

The correlation of the upper 80' of Arbuckle is questionable.

February, 1942.

425582
Lario #1 Lynch,
C SL SE SW, 24-4S-20W,
Elevation 2018'
Rotary.

P.C

Pennsylvanian conglomerate 3467-3470'

3467-3470 Rotary cuttings show a small amount of consolidated fine sand and one fragment of quartzose chert. It appears that these clastics are marine and that residuum is entirely lacking.

Arbuckle Top 3470' Penetration 365'. Sub-sea, minus 1452'

3470-3550 Questionably Pre-Cotter. May be Cotter. See remarks below. Dolomites, coarse and white at top, grading down into medium to fine white and pink dolomites, all chert-free. If Pre-Cotter, this is the post-Boyce.

3550-3605 Boyce sandy dolomite. White and pink dolomites with varying sand content.

3605-3670 Pre-Boyce dolomites, white, medium.

3670-3705 Weigel dolomite. Chert restricted to soft silica dolocasts.

3705-3790 Everleigh sandy dolomites. White, brown, pink, and red dolomites with considerable included sand and abundant pellets of glauconite.

3790-3835 Reagan sand. Medium to coarse sand, glauconite-free, but with dolomititic streaks.

3835-3848 Pre-Cambrian granite.

Remarks: This section has an unusually thick Everleigh, together with a normal Reagan sand section. To the northwest, along the flanks of the granite high, most well sections show Everleigh lying on Pre-Cambrian.

The upper 80', from 3470-3550', carries no specific Cotter criterion. However, it may include some lower Cotter, as the contact between Cotter and Pre-Cotter is not well known in this area. Mr. Conselman considered it to be Cotter, but felt that such a call was not by any means proven. In Weekly Letter #31-1941, Mr. Conselman writes: "The Arbuckle section is unusually long compared to regional control. Classification of the topmost 80' is questionable, suggesting basal Cotter with a possible fault zone at 3550', placing Cotter against low post-Boyce Pre-Cotter beds. If the upper 80' is included in the Pre-Cotter, the post-Boyce interval becomes normal. This more conservative interpretation, however, disregards important lithologic changes above and below possible fault zone material between 3540-3550'. Pre-Boyce dolomites, probably including Weigel equivalents near the base, extend to 3695', top of the Everleigh zone". Mr. Conselman's fault zone material appears to be the sharp change at the top of the Boyce sandy zone.

Map as post-Boyce dolomite, with a possibility of lower Cotter.

ML

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June 1942

Note concerning contact between Cotter and Pre-Cotter in the Lario #1 Lynch, Sec. 24-4S-20W, Sheeted by Littlefield, Feb. 1942.

Top Pre-Cotter believed to be 3505'. This is in keeping ~~from~~ with data from 32-8S-16W and reworking of 26-7S-17W.