An Analysis of the P-V-T Data for Several High Molecular Weight Hydrocarbons*

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The work reported in this paper was performed at the Pennsylvania State
University and was jointly supported by the University and the American Petroleum
Institute. Volume-pressure data to 10 kilobars were determined for a series of
structurally related, high molecular weight hydrocarbons synthetically produced
by API Research Project 42 at Penn State. The volume changes due to pressure were
measured at six temperatures about equally spaced in the range 37.8° C - 135° C.
The structures of the compounds used for this study were as follows: (Slide #1)

The PSU number is assigned for identification purposes and $C_{\rm R}$ refers to an unbranched, saturated chain of n carbon atoms with the substituent hydrogens. Details of experimental technique for measurement of the volume changes of these liquids have been previously reported.

^{*} Presented at American Physical Society meeting, Washington, D. C., May 3, 1958.