

Petroleum geology of Loralai Formation in western Sulaiman Range

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The Loralai Formation was deposited on the northern shelf of Tethys as carbonate platform depositional product and belongs to the Middle Jurassic carbonate rocks with its wide distribution and thousands of meters of thickness in the study area due to structural duplication on the large scale continent-continent plate margin, the thin skin tectonics and the decollement provided by shales of Sembar Formation, the largest source rock. Also because the Sulaiman Basin is in structural and stratigraphic equivalence with Kirthar Basin, the reservoir potential of Loralai Formation is beyond any question. The Lithology, stratigraphy and structure of the Loralai formation here is analogous to other such producing and proven basins. The studies on the sedimentology of the formation comprised analyses of stratigraphic sections, microfacies assemblages, and diagenetic sequences. In this area the diagenetic environments of Loralai Formation are different from one another by the resultant features such as cementation and dissolution. This is an attempt to demonstrate the pronouncing possibilities of reservoir potential of this formation for petroleum in Western Sulaiman Range.