R.19E. R.20E. R.21E.

T. 9 S.

T. 10 S.

Jefferson County

Leavenworth County

Fault

Plate 4. Block diagram of McLouth sand showing thickness, lithology, and production of selected wells in McLouth field, Jefferson and Leavenworth counties, Kansas.

EXPLANATION

Top of McLouth sand represents horizontal datum plane coincident with top surface of block. Top of Mississippian represents irregular eroded and deformed surface determined by base of well sections on diagram.

Diagram based on examination of cable-tool cuttings together with information from drillers' logs.

Diminishing horizontal scale shown by section lines; diminishing vertical scale indicated along borders of block.

Production figures at top of wells represent initial open-flow gauge in million cu. ft. of gas per day and initial oil potential in barrels per day (b).

Wells with no production figures are dry holes.

Numbers below wells refer to index of well names in Table 27.

Letters A, C, E, G on cross sections designate sand zones discussed in text of report.

st	oil-stained sand
*	gas show
●	oil show
ww	sand yielding water
HFW	hole full of water
ww	bottom of well in McLouth sand above top of Mississippian
--------	Approximate trace of fault on surface of block (top of McLouth sand)

Rock types of low porosity and permeability:

Black to gray clay shale	Siltstone
Micaceous silty shale	Clay
Coal (thin layers)	Clay ironstone

Argillaceous sandstone, intermediate porosity and permeability (interstices partially filled with silt and clay; denser stippling indicates more argillaceous material and lower porosity.)

Well-sorted, porous sandstone (high porosity and permeability; poorly cemented, and interstices for most part open)

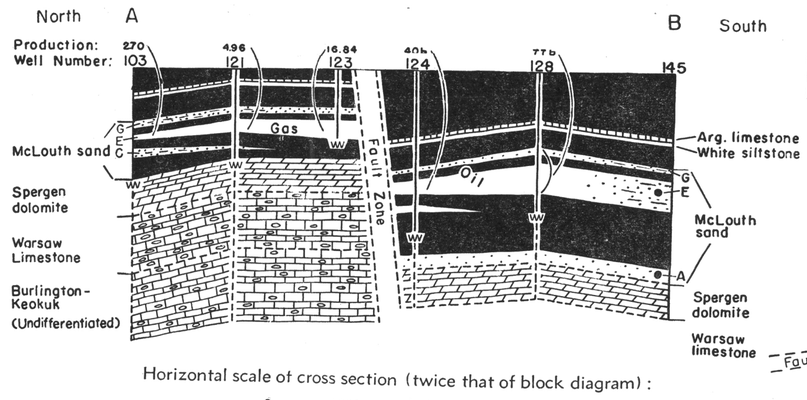
Thin beds of shale, siltstone or clay in sandstone

Vertical Scale

0 Feet
50
100
150
200

CROSS SECTION showing

beds on upthrow and downthrow sides of fault zone on south flank of McLouth anticline (secs. 3 and 4, T. 10 S., R. 20 E.) from well 103 to well 145. Section shows fault trap for gas in McLouth sand on upthrow side and oil-producing zone on downthrow side. Dip of fault unknown.



Horizontal scale of cross section (twice that of block diagram):

0 1000 2000 3000 feet