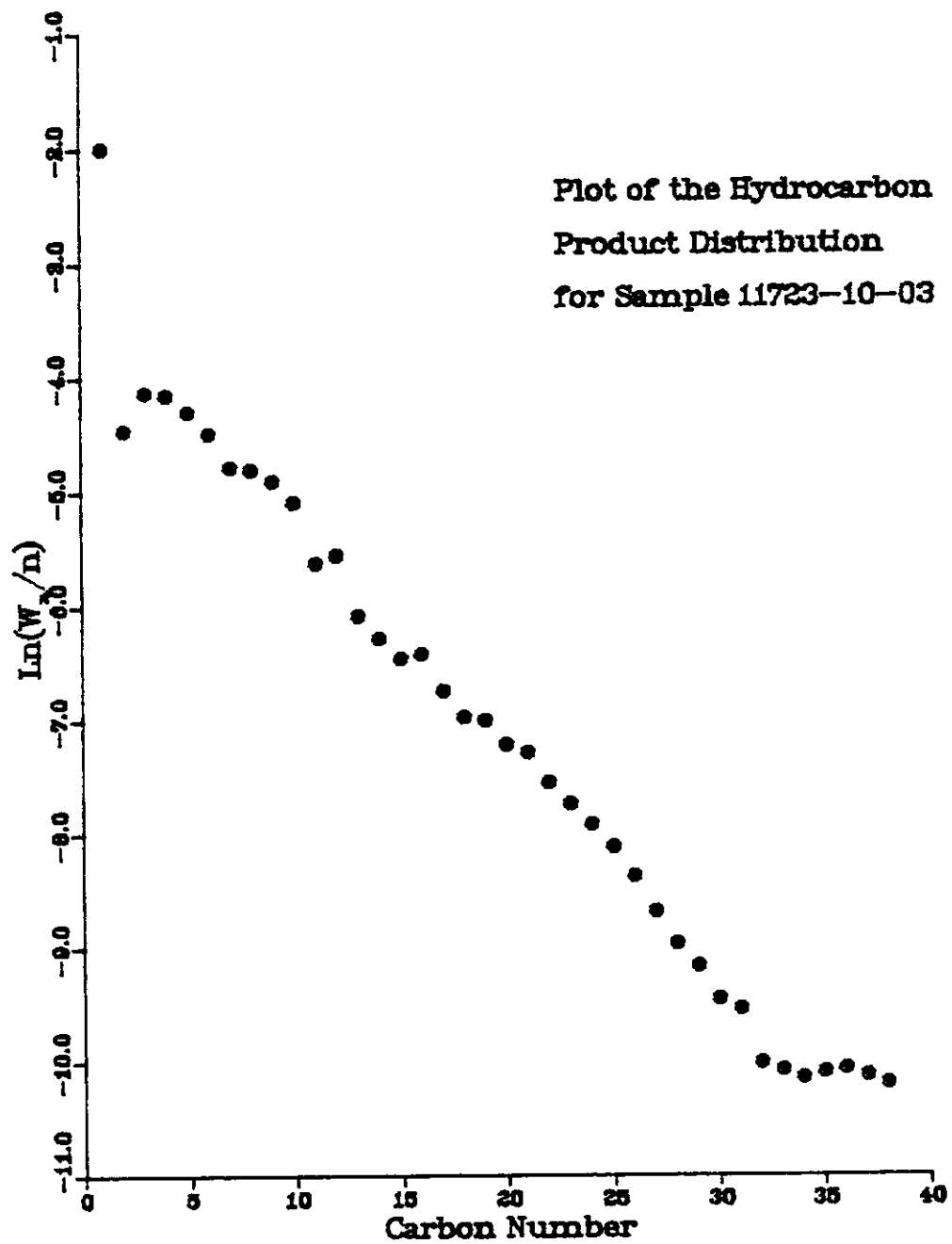


Fig. 14

