

EXPLANATION

PRESENT SURFACE GEOLOGY

IGNEOUS AND METAMORPHIC ROCKS

Intrusive rocks
Includes small areas of metamorphic rocks in Little Rocky Mountains and northern Black Hills

Extrusive rocks
Includes small areas of intrusive rocks in Bearpaw Mountains

Metamorphic rocks

Contact

Thickness line
Isopach showing thickness, in feet; long dashes in areas of poor control; short dashes indicate reconstructed thickness in areas of metamorphic or intrusive rocks; isopach interval 25 feet

Reverse fault
Dashed where approximately located. U, upthrown side; D, downthrown side

Limit of Three Forks formation

Control well that bottomed in Devonian rocks

Control well that bottomed in pre-Devonian rocks

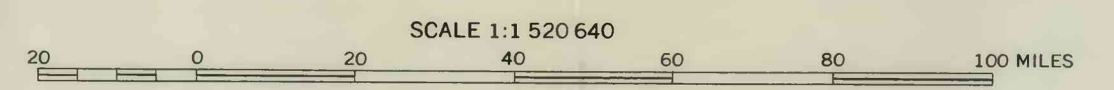
Measured surface section

Wells shown in cross section on plate 7

SOURCES OF DATA

Radioactivity and electrical logs released by commercial companies prior to Feb. 1, 1959; lithologic logs prepared by geologists of the U. S. Geological Survey; reports of the U. S. Geological Survey; and data furnished by oil companies

ISOPACH MAP OF BIRDBEAR AND THREE FORKS FORMATIONS IN WILLISTON BASIN AND IN CENTRAL MONTANA AND NORTH-CENTRAL WYOMING



By Charles A. Sandberg
INTERIOR - GEOLOGICAL SURVEY, WASHINGTON, D. C. - 10262