

July 1944

Darby #5 Kultgen
Section 16-16S-12W, NW/c
Elev. 1889' ^{7F} ₂ R

Cable tools

Pennsylvanian Conglomerate 3309'- 3350'

- 3309-3321 Sandy limestone. Buff to pink limestone with scattered coarse sand grains which become very abundant at the base. A trace of chert pebbles. Marine conglomerate.
- 3321-3326 No samples.
- 3326-3330 Very coarse sand. Pitted irregular angular grains with a few adhering books of muscovite mica. Green clay impairs porosity. Pre Cambrian derived material in marine conglomerate.
- 3330-3334 Oil-stained sand. Clean porous recrystallized fine to medium sand. Closely resembles Pre Cotter sands, from which it was derived. Careful search showed a 3 mm worn pebble of Cotter oolitic chert embedded in a sand cluster. An excellent reservoir rock. Marine conglomerate.
- 3334-3346 Poor samples. Much caving Pennsylvanian material, pink and white limestone, shales, and both types of sand previously drilled. Some coarse rounded, frosted sand grains from the Arbuckle.
- 3346-3350 Chert conglomerate, Coarse fragments of varied Arbuckle cherts. Both fresh and oxidized. Most abundant are brown quartzose oolitic cherts derived from the basal Cotter. Rounded sand grains, caving Pennsylvanian limestone and shale as above.

Pre-Pennsylvanian land wash top 3350'

Subsea - 1461'

- 3350-3352 Red clay and chert. Sandy dark-red clay and flinty Arbuckle cherts showing red clay contacts. Obscured by cavings of all types of material from above.

Remarks: Test made a 149 barrel well from the Pennsylvanian sand at 3330-3334'.

The NE diagonal off-set drilled into Pre Cambrian quartzite at -1398'. The unusually thick section of marine conglomerate in the #5 Kultgen was deposited on a fairly steep slope (7° plus) of a quartzite hill. Note the reverse order of material within the conglomerate.