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Under-Explored Oil and Gas Trends of Mississippi

Several under-explored trends in Mississippi offer explorationists potential targets for the drill bit, especially with the higher oil and gas prices seen in recent years. These trends are the Miocene in the southern coastal counties and state waters, Upper Cretaceous Tuscaloosa Marine Shale in southwestern Mississippi, the Lower Cretaceous James Lime in southern Mississippi, the deep Jurassic Norphlet Sand on the southern flank of the Wiggins Arch and state offshore waters, and the “Knox-Ordovician” Stones River of the Black Warrior Basin in northeastern Mississippi. Several of these trends offer the possibility of discovering significant new oil or gas reserves. Because of the 2001 discovery of a shallow Miocene gas field in coastal Hancock County and the recent “rediscovery” and field development of deep gas in the “Knox-Ordovician” at Maben Field in northern Mississippi’s Oktibbeha County, these two trends are of particular interest and, along with the Norphlet deep gas trend, are the least explored. The two Miocene sand completions at Mariner Field have produced at rates of over three million cubic feet of gas per day since coming on production in 2001 from above 4,000 feet. Several of the “Knox-Ordovician” gas completions at Maben Field have had sustained rates of over five million cubic feet of gas per day from fractured dolomite reservoir and have potential reserves of over 15 billion cubic feet of gas recoverable per well at a depth of 15,500 feet. Several of these trends extend over significant areas of Mississippi and are virtually unexplored