

HOLLEY ELLENBURGER FIELD NOLAN COUNTY, TEXAS

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ABSTRACT

The Holley Ellenburger Field is located in northeast Nolan County, Texas approximately 10 miles northeast of Sweetwater and 30 miles west of Abilene, Texas. The field is located just west of the Fort Chadbourne fault system, which is the source of the folding and faulting that formed hydrocarbon traps in this area. Nolan County has proved to be one of the most prolific Ellenburger producing counties in this area with over 42 million barrels of oil produced to date.

The Holley Ellenburger Field was discovered in 1986, with the re-entry of a well drilled and abandoned as a dryhole in 1956. In those days, the common view was that if the Ellenburger did not produce from the first dolomite, then it would not be productive. A drill-stem test taken in 1956 in the first dolomite showed no reservoir pressure, thus the original well was plugged and abandoned. However, the interval tested was not the true Ellenburger, but a tight detrital zone on top of the Ellenburger. Below this detrital zone was 36 feet of fractured porous dolomite that was not tested originally, but proved productive in the re-entry in 1986.

Since its discovery, the Holley Ellenburger Field has produced in excess of 500,000 bbl of oil from 13 wells at a depth of 5900'. Pay thickness ranges from 5-50+ ft, with porosity types ranging from fractured dolomite to intergranular sandy dolomite. The field has approximately 200 ft. of structural closure bounded to the east by a large down-to-the-west fault, which is characteristic of Ellenburger fields in this area.