

THE ROLE OF CRETACEOUS RIFTS ON THE OCCURRENCE OF OIL IN SINDH MONOCLINE, PAKISTAN

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The occurrence of oil and gas in Sindh Monocline seems to be due to the extensional tectonics. The main Cretaceous rifting episodes divided the Monocline into horst and grabens. The oil formations in the grabens were buried deep and were subjected to high temperatures, resulting in cracking and maturation of hydrocarbons into condensate and dry gas, whereas the oil formations in the horst show their burial to relatively shallow depth and lower temperatures, thus they were able to retain the oil. The present depths of the producing formation suggest that faulting in the Monocline was continuous, and even the condensate and gas bearing reservoir rock was uplifted, but this did not affect the hydrocarbons due to irreversibility of the process of cracking and maturation.