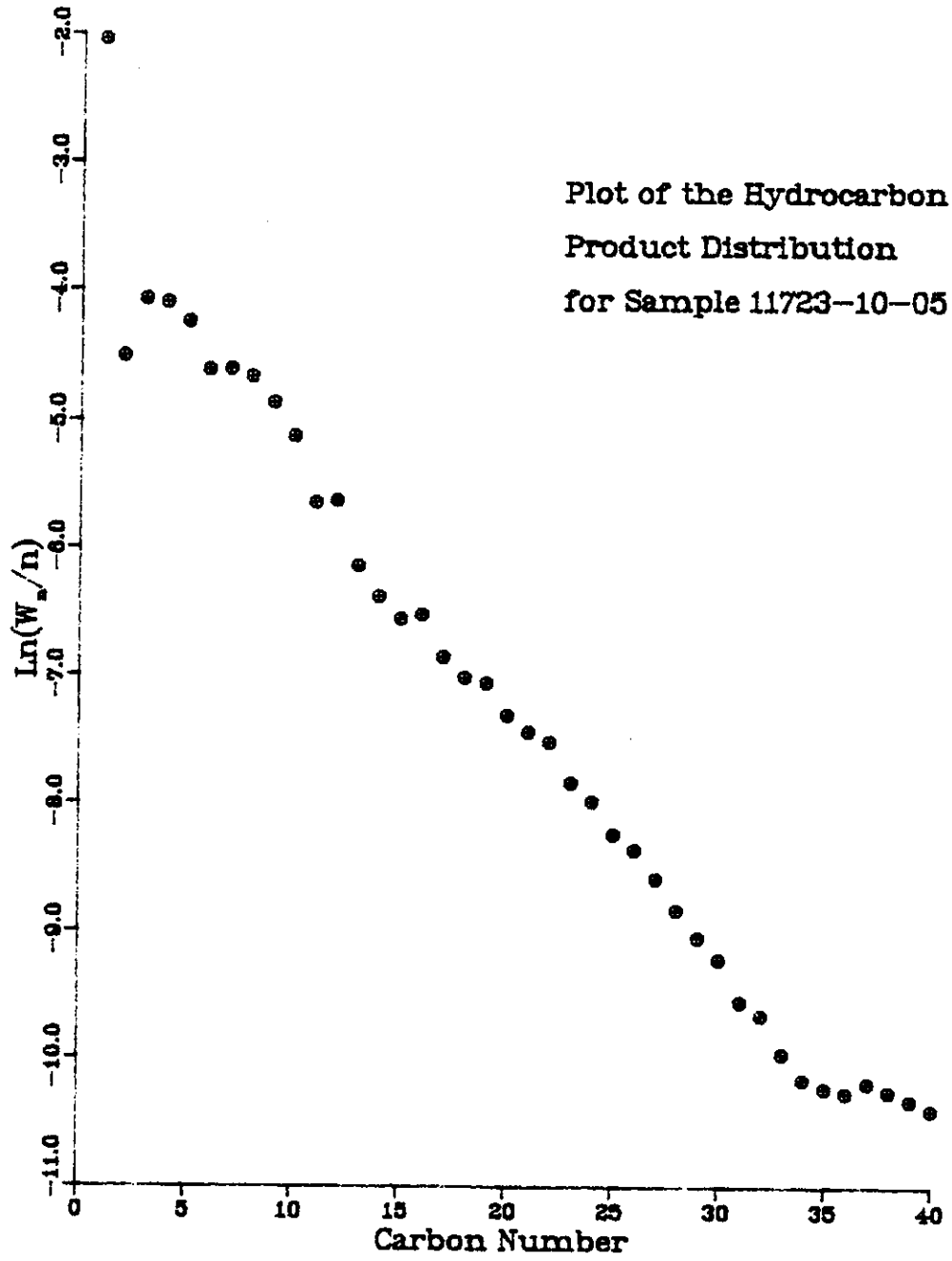


Fig. 15

