January, 1940.

Carter #1 Andress,
C NL SE, 2-21S-13W,
Elevation 1864'.

Pennsylvanian conglomerate 3475-3525'

3475-3500 Clay shales with rare included stained chert.

3500-3525 Conglomerate of cherts of Viola and Arbuckle type, with limestone nodules and clay shale. Some shale of Decorah type is present but is believed to be reworked Arbuckle residuum or slumped Decorah.

Decorah, Questionable

As noted above, Decorah type shale occurs from 3505-3525'. However, it is mixed with new material in each suceeding sample and it is very doubtful if Decorah is in place.

Arbuckle Top 3525' Penetration 80' Sub-sea, minus 1661'

3525-3552 Miller dolomite. The upper ten feet of the section is badly riddled by solution and is probably merely chunks of dolomite in a mass of shale. The contact between Upper and Lower Miller does not show clearly as the samples are rotary to 3554'.

3552-3594 Purcell dolomite. The abundant shale and sandy shale in the Purcell make the samples poor as residue material.

3594-3605 Cotter dolomite.

The porous zones of the Miller were drilled with rotary and are hard to evaluate. The Upper Miller is probably too badly dissolved to be a reservoir. The samples suggest that a water was found at about 3558', which is 2' above the top of Zone 6 of the Purcell. Estimated restored top of the Arbuckle is 3517', or -1653'. It is possible that all of the Arbuckle is present, but that the section is shortened by compaction due to solution. If this is the case, Decorah may be in place above, although badly dissarranged by slumping.