

Poster 5      **Pre-Pennsylvanian Paleocanyon in a Portion of McClain County, Oklahoma: Implications for Deese Oil and Gas Production**

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The Golden Trend oil field is located on the north flank of the Arbuckle mountains, the east flank of the Anadarko basin, south of the Nemaha Ridge and just to the west of the Pauls Valley Uplift. This field has produced 84 million bbls of oil and 1 TCF of gas since 1979. The Deese interval has produced 34 million bbls of oil and 119 bcf of gas. The study area is in Township 5N Range 3W in McClain County, Oklahoma, and has produced more than 1.3 million bbls of oil and 14 bcf of gas from the Deese interval.

The study consisted of examination of well logs, mud logs, completion reports, Lasser production data, available seismic and previously published work in the area. The Deese interval contains limestones and sandstones. But most of the production comes from sandstones, many with fining upward sequences. Log signatures indicate deltaic deposition of the Deese strata. The dominant feature in the study area is a paleocanyon trending approximately north-south. The canyon was identified by the lack of Tulip Creek to Caney strata in well logs. The imprint of this pre-Deese canyon can be seen in Deese structure maps. The best production in the area is located south and southwest of the canyon. In the deeper portion of the canyon there are only two wells that have significant production. However, there is significant production on the southeast and northwest flanks of the canyon. The best production can be found in the deltas emptying into the canyon.