

Tinsley Field, Yazoo County Mississippi: A Deeper Look at Mississippi's First Oil Field using 3-D Seismic

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Abstract

The first commercial oil production in Mississippi was established in 1939 at Tinsley Field with the completion of the Union Producing Company No.1 G. C. Woodruff, Section 13, Township 10 North, Range 3 West, Yazoo County, Mississippi. Subsequent drilling in the 1940's and 1950's established oil production in the Eutaw and Upper Tuscaloosa formations. Cumulative production is more than 224 million barrels of oil and 14.4 billion cubic feet of gas. The deepest wells drilled in Tinsley Field have been four wells drilled into the Smackover Formation. Two of these wells reported gas shows but due to high H₂S content none were commercial completions.

Structurally, Tinsley Field is a large salt cored, faulted anticline. Large faults divide the field into three distinct producing segments. Recent deeper drilling (6500 ft to 10,940 ft true vertical depth) on the north flank of the field by Hassle Hunt Exploration and Pennzoil has resulted in excellent oil and gas discoveries in the Hosston, Pine Island, Rodessa, Mooringsport and Paluxy formations. Current development is underway guided by a 3-D seismic program. The significance of the 3-D seismic is illustrated by the fact that no dry holes have been drilled in the development of these reservoirs.