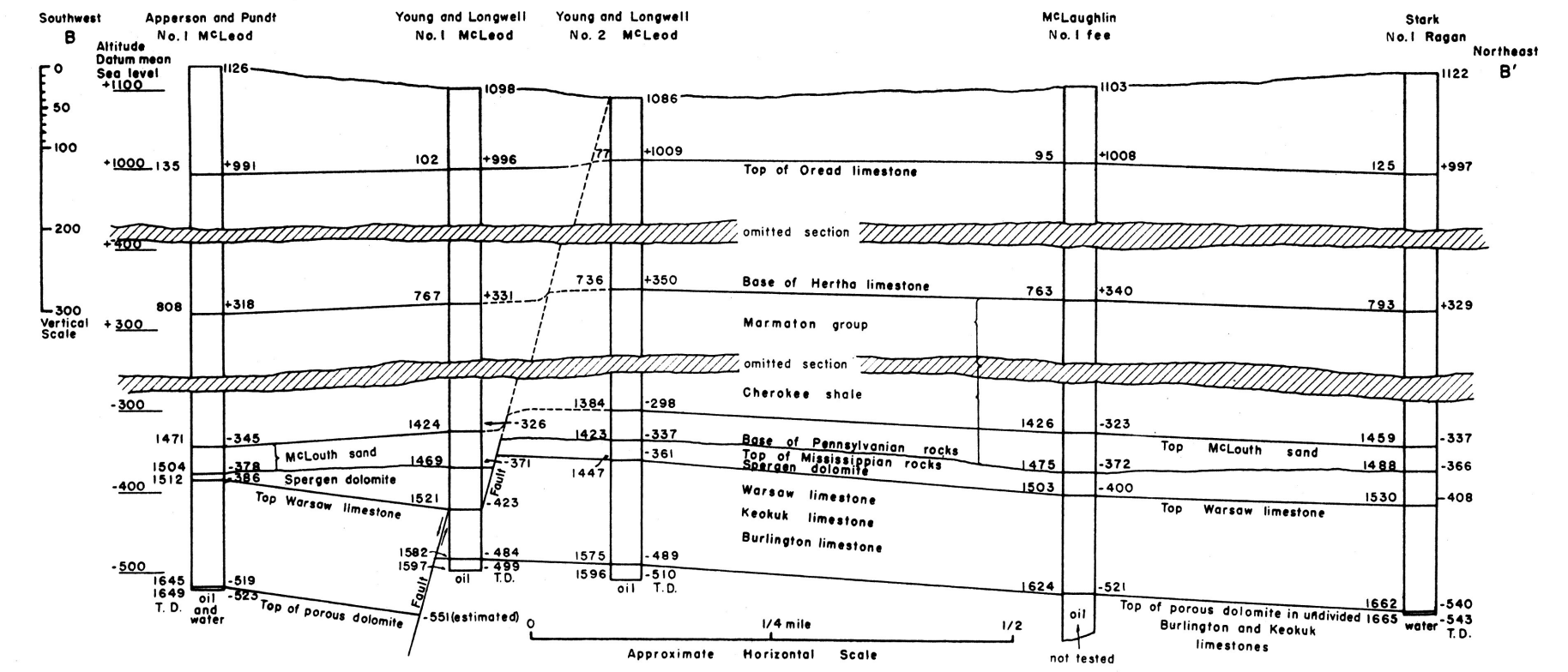


A. Cross-section of McLouth sand along line A-A' (pl. 1) in a northeast direction along crest of McLouth anticline (secs. 3, 4, and 5, T. 10 S., R. 20 E.) Variations in thickness and lithologic character of sand interpreted from study of logs and examination of well cuttings.

Well logs are correlated utilizing the white siltstone horizon, 11 to 21 feet above top of McLouth sand zone, as the upper datum plane.

Some well logs do not record sand unless it contains oil, gas, or water. The top of the gas pay portion of the McLouth sand is below the top of the McLouth sand proper in some wells.

The cross-section also shows the position of the top of the Mississippian rocks and the top of the Warsaw limestone in relation to the white siltstone. On the assumption that the top of the white siltstone was originally horizontal, the top of the Mississippian had a relief of 10 to 12 feet on the line of the cross-section. Depths below surface shown by figures at left of well columns.



B. Cross-section of McLouth field along line B-B' (pl. 1) showing structural relationships of Pennsylvanian and Mississippian rocks. It is significant that the anticlinal dips are gentle in younger Pennsylvanian rocks but progressively steeper with increasing depth. In older Pennsylvanian rocks the anticlinal crest passes near the Young and Longwell No. 2 McLeod well. In Mississippian rocks the structural crest adjoins a fault, and the crest of the anticline passes near the Young and Longwell No. 1 McLeod well.

The numbers at right of well columns indicate altitude in feet above and below sea-level; those at left indicate depth below land surface. The two cross-ruled bands represent parts of the logs that are omitted in the diagrammatic section.

ABBREVIATIONS

- cse—coarse
- mic—micaceous
- siltst—siltstone
- wh—white
- ss—sandstone
- ls—limestone
- cem—cemented
- blk—black
- siltst—siltstone
- ss—sandstone
- ls—limestone
- dense—close-grained and lacking in porosity
- sd—sand
- sh—shale
- dol—dolomite