

CITRONELLE FIELD

MOBILE COUNTY, ALABAMA

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ABSTRACT

The Citronelle Field, Mobile County, Alabama is located 30 miles north of the town of Mobile in the southwest corner of the state. Discovery was made on August 16, 1955 when the Zach Brooks, No. 1 Donovan, Section 25, Township 2 North, Range 3 West, tested 45.6° gravity oil through drill stem from a porous sand in the Rodessa formation. The depth tested was from 10,879 feet to 10,924 feet, and further drilling and testing resulted in the discovery of additional oil from this and also the Bailey Zone, an equivalent to the Sligo formation of North Louisiana. At the present, the structural pattern of the field appears to be an oval shaped anticline, being four miles long and two and one-half miles wide with an axis running north-northwest and south-southeast. There have been ninety-three producers, four are drilling or testing, and four dry holes completed to date. Dry holes have been drilled on the east, northwest and southwest flanks.

The Rodessa, or upper producing zone, consists of one or more lenticular sands ranging from one to twenty-five feet in thickness. The Bailey Zone, or lower producing zone, consists of one or more lenticular sands much thinner than the upper zone, and usually no more than two lenses are found. The two producing zones are separated by a 160 foot interval of black shale and porous sands, perhaps Pine Island in age. The sands in this zone carry salt water and this has caused considerable trouble and well expense in completion. Although the upper and lower zones are definitely separated, the character of the oil and more so the two reservoirs are very similar. Both appear to be closed reservoirs with an original gas-oil ratio of 150 feet to one barrel of oil, have a very low bubble point and a very uniform drop in bottom-hole pressure. The gravity of the oil varies one degree.

The field was developed on forty acre spacing, a requirement that had been written into the Alabama State Statute, and if this had not occurred, the field would have perhaps been developed on a wider spacing pattern. The original allowables set by the Oil and Gas Board were 350 barrels daily from the upper zone and 200 barrels from the lower. This has since been reduced to 200 from the upper zone and 150 barrels from the lower.

On May 1, the field was producing 11,300 barrels daily and the total accumulation was 2,942,696 barrels. Since discovery, the Gulf Pipe Line Company has laid an 8 inch line from the field to a terminal at the port of Mobile.

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