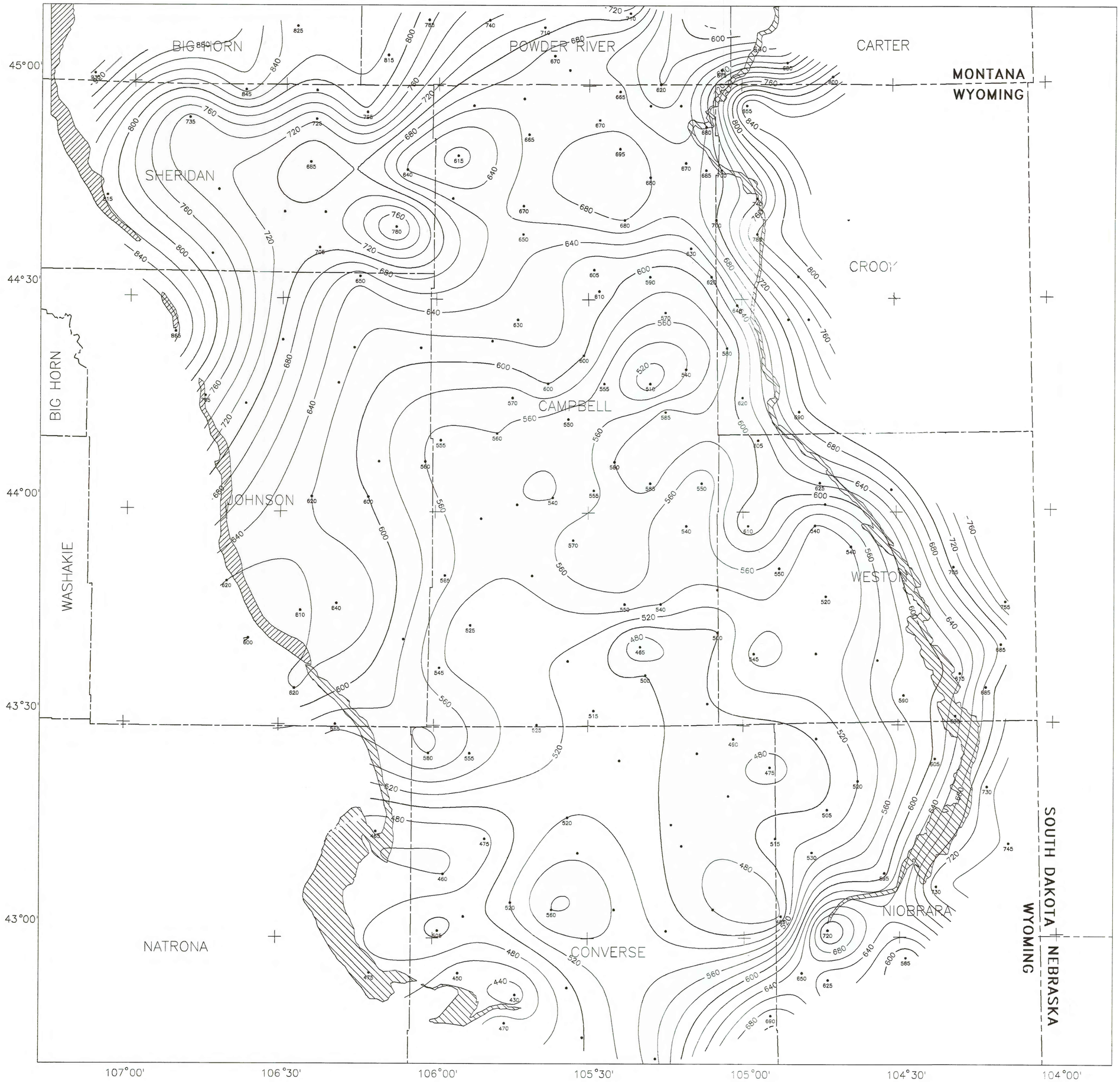
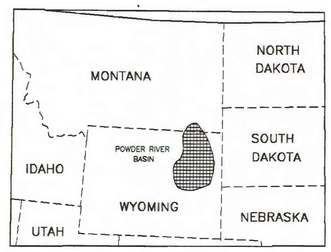
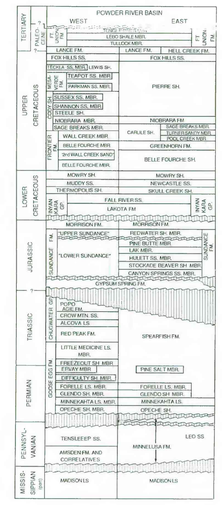
OPEN-FILE REPORT 87-340 P





Location of the Powder River basin



Generalized stratigraphic column in the Powder River basin

EXPLANATION

100 — Borehole. Number is thickness in feet.

100 — Isopach of mapped interval in feet. Thickness values were not corrected to true thickness nor labeled as anomalous in wells with inclination of beds, faulting, or problems of hole deviation. Such occasional conditions are more likely to occur in the southeast portion of the map and along deformed margins of the basin.

Generalized outcrop of the Upper Cretaceous Lance Formation and Fox Hills Sandstone, undivided.

Generalized outcrop of the Upper Cretaceous Fox Hills Sandstone.

Data from which this map was constructed are stored in a database of formation tops and bases determined from electric logs of 186 wells penetrating Upper Cretaceous and older rocks. These logs are shown in 22 cross sections of the Powder River basin by James E. Fox, 1986 (U.S. Geological Survey Open-File Reports OF 86-465A through OF 86-465V). The map was produced by using the Interactive Surface Modeling[1] (ISM) program of Dynamic Graphics, Inc. Values at some of the data localities may not be as closely honored as on a hand-contoured map because of the mathematical constraints of the mapping program.

This map is prepared in part for the Evolution of Sedimentary Basins program.

1 Any use of trade names is for descriptive purposes and does not imply endorsement by the U.S. Geological Survey.

This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards.

THICKNESS OF LOWER CRETACEOUS ROCKS, POWDER RIVER BASIN, WYOMING AND MONTANA

By James E. Fox and Debra K. Higley

1987

Scale 1:500,000

10 0 10 20 MILES

10 0 10 20 KILOMETERS

Contour interval 20 feet

Lambert conformal conic projection