

“Sequence Stratigraphy and Depositional Dynamics of Sarare - La Victoria, Subcuenca de Apure”

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Abstract

The study area is located in the Barinas-Apure Basin, specifically on the Apure sub basin, bounded on the north by Merida state and NE Barinas state, covering an area of 6,586 km². The data contains 2,350 km of 2D seismic lines and 46 wells. This study focus is basin analysis from the stratigraphic seismic interpretation to generate a tectonostratigraphic framework.

Due to the structural and stratigraphic complexity of Sarare-La Victoria area, the previous works remain uncertain about the definition and interpretation of tectonosequences and limits of sequences. This study proposes to generate a tectonostratigraphic framework that includes new data in order to establish a new framework for the area.

New framework for tectonic events is proposed: active rifting: Triassic -Jurassic (Barremian) passive rifting: -Cretaceous Early Jurassic (Barremian) Start Active Phase Margin from Paleocene.

Six units regarding three tectonic phases were defined.

- a) The UDI unit associated with the opening phase Continental Triassic-Early Cretaceous,
- b) Unit II, played in Phase Margin Passive Aptian-Maastrichtian and c) UDIII, UDV, UDVI and UDVII associated with active tectonic phase margin.

The UDI unit has good reservoir development, regional seal and quality of bedrock, the UD-III unit has good quality bedrock, low presence of reservoir and seal quality, UD-V unit is characterized by low quality bedrock, good development of low-quality reservoir and seal. Finally, the unit features rock UDVI immature mother and good distribution of reservoir and seal low effectiveness.