

عنوان مقاله:

Investigation of sedimentary Facies and sequence Stratigraphy in one of the possible hydrocarbon reservoirs of
(Kopet-Dagh Basine, NE Iran (Tirgan Formation

محل انتشار:

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خلاصه مقاله:

Lower Cretaceous strata in Kopet-Dagh basin (Iran, Turkmenistan and Afghanistan) have hydrocarbon potential and are mostly composed of medium- to thick-bedded, mostly grainy limestones with various skeletal (bivalves, foraminifera, algae, echinoderms, brachiopods) and nonskeletal (peloids, ooids, and intraclasts) allochems. In this study, two stratigraphic sections in Chaman-Bid and Sorkh-Ghaleh with a thicknesses of ۲۴۲ and ۱۶۵ m in NE Iran, have been studied in order to determination of the sedimentary environment and sequence stratigraphy. Based on the field observations, petrographic studies, textural and facies characteristics, as well as the abundance and distribution of foraminifera and other components, ۱۶ carbonate microfacies have been identified. Facies analysis documents low - to high-energy environments, including tidal-flat, lagoonal, shoal, and open-marine facies. Because of the wide lateral distribution of microfacies and the apparent absence of distinct paleobathymetric changes, the depositional system likely represents a westward-deepening homoclinal ramp. Four third-order depositional sequences can be distinguished in each of two stratigraphic sections. Transgressive system tracts (TST) show deepening-upward trends, in which shallow-water (tidal flat and lagoonal) facies are overlain by deeper-water (shoal and open-marine) facies. Highstand systems tracts (HST) show shallowing-upward trends in which deep-water facies are overlain by the shallow facies. All sequence boundaries in the study sections are SB. According to the study conducted from the west of the basin to the east and Afghanistan, the thickness of carbonate deposits and reservoir potential decreases. On the other hand, studies conducted to the north and Turkmenistan show the reservoir potential conditions for these deposits, and since the studies conducted in the study area have similar conditions to the deposits of Turkmenistan, it is hoped that this information can be used to reconstruct the potential. Reservoir in this area to help

کلمات کلیدی:

Sedimentary Facies; Sequence Stratigraphy; Tirgan Formation; Kopet-Dagh Zone

لینک ثابت مقاله در پایگاه سیویلیکا:

