

Production in the field is obtained from calcareous rock containing mostly disoriented macrofossils (rudistids) which is reached at a depth of about 11,500 feet. The trap is a gentle anticline associated with a biostromal reef. Productive zones begin at the top of the Sunniland Limestone and extend to a depth of about 65 to 75 feet lower in the section; the lowermost of these zones is correlative with the productive Roberts zone of the Sunoco-Felda field.

Production from the better wells in the Sunniland field ranges from about 180 to 220 BOPD, with 27 and 37 percent, respectively, of the total fluid recovery being salt water. The gravity of this oil ranges from 19 to 26 degrees API. Table 2 shows monthly and cumulative oil production from the field for the seven-year period, 1961-1967, inclusive. Along with the 1967 production of 585,374 barrels of oil (table 2), the field also produced 1,646,215 barrels of salt water, which is 74 percent of the total fluid yield.

It is significant that the oil production in the years following 1961 increased markedly over the 1961 figure (table 2). This reflects the opening to production, beginning in 1962, of deeper zones (C₂ and D) of the field in a total of nine wells (fig.4). The bottom of zone D is only about 65 to 75 feet below the top of the Sunniland producing interval.

At this time it is thought that 30 million barrels of oil probably is a reasonable figure for the initially recoverable reserves of the field.

Humble has completed drilling operations on their No. 25 Gulf Coast Realities Corporation well, which is the only field test drilled in 1967. This well is located near the northeastern edge of the field. On December 15, 1967 an induction-electrical log was recorded for this hole, and it has been released by the company. The structural contours of the field, as shown in figure 4, have been revised to reflect this additional control. It will be noted that the No. 25 well has a rather favorable structural elevation. As of the end of the year, the operator was conducting testing operations to determine the productivity of this well. Since this is an edge location, it is possible that the relatively favorable structural elevation will not be a guarantee that the parts of the Sunniland producing interval with a strong water drive will produce.

EXPLORATION

EXPLORATORY DRILLING

As recapitulated in table 3, a footage of 98,432 feet was drilled in 11 exploratory tests in 1967, including an outpost well to the abandoned Forty Mile Bend field. All of these wells have been plugged and abandoned. Well data sheets for these test are presented in appendix 1.

GEOPHYSICAL ACTIVITY

The interest in Florida offshore geophysical activity which began in 1964 continues to the present time. In 1967, as shown by figure 5, a total of 23 permits were issued to 8 major oil companies and 2 independents for offshore geophysical work. Work permitted was: 15 non-conventional seismic surveys