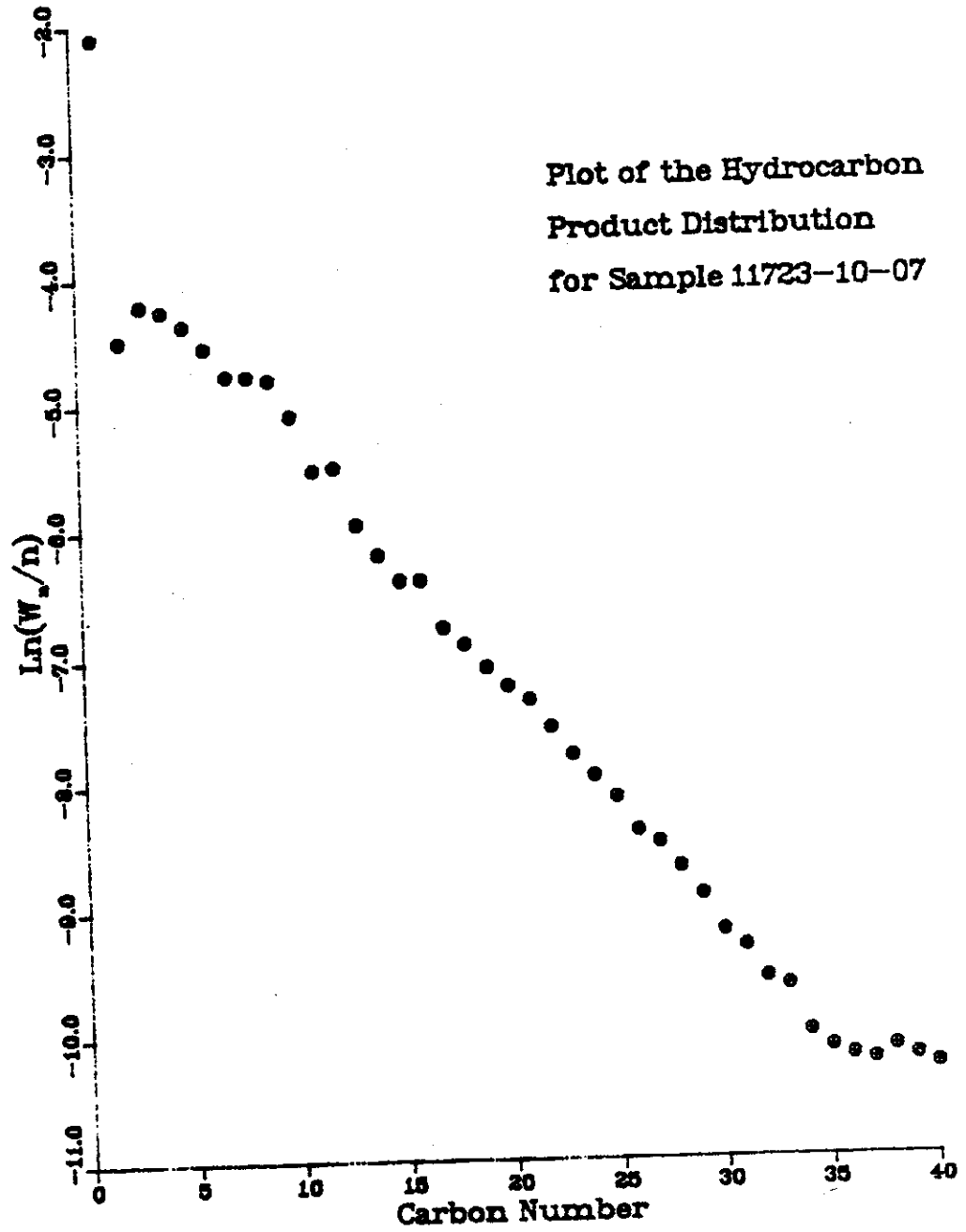




Fig. 16

