

PALUXY OF THE CENTRAL BASIN - EAST TEXAS

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ABSTRACT

The Paluxy Formation (Lower Cretaceous) has been a consistent sandstone exploration objective in the central East Texas basin, occurring at moderate depths on the order of 5,000 to 8,000 ft., with oil in reservoirs with good permeability and porosity, and reserves in the range of 200,000 to 500,000 bbls per well. Since the 1940s the pace of Paluxy field discoveries has been steady - generally a new field or two every one or two years - and there is every reason to believe that there is continued potential for the Paluxy in the future.

The central part of the East Texas basin, in Smith County and adjacent areas, has complex structure, with numerous salt domes, and intervening sediment wedges (turtles) that formed during movement of the salt. Paluxy oil and gas in this area occurs mainly in combination structural-stratigraphic traps along normal faults that cut turtles.

Major exploration trends in the central basin include (1) the Lindale turtle with a number of widely spaced fields, generally with only a few wells, but with relatively good per well reserves, (2) the Tyler turtle with the largest fields and some of the most prolific Paluxy production in the central basin, (3) the Flint and Irene turtles, with relatively thin sandstones and modest production, (4) the Lane Chapel turtle, with some exciting new Paluxy discoveries, and (5) the rim areas of salt domes.