

October 1944

Darby #4 Kultgen
Section 16-16S-12W, C SL N $\frac{1}{2}$ NW $\frac{1}{4}$
Elev. 1907'

Cable tools

Pennsylvanian Conglomerate 3346'- 3392'

- 3346-3365 Sandy limestone. White and buff limestone with included medium sand grains which become more abundant downward. A few sand clusters are present in the bottom two feet. Marine conglomerate.
- 3365-3370 No samples.
- 3370-3385 Conglomerate of chert gravel. Fresh white translucent Arbuckle cherts, in part oolitic. Although these cherts are strikingly similar in type and are fresh and white rather than oxidized, they are not residuum in place as shown by: (1) worn edges; (2) sand contacts; (3) lack of associated clays; (4) stratigraphic position above a Pennsylvanian shale. These are residual cherts locally reworked as a Marine conglomerate.
- 3385-3389 Clay shale. Green-gray shale with black streaks. This is the same shale shown in cores in our #1 Kultgen.
- 3389-3392 Sand. Loose rounded grains with caving shale and a little chert. Probably conglomerate.

Arbuckle Top 3392' Penetration 12' Subsea -1485'

Boyce 3392'- 3404'

- 3392-3393 Silicified sand and coarse recrystallized sand grains.
- 3393-3404 No samples. Reported as Arbuckle sand by Carmody.

Pre-Cambrian Top 3404' Penetration 13' Subsea -1497'

- 3404-3417 No samples. Carmody (Letter #45, 1936) states, in part, "The angular sand or quartzite topped at 3404' contains an abundance, 50% or better, of muscovite. ----- Not arkosic."

Remarks: A producer.

RFW:HL