

THE SLIGO STRATIGRAPHY OF NORTH LOUISIANA, ARKANSAS AND EAST TEXAS

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ABSTRACT

The Sligo formation is in the upper Coahuila group in the Comanchean Series of the Lower Cretaceous period and underlies the Pine Island black shale section of the Trinity group and above the Hosston sands and shales of the Coahuila group. The Sligo formation is in conformable contact with the overlying Pine Island but is transgressive on the Hosston formation as indicated by the dark shallow water marine sediments overlying the nonmarine Hosston sediments.

The type locality of the Sligo formation is the Sligo field in Bossier Parish, Louisiana. Production from the Sligo is generally referred to as "Pettet" production since any porous oolitic limestone section in the Sligo is referred to as Pettet porosity, from the discovery well in the Sligo field.

The Pettet porosity zones of the Sligo formation have accounted for a major portion of the gas production and a considerable portion of the oil production in the North Louisiana, Arkansas and East Texas areas. Production is obtained from anticlines, fault traps and stratigraphic porosity traps. Of these the stratigraphic trap is by far the most important from the standpoint of accumulated production.

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