Abstract:
Midfield Field, Matagorda County, Texas,*
by James O. Lewis, Jr., Consultant, Houston, Texas

The discovery well of Midfield Field was drilled by Sun Oil Co. in November 1943; however, this well, the No. 1 Stranadel, was junked and abandoned after encountering a salt water flow at 10,500 feet.

The production established one of the earliest lower Frio fields in Matagorda County. Midfield Field is particularly interesting for study as the Frio sedimentation is very important and very evident. The conditions existing in Midfield Field exist in most lower Frio fields in Jackson, Matagorda, and Brazoria Counties with numerous complications and twists, however, the basic sedimentary processes and results are the same.

Simply stated, Midfield Field production is a result of Northward thickening of the lower Frio section, changing the "regional" dip from southeast to northwest. Nosing on the upper Frio horizons becomes closure at depth.

*Presented before the Houston Geological Society, May 8, 1961
While a stratigraphic "shale-out" of the "Midfield" sand does exist on the southeast flank of production it is not the primary cause of accumulation but is responsible for the larger column of accumulation.

There are only two producing sands in Midfield Field. The lowest, the "Fluery" sand at 10,500 ft., is of minor importance and is wholly a stratigraphic type accumulation. The second producing sand, the "Midfield" sand at 9,100 ft., has over one hundred feet of producing column. This accumulation is a result of structural closure and a stratigraphic condition. The "Midfield" sand is productive as it occupies a particular position in the stratigraphic section where structure changing from all Southeast dip shallow to all northwest dip at depth across a regional nosing has resulted in a structural closure.

The three maps presented with this discussion illustrate the structural change brought about by northward thickening of the Frio section. While the interval used for illustration is small it is probably the most critical part of the section.

It is the opinion of the writer that a thorough understanding of the conditions existing in Midfield Field will be of untold value in understanding and predicting the lower Frio eccentricities throughout the Gulf Coast.