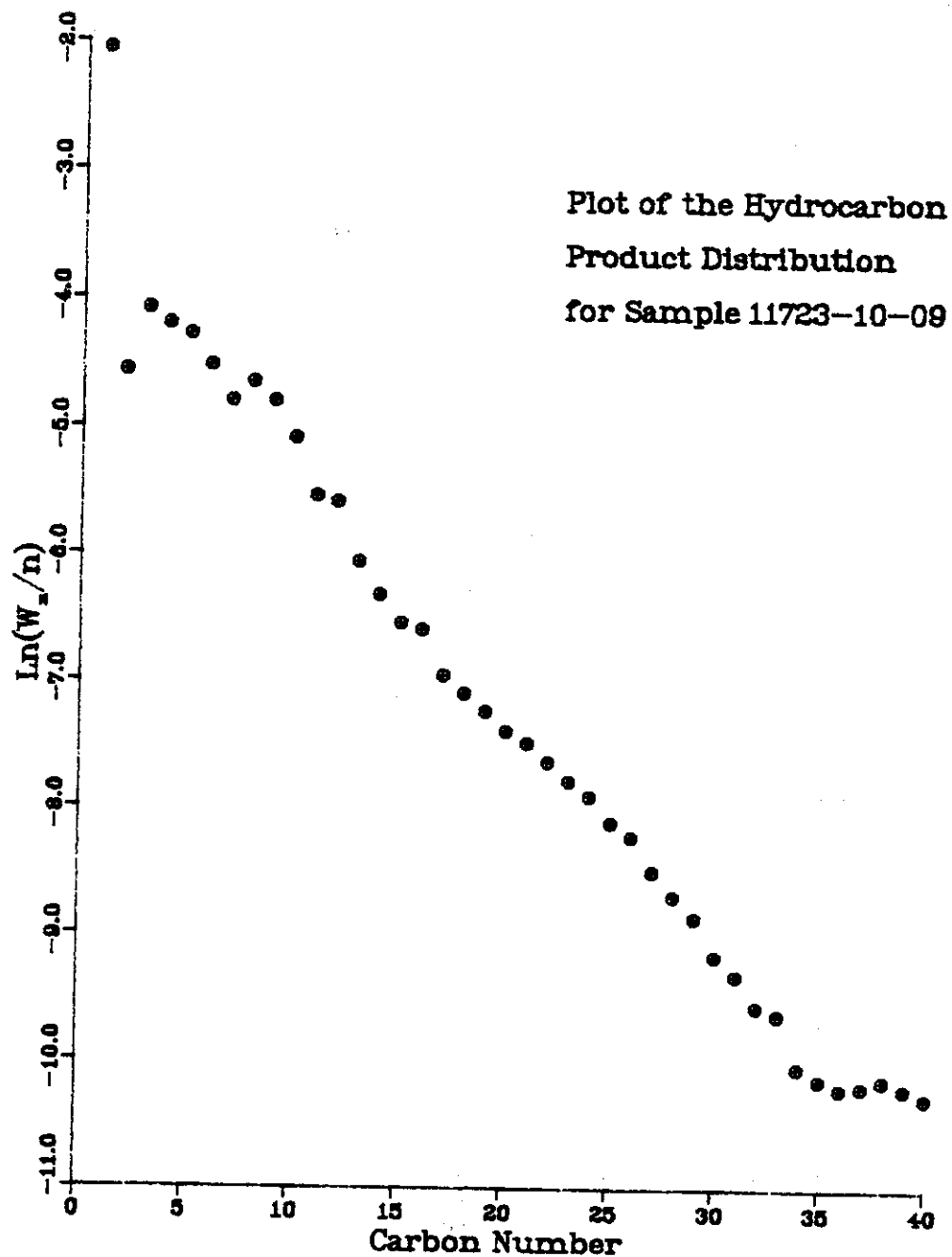


Fig. 17

