



Petrography and Characterization of the Frisco City Sand in Conecuh and Covington Counties, Alabama

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ABSTRACT

The Frisco City Sandstone is a prolific Upper Jurassic oil reservoir located in southwestern Alabama. This sandstone can be found in two main productive areas, the Covington High in Covington County and the Conecuh Ridge in Monroe County, Alabama. The Frisco City Sand first produced oil in 1986 in the Frisco City Field in Monroe County, Alabama. Previous research on the Frisco City Sand in the Frisco City Field has classified the sand as a member of the Haynesville Formation.

There is no consensus on the depositional environment of the Frisco City Sand, with interpretations ranging from alluvial fans to a marine shoreface facies. In Conecuh and Covington counties, Alabama, to the east of Monroe County, the Frisco City Sand may be older and from a different depositional setting. The depositional environment of the Frisco City Sand in Monroe County appears to be more continental, whereas the Frisco City Sand in Conecuh and Covington counties appears to be more marine to marginal marine.

The aim of this research is to determine if the Frisco City Sand near the Brooklyn/Little Cedar Creek Field Complex is a producing sand member of the Upper Jurassic Smackover or Haynesville Formation and to determine the depositional setting. This research will primarily be a petrographic study utilizing thin sections, core, geophysical logs, and seismic to determine the environment of deposition of the Frisco City Sand in Conecuh and Covington County, Alabama. Approximately one dozen wells will be used to evaluate the Frisco City Sand. From these wells, whole core will be analyzed to evaluate the Frisco City Sand and provide an insight on the depositional sequence.