
Upper Paleocene–Lower Eocene ‘Wilcox’-Sourced Petroleum Systems of the Gulf of Mexico Basin: A Re-Evaluation and Comparison with the Coeval Patala Formation–Sourced Petroleum System in the Upper Indus Basin, Pakistan

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EXTENDED ABSTRACT

Wilcox Group, Gulf of Mexico

The upper Paleocene–lower Eocene Wilcox Group of the Gulf Coast represents a complete non-marine to deep marine series of systems tracts ranging from coaly delta plain environments onshore Gulf Coast to a time-equivalent bathyal condensed section on the floor of the Gulf of Mexico. Source potential is present in each environment: terrigenous organic matter (OM) in paralic coals has waxy oil and gas expulsion potential; marine shelf and slope mudstones are dominated by marine OM with varying but generally minor contribution of terrigenous OM; the abyssal condensed section has totally marine OM. OM in these marine-dominated environments was subjected to varying degrees of oxidation and is variably oil and gas prone.

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