THE CUSHING OIL FIELD

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The Cushing oilfield, about 35 miles southwest of Tulsa, Oklahoma, has produced nearly one-half billion barrels of oil since its discovery in 1912. To aid in the recovery of the millions of barrels of oil still remaining in the sands of this old field, Bureau of Mines engineers made a study and prepared Report of Investigations #5415, "History and Potentialities of the Cushing Oilfield."

Although oil in commercial quantities has been recovered from 10 separate reservoirs, the Bartlesville and the Layton sands are responsible for 86 percent of the cumulative total. These two formations have the greatest potential in the central and south parts of the field.

The north-south anticline is modified by three domes, but facies changes from sand to shale were as important as edge water in limiting the original oil productive area. Although some parts of the field are subject to a natural water drive, accidental flooding by extraneous water has resulted in the recovery of at least two million barrels of additional oil. This accidental flooding indicates the susceptibility of the formations for planned flooding. The production history as well as the sand characteristics are important in determining the potentialities of any property for improved recovery methods.

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