

## NOTES

Abstract:Red Fish Reef, South, Field, Chambers-Galveston  
Counties, Texas, by Earl Stout \*

Red Fish Reef, South, Field is located on the Chambers-Galveston Counties line in Galveston Bay. The name, as applied by the Oil & Gas Division of the Railroad Commission, refers to that oil production from the Frio No. 15 sand member of the Catahoula group. The field is a southern fault block extension of the Red Fish Reef Field. The first oil production in the Red Fish Reef, South, Field was from Humble's Galveston Bay State A-95 which was completed through perforations 11,406-16 feet in August 1959. The sub-normal bottom hole pressure indicated in this well suggested possible communication between this well and Frio No. 15 sand gas wells located in Red Fish Reef Field. Because of this communication, the gas wells were immediately shut in. Subsequent drilling and workovers have resulted in the completion of four additional oil wells, making a total of five wells in the Red Fish Reef, South, Field. A normal stratigraphic section, ranging from the Recent series to the middle of the Frio formation of the Miocene series, is encountered in wells drilled to the Red Fish Reef, South, Field pay; however, Humble's Galveston Bay State A-91 was drilled through lower Frio sands and shales of the Miocene series before encountering salt at 15,230 feet. The faunal content of these beds of the Miocene series suggest a continuing regressing sea all during Frio, Anahuac and Fleming deposition. The apparent depositional environment grades from 200-300 feet in the lower and middle Frio beds to the brackish environment of the Fleming sands and shales. Some topographic relief has been noted on hydrographic maps covering the area of Red Fish Reef, however, these maps were made prior to the current dredging operations in the area. The subsurface data indicate that the Red Fish Reef, South, Field is located on an anticline, oriented east-west, parallel to a major down-to-the-basin fault. There are smaller faults, some of which are down-to-the-basin like the major fault and some of which are down-to-the-north or antithetic faults. A careful study of these small faults suggests at least two stages of fault growth: One which began as early as Frio deposition and terminated near the beginning of the upper Frio deposition, and one which began near the end of the Frio deposition and terminated near the beginning of Anahuac deposition. It is one of these small, antithetic faults that apparently controls the oil accumulation in Red Fish Reef, South, Field. The producing bed has approximately 500 feet of structural closure, and the present subsurface interpretation indicates that the oil column covers approximately 1400 acres. Two wells are currently drilling in Red

---

\*Presented before the Society, January 9, 1961

Fish Reef, South, Field, Humble's Galveston Bay State A-104 and A-105. These wells, along with others to be drilled, are spaced on an 80-acre density. As drilling progresses and the limits of the reservoir are defined, a decision will be made based on the additional data - reservoir performance, structural, and stratigraphic - as to whether or not the field should be developed on this or some other density.