

July, 1938.

Empire #1 Hamm.
SW NW 1/4, 24-22-19W,
Elevation 1992'
1998

- Pennsylvanian conglomerate 3445-3523'
- 3445-3460 Limestone, dense to elastic; with included sand and chert fragments, also some pink secondary chalcodony.
- 3460-3507 Conglomerate of detrital chert, mainly stained and weathered. All types are represented, including colitic Cotter chert. Matrix is dark red sandy clay and consolidated clayey sand. Fragments of chert showing worn surfaces are common throughout and suggest that this interval is a true conglomerate rather than residuum.
- 3507-3525 Clay, red and gray, mottled, sandy. Strongly suggests residuum. Also considerable chert which may be caving.
- Arbuckle Top 3525' Penetration 75' Sub-sea, minus ¹⁵²⁵ 1551'
- 3525-3598 Dolomite, white to brown, fine to medium; with small percentages of included fine sand. Pre-Cotter. The upper part is badly riddled by solution and contains some clay infiltrated into cracks. There is also some caving of detrital chert from the conglomerate.

This section probably belongs in the upper half of the Pre-Cotter.

The abundance of colitic Cotter chert in the conglomerate and the presence of sandy clay which looks like Pre-Cotter residuum points to the presence of Cotter within a few locations.