

June, 1936.

Twin Drilling Co. #1 Sander, D
NE NE NW, 10-14S-17W,
Elevation 2006'

Pennsylvanian conglomerate No conglomerate proper.

Ordovician Top 3530' ? Sub-sea, minus 1524'
Decorah 3530-3535' ?
3530-3535 Shales, in part green. Sample was oilsoaked
and then burned when drying and the character
of the shale is difficult to see. However,
considerable shale of Decorah type shows as
cavings in the dolomite samples below. Also
the Arbuckle sequence indicates that the top
of the Miller was drilled.

Arbuckle Top 3535' Penetration 90' Sub-sea, minus 1529'
3535-3600 Miller-Purcell dolomite. Samples poor to 3570'
and very good from 3570-3600'. Sequence
checks with Miller-Purcell sequence in 12S-17W.
3600-3625 Cotter dolomite. Top Cotter is arbitrarily
picked on chert criteria and is not traced in
from other areas. It may have to be moved
down after more data are obtained.

This section indicates that the Decorah outcrop boundary is just to the east of this well and that the area to the west has a cover of Decorah. The upper part of the Miller-Purcell seems to have considerable heavy oil. The porosity is difficult to judge but there is considerable silica filling which reduces porosity to some extent. Below 3580' there is considerable asphaltic material in the coarser dolomites.

The failure of this test does not condemn the area but does suggest that porosity may be somewhat spotty where the Decorah is thin. This well tested the forty acres which it centers. A half mile away porosity may be good although there is no way to pick the spot except that it is probably to the west.