

March, 1941

Skelly, No. A-4 Kempe
C N $\frac{1}{2}$ SW NE 12-11S-18W

Elevation 1870 feet

Salt-water disposal well in Burnett pool, with sinkhole section surrounded by production. Rotary samples, badly contaminated by caving and recirculated sinkhole fill, unsuited for residue study.

Pennsylvanian

Basal conglomerate

3360-3411 feet Red clay and detrital chert, chiefly reworked Mississippian residuum.

Ordovician

Viola residuum

3411-3417 feet Residual Viola chert and fine siliceous replacement (?) aggregates.

Simpson residuum and slumped fill.

3417-3445 feet Leached blue-green structureless Simpson shale and sandy shale, with phosphate pellets. Thickness probably increased by slumping into sink.

Arbuckle residuum and slumped Simpson.

3445-3485 feet Residual Arbuckle cherts with traces calcitic dolomite and large amounts slumped Simpson shale.

Arbuckle (normal) top 3485 feet of 1615 feet subsea.

(Note: top residual Arbuckle 1575 feet subsea; top restored Arbuckle 1530 feet subsea.)

Penetration 447 feet to pre-Cambrian.

(Note: Arbuckle thickness including residuum 487 feet; Arbuckle thickness restored to normal for location 532 feet.)

3485-3622 feet Cotter.

3485-3507 feet Cotter, Zone II. Very poorly sampled. Base approximate.

3507-3622 feet Cotter, Zone I. Includes several porous dolomite beds probably water-bearing. Poorly sampled.

3622-3932 feet Pre-Cotter.

3622-3730 feet Post-Boyce dolomite.

3730-3765 feet Boyce sandy zone. Base may be slightly higher.

3765-3828 feet Pre-Boyce, post-Weigel.

3828-3848 feet Weigel.

3848-3882 feet Pre-Weigel dolomite. Gradational below.

3882-3932 feet Everleigh sandy dolomite and dolomitic sandstone, with possible thin basal sand included.

(310)

Skelly, No. A-4 Kempe, Continued

Pre-Cambrian

3932-3964 feet TD Red biotite granite.

Remarks:

Restored top of Arbuckle approximately 3400 feet, or 1530 feet subsea, still structurally lower than near wells.

Poor rotary samples make exact position of markers doubtful. In particular, top Cotter Zone I and base Cotter may be too low, as samples bad in this interval.

FBC?