August, 1941

Lario, No. 1 Lynch Estate
C S½ SE SW 24-4S-20W

Elevation 2018 feet

Rotary dry hole. Samples fair.

Ordovician and Cambrian

Arbuckle top 3470 feet, or 1452 feet subsea. Penetration 365 feet to pre-Cambrian. Marmaton cover.

3470-3550 feet Cotter I or pre-Cotter. Buff and brown to pink and red medium-textured dolomites, slightly sandy, locally granular. Oxidized in upper portion. No chert noted. Last 10 feet is stained red and includes red clays; may mark possible fault as discussed below.

3550-3835 feet Pre-Cotter. Classed as follows:

3550-3575 feet Post-Boyce dolomitic marble, with trace of Boyce sand at base. Lithologically distinct from zone above, which may also be pre-Cotter. Interval abnormally short; see remarks below.

3575-3695 feet Pre-Boyce--post-Everleigh Cambrian dolomites, becoming slightly glauconitic below 3650 feet. No Weigel chert recognized; however, interval 3660-3690 feet is roughly equivalent.

3695-3835 feet Everleigh glauconitic sandy dolomites and dolomitic sandstones, with minor amounts red shale and general red staining. Sands variable in texture, ranging from medium-fine to very coarse. No basal sand of Reagan type recognized.

Pre-Cambrian

3835-3848 feet TD. Granite wash and hornblende granite, possibly separable at 3840 feet.

Remarks: This is an abnormally thick Arbuckle section as compared to regional control. The chief problem presented is the classification of the topmost 80 feet of beds. If assigned to post-Boyce pre-Cotter the thickness of that zone is restored almost to its complete representation, while if placed in basal Cotter only 25 feet of post-Boyce pre-Cotter is recognized. However, the lithology is more or less similar to low Cotter of normal wells. There is a strong suggestion of fault-zone material at the base of the questionable interval. If a fault was actually crossed by this test, the presence of Cotter on thin post-Boyce pre-Cotter is readily explained as downthrown into position.

Lario, No. 1 Lynch Estate, Continued

With or without faulting, there appears to be a definite low on the pre-Cambrian surface at this locality, with corresponding increased Arbuckle section. This low is in direct alignment with the northwest-trending low passing through vicinity of Stockton, in north-central Rooks County.

FBC