

April, 1941

Gulf, No. 2 Janssen
C E $\frac{1}{2}$ NE SW 29-17S-10W

Elevation 1807 feet

Sink-hole dry hole offset to north and northeast by moderate production in Cotter Zone I. Markers checked against rotary drilling time.

Pennsylvanian

Marmaton 3250-3262 $\frac{1}{2}$ feet Thickness 12 $\frac{1}{2}$ feet.

3250-3257 feet Calcareous shales.

3257-3262 $\frac{1}{2}$ feet Nodular and dense limestones.

Basal conglomerate

3262 $\frac{1}{2}$ -3294 feet Conglomerate with oxidized lower Cotter cherts and large amounts of red clay, minor sand and shale. Thickness above normal because of topographic sink depression. Red clay cap 3262 $\frac{1}{2}$ -3267 feet.

Ordovician

Arbuckle residuum top 3294 feet, or 1487 feet. Penetration 38 feet, base not reached.

3294-3330 feet Residual Cotter. Zone I. White oolitic, dense and quartzose cherts, free oolites, residual frosted sand and small amounts green shale. Relatively free from oxidation staining. Probably represents 80 to 100 feet of section, concentrated before Pennsylvanian stripping was completed.

3330-3332 feet TD. Pre-Cotter? Residual bright gray and green-gray clays and sandy clays similar to pre-Cotter residuum. Penetration of only 2 feet makes pre-Cotter correlation tentative only.

Remarks:

This test was stopped above Arbuckle dolomite for economic reasons, as total depth is far below offset production data. For regional purposes restored Arbuckle top may be placed at 3267 feet, or 1460 feet subsea. Restored top of pre-Cotter cannot be established with accuracy, but may be in vicinity of 3325 feet.

Circulated sample at total depth 3332 feet contains chert gastropod cf. Lecanospira (?), derived from Cotter Zone I residuum.

FBC