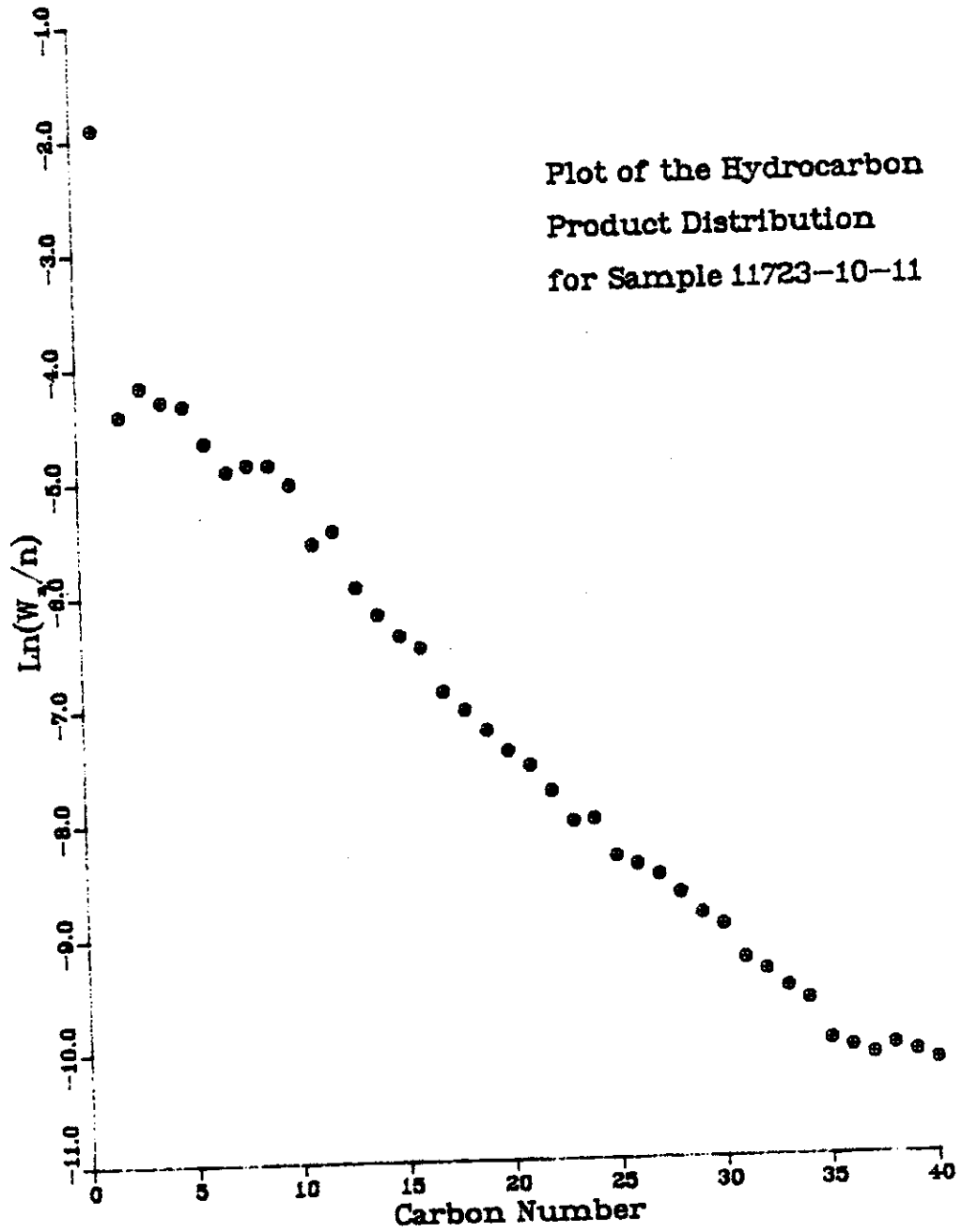


Fig. 18

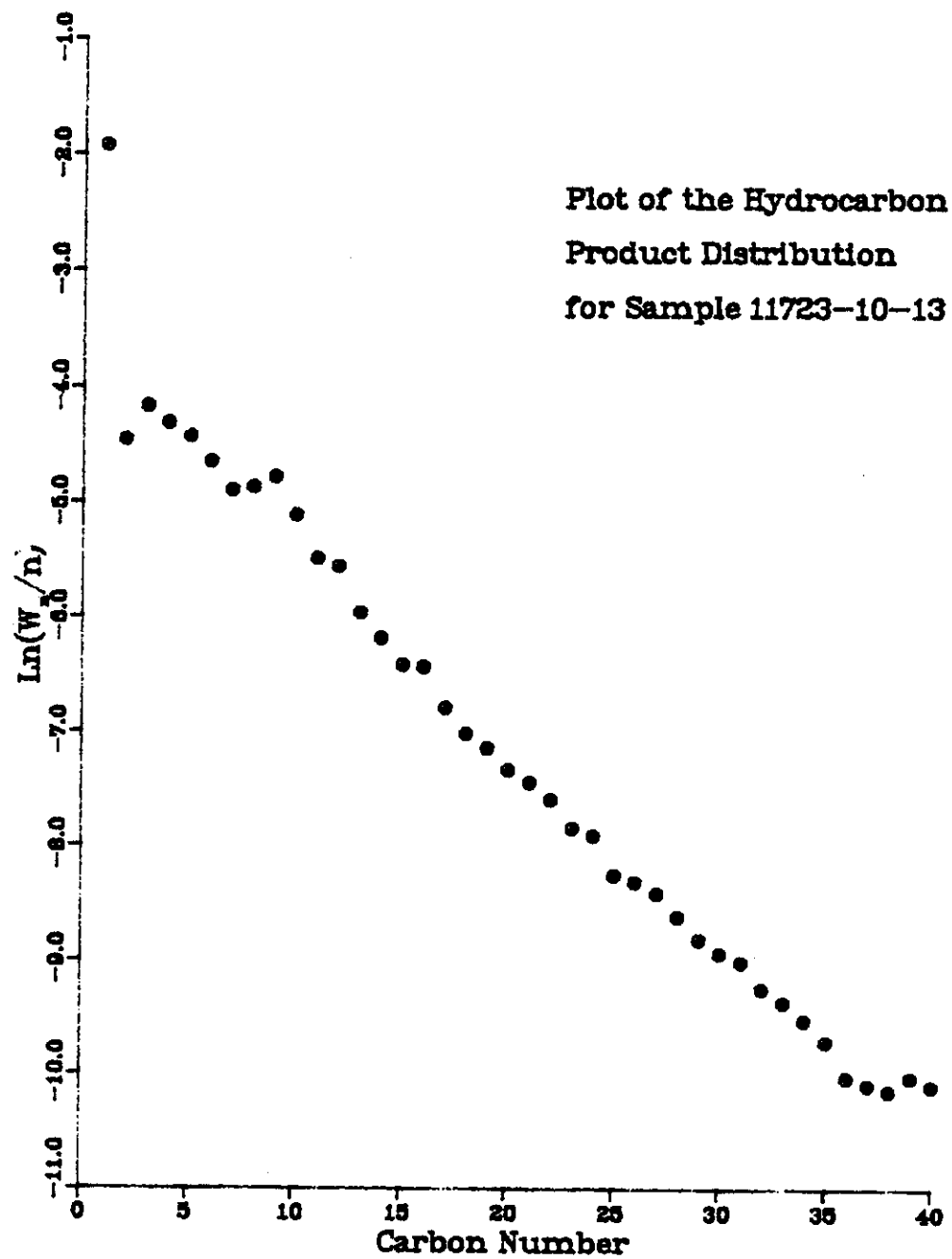


Fig